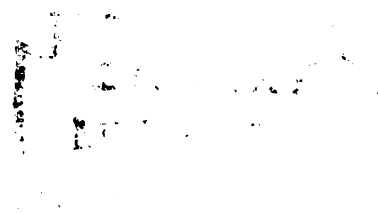




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OF AESTHETIC AND UTILITARIAN QUALITIES IN CLOTHING
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CLOTHING VALUING: A STUDY OF THE DOLLAR VALUE
OF AESTHETIC AND UTILITARIAN QUALITIES IN CLOTHING

By

Michelle Ann Morganosky

A DISSERTATION

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ABSTRACT

CLOTHING VALUING: A STUDY OF THE DOLLAR VALUE OF AESTHETIC AND UTILITARIAN QUALITIES IN CLOTHING

By

Michelle Ann Morganosky

The purpose of this study was to determine whether consumers value aesthetic qualities more than utilitarian qualities in clothing. It was hypothesized that consumers would be willing to pay significantly more for aesthetic qualities in clothing than utilitarian qualities.

Measures of aesthetic and utilitarian qualities were determined by having nine experts trained in design evaluate 20 clothing items on a scale from one to ten. Agreement among the experts was very high with an alpha reliability coefficient of .85 for aesthetics and .97 for utility.

One hundred two female shoppers at a regional mall in Champaign, Illinois were selected to respond to twenty items of clothing, representing five categories of clothing (gloves, shoes, aprons, sweaters and hats). Each consumer was shown one clothing category of items at a time (four gloves for example). Each clothing category of four clothing items was represented by one low aesthetic, low utility item; one low aesthetic, high utility item; one high aesthetic, low utility item and one high aesthetic, high utility item. Clothing items within a clothing category were similar in color, price and style. The

consumer was then asked how much she would be willing to pay for each of the clothing items.

Analysis of variance and Tukey post hoc comparisons were the major forms of statistical analyses used to determine whether differences existed between the dollar amounts consumers were willing to spend for the clothing items.

The findings of this study indicated that consumers demonstrated an overall pattern of willingness to pay more for the higher aesthetic items than the lower aesthetic items. No clear pattern of willingness to pay more for the higher utility items than the lower utility items was demonstrated by the consumers. Demographic variables such as age, income level, marital status, number of children, race, occupation and educational level were not significantly related to dollar amounts that consumers said they would be willing to spend for the clothing items. These findings would tend to confirm the hypothesis that consumers value aesthetic qualities more than utilitarian qualities in clothing.

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CHAPTER I

INTRODUCTION

The relationship of an object's beauty to its use and the corresponding valuations ascribed to it has intrigued philosophers throughout history. Some objects may be valued primarily for their usefulness; others for the aesthetic qualities that characterize them. What, then, is the nature of the valuing behavior when an individual object is made up both of utilitarian and aesthetic qualities?

Kluckhohn (1951, p. 395) has defined value as "a concept of the desirable which influences selection from available modes, means and ends of actions." If this be true, what are the "concepts of the desirable" which direct consumers in their purchases of clothing? The concern of the present study was to investigate the relationship between beauty and use for one particular class of objects, clothing, and to determine the concept that is most influential in the selection process. In order to do so a means of determining relative value was needed. A decision was made to attempt the use of dollar amounts subjects would be willing to pay for each item as "value indicators."

As explained by the Kluckhohn definition, values are "concepts" of the desirable. This implies that values are not directly observable for investigation. "Dollar amounts" as indicators of value would be a means of measuring both the existence and the magnitude of values. In this way, an attempt would be made to quantify the inherently qualitative nature of values. This quantification of values would then permit comparisons of consumers' valuations of the aesthetic qualities in clothing with those of the utilitarian qualities.

The purpose of this study was to determine whether the consumer values aesthetic qualities in clothing more than utilitarian qualities. If differences should be found in the dollar amounts that consumers are willing to spend for aesthetic versus utilitarian qualities, then the theory that consumers value aesthetic qualities in clothing more than utilitarian qualities would be substantiated.

CHAPTER II

THEORETICAL DEVELOPMENT AND REVIEW OF LITERATURE

The following discussion will begin with an historical and philosophical analysis of the relationship between aesthetics and utility. A model for the investigation of this relationship will be presented and proposed as a means of studying the relationship. Further delineation of the concepts "aesthetic" and "utilitarian" will follow. Lastly, specific research will be presented which illustrates the importance of aesthetic and utilitarian qualities in clothing.

Historical Background on the Relationship of Aesthetics to Utility

The relationship of beauty to use in clothing is the specific concern of the present study. However, before attempting such an investigation, an understanding of the philosophical and historical background for the relationship of beauty to use is necessary.

Humanism

Philosophers throughout time have struggled to define "summum bonum," which in Latin means the "highest good." Branches of ethical philosophy have arisen based on

differing concepts of this "summum bonum." Humanists base their definition of the "highest good" on an examination of human capacities.

Aristotle tells us that a "good" man is a man that lives according to reason, which is man's distinctive function or activity. Just as a "good" knife is one that cuts well, so a "good" man is one that performs his proper function (Albert et al., 1953, p. 39).

Even before Aristotle, Socrates elaborated on the relationship between goodness, usefulness and beauty. According to Xenophon's Memorabilia, Socrates is quoted as saying,

you think, do you, that good is one thing and beautiful another? Don't you know that all things are both beautiful and good in relation to the same things ... namely in relation to those things for which they are useful. Is a dung basket beautiful then? Of course, and a golden shield is ugly, if the one is well made for its special work and the other badly (DeZurko, 1957, p. 16).

Hence, it would appear as though early philosophers placed utility or function in a superior role to beauty or aesthetics. This is not to say that beauty was disregarded. However, function was seen as the parent of beauty rather than beauty as the parent of function. To the humanist, beauty is a result of usefulness or proper functioning.

Philosophical belief in the supremacy of function in relationship to beauty has been most clearly enunciated by architects of the early 1900's. The "International Style"

of architecture as it has become known advocated that pre-eminence be given to the handling of function and that building be considered as science and not art. Some proponents of the style went so far as to deny that the aesthetic element in architecture even existed (Hitchcock and Johnson, 1932, p. 35). Particularly offensive to advocates of the International Style was the addition of "ornamentation" to already structurally sound buildings.

Walter Gropius, founding father of the "Bauhaus" design school, expressed his disdain for ornamentation in the following statement:

During the course of the last two or three generations architecture degenerated into a florid aestheticism, as weak as it was sentimental, in which the art of building became synonymous with meticulous concealment of the verities of structure under a welter of heterogenous ornament. Bemused with academic conventions, architects lost touch with the rapid progress of technical developments and let the planning of our towns escape them. Their 'architecture' was that which the Bauhaus emphatically rejected. A modern building should derive its architectural significance solely from the vigour and consequence of its own organic proportions. It must be true to itself, logically transparent and virginal of lies or trivialities, as befits a direct affirmation of our contemporary world of mechanization and rapid transit (Gropius, 1955, pp. 81-82).

Gropius not only advocated this new style of architecture but also was convinced of its ethical "rightness." In the last paragraph of Gropius' book entitled The New Architecture and The Bauhaus he stated,

The ethical necessity of the New Architecture can no longer be called in doubt.

And the proof of this -- if proof were still needed -- is that in all countries youth has been fired with its inspiration (Gropius, 1955, p. 112).

Unfortunately for Gropius, a measure of popularity is rarely a good measure of ethical necessity. The advocates of the International Style may be judged on the basis of the architectural inheritance they have left for modern society. Skyscrapers that all look alike, flat topped roofs that neither support the weight of rain nor snow, and glass "palaces" that neither keep out the cold in winter nor the heat in summer are but a few of their legacies. These are buildings that are not only criticized for their lack of aesthetic quality but for their lack of functional qualities as well.

To some a discussion of architecture may seem out of place when dealing with a study involving clothing. However, the parallels between architecture and clothing are numerous. In one sense, architecture is a form of "collective" clothing. Architecture, like clothing, gives protection from the natural environment as well as the provision of privacy. It might be said that architecture is the cloth of the masses while clothing is the architecture of the individual.

Hedonism

Let us now contrast the humanist's view of function with that of the hedonist's view of pleasure. Hedonism is that branch of ethical philosophy which defines the "summum

bonum" as the enjoyment of the greatest amount of pleasure. Value is assessed on the basis of how much pleasure and how little pain is produced. Hedonism has been particularly misunderstood because of the variety of definitions for "pleasure." However, hedonists do agree that no matter how one attempts to define pleasure, it is nevertheless a feeling, and thus feelings are the locus of moral value. Most hedonists further agree that the value of pleasure can be subjected to quantification (Wheelwright, 1935, pp. 67-68). Hedonists stand in opposition to the humanists who equate goodness with use or function. To the hedonist, beauty has its rightful place, perhaps separate from use, as a contributor to the feeling of pleasure.

There are two major schools of hedonism. The egoistic hedonist cares only for his own pleasures and pains. On the other hand, universalistic hedonists are concerned with bringing about pleasure for the greatest possible number of people. The term "hedonism" is frequently viewed in a negative light because of its relationship to egoistic hedonism.

One of the most famous universalistic hedonists was Jeremy Bentham (1748-1842). During his lifetime Bentham had seen tremendous advancement in the physical sciences because of their ability to quantify information. Bentham also realized that economics was the most advanced of the social sciences for the same reason. Bentham, a social reformer, eagerly pushed for the quantification of value

theory.

Out of this desire to quantify values, Bentham devised a "hedonistic calculus" by which pleasures and pains might be evaluated without reference to any but quantitative differences. According to the calculus, value was based on seven factors. These factors were:

- 1) the intensity of the pleasures and pains produced,
- 2) their duration, 3) the degree of probability that they will occur as predicted, 4) the promptitude of their fulfillment, i.e. nearness versus remoteness, 5) their fecundity, i.e. the tendency of a pleasure to be followed by other pleasures or of a pain by other pains, 6) their purity, i.e. the freedom of a pleasure from attendant or subsequent pains, and of a pain from attendant or subsequent pleasures, 7) their social extent, or the number of persons affected by them (Wheelwright, 1935, p. 79).

Bentham's hedonistic calculus was strongly attacked during his day and continued to be controversial after his death in 1842. Many referred to Bentham's theory as a "pig philosophy" since a life of pursuing pleasure seemed only worthy of swine, not humans. John Stuart Mill (1806-1873) attempted to defend universalistic hedonism after Bentham's death. However, while attempting to give support to Bentham he altered the fundamental basis for Bentham's beliefs. In his defense of Bentham's theory as something more than "a doctrine worthy of swine" he stated:

... even among men, some kinds of pleasure are more desirable and more valuable than others. Of two pleasures, if there be one to which all or almost all who have experience of both give a decided preference, that is the more desirable pleasure ... whoever supposes that this preference takes place at a sacrifice of happiness ... confuses the two very different ideas of happiness and content. It is better to be a human being dissatisfied, than a pig satisfied; better to be Socrates dissatisfied than a fool satisfied (Smith and Sosa, 1969, pp. 4-5).

It is in these words that Mill parted with Bentham. Mill interjected a "qualitative" difference between values. To Bentham, quantitative differences between pleasures were the sole criteria for preference. In his attempt to defend Bentham, Mill actually deserted him.

To summarize the discussion so far, an attempt has been made to illustrate the broader philosophical and historical basis for this study. Although the specific concern for the present study was the relationship of beauty to use in clothing, a more general discussion has taken place. Two major branches of ethical philosophy, humanism and hedonism, have been discussed. Humanists tend to equate goodness with usefulness while hedonists equate goodness with the feeling of pleasure. Humanists view qualities of beauty in relationship to function or usefulness. Hedonists would tend to recognize the "goodness" of beauty in and of its own right, because beauty has the ability to produce pleasure. Hence, the humanist would only call a knife that cuts well "beautiful." On the other hand, the hedonist would be willing to call a

knife "beautiful" even if it did not cut well. If by looking at the knife a feeling of pleasure is experienced, the hedonist would feel completely comfortable in describing it as "beautiful."

A Model for the Investigation of the
Relationship Between Aesthetics and Utility

It appears as though there is an element of truth in both the humanist's view of the relationship of beauty to use as well as in the hedonist's view. Perhaps no one has worked harder than the philosopher C. I. Lewis to reconcile and integrate these opposing views into a comprehensive value theory.

Lewis (1962) divided values into two broad categories (Figure 1). The first of these is the intrinsic value or satisfaction derived in experience. This type of value or "good" is considered good for its own sake. It is an end in and of itself. In opposition to intrinsic value is extrinsic value or value that is good for the sake of something else. Extrinsic value is the value assigned to the domain of objects. As C. I. Lewis stated,

the goodness of good objects consists in the possibility of their leading to some realization of directly experienced goodness ... no sensible act has its terminus in the production of good objects merely, but in some consequent realization of goodness in experience (Lewis, 1962, p. 387).

Lewis continued to delineate the concept of extrinsic value by further dividing it into two sub-categories. The

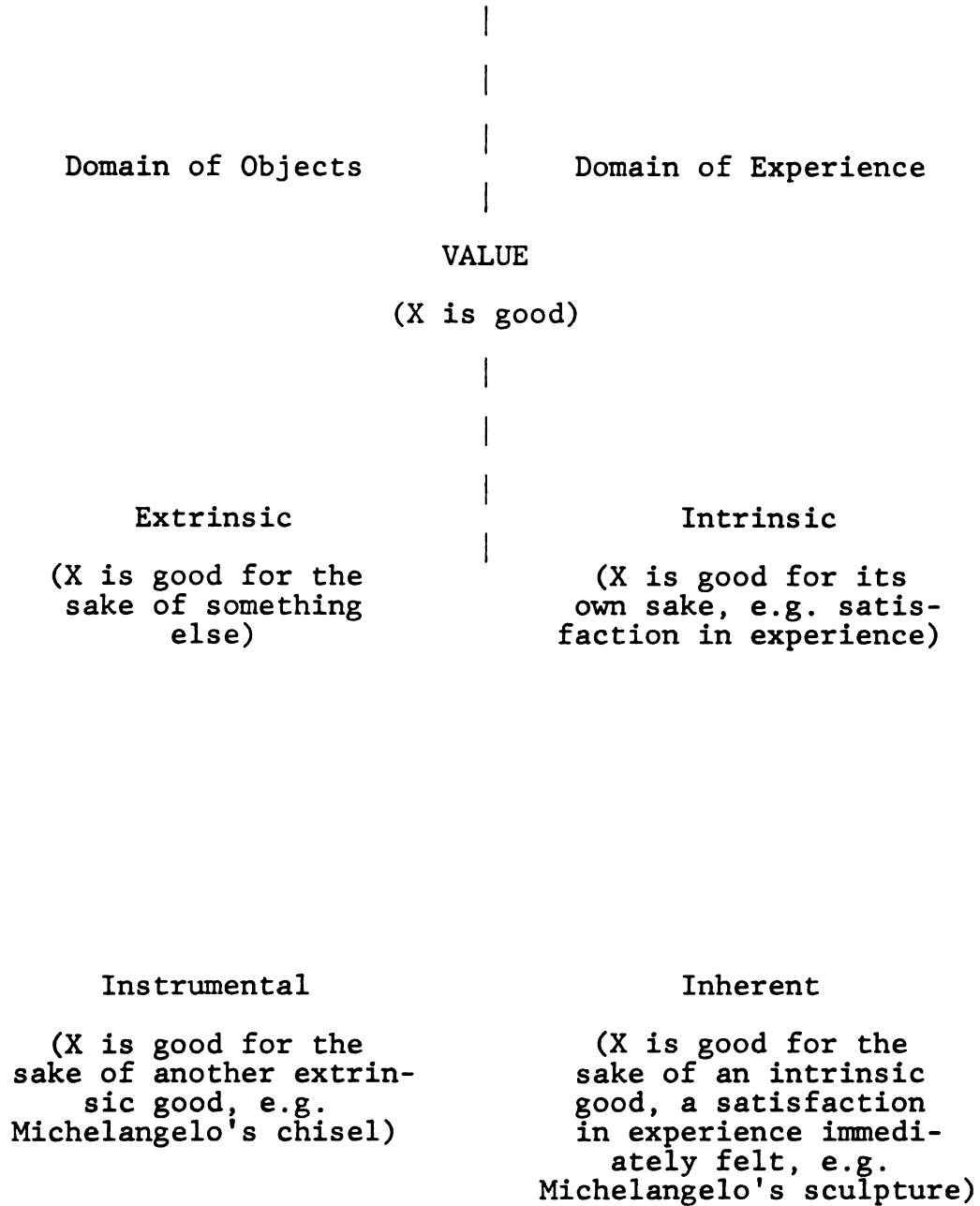


Figure 1. Representation of object value as presented by John F. A. Taylor.

first of the sub-categories is that of inherent value. Inherent values are defined as "those values which are resident in objects in such wise that they are realizable in experience through presentation of the object itself to which they are attributed" (Lewis, 1962, p. 391). For example, as we look at Michelangelo's sculpture, the Pieta, we value it because of the satisfaction that is immediately felt in its presence. In contrast, on being presented with Michelangelo's chisel with which he used to create the masterpiece, we value it only in relationship to the masterpiece. This type of valuing Lewis terms "instrumental" because the chisel is good in relationship to the sculpture. The sculpture in turn is "good" because it provides the opportunity for satisfaction in experience. Thus, we see that Lewis did not neglect the role of function or use in valuing behavior.

Boyd (1976) utilized Lewis' two dimensions of instrumentality and inherentness to construct a conceptual model for discrimination of object value. The four quadrant model developed as the dimensions of instrumentality (utilitarian qualities) and inherentness (aesthetic quality) were further divided into high and low segments (Figure 2). The four quadrant model could then be used to place objects according to their utilitarian and aesthetic qualities. The four quadrants of the model consisted of: 1) low aesthetic and low utilitarian value, 2) low aesthetic and high utilitarian value, 3) high aesthetic

and low utilitarian value and 4) high aesthetic and high utilitarian value. Using objects from the material environment such as chairs, mailboxes, etc., Boyd found the model to be useful in assessing how individuals value their material environments (Boyd, 1976, p. 131).

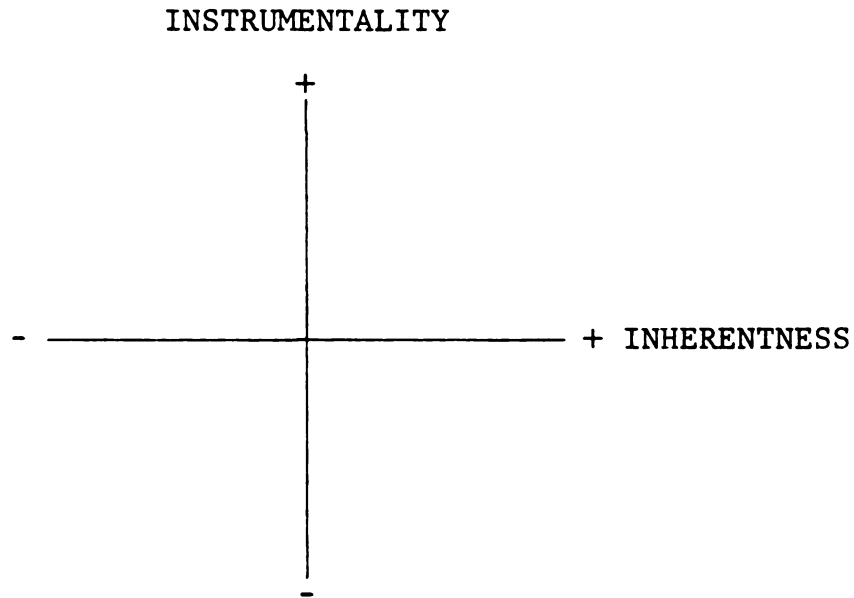


Figure 2. A model of object value as presented by Virginia T. Boyd.

Boyd's model is particularly applicable to the study of aesthetic and utilitarian qualities in clothing. Clothing, like architecture, has certain functional requirements placed upon it. If one were to ask Aristotle what a "good" coat is, he would answer that a good coat "keeps one warm." Likewise a "good" raincoat keeps the rain away from the body, and a "good" shoe makes walking easier by protecting the foot from stones, insects, etc. But aside from these utilitarian aspects, there is concern with the beauty of clothing. This concern is frequently

called the aesthetic dimension of clothing. Aesthetics, as a branch of philosophy, attempts to provide us with a theory of the beautiful. Because clothing is such a common and integral part of everyday life, an analysis of this aesthetic dimension is frequently overlooked. The argument concerning the relationship of beauty to use is an old one. However, daily as we don our "architectural" clothing we bring up the old argument. It is the purpose of this study to investigate, in as scientific a manner as possible, the relationship of beauty to use in clothing. Because Boyd's model of object value considers both the utilitarian and aesthetic aspects of clothing, it was considered an appropriate model for an analysis of clothing.

Delineation of the Concepts "Aesthetic" and "Utilitarian"

Before beginning a discussion of the procedural methods of the present study, a review of clothing research in relationship to aesthetics and utility is profitable.

To begin with, the author knows of no studies where the relationship between aesthetic and utilitarian qualities in clothing has been specifically investigated. However, a number of studies have been reported which identify the qualities in clothing that consumers value. This investigator has attempted to categorize these factors generally as either aesthetic or utilitarian in nature. Lewis' definitions of inherent value and instrumental value

were utilized as guidelines for classification. In other words, those clothing qualities that contributed to immediate satisfaction in experience were considered aesthetic. Such factors as color, style based on design quality, and appearance were generally considered aesthetic in nature. Durability and ease of care were thought as being more of a means to an end than an end in themselves. Therefore, these were considered utilitarian qualities. Several factors, such as comfort and fit, were difficult to classify precisely, because both aesthetic and utilitarian dimensions are inherent in these concepts.

For example, if a garment is uncomfortable because of a cumbersome style, cut, or a too tight fit, it may hinder body movement. In these cases utilitarian concerns are evident. However, a correctly sized and cut garment, i.e. a comfortable garment, may "feel" good, thus contributing to tactile pleasure. Although comfort might be considered aesthetic in nature, the decision was made to consider comfort primarily utilitarian. However, a garment that does not fit well regardless of style will usually lower the overall aesthetic quality of the garment on the person. Therefore, fit was seen by this researcher as being more aesthetic than utilitarian in nature. The basis for the decision to classify comfort primarily as utilitarian and fit as aesthetic grew out of the investigator's intuitive knowledge of consumer behavior and clothing characteristics. Precise research findings which support or refute

the decision are not available currently.

Before reviewing those studies which contribute information concerning the role of aesthetics and utility in clothing, a general discussion about how one defines "aesthetic" or "utility" is necessary. Of the two concepts, utility is perhaps the more clearly definable.

The utilitarian dimension of an object is referred to as its "use" or "function." Specific reference to "utility" implies a means to some end. For example, we "use" clothing to keep warm. The end state of "being warm" is thus facilitated by wearing a sweater in cold weather. However "providing warmth" is only one of several distinct utilitarian dimensions of clothing. Hats may be worn to keep the head and body warm but they may also be worn to protect one's face from sunburn. Gloves might be worn to keep the hands warm or to protect the hands from detergents when washing dishes. Shoes facilitate ease in walking by providing a flat durable surface that resists penetration from stones. The human foot is susceptible to glass, ice or extremely hot surfaces. The shoe thus "functions" as a way to promote ease in walking under many conditions. An apron is generally "used" to protect another garment from the splatterings of Sunday's bacon. Thus, the word "utilitarian" can describe any number of distinct uses for clothing.

What happens, however, when the shoe is no longer a flat surface that facilitates walking but is made with a

high heel that facilitates a twisted ankle? At this point the more difficult of our two concepts, aesthetic, must be defined. Aesthetics has been looked at primarily from three perspectives in the theoretical literature. These perspectives include 1) a delineation of the aesthetic experience for the producer of the aesthetic object, 2) characteristics of the aesthetic object itself and 3) effects of the aesthetic object on the perceiver. The concern of the present study is focused on perspectives two and three. The following discussion is an attempt to delineate the concept of "aesthetic" as it relates to clothing.

Once again, it is appropriate for us to turn to Aristotle for insight. In a general discussion on the nature of virtue, Aristotle develops the "doctrine of the mean" as follows:

Virtues are destroyed either by deficiency or by excess. We may see this illustrated in the analogous case of bodily strength and health: strength is destroyed by an excess as well as by a deficiency of bodily exercise; likewise health is destroyed by too much as well as by too little food, but is produced, developed, and preserved by a moderate amount. So with temperance, courage, and the other virtues: the man who flees and fears everything and never stands his ground is a coward, while he who fears nothing at all and is ready to face everything is rash. Similarly, the man who partakes of every pleasure and abstains from none is a profligate, while he who boorishly shuns all pleasures may be called insensible (i.e. without feeling). Thus temperance and courage are destroyed by excess and deficiency but preserved by moderation (Wheelwright, 1935, p. 205).

This "golden mean" will not be the same for all individuals. Its position will vary according to circumstances. More courage is required of a soldier than a tailor, therefore the appropriate action for a soldier will deviate from that of the tailor.

Although Aristotle's comments were made in reference to virtuous behavior, they can be useful in leading towards a definition of beauty in clothing. When Aristotle refers to the "golden mean" he is not talking about mediocrity but rather balance.

In a specific discussion on the qualities that contribute to the production of "good" tragedy (drama), Aristotle puts forth his concept of "organic unity" in tragedy. As with all organic or living structures, there must be a beginning, a middle and an end to the action. The tragedy, like the human organism, experiences a growth process. The beginning is the first part of the action. With the beginning of the tragedy, we experience no need to go backwards. The beginning is the beginning. We accept it as such. So too with the end. The end of a tragedy is the completion of an action or the completion of the outward revelation of the internal man. There is no need for further revelation. The revelation is complete in and of itself.

The middle of any organism is the natural development of all that precedes it and all that will follow it. Butcher (1951, p. 282) states that the middle is

distinguished by its causal relation to what goes before and is causally connected with what follows. By causal is meant that there is an effect or result produced, the middle being caused by the beginning and the end being caused by the middle.

However, for unity to be achieved, the phenomena represented in the tragedy must be selected. To choose to include every detail of a man's life would destroy the unity. The action must be significant action or bear some consequence for its performance. Organic unity implies the concept of "wholeness" rather than "oneness." Butcher explained:

The parts which constitute it must be inwardly connected, arranged in a certain order, structurally related and combined into a system. A whole is not a mere mass or sum of external parts which may be transposed at will, any one of which may be omitted without perceptibly affecting the rest ... unity is unfolded and expanded according to the law of its own nature, an organism which develops from within (Butcher, 1951, p. 175).

To Aristotle, organic unity in a work of art is characterized by the presence of all necessary parts and the absence of all unnecessary parts. The whole work of art, is just that -- a whole of interrelated and necessary parts -- none superfluous, none absent.

DeWitt Parker (1946), like Aristotle, considered the law of organic unity the master aesthetic principle. All other principles serve it. "The unity is a unity of the variety and the variety is a differentiation of the unity,"

stated Parker (1946, p. 70). Even in contrasting elements there is unity, for despite the contrast they supplement each other. Parker continues, "things merely different, no matter how different, cannot contrast, for there must be some underlying whole, to which both belong, in which they are unified" (Parker, 1946, pp. 71-72).

In Parker's words we see hints of the "balance" Aristotle referred to in his doctrine of the mean. According to Parker, the aesthetic object is one that demonstrates unity in variety. This is an object that is unified but at the same time characterized by differences within the object itself. There is a balancing of "alike-ness" with "unalikeness," "similarity" with "dissimilarity." This similarity contributes to the human need for order while dissimilarity contributes to the need for interest, the result being one of ordered interest.

The previously discussed concepts of the doctrine of the mean, organic unity and unity in variety have application for a theory of aesthetics in clothing. The design elements of color, line and texture should be balanced to create clothing that neither "over stimulates" nor "under stimulates" the senses. Just as the best cake is one that is neither undercooked nor overcooked but "baked all through," so clothing as well must not be overdone or underdone.

The doctrine of the mean, organic unity and unity in variety are all principles by which aesthetic quality in

clothing may be measured. This researcher knows of no study where the aesthetic dimension of clothing has been studied in such a manner. Perhaps this is due to a paucity of scholars who are investigating the aesthetic dimension of clothing.

A search of the research literature has failed to reveal any recent studies which specifically investigate the role of aesthetics in clothing. In most of the studies, the investigators have attempted to identify in a more general manner the characteristics of clothing that are important to consumers. Because the aesthetic and utility dimensions in the studies have not been precisely defined as such, distinct classification of the variables as either "aesthetic" or "utilitarian" is difficult.

Relationships Between Aesthetic and Utilitarian Qualities in Clothing

Numerous studies have been reported which illuminate the qualities in clothing that consumers value. Those included in the following review were chosen to further the theoretical argument that consumers operate from two main value orientations in their selections of clothing. These are the concern with aesthetics and with utility in clothing. The studies also emphasize the tendency of consumers to place more importance on aesthetic than utilitarian concerns.

Research from a wide variety of samples was chosen for

discussion (e.g. low income, high income, blacks, whites, young adolescents, etc.) in order to illustrate the pervasive nature of the concern with aesthetics in relationship to clothing. The overall pattern of these studies suggests that the aesthetic dimension of clothing is important to individuals regardless of their age, income level, race or other demographic variables.

Throughout the 20th Century home economists/human ecologists have focused on the study of the family's need for food, clothing and shelter. From a utilitarian perspective, food provides the body with the necessary nutrients to maintain adequate health. But who will deny the influence of the aesthetic dimension on an individual's consumption of food? Likewise, housing provides protection from cold, from wind, etc. but is not exclusively or even primarily built to accommodate utilitarian concerns. Those who study food, clothing and shelter cannot neglect the interactive effect of attempting to accommodate both utilitarian and aesthetic concerns. Nowhere perhaps is this more obvious than in the study of clothing.

The question of what is important to individuals in their selection and purchasing of clothing has been approached from various perspectives. As early as 1955, Katherine Hall undertook an investigation into the factors that contributed to satisfaction and dissatisfaction with clothing. Utilizing a sample of lower income women, Hall asked her subjects what factors they considered most

important in work clothes for themselves. Style, comfort and ease in doing up were listed in order of importance. When asked what was most important to women in terms of dressy clothes, fit, style, followed by comfort were listed (Hall, 1955, pp. 190-191).

Frequently it is assumed that the concern with aesthetics is more prevalent among higher income individuals than lower socioeconomic groups. Hall's findings tend to negate this notion. Fit, listed by Hall's subjects as most important in dressy clothes, is partially utilitarian in nature, but primarily aesthetic or affecting the appearance of a garment. Hall further compared those factors mentioned by the women as having influenced them to buy a favorite blouse. Of the 19 different responses received, style then color was most frequently mentioned (Hall, 1955, pp. 167-169).

Style, when referring to an assessment of design quality, is definitely an aesthetic consideration. However, style may also refer to "fashion" which is not necessarily of high aesthetic quality. The style that is said to be fashionable is usually time bound. Although there may be overlap between the two concepts, they are nonetheless distinct. An aesthetically pleasing design may or may not be fashionable. Since Hall did not ask her subjects what definition of "style" was being used, precise categorization of style as purely aesthetic is not possible.

The Northeastern Regional Research Project in Textiles and Clothing in 1959 spearheaded a comprehensive investigation into components of satisfaction with clothing. Appearance (reported by subjects as the concern with "color," "decorative detail," "shape of collar," etc.), comfort, becomingness, ease of care, fit and durability were listed as the six most important components of satisfaction for women's casual street dresses. For women's slips, components were ordered as follows: appearance (decorative detail), comfort, fit, durability and ease of care (Ryan et al., 1963). A noted contribution of the Northeast Regional Research Project was its utilization of a large sample varying in age from 25 years old to over 65 years old. Many times it is assumed that as an individual's age increases, the concern with appearance and aesthetics decreases. However, the Northeastern Regional Project revealed that the concern with the becomingness of a garment was equally important at all ages (Ryan et al., 1963).

During the 1960's several investigators looked specifically at the relationship between clothing valuing and valuing in general. An underlying hypothesis in each of these studies was that there was a connection or relationship between what an individual values in clothing and what he or she values more generally in life. A theoretical question dealt with in these studies was whether or not clothing might actually be a partial

reflection or microcosm for an individual's larger valuing system. Most of these efforts utilized the Allport-Vernon-Lindzey Test with its six value orientations:

- 1) theoretical, 2) economic, 3) aesthetic, 4) social,
- 5) political and 6) religious.

Lapitsky (1961) compared the clothing values of 80 undergraduate women students with 80 teachers at the Pennsylvania State University and found that the aesthetic clothing value had a higher mean score for both groups, teachers and students, than any other clothing values investigated. The correlation between the clothing aesthetic value and the general aesthetic value was .39 for the teachers and .27 for students (Lapitsky, 1961, pp. 47, 49, 53, 55).

Further evidence of the importance of the aesthetic value in relationship to clothing is given in Altpeter's (1963) study of married women between 20 and 40 years old. Altpeter used a measure of values developed by Finlayson (1959) and found that the aesthetic clothing value was ranked first by her subjects (Altpeter, 1963, p. 67). Creekmore (1963) related more specific clothing practices to general values and found an emphasis on appearance to be the most pervasive concern with clothing for her subjects out of fourteen studied (Creekmore, 1963, pp. 65, 84).

In an attempt to determine the relationship between clothing values and general values in a cross cultural

setting, Mendoza (1965) compared the clothing values of 160 American undergraduate women with those of 160 Filipino undergraduate women. Mendoza also included the clothing value of "sensuous," defined as contributing to warmth, coolness, smoothness, etc. The rank orderings of the eight clothing values for the American women were first aesthetic, followed by sensuous, exploratory, economic, political, theoretical, social and religious. The Filipino women ordered the clothing values as first sensuous, followed by economic, aesthetic, theoretical, exploratory, religious, political and social (Mendoza, 1965, p. 218). The high ranking of aesthetics and sensuous values for both groups should be noted. Mendoza's study furthered the theoretical argument that clothing values act as an indicator of general values and may even be an indicator of cultural values as well. The high ranking of the aesthetic value for both groups suggests that the importance of aesthetics in relationship to clothing is a cross cultural phenomenon.

The dominance of aesthetic concerns over utilitarian concerns in clothing also appears to extend across racial lines within the United States. Garrison (1965) studied a group of 40 black women living in Knoxville, Tennessee. In order to determine what features were important to these women when purchasing a dress for themselves, they were asked to rank in order of importance five characteristics they looked for when purchasing clothing. The items most frequently checked were color and price followed by

style, care required, comfort and durability (Garrison, 1965, p. 51).

When mothers purchase children's clothing, frequently it is assumed that utilitarian characteristics such as ease of care are utmost in the minds of the mothers. However, a study done by Harabin in 1968 would tend to refute this assumption. Harabin asked 31 mothers of sons in the third grade of an elementary school in central Pennsylvania what factors they considered important when purchasing shirts for their sons. Of the six factors ranked as important, fit, appearance and ease of care were listed as the top three (Harabin, 1968, p. 48). Harabin's subjects tended to come from a higher socioeconomic level, since most of the occupations of the subjects' husbands were university professors, engineers, doctors and managers.

As mentioned earlier, the aesthetic value appears to be so pervasive as to influence clothing purchases regardless of age. Instead of asking mothers what was important to them when purchasing boy's clothing, Whaley (1968) asked 100 boys, ten and eleven years old, what the most influencing factor would be in the purchase of a hypothetical sweater. The concern with aesthetics was evidenced even at this early age since the factor considered most influential was color, receiving 45% of the subjects' responses (Whaley, 1968, pp. 42-48).

The purchasing of clothing is inherently an aesthetic

experience involving the senses of sight and touch. However, relatively few clothing researchers have utilized actual items of clothing in their studies. Martin's (1971) investigation of those pieces of information about a garment considered to be most important to the consumer was somewhat unique in this respect. Martin showed a basic shirt dress to women shoppers and then asked them to select five pieces of information about the garment out of nine possible. Information about color was most frequently requested after price. Utilitarian concerns such as garment care were rank ordered sixth (Martin, 1971, p. 69).

The tendency for consumers to place more importance on aesthetic than utilitarian characteristics appears to hold true across different clothing categories such as dresses, shirts, sweaters, etc. This would support the hypothesis that the concern with aesthetics is so pervasive as to influence consumer decision making regardless of the clothing category. The testing of this hypothesis is one of the reasons why a variety of clothing categories such as sweaters, shoes, hats, etc. were used for study.

Although the concern with aesthetics in clothing appears to generally transcend differences in age, income and race, there is some evidence that utilitarian concerns may be influenced by such differences. Bonaker (1970) looked specifically at motives for the selection of clothing such as utility and related this to income levels,

age and marital status. The utility motive, defined as the concern with the functional characteristics of clothing such as durability and ease of care, was related to age, education and social class. Respondents in the survey who expressed a low degree of concern with utility could be described as young, high school students or college graduates, members of the middle social class levels, and tended to fall into the middle or lower occupational ranks. Persons expressing a high degree of concern for utility were in the upper age brackets, had completed high school, and were members of the lower social classes. Highly educated individuals also demonstrated a high degree of concern with the functional aspects of clothing (Bonaker, 1970, p. 60). Slocum (1975) investigated female college students' satisfaction with one particular clothing category, shoes, which were owned and worn by the subjects. Slocum found appearance to be significantly more influential in affecting general satisfaction than durability or ease of care (Slocum, 1975, p. 185).

Many researchers of clothing variables have tended to analyze the aesthetic qualities of clothing separately from utilitarian qualities. Until recently, an attempt to study clothing from a multidimensional approach of both aesthetics and utility has not been made. Although Jenkins and Dickey (1976) did not analyze clothing multidimensionally, they were able to categorize consumers of clothing according to the consumers' valuations of

appearance and practicality in clothing. These two dimensions developed through a factor analysis of consumer statements. Consumers were then placed into one of four categories or "consumer types" that emerged as follows: 1) high appearance, low practicality consumers, 2) low appearance, low practicality consumers, 3) high appearance, high practicality consumers and 4) low appearance, high practicality consumers. Lower socioeconomic level consumers were more likely to be in categories three and four than one or two (Jenkins and Dickey, 1976, p. 160). This finding indicates that the socioeconomic level of a consumer appears to play an insignificant role in determining one's aesthetic orientation. However, a consumer's utility or practicality orientation is influenced by socioeconomic factors. This conclusion agrees somewhat with Bonaker's (1970) findings that demographic variables influence utilitarian concerns.

In an attempt to support the inclusion of clothing among the components of quality of life, Sontag (1978) asked 116 wife-husband pairs in Oakland County, Michigan to respond to the question, "What are some of the most important reasons why you feel as you do about your clothing?" Women's ordered responses included beauty and attractiveness as the category most frequently mentioned followed by standard of living, miscellaneous, economy, acceptance and inclusion by others, functionality, fashion, self regard and independence and freedom. For men, ordered

responses were standard of living, beauty and attractiveness, miscellaneous, functionality, fashion, acceptance and inclusion by others, economy, independence and freedom (Sontag, 1978, pp. 186-187). For both men and women, "beauty and attractiveness" was more influential than "functionality" in determining why subjects felt as they did about their clothing.

From a summary of the research concerning what consumers value in their clothing, several generalizations could be presented. Two recurring dimensions of value that seem to predominate in the literature were those based on the aesthetics (color, style, decorative detail, etc.) of the clothing item and those based on the usefulness (durability, ease of care, etc.). The aforementioned studies illustrated the consumer's tendency to place more importance on aesthetic concerns than utilitarian concerns with respect to clothing. In addition, the consumer's willingness to place more importance on aesthetics than utility was not influenced by such demographic variables as age, income level or race. However, there was a tendency for the concern with utility to be influenced somewhat by socioeconomic variables as illustrated by Bonaker (1970) and Jenkins and Dickey (1976).

As evidenced by the previous discussion of the pertinent literature, only one study used a multidimensional approach in an analysis of the data. However, instead of the clothing being analyzed, the consumers were analyzed

on aesthetic and utility concerns. Perhaps a multi-dimensional analysis of actual items of clothing would clarify the relationship between the aesthetic and the utilitarian qualities. The rationale for such an analysis will be discussed in the following section.

Clothing, as part of the near environment, is valued for various reasons. As indicated in the previous discussion, two value orientations were repeatedly revealed as highly important. These are the concerns with aesthetic and with utilitarian values. Clothing appears to be valued for both of these reasons not exclusively one or the other. Therefore, a means of capturing the multi-dimensionality of this valuing behavior must be developed.

As previously mentioned, Virginia Boyd (1976) constructed a conceptual model for the discrimination of object value on the dimensions of utility and aesthetics. To date, an attempt to utilize Boyd's conceptual model in assessing how individuals value clothing has not been made. Clothing researchers have analyzed clothing predominantly on one or the other of Boyd's dimensions but not on both simultaneously. Delong (1968, p. 788) for example, has dealt specifically with the aesthetic dimension of clothing. She had devised a system of aesthetic perception based on one's ability to see clothing as uniform/multi-forms and determinate/indeterminate surface levels. Delong's (1977, p. 216) later work involved analysis of clothing from a morphologic (perception of forms) or

axiologic (perception of meanings) orientation. On the other hand, much research has currently been done in terms of meeting the functional/utilitarian requirements that particular individuals place on their clothing. Most of this research has been directed towards meeting the specific needs of the handicapped and elderly. No less than fifty-four articles dealing with clothing for the handicapped and elderly have appeared in periodicals from 1975 to 1980.

Because Boyd's model was developed following Lewis' concept of value as a multidimensional phenomena, its usefulness in the analysis of clothing seems particularly appropriate. Since clothing is inherently a combination of aesthetic and utilitarian concerns, the utilization of Boyd's model would take into account the multidimensional nature of valuing and at the same time allow for comparisons between aesthetic and utilitarian qualities in clothing.

CHAPTER III

STATEMENT OF THE PROBLEM

The main purpose of this study was to assess the values that individuals place on the aesthetic and utilitarian qualities in clothing as demonstrated by the dollar amount they were willing to pay for an item. Clothing items were categorized on the basis of Boyd's model, which allowed for comparisons between utilitarian and aesthetic qualities. A further purpose of this study was to test the application and appropriateness of Boyd's Model of Object Value for use in clothing value research. Lastly, the influence of particular demographic variables such as age, income level and occupation were tested for their influence upon choices of aesthetic and utilitarian qualities in clothing. The following definitions, hypotheses and assumptions were used to guide the research study.

Definition of Terms

Clothing Item is one of the particular clothing articles within a clothing category with a position of either quadrant 1 (low aesthetic, low utility value), quadrant 2 (low aesthetic, high utility value), quadrant 3

(high aesthetic, low utility value) or quadrant 4 (high aesthetic, high utility value) in the clothing value model.

Clothing Category is one of the five groupings of clothing such as gloves, hats, shoes, sweaters and aprons. Within each clothing category there are four clothing items each representing one quadrant in the clothing value model.

Clothing Value Model is the model representing clothing on the two dimensions of aesthetic and utility value.

Aesthetic is defined in accordance with Lewis' theory (1962, p. 434) as inherent value or a satisfaction in experience immediately felt. Specifically, the aesthetic value of each clothing item is defined as the degree of pleasure derived from looking at the clothing item upon presentation.

Utility is defined congruently with Lewis' (1962, p. 435) instrumental value as useful for the production of other good things but not gratifying in themselves. Specifically, utility for the glove, hat and sweater categories is defined as "useful for keeping warm." The definition of utility for the shoe category is "useful for walking." Lastly, apron utility is defined as "useful for protection while cooking."

Value is defined according to Kluckhohn (1951, p. 395) as "a concept of the desirable which influences the selection from available modes, means and ends of action."

Clothing Value Model Position is the quadrant in which a clothing item is placed. The four clothing value model positions are 1 (low aesthetic, low utility value), 2 (low aesthetic, high utility value), 3 (high aesthetic, low utility value) and 4 (high aesthetic, high utility value). The position of the clothing item into one of the four quadrants is represented by hat 1, hat 2 ... hat 4, etc.

Dollar Amount Consumer is Willing to Spend is the dollar amount consumers communicate they are willing to pay for one of the clothing items in each of the clothing categories.

Hypotheses

It was generally hypothesized by the researcher that a clothing item's position in the clothing value model would influence a consumer's willingness to spend money for that clothing item. It was further hypothesized that a clothing item's aesthetic qualities would be more influential in determining how much consumers would be willing to spend for a clothing item than the utilitarian quality of that item.

The following specific hypotheses were proposed for this study:

- H₁: There will be a significant difference between the dollar amounts consumers are willing to spend for gloves 1, 2, 3 and 4. The dollar amounts for the low aesthetic gloves will be less than the

- dollar amounts for the high aesthetic gloves.
- H₂: There will be a significant difference between the dollar amounts consumers are willing to spend for shoes 1, 2, 3 and 4. The dollar amounts for the low aesthetic shoes will be less than the dollar amounts for the high aesthetic shoes.
- H₃: There will be a significant difference between the dollar amounts consumers are willing to spend for aprons 1, 2, 3 and 4. The dollar amounts for the low aesthetic aprons will be less than the dollar amounts for the high aesthetic aprons.
- H₄: There will be a significant difference between the dollar amounts consumers are willing to spend for sweaters 1, 2, 3 and 4. The dollar amounts for the low aesthetic sweaters will be less than the dollar amounts for the high aesthetic sweaters.
- H₅: There will be a significant difference between the dollar amounts consumers are willing to spend for hats 1, 2, 3 and 4. The dollar amounts for the low aesthetic hats will be less than the dollar amounts for the high aesthetic hats.
- H₆: The demographic variables of education, occupation, marital status, age, number of children, income and race will not be significantly related to the dollar amounts consumers are willing to spend for clothing items.

Assumptions

1. Valuing behavior is not random. Although values are concepts, they nevertheless order the behavior of individuals. It is believed by the researcher that values are structured concepts and this structure can be

investigated in an empirical fashion.

2. The dollar amount the consumer is willing to spend on the clothing item is an indicator of the degree to which the consumer values the clothing item. The value of material objects is often determined by one's willingness to pay more or less for an object. An object's dollar value to an individual is not the only assessment of value, but it is one that is used frequently and extensively in everyday life.

3. The stated dollar amount consumers say they are willing to spend for a clothing item is a true statement of their willingness to spend that amount for the clothing item. Although the researcher realizes that what individuals verbalize may not be a completely accurate reflection of their values, there was no reason to suspect that subjects would intentionally falsify statements concerning their willingness to spend an amount for a clothing item.

CHAPTER IV

PROCEDURE

The procedural framework for this study is presented under the following headings: (1) Selection of the Sample, (2) Selection of Measures, (3) Collection of Data and (4) Method of Analysis.

Selection of the Sample

The sample selected for the research project consisted of 102 female shoppers at a large regional shopping center in the city of Champaign, Illinois. This particular shopping center was chosen because it was the major shopping area within the city and surrounding areas. The researcher chose a central mall location and attempted to begin an interview with the next approaching person as soon as one interview was completed. This was done so as to reduce biased selections for interviews. Relatively few shoppers refused when asked to be interviewed. Interviews were conducted on a Friday evening from 6:00 p.m. to 9:00 p.m. and all day Saturday from 10:00 a.m. to 9:00 p.m. A sample of 100 subjects was considered large enough for the testing of statistical significance.

Selection of Measures

Three main variables were developed for use in the research project. They consisted of aesthetic value, utility value and dollar amount consumer was willing to spend for each of the clothing items. A fourth variable, clothing value model position, was developed by combining the measures of aesthetic value and utility value.

Aesthetic Value

The researcher initially purchased four clothing items within each of the five clothing categories for a total of 20 clothing items. These items were selected for purchase based on characteristics which seemed to indicate a "fit" into one of the four quadrants of Boyd's Model of Object Value. For example, one hat was selected because of its low aesthetic, low utility (in this case warmth) qualities. The second hat was selected for its low aesthetic, high utility qualities. The third hat was selected for its high aesthetic, low utility qualities and the fourth hat for its high aesthetic, high utility qualities. Each of the other clothing items was chosen in a similar manner.

The researcher visited stores and initially relied upon her own experience to judge the aesthetic quality of the clothing items. Lewis' (1962) definition of aesthetic value as satisfaction in experience immediately felt, guided the researcher. This was seen as a "weeding out" process. The items could later go through several stages

of evaluation in terms of their aesthetic quality.

The intent was to select items initially that were either of high or low aesthetic quality. It was hoped by the researcher that this process of selection and evaluation might shed light on why items were considered of high or low aesthetic quality. For example, the researcher did not go into the marketplace looking for clothing items made up of any particular design arrangement. She simply looked at clothing item after clothing item until an item presented itself where a high degree of satisfaction or dissatisfaction was felt from viewing the item. However, later after the clothing items had been evaluated several times, the researcher could begin to explain why items were classified as either of low or high aesthetic quality.

For example, sweater 2 (Appendix B, Photograph 14) experientially was visually dissatisfying to the researcher. In attempting to analyze why this was so, the researcher felt that it was due to its "overdoneness." As mentioned in Chapter II, a violation of Aristotle's organic unity had taken place. There were too many unnecessary "parts." The line and textural differences brought confusion into the garment. Instead of ordered interest, we had disordered confusion. The unity of the garment had been sacrificed at the expense of variety.

In contrast, sweater 3 (Appendix B, Photograph 15) was well controlled. It appeared to have had neither unnecessary parts nor lacking in needed parts. According

to Parker (1946) it provided "unity in variety" for the beholder. It was not so plain as to be boring nor overdone so as to be confusing. The line variety had been controlled and unified. It came close to striking a "golden mean."

It should be pointed out that the researcher recognizes that such descriptions lack specificity. However, given the fact that few researchers are investigating the aesthetic dimension of clothing, the best case must be made of a less than perfect situation. In many respects this study was exploratory in nature.

In addition, the researcher did not consider only the level of aesthetic quality when selecting items for the study but utility as well. Because Boyd's Model of Object Value is a multidimensional model, items were chosen on the basis of both their aesthetic and utility characteristics (definitions of utility will be discussed in the next section). Also, effort was made to control as much as possible the color, price and basic style within a clothing category. The author recognizes that "color" is an aesthetic concern but color preference can bias a judgment of other design qualities. It was therefore decided to choose only those items that were of neutral colors.

As mentioned in the previous section, the aesthetic concept is not synonymous with the concept of "fashion." A new style may be of poor design quality. Likewise, an older style may be of high design quality. The researcher

therefore attempted to obtain clothing items that were fairly similar in style and currently in fashion. By no means were clothing items selected within a category that were "perfectly" equal in terms of fashion and style. Shoe 2 (Appendix B, Photograph 6) for example, was probably less fashionable than the other three shoes. In future studies of this nature, fashionableness should be controlled in a more precise manner. This would further ensure that the aesthetic concept would not be confused with the concept of "fashionableness."

The decision to use actual items of clothing rather than pictures of items made the process more tedious and expensive, but was considered important to obtaining the best possible results. In comparing the photographs provided in Appendix B with the actual clothing items, several observations can be made. The photographs tend to "neutralize" the overall effect of the clothing item for the viewer. The experience of satisfaction or dissatisfaction is dulled when presented with the photographs rather than the actual items. Photographs of the high aesthetic items seem to produce less satisfaction and the low aesthetic items produce less dissatisfaction than the actual items. Of course, these are only observations. An empirical study should be conducted to confirm these observations.

After twenty items of actual clothing were selected, they were individually presented to 50 retail and marketing

students who rated the aesthetic quality of each clothing item. The students were asked to rate the items on a scale from one to ten according to "how pleasing to look at" each item appeared (Questionnaire 1, Appendix A). Those items receiving a mean score between 1 and 4.9 were placed into the low aesthetic category. Those items receiving a mean score of 6 to 10 were placed into the high aesthetic category. Items receiving a mean score between 5 and 5.9 were eliminated on the basis of being non-discriminating on the aesthetic dimension.

Items that were eliminated were replaced by purchasing additional items and then re-tested by another group of 50 retail and marketing students (Questionnaire 2, Appendix A). A total of 34 items were individually and randomly tested on the re-test so that the new items were interspersed among the old items for a total testing of 34 items. Again, items were rated on a scale from one to ten and categorized in the same way as they were on the first testing.

All 34 items were then rated by nine experts (with design training) using the same procedure that was employed with the retail and marketing students (Questionnaire 2, Appendix A). One of the experts was asked to rate the items one month later to determine the degree of consistency over time of the ratings. The reliability coefficient, alpha, was used to determine the degree of agreement among the nine experts. A high degree of agreement

was represented by the alpha coefficient of .85. The consistency of the one expert's ratings over time was very high, with an alpha coefficient of .97. The experts' ratings of aesthetic quality were then used as a basis for placing items into high or low aesthetic value categories. The experts' ratings rather than the retail students' ratings were chosen as a basis for placement into categories because reliability was higher among the experts.

Utility Value

The utility value was determined in a manner similar to that used for the aesthetic value. However, where only one definition of aesthetic value was used ("how pleasing to look at"), three separate definitions of utility were used depending on the clothing item rated. Raters were asked to rate on a scale from one to ten each of the gloves, hats and sweaters according to "how useful for keeping warm" the item appeared to them. Shoes were rated on the basis of "how useful for walking" and aprons according to "how useful for protection while cooking" (Questionnaires 3 and 4, Appendix A). The reliability coefficient, alpha, used to determine reliability among the nine experts on utility value, was an exceptionally high .97. As might be expected, there was a higher degree of consistency among the experts when rating utility than aesthetics. Utility value based on concepts such as "warmth" and "protection" seem to be more tangible constructs than the aesthetic construct of "how pleasing to

look at" an item appears to the individual. This is not to say that the aesthetic construct does not exist, it simply implies its more "buried" nature for researchers. The consistency of utility ratings across time for the one expert was represented by an alpha coefficient of .96, which would imply that the utility ratings were quite stable over the given time period (one month). The experts' ratings of utility quality were then used to place items into high or low utility categories.

Three distinct definitions of utility were utilized to broaden the scope of the study. Although the concept of "aesthetic" appears to be a more complex concept than "utility," utility can be defined in several specific ways. In this study utility was defined for the hats, gloves and sweaters as "useful for keeping warm." The aprons' utility was defined as "useful for protection while cooking" and the shoes' "useful for walking." The researcher felt that it would be best to include several definitions of utility in the study, since the broader concept of "utility" was of more interest than any one specific definition of utility such as "warmth" or "protection while cooking."

Clothing Value Model Position

The combined experts' ratings on aesthetics and utility were used to place each of the clothing items into one of the four quadrants in the clothing value model. Positions for each item in each clothing category were

thus determined. For example, if a clothing item was high on aesthetics (mean score between 6 and 10) but neutral on utility (mean score between 5 and 5.9) it could not be used in the research project and was eliminated. Twenty items of actual clothing representing five clothing categories (gloves, hats, shoes, sweaters and aprons) and four positions within each category were finally developed and are pictured in Appendix A. Table 1 gives the experts' mean aesthetic and utilitarian ratings for each of the clothing items. Placement of the clothing items into the clothing value model are represented in Figures 3, 4, 5, 6 and 7.

By looking at Figures 3, 4, 5, 6 and 7 one can see that clothing items within a category were not perfectly fitted to the model. For example, the ideal situation would be to have clothing items that fit into the model so that a perfect square is formed. The low aesthetic, low utility glove would have a rating of 1 on aesthetics and 1 on utility. The low aesthetic, high utility glove would have a rating of 1 on aesthetics and 9 on utility. The high aesthetic, low utility glove would score 9 on aesthetics and 1 on utility. Lastly, the high aesthetic, high utility glove would score a 9 on aesthetics and a 9 on utility. Because of the exploratory nature of this study less than the ideal was accepted as permissible. However, it is recognized that items conforming more closely to the ideal should be selected before attempting

Table 1. Mean aesthetic and utilitarian ratings for twenty clothing items by nine design experts.

Clothing Item	Aesthetic Rating	Utilitarian Rating
Glove 1 (LA,LU) ¹	4.1	3.3
Glove 2 (LA,HU)	4.7	8.9
Glove 3 (HA,LU)	6	1
Glove 4 (HA,HU)	7.6	9.4
Shoe 1 (LA,LU)	1.9	2
Shoe 2 (LA,HU)	4.1	8
Shoe 3 (HA,LU)	7.1	3.4
Shoe 4 (HA,HU)	6.8	7.7
Apron 1 (LA,LU)	2.2	1.1
Apron 2 (LA,HU)	4	6.1
Apron 3 (HA,LU)	6	2.1
Apron 4 (HA,HU)	6.1	6.3
Sweater 1 (LA,LU)	3.9	1.9
Sweater 2 (LA,HU)	3.3	8.7
Sweater 3 (HA,LU)	8	4.3
Sweater 4 (HA,HU)	7.6	7.8
Hat 1 (LA,LU)	2.3	1.4
Hat 2 (LA,HU)	2.6	6
Hat 3 (HA,LU)	7.4	4.8
Hat 4 (HA,HU)	7	6.5

¹ LA,LU = low aesthetic, low utility item
 LA,HU = low aesthetic, high utility item
 HA,LU = high aesthetic, low utility item
 HA,HU = high aesthetic, high utility item

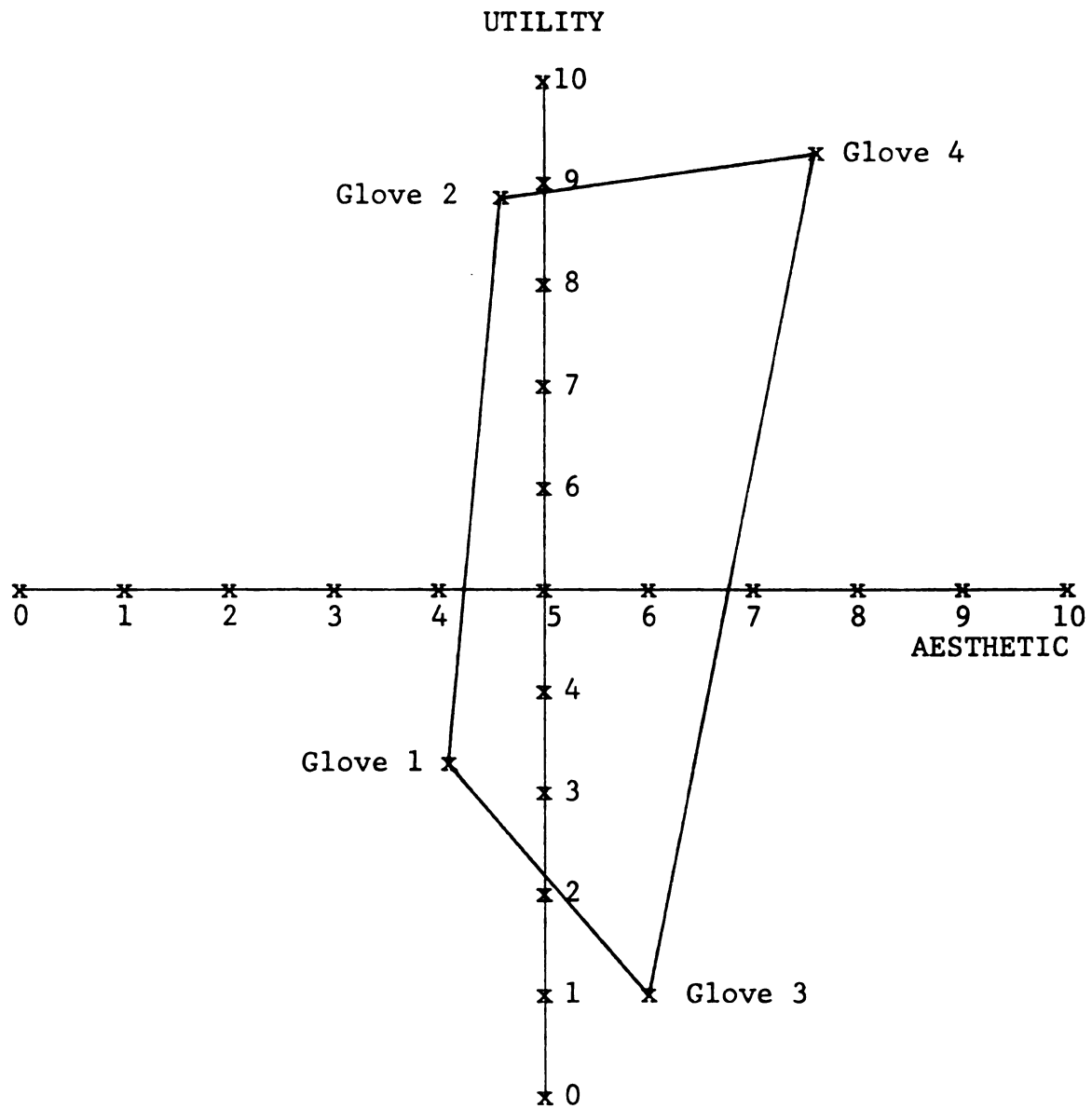


Figure 3. Placement of clothing category gloves into the clothing value model.

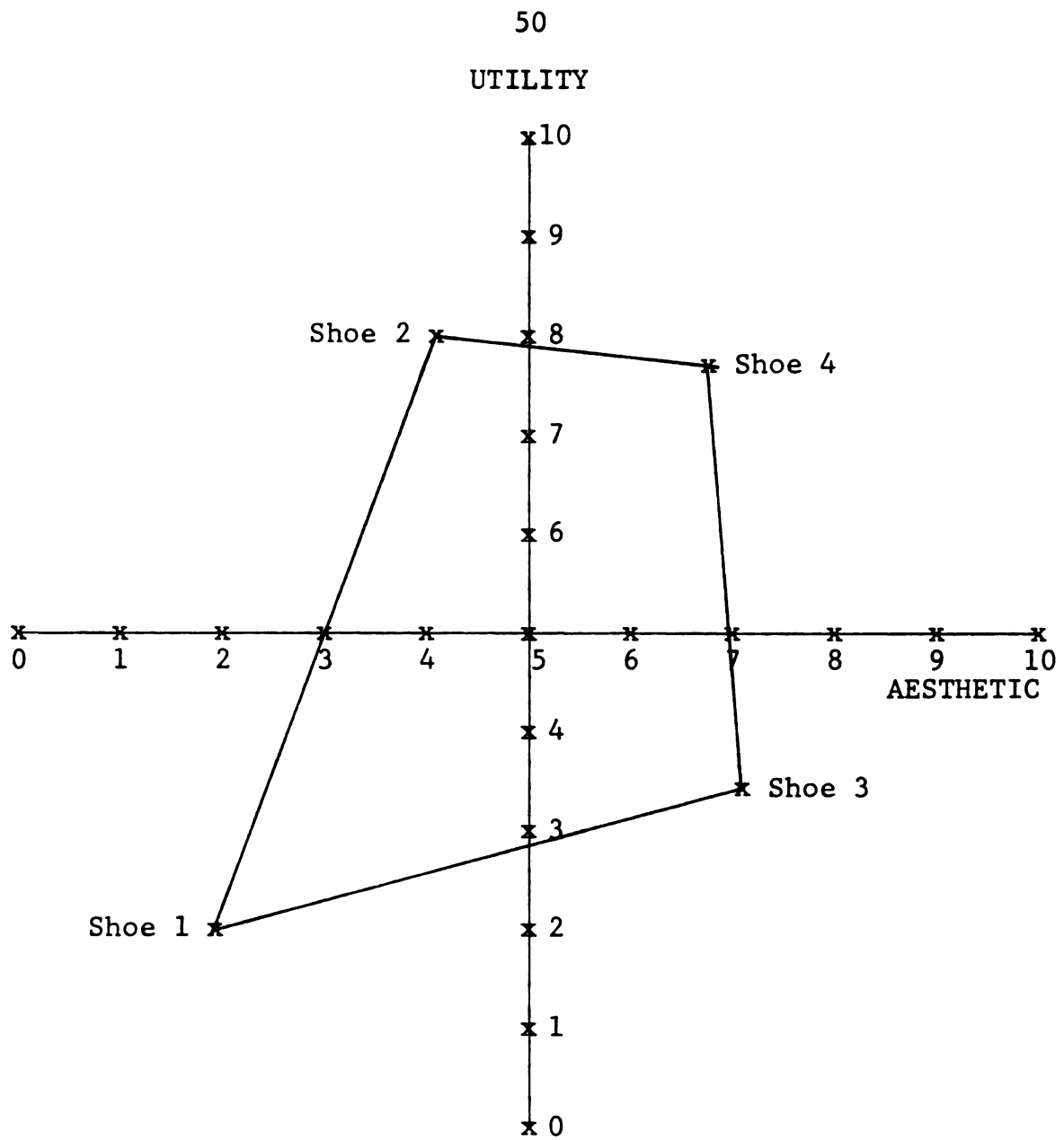


Figure 4. Placement of clothing category shoes into the clothing value model.

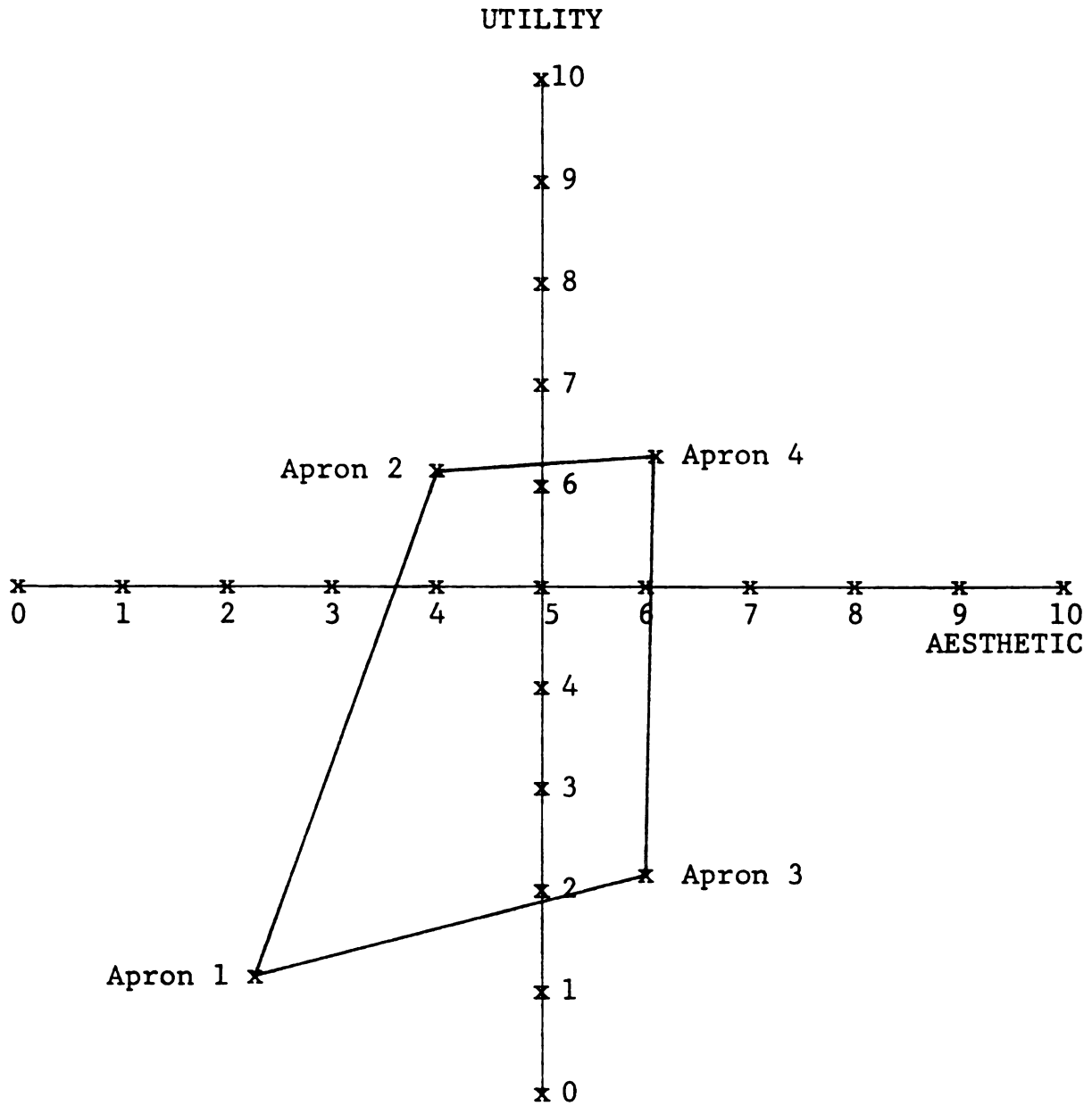


Figure 5. Placement of clothing category aprons into the clothing value model.

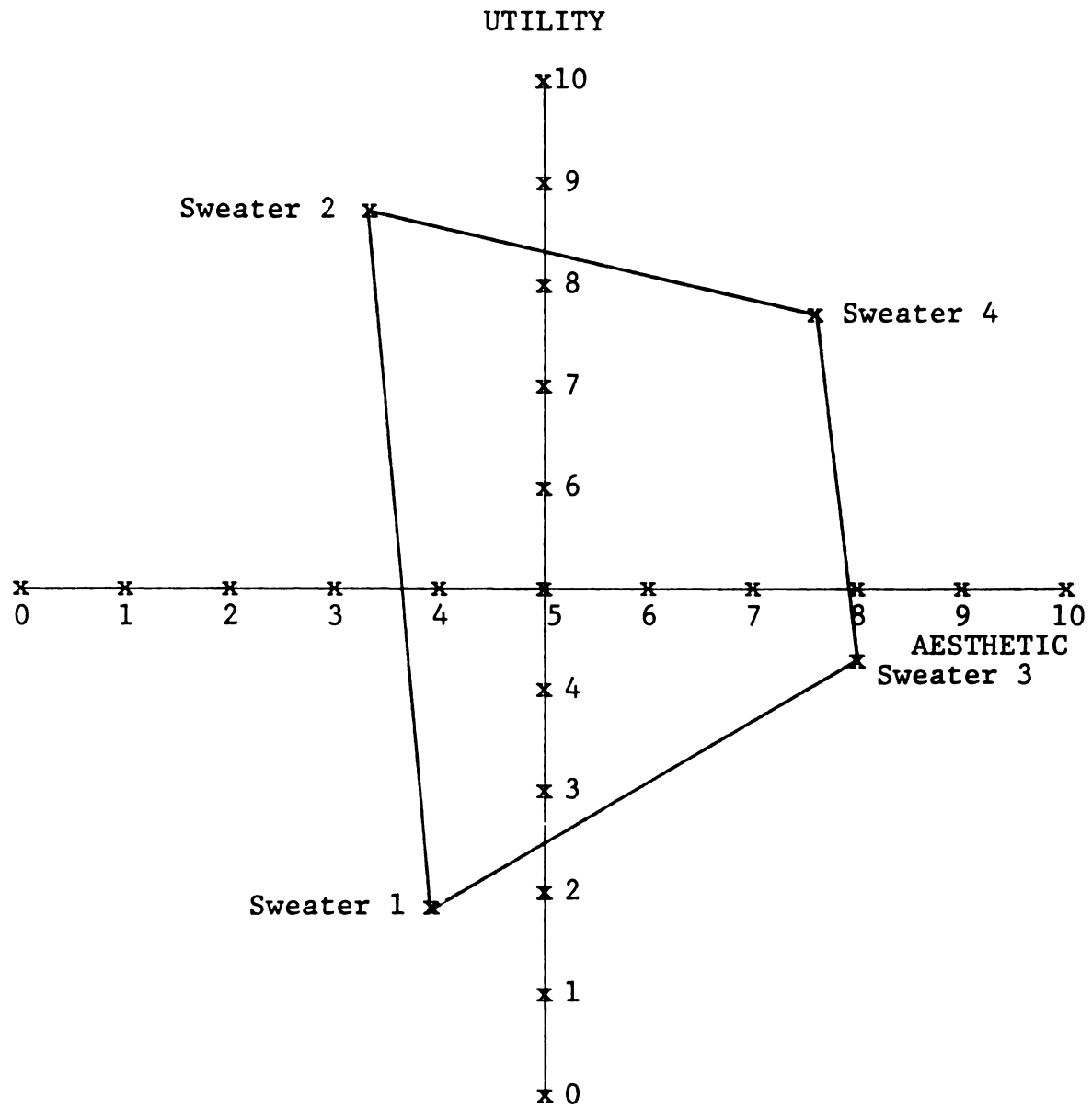


Figure 6. Placement of clothing category sweaters into the clothing value model.

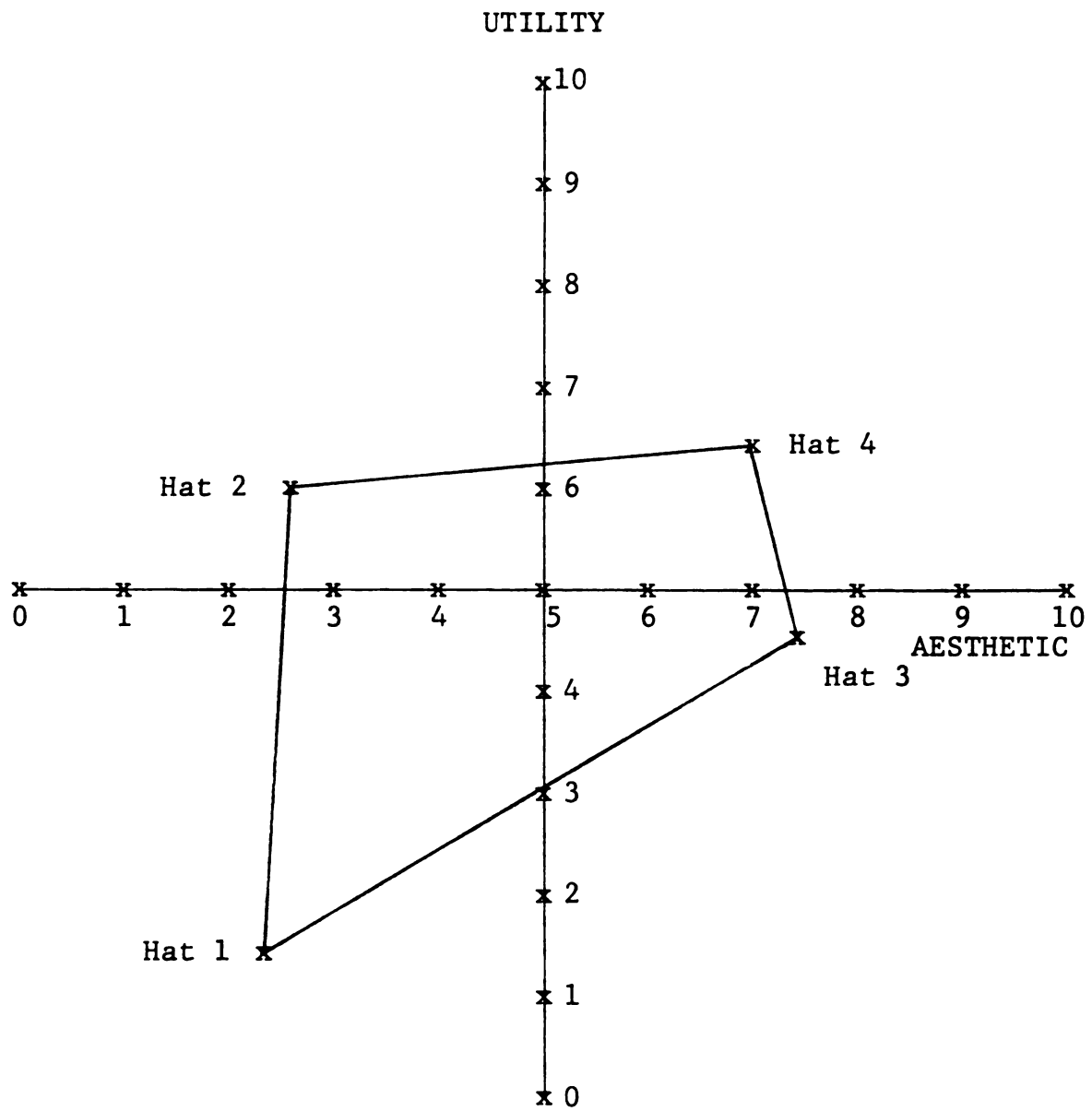


Figure 7. Placement of clothing category hats into the clothing value model.

additional investigations in the future.

Dollar Amount Consumer Was Willing to Spend
for Each Clothing Item

The problems associated with quantifying values have continuously plagued value theorists. Many simply say that values are qualitative rather than quantitative in nature and therefore should not be measured and studied in a mathematical manner. But what does such an attitude do for the furtherance of our understanding of values? Five centuries before the Christian era Pythagoras declared that "all is number," that is, that all phenomena can be rationally understood by expressing their differences numerically. He had observed that vibrating strings whose lengths bore simple fractional relations to one another would make pleasant harmonies, but when the lengths bore no such numerical relations the resulting sounds were discordant (Wheelwright, 1935, pp. 77-78).

Before the chemist Mendelyeyev had discovered the Periodic Law it was firmly believed that the chemical elements were irreducibly qualitative. Yet in combining the elements with one another the methods of quantitative analysis in chemistry were discovered. Hence, a staunch belief in qualitative differences is frequently held until a means of measuring quantitative differences is found.

It is the belief of the present investigator that quantification of values would yield a more specific understanding of values. For this reason in the present

study an attempt was made to measure values on an interval scale (units of measurement) rather than an ordinal scale (ordering). Measuring values based on dollar amounts permitted analyses not only of those clothing items which were most valued by the consumers, but also of how much more they were valued by the consumers. Admittedly, dollar amounts may be a crude measure of values. Nonetheless, it is an interval measure and for this reason was chosen as the means of measuring values. In addition, the assessment of value based on monetary considerations is something that most people are familiar with on a daily basis. As we go to the grocery store or the department store or the hardware store, we are confronted with "value" decisions. Is the orange that costs 30¢, worth 30¢? Is the dress that costs \$50, worth \$50? The utilization of dollar amounts as a means of assessing value is a familiar measurement tool for the consumer.

Lastly, some may argue that five dollars is valued differently by different people. This is a just criticism but one that can be dealt with by utilizing a large sample for investigation. In the present study, where over 100 subjects were questioned, it can be assumed that just as many people "over valued" five dollars as did "under value" five dollars. With a sample of 100 or more, a normal bell shaped curve can be assumed. Therefore, the effect of such differences is neutralized.

The dependent variable, dollar amount consumer was

willing to spend for the clothing item, was determined by asking the 102 interviewed consumers how much they would be willing to pay for each of the clothing items (Questionnaire 5, Appendix A). It was stressed that the interviewer was not asking what they thought the price of the glove was in a retail store, but rather what they personally would be willing to pay for that particular glove, shoe, apron, sweater or hat.

Collection of Data

Each of the clothing items was assembled on a large board to ensure that each subject viewed each clothing item in the same manner. The ordered position of the clothing item within the clothing category was randomized and labeled as "A," "B," "C" or "D." The interviewer showed the four gloves to the interviewee and asked what each was willing to pay for "A," then "B," etc. The interviewer presented the interviewee with the four sweaters and continued the above process until all 20 items were viewed by the subject. Demographic variables such as educational level, occupation, marital status, age, number of children, income and race were then collected (Questionnaire 5, Appendix A). Information about income was not collected for 16 of the subjects. Twelve of these subjects did not know their income and four subjects refused to answer this question.

The survey and procedure were pre-tested three weeks

prior to the time of data collection. Small adjustments were made in the format of the survey as a result of pre-testing.

The researcher waited until the weather became cooler (October) to conduct the survey since it was felt that the consumers' responses to "warm" clothing during warm weather would interfere with the schematic framework of the study. The interviewer approached each person by introducing herself and explaining that she was doing a short consumer survey and asked if the person would have a few minutes to answer some questions about clothing items. The visual appeal of having the actual clothing items present rather than pictures seemed to increase the subjects' interest and willingness to participate in the survey. As mentioned previously, very few shoppers refused to be interviewed.

Method of Analysis

The data obtained from the survey were encoded to numerical codes and recorded on computer coding forms. Computer files were then created and stored. The computer programs used in data analysis were those available through the Statistical Package for the Social Sciences (Nie et al., 1975).

Since the basic research question of this study was, "What is the difference between the dollar amounts the consumer is willing to pay for a low aesthetic, low

utility clothing item compared to a low aesthetic, high utility item; a high aesthetic, low utility item and a high aesthetic, high utility item?," analysis of variance was chosen as the appropriate statistical treatment. If one is comparing differences between two groups, a t test or z test of mean differences is usually computed. However, when more than two groups are being compared (as is the case in this research project) t tests or z tests become cumbersome and increase the chance of making a Type I error (accepting the hypothesis when in reality it is false) as the number of tests increase.

Three major assumptions underlie the analysis of variance test. They are 1) independence of the observations between and within groups, 2) normality and 3) equality of variance. The analysis of variance test demonstrates robustness (the insensitivity of a statistical test to violation of its assumptions) in relationship to the assumption of normality when the sample size is large. The test is also robust in regards to its assumption of equality of variances when the sample sizes of each group to be tested are equal. In this study, assumptions two and three could easily be met because the sample size was sufficiently large (102 subjects) and each group to be compared was of an equal sample size with each of the other groups (102). However, because the same subjects were asked to respond to each of the clothing items the assumption of independence could not be

immediately assumed.

In order to meet the assumption of independence the dollar amounts were inspected to determine if the dollar amounts were additive (subject paid \$1 for glove 1, \$2 for glove 2, \$3 for glove 3 and \$4 for glove 4) or multiplicative (subject paid \$1 for glove 1, \$2 for glove 2, \$4 for glove 3 and \$8 for glove 4). A scatterplot of the residuals (measures of the error component or differences between individuals) against the mean dollar amounts for each clothing category was computed. The overall patterns of the five scatterplots (one for each clothing category, gloves, hats, shoes, sweaters and aprons) revealed a basically straight band pattern indicating that the dollar amounts were additive and not multiplicative in nature. The dollar amounts were then corrected for lack of independence by subtracting the dollar amount of the low aesthetic, low utility item from the dollar amounts of the other three clothing items for each subject. The result was that a constant (the dollar amount of the low aesthetic, low utility item) was removed from each amount of the other items. Hence, the "additive" effect was corrected and the assumption of independence within groups as well as between groups could then be met.

In analysis of variance, the hypothesis of differences between groups is tested by seeing if the ratio of the variability between groups (mean square between groups)

to the variability within groups (mean square within groups) follows an F distribution with $J-1$ (J = number of groups) and $N-J$ (N = sample size) degrees of freedom. The decision rule is to accept the hypothesis of differences between groups for large values of F . Specifically the hypothesis of differences should be accepted when F (which equals the mean squares between groups divided by mean squares within groups) is larger than F at $J-1$ and $N-J$ degrees of freedom at a given level of significance ($1 - \alpha$).

A disadvantage in using the F-test in analysis of variance when more than two groups are being compared is that only general conclusions can be drawn from the acceptance of the hypothesis. We can conclude that all group means are not identical, but we cannot determine the location or the magnitude of the differences on the basis of the F-test alone. Therefore, an interval estimation technique such as the Tukey Post Hoc Comparison must be used to determine the magnitude of group differences. In this study the precise location and magnitude of differences in dollar amounts paid for each item within a clothing category was of particular importance, for only then was the researcher able to determine how important the aesthetic component was in relationship to the utilitarian component.

The Tukey technique constructs interval estimates about the computed contrast of interest (for example hat

1 with hat 2). If this interval includes zero, then the hypothesis of differences between the two groups must be rejected and the contrast is not statistically significant. On the other hand, if the value of zero is excluded from the confidence interval, then that is equivalent to accepting the hypothesis that there is a difference between the groups and declaring that the contrast (in this case the difference in dollar amounts between hat 1 and hat 2) is statistically significant. The range of the interval can then be used to determine how different from each other each group is from every other group. The Tukey technique is most appropriate over other post hoc comparison procedures when the groups are of equal sample size, and was for this reason chosen as the appropriate post hoc procedure for the investigation.

As mentioned earlier, if multiple t-tests had been chosen as the statistical treatment for this study instead of analysis of variance with the Tukey post hoc procedure, the alpha level would have been inflated over the whole study. Therefore, the chances of accepting the hypothesis when in reality it is false would be increased. The Tukey technique gains control over the size of the alpha level, thus reducing the chances of accepting a false hypothesis.

CHAPTER V

RESULTS AND DISCUSSION

The discussion of the results will include a description of the subjects, differences between dollar amounts consumers were willing to spend for each clothing item as well as relationships between dollar amounts and demographic variables of subjects.

Description of Subjects

The educational levels of the subjects averaged 13.21 years with a fairly wide range of seven to 24 years (Table 2). Eighty-eight percent of the subjects had completed high school and 18% had completed four or more years of college (Table 3). The subjects' mean age was 32 years with a range of 13 to 69 years old (Table 2). The age distribution was fairly evenly distributed with peaks occurring between 19 and 24 years (21.6%), 25 and 30 years (29.4%) and 43 and 48 years (13.7%) (Table 4).

Since a substantial portion of the subjects were not married (29.4%), a fair number of subjects (38.2%) did not have children (Table 5). The range for the number of children was between 0 and 5 (Table 2) with most of the concentration between one and three children. A fairly

Table 2. Range, mean, mode, median and standard deviation for educational level, age, number of children and household income level of subjects.

	Range	Mean	Mode	Median	Standard Deviation
Education	7-24	13.21	12	12.41	2.62
Age	13-69	32.35	29	29.13	12.34
Children	0-5	1.42	0	1.05	1.51
Income	\$8,000-\$80,000	\$27,686	\$30,000	\$25,250	\$13,680

N = 102 for education, age and children categories.
N = 86 for income category.

Table 3. Distribution of subjects by educational level.

Educational Level	No.	%
7	1	1.0
8	3	3.0
9	2	2.0
10	1	1.0
11	5	5.0
12	43	42.2
13	12	11.8
14	9	8.8
15	8	7.8
16	9	8.8
17	1	1.0
18	5	5.0
20	2	2.0
24	1	1.0
Totals	102	100.4

Table 4. Distribution of subjects by age.

Age	No.	%
13-18	8	7.8
19-24	22	21.6
25-30	30	29.4
31-36	9	8.8
37-42	6	5.9
43-48	14	13.7
49-54	6	5.9
55-60	5	4.9
61-66	1	1.0
67-69	1	1.0
Totals	102	100.0

Table 5. Distribution of subjects by number of children.

Number of Children	No.	%
0	39	38.2
1	22	21.6
2	16	15.7
3	15	14.7
4	4	3.9
5	6	5.9
Totals	102	100.0

wide range of incomes was reported with a mean income of \$27,686 per household (Table 2). The distribution of the subjects' household income in \$5,000 increments is shown in Table 6.

Over 60% of the subjects were employed outside the home, 16.7% were students and 21.5% were homemakers. "White collar" employment included managers, secretaries, teachers, nurses, administrators, etc. Most of the blue collar workers were employed as laborers at a large food processing and manufacturing plant (Table 7). Most of the subjects were married (66.7%) while 29.4% were single (Table 8). White subjects were 78.4% of the total and black subjects, 19.6% (Table 9).

Based on the review of literature, the concern with aesthetics in clothing appears to transcend differences based on age, income level, educational background, marital status, occupation and race. Because the subjects of the present study represented a range of ages, income levels, educational backgrounds, marital statuses, occupations and races, the influence of these demographic variables could be tested.

Although the sample selected for this investigation was not a random sample of all consumers within the United States, the sample reflected the characteristics of the United States' population. Based on information from the 1980 census and reported in Sales and Marketing Management, the median age of the U.S. population was 30 years. The

Table 6. Distribution of subjects by income level.

Income Level	No.	%
\$ 8,000-12,999	11	12.8
13,000-17,999	12	14.0
18,000-22,999	12	12.8
23,000-27,999	10	11.6
28,000-32,999	13	15.1
33,000-37,999	9	10.5
38,000-42,999	9	10.5
43,000-47,999	5	5.8
48,000-52,999	2	2.3
53,000-57,999	1	1.2
58,000-62,999	0	0.0
63,000-67,999	0	0.0
68,000-72,999	1	1.2
73,000-77,999	0	0.0
78,000-80,000	1	1.2
Totals	86	99.0

Table 7. Distribution of subjects by occupation.

Occupation	No.	%
Homemaker	22	21.5
Student	17	16.7
Blue Collar	14	13.7
White Collar	48	47.1
Unemployed	1	1.0
Totals	102	100.0

Table 8. Distribution of subjects by marital status.

Marital Status	No.	%
Single	30	29.4
Married	68	66.7
Divorced	4	3.9
Totals	102	100.0

Table 9. Distribution of subjects by race.

Race	No.	%
White	80	78.4
Black	20	19.6
Other	2	2.0
Totals	102	100.0

median age of subjects in this study was 29.13 years. Median household income for the subjects was \$25,250 while the U.S. population had a median household income of \$21,382. The subjects in the present study were somewhat better educated than the U.S. population with 88.4% of the subjects having finished high school (compared to 68.7% for the U.S. as a whole) and 17.8% having finished college (compared to 13.6% for the U.S. population). The subjects were represented by a somewhat higher percentage of blacks (19.6%) than is found in the U.S. population (12%).

Analysis of Differences Between Dollar Amounts for Gloves

As explained in the previous chapter, two statistical tests (analysis of variance and the Tukey post hoc comparisons) were performed on each clothing category to analyze differences between dollar amounts of the clothing items. It was hypothesized that there would be a significant difference between the amount of money subjects were willing to spend for glove 1 (low aesthetic, low utility), glove 2 (low aesthetic, high utility), glove 3 (high aesthetic, low utility) and glove 4 (high aesthetic, high utility). It was further hypothesized that the order of the differences in dollar amounts would favor the aesthetic dimension (gloves 1 and 2 receiving lower dollar amounts than gloves 3 and 4).

In Table 10 the mean dollar amount differences and

Table 10. Mean dollar amounts and dollar amount rankings for clothing category gloves by clothing value model position.

Clothing Model Position	Mean Dollar Amounts	Rank According to Mean Dollar Amount
Glove 1 (LA,LU) ¹	\$8.99	2nd
Glove 2 (LA,HU)	8.40	3rd
Glove 3 (HA,LU)	4.26	4th (lowest)
Glove 4 (HA,HU)	9.39	1st (highest)

¹ LA,LU = low aesthetic, low utility item
 LA,HU = low aesthetic, high utility item
 HA,LU = high aesthetic, low utility item
 HA,HU = high aesthetic, high utility item

N = 102.

the rank of mean dollar amount is listed from high to low. To test if the differences in these dollar amounts were significant, the analysis of variance and Tukey tests were performed (after adjustments were made to ensure independence). To determine if there were any significant differences within the clothing category of gloves as a whole, the analysis of variance test was calculated first. The analysis of variance for the clothing category of gloves, revealed that there were significant differences within the category at the .001 level (Table 11). To determine specifically where these differences occurred, the Tukey test was then performed by comparing each glove with every other glove. In order for one glove to be significantly different from another, the difference

Table 11. Analysis of variance for clothing category gloves.

Source of Variation	DF	Sum of Squares	Mean Squares	F Ratio	Significance of F
Between Clothing Items	2	1510.3	755.2	26.1	.001
Within Clothing Items	303	8772.5	29.0		
Total	305	10282.8	33.7		

N = 102.

between the gloves' dollar amount ranges had to be 3.34 as determined by the Tukey test at the .05 significance level. As illustrated in Table 12, glove 3 (high aesthetic, low utility) was significantly different from gloves 1, 2 and 4 because the range of differences in the dollar amount means was greater than 3.34. Gloves 1, 2 and 4 did not significantly differ from each other at the .05 level of significance because their range of difference in dollar amount means was not greater than 3.34 (-0.59 to 0.00 for gloves 2 and 1; 0.00 to .40 for gloves 1 and 4; -0.59 to .40 for gloves 2 and 4).

Glove 3, classified as high on aesthetic quality but low on utility quality (useful for keeping warm), was a lightweight loosely crocheted type glove mostly appropriate for spring or summer wear (Photograph 3, Appendix B). Apparently the consumer considered this glove so poor in

Table 12. Tukey Post Hoc Comparisons¹ for clothing category gloves.

Clothing Model Position	Glove Dollar Amount Mean ²
Glove 3 (HA,LU) ³	-4.73

Glove 2 (LA,HU)	-0.59
Glove 1 (LA,LU)	0.00
Glove 4 (HA,HU)	.40

¹ Comparison range for the .05 level is 3.34.

² Adjusted for independence.

³ LA,LU = low aesthetic, low utility item
 LA,HU = low aesthetic, high utility item
 HA,LU = high aesthetic, low utility item
 HA,HU = high aesthetic, high utility item

N = 102.

utilitarian quality that its higher aesthetic quality could not outweigh its poor utilitarian qualities. Although glove 4 (high aesthetic, high utility) was the glove consumers were willing to pay the most for, glove 1 (low aesthetic, low utility) was the glove consumers were second most likely to choose. The tendency to pay more for glove 1 than glove 2 or 3 was perhaps due to the fact that the design of glove 1 was a knocked-down, cheaper version of the "ISOTONER" (name brand) glove which has been heavily promoted through television commercials and magazine ads. Apparently, the consumer was willing to pay for the poorer design because she felt she was buying a

fashionable, highly promoted glove. This example speaks well for the power of the media to influence consumer purchasing. Since consumers were willing to pay significantly more for gloves 2, 1 and 4 than glove 3, the hypothesis that consumers would be willing to pay more for aesthetic quality than utilitarian quality in gloves could not be accepted.

Analysis of Differences Between Dollar Amounts for Shoes

The mean dollar amounts and rankings for shoes is given in Table 13. The analysis of variance test for shoes (Table 14) revealed that there were significant differences between dollar amounts at the .001 level. The Tukey test pinpointed these differences which were between shoes 2 and 1, 2 and 4, 2 and 3, 1 and 3, and 4 and 3. The broken lines on Table 15 indicate where these differences occur. As can be seen in Table 15, the general order of the means follows a pattern of preference from low aesthetic, high utility to high aesthetic, low utility. In other words, the consumer would pay less money for low aesthetic, high utility shoes and more money for high aesthetic, low utility shoes. Apparently the consumer is willing to pay more for nonfunctional shoes (as evidenced by significant preference for shoe 2 over shoe 1 and preference for shoe 4 over shoe 3). This would suggest that the major value orientation from which the consumer

Table 13. Mean dollar amounts and dollar amount rankings for clothing category shoes by clothing value model position.

Clothing Model Position	Mean Dollar Amounts	Rank According to Mean Dollar Amount
Shoe 1 (LA,LU) ¹	\$12.51	3rd
Shoe 2 (LA,HU)	8.87	4th
Shoe 3 (HA,LU)	18.09	1st
Shoe 4 (HA,HU)	13.71	2nd

¹ LA,LU = low aesthetic, low utility item
 LA,HU = low aesthetic, high utility item
 HA,LU = high aesthetic, low utility item
 HA,HU = high aesthetic, high utility item

N = 102.

Table 14. Analysis of variance for clothing category shoes.

Source of Variation	DF	Sum of Squares	Mean Squares	F Ratio	Significance of F
Between Clothing Items	2	4335.2	2167.6	30.7	.001
Within Clothing Items	303	21385.1	70.6		
Total	305	25720.3			

N = 102.

Table 15. Tukey Post Hoc Comparisons¹ for clothing category shoes.

Clothing Model Position	Shoe Dollar Amount Mean ²
Shoe 2 (LA,HU) ³	-3.64

Shoe 1 (LA,LU)	0.00
Shoe 4 (HA,HU)	1.20

Shoe 3 (HA,LU)	5.58

¹ Comparison range for the .05 level is 3.34

² Adjusted for independence.

³ LA,LU = low aesthetic, low utility item
 LA,HU = low aesthetic, high utility item
 HA,LU = high aesthetic, low utility item
 HA,HU = high aesthetic, high utility item

N = 102.

operates when buying shoes is the aesthetic.

Analysis of Differences Between Dollar Amounts for Aprons

The ordering of dollar amount means and actual means for aprons is given in Table 16. The analysis of variance test indicated that there were significant differences between dollar amounts within the apron category beyond the .001 level of significance (Table 17). The Tukey comparisons (Table 18) revealed three subsets of aprons (as indicated by the broken lines) that were significantly

Table 16. Mean dollar amounts and dollar amount rankings for clothing category aprons by clothing value model position.

Clothing Model Position	Mean Dollar Amounts	Rank According to Mean Dollar Amount
Apron 1 (LA,LU) ¹	\$2.32	4th
Apron 2 (LA,HU)	4.41	3rd
Apron 3 (HA,LU)	6.81	1st
Apron 4 (HA,HU)	6.74	2nd

¹ LA,LU = low aesthetic, low utility item
 LA,HU = low aesthetic, high utility item
 HA,LU = high aesthetic, low utility item
 HA,HU = high aesthetic, high utility item

N = 102.

Table 17. Analysis of variance for clothing category aprons.

Source of Variation	DF	Sum of Squares	Mean Squares	F Ratio	Significance of F
Between Clothing Items	2	380.0	190.0	21.4	.001
Within Clothing Items	303	2689.6	8.9		
Total	305	3069.6			

N = 102.

Table 18. Tukey Post Hoc Comparisons¹ for clothing category aprons.

Clothing Model Position	Apron Dollar Amount Mean ²
Apron 1 (LA,LU) ³	0.0

Apron 2 (LA,HU)	2.1

Apron 4 (HA,HU)	4.4
Apron 3 (HA,LU)	4.5

¹ Comparison range for the .05 level is 2.10.

² Adjusted for independence.

³ LA,LU = low aesthetic, low utility item
 LA,HU = low aesthetic, high utility item
 HA,LU = high aesthetic, low utility item
 HA,HU = high aesthetic, high utility item

N = 102.

different from each other. Utilizing a comparison range of 2.10 at the .05 significance level, apron 1 was significantly different from aprons 2, 4 and 3; aprons 3 and 4 were not significantly different from each other. The consumer, in responding to aprons, is clearly utilizing an aesthetic base to determine how much she will spend on a particular apron. The closeness of aprons 3 and 4 (4.5 and 4.4 respectively) which are both examples of aprons with high aesthetic appeal but varying utilitarian qualities, indicates that differences in utility do not make much difference to the consumer in terms of how much

she is willing to spend for an apron. In fact, the consumer has a slight tendency to pay more for the high aesthetic, low utility apron (however, this is a slight not a significant difference). These findings are particularly interesting in light of the fact that we usually think of an apron as being more of an utilitarian item of clothing.

Analysis of Differences Between Dollar Amounts for Sweaters

It was hypothesized that there would be significant differences between the dollar amounts of the four sweaters and that the magnitude of these dollar amounts would favor the aesthetic dimension. The initial order and magnitude of the unadjusted dollar amount means are given in Table 19 and indicate a willingness on the part of the consumer to pay more for the higher aesthetically pleasing sweaters (paying \$19.76 and \$18.38 for the high aesthetic sweaters as compared to \$11.76 and \$16.70 for the low aesthetic sweaters). The analysis of variance test indicated significant differences in the dollar amounts for the group at the .06 level of significance (Table 20). The Tukey post hoc comparisons (Table 21) revealed that sweater 1 (low aesthetic, low utility) was significantly different from sweaters 2, 3 and 4 by a fairly wide margin (range of 0.00 - 4.95 between sweaters 1 and 2; 0.00 - 8.01 between sweaters 1 and 3). Again, this clothing category

Table 19. Mean dollar amounts and dollar amount rankings for clothing category sweaters by clothing value model position.

Clothing Model Position	Mean Dollar Amounts	Rank According to Mean Dollar Amount
Sweater 1 (LA,LU) ¹	\$11.76	4th
Sweater 2 (LA,HU)	16.70	3rd
Sweater 3 (HA,LU)	19.76	1st
Sweater 4 (HA,HU)	18.38	2nd

¹ LA,LU = low aesthetic, low utility item
 LA,HU = low aesthetic, high utility item
 HA,LU = high aesthetic, low utility item
 HA,HU = high aesthetic, high utility item

N = 102.

Table 20. Analysis of variance for clothing category sweaters.

Source of Variation	DF	Sum of Squares	Mean Squares	F Ratio	Significance of F
Between Clothing Items	2	478.8	239.4	2.7	.06
Within Clothing Items	303	26443.4	87.3		
Total	305	26922.2			

N = 102.

Table 21. Tukey Post Hoc Comparisons¹ for clothing category sweaters.

Clothing Model Position	Sweater Dollar Amount Mean ²
Sweater 1 (LA,LU) ³	0.00

Sweater 2 (LA,HU)	4.95
Sweater 4 (HA,HU)	6.63
Sweater 3 (HA,LU)	8.01

¹ Comparison range for .05 level is 3.34.

² Adjusted for independence.

³ LA,LU = low aesthetic, low utility item
 LA,HU = low aesthetic, high utility item
 HA,LU = high aesthetic, low utility item
 HA,HU = high aesthetic, high utility item

N = 102.

illustrates a willingness on the part of the consumer to pay more for high aesthetic items. The utilitarian dimension is not as important to the consumer as demonstrated by the very wide range of over eight points between the low aesthetic, low utility item (sweater 1) and the high aesthetic, low utility item (sweater 3). The hypothesis that there would be significant differences between the dollar amounts and that the dollar amounts for the low aesthetic sweaters would be less than the dollar amounts for the high aesthetic sweaters is therefore accepted.

Analysis of Differences Between
Dollar Amounts for Hats

The mean dollar amounts and dollar amount rankings for the hat clothing category are given in Table 22. The analysis of variance test for differences between dollar amounts revealed that differentiation between hats was significant at the .26 level of significance (Table 23). The Tukey comparison range of 2.98 revealed that subjects saw hat 1 (low aesthetic, low utility) as being significantly different from hats 2, 3 and 4 and as being most different from hat 2 (low aesthetic, high utility) (Table 24). Apparently utility seems to have more weight within the hat category than the shoe, sweater and apron categories. It should be pointed out that for all of the five clothing categories, the least amount of variation in dollar amounts was seen in the hat category.

Summary of Findings of Differences Between
Dollar Amounts for Five Clothing Categories

Table 25 summarizes the mean dollar amount rankings for the five clothing categories of gloves, shoes, aprons, sweaters and hats. As illustrated in the table, there is a clear overall pattern of willingness to spend more for the high aesthetic items than the low aesthetic items. Eight of the ten lowest ranked dollar amounts are low aesthetic items while eight of the ten highest ranked dollar amounts are high aesthetic items. Overall, 16 of

Table 22. Mean dollar amounts and dollar amount rankings for clothing category hats by clothing value model position.

Clothing Model Position	Mean Dollar Amounts	Rank According to Mean Dollar Amount
Hat 1 (LA,LU) ¹	\$2.71	4th
Hat 2 (LA,HU)	5.89	1st
Hat 3 (HA,LU)	5.54	2nd
Hat 4 (HA,HU)	5.22	3rd

¹ LA,LU = low aesthetic, low utility item
 LA,HU = low aesthetic, high utility item
 HA,LU = high aesthetic, low utility item
 HA,HU = high aesthetic, high utility item

N = 102.

Table 23. Analysis of variance for clothing category hats.

Source of Variation	DF	Sum of Squares	Mean Squares	F Ratio	Significance of F
Between Clothing Items	2	23.0	11.5	1.3	.26
Within Clothing Items	303	2610.6	8.6		
Total	305	2633.6			

N = 102.

Table 24. Tukey Post Hoc Comparisons¹ for clothing category hats.

Clothing Model Position	Hat Dollar Amount Mean ²
Hat 1 (LA,LU) ³	0.00

Hat 4 (HA,HU)	2.51
Hat 3 (HA,LU)	2.83
Hat 2 (LA,HU)	3.18

¹ Comparison range for the .05 level is 2.08.

² Adjusted for independence.

³ LA,LU = low aesthetic, low utility item
 LA,HU = low aesthetic, high utility item
 HA,LU = high aesthetic, low utility item
 HA,HU = high aesthetic, high utility item

N = 102.

Table 25. Summary table of mean dollar amount rankings for five clothing categories.

Rank of Mean Dollar Amount	Glove Model Position	Shoe Model Position	Apron Model Position	Sweater Model Position	Hat Model Position
1st (highest)	4 (HA, HU) ¹	3 (HA, LU)	3 (HA, LU)	3 (HA, LU)	2 (LA, HU)
2nd	1 (LA, LU)	4 (HA, HU)	4 (HA, HU)	4 (HA, HU)	3 (HA, LU)
3rd	2 (LA, HU)	1 (LA, LU)	2 (LA, HU)	2 (LA, HU)	4 (HA, HU)
4th (lowest)	3 (HA, LU)	2 (LA, HU)	1 (LA, LU)	1 (LA, LU)	1 (LA, LU)

¹ LA, LU = low aesthetic, low utility item
 LA, HU = low aesthetic, high utility item
 HA, LU = high aesthetic, low utility item
 HA, HU = high aesthetic, high utility item

N = 102.

the 20 items (or 80%) clearly differentiate themselves on the basis of high or low aesthetic quality. On the other hand, no clear pattern is displayed by the low or high utility items. Five out of ten (or exactly one half) of the lowest ranked dollar amounts are low utility items and five are high utility items. Likewise, half of the higher ranked dollar amounts are low utility items and half are high utility items. The shoes, aprons and sweaters totally differentiate on the basis of aesthetics, having all low aesthetic items ranked lowest in dollar amounts and all high aesthetic items ranked highest in dollar amounts. The high dollar amount rankings for the high aesthetic, low utility shoe, apron and sweater are particularly interesting and suggest a willingness on the part of the consumer to pay more for high aesthetic, low utility items than for high aesthetic, high utility items.

Table 26 summarizes the results of the analysis of variance tests for all clothing categories. The greatest differences in dollar amounts were found between the shoes, gloves and aprons and the least amount amongst hats. Tukey post hoc comparisons for all clothing categories are summarized in Table 27. The pattern of differentiation here clearly suggests that the low aesthetic, low utility items are significantly different from the other items as four out of five of these lowest dollar amount subsets are low aesthetic items or low utility items. All clothing categories formed at least two distinct subsets of

Table 26. Summary table for analysis of variance F ratios and significance levels for five clothing categories.

Clothing Category	F Ratio	Significance of F
Glove	26.1	.001
Shoes	30.7	.001
Aprons	21.4	.001
Sweaters	2.7	.06
Hats	1.3	.26

N = 102.

Table 27. Summary table of Tukey post hoc comparisons for five clothing categories.

Glove Model Position	Shoe Model Position	Apron Model Position	Sweater Model Position	Hat Model Position
3 (HA,LU) ¹ ----- ²	2 (LA,HU) -----	1 (LA,LU) -----	1 (LA,LU) -----	1 (LA,LU) -----
2 (LA,HU)	1 (LA,LU)	2 (LA,HU)	2 (LA,HU)	4 (HA,HU)
1 (LA,LU)	4 (HA,HU)	-----	4 (HA,HU)	3 (HA,LU)
4 (HA,HU)	-----	4 (HA,HU)	3 (HA,LU)	2 (LA,HU)
	3 (HA,LU)	3 (HA,LU)		

¹ LA,LU = low aesthetic, low utility item
 LA,HU = low aesthetic, high utility item
 HA,LU = high aesthetic, low utility item
 HA,HU = high aesthetic, high utility item

² Broken line indicates where differences in dollar amounts are significant.

N = 102.

dollar amounts. Two categories, shoes and aprons, formed a third subset of distinct dollar amounts made up of only aesthetic items. Table 28 shows that subset 1 is characterized predominately by a combination of low aesthetic and low utility items, subset 2 is characterized by predominately high utility items and subset 3 is made up exclusively of high aesthetic items. In other words, the consumer will pay the least for low aesthetic, low utility items and the most for high aesthetic items regardless of utility.

The above findings would tend to confirm the idea developed in the review of literature that the consumer operates out of two main references when evaluating clothing, which are the aesthetic and utilitarian dimensions. In this study the value that the consumer places on each of these dimensions has been tested in relationship to the amount of money the consumer indicated she was willing to pay for a clothing item. The hypothesis was that when items of similar color, price and style vary on the basis of aesthetic and utilitarian qualities, these variations will influence the amounts of money the consumers are willing to pay for a clothing item. It was felt by the researcher that the influence of the aesthetic dimension would be stronger than the utilitarian dimension influence. For the most part these hypotheses have been confirmed.

The research findings of this study agree with those of the Northeast Regional Research Project in Textiles and

Table 28. Summary table of Tukey post hoc comparison subsets for all clothing categories by aesthetic and utility qualities.

Subset	# of High Aesthetic Items	# of Low Aesthetic Items	# of High Utility Items	# of Low Utility Items	Total # of Items in Subset
Subset 1 (lowest dollar amount)	1	4 ^a	1	4	5
Subset 2 (higher dollar amount)	6	6	8 ^b	4	12
Subset 3 (highest dollar amount)	3 ^c	0	1	2	3

^a Indicates subset 1 is a subset of predominately low aesthetic/low utility items.

^b Indicates subset 2 is a subset of predominately high utility items.

^c Indicates subset 3 is a subset of predominately high aesthetic items.

Clothing (Whitlock et al., 1959; Ryan et al., 1963) which found appearance to be a key factor in determining satisfaction for several different clothing categories. Specifically, the role of the aesthetic dimension in influencing what a consumer will pay for a garment tends to agree with Lapitsky's (1961, p. 47), Creekmore's (1963, p. 65), Altpeter's (1963, p. 67) and Mendoza's (1965, p. 218) findings that the aesthetic clothing value is preeminent in the American clothing purchaser's value scale. Slocum (1975, p. 185) found comfort in shoes to be slightly more important than appearance. The results of the present study would tend to disagree in part with this finding. The current study revealed a tendency to pay more for aesthetically pleasing, potentially uncomfortable shoes than aesthetically pleasing comfortable shoes. However, differences in procedural methods between the two studies may account for the conflicting results since Slocum asked her subjects to respond to shoes that were already owned and part of a subject's shoe inventory.

Relationships Between Dollar Amounts and Demographic Variables

An overall examination of the correlation coefficients between dollar amounts for clothing items and the demographic variables of educational level, occupation, marital status, age, number of children, income and race revealed relatively little relationship between the

variables (Table 29). None of the correlation coefficients for education were greater than .16, illustrating an almost total lack of relationship. There was a slight positive relationship between occupation and three of the clothing items' dollar amounts (glove 1 = $r = .25$; sweater 3 = $r = .24$; sweater 4 = $r = .27$) indicating a tendency for homemakers to pay less for the items than blue collar or white collar workers. A slight negative relationship was revealed between marital status and four of the dollar amounts. Subjects who were married had a tendency to be willing to pay less for clothing items shoe 3 ($r = -.23$), apron 2 ($r = -.21$), apron 3 ($r = -.26$) and apron 4 ($r = -.23$) than single subjects. The strongest relationship was between age and shoe 2 ($r = .46$) indicating a tendency to pay more for shoe 2 as age increased. Age was also mildly related to shoe 4 ($r = .23$), hat 2 ($r = .27$) and hat 3 ($r = -.26$). As the number of children that subjects had increased, there was a tendency to pay less for apron 1 ($r = .35$) and hat 3 ($r = -.26$). An almost complete lack of relationship existed between dollar amounts and income levels. Only one clothing item's dollar amount, sweater 1 ($r = .20$), was mildly related to income. Race was mildly related to the dollar values of five clothing items. Black subjects had a tendency to be willing to pay more for glove 3 ($r = .29$), apron 1 ($r = .20$) and apron 3 ($r = .21$) while being likely to pay less for sweater 2 ($r = -.20$) and sweater 3 ($r = -.25$) than

Table 29. Correlation coefficients for dollar amounts of clothing items with educational level, occupation, marital status, age, number of children, income and race.

Item	Education	Occupation	Marital Status	Age	Number of Children	Income	Race
Glove 1	.12	.25*	-.19	-.06	-.06	.00	.13
Glove 2	.01	.18	-.02	.02	.02	-.06	.10
Glove 3	.02	-.02	-.15	-.11	-.12	-.04	.29*
Glove 4	-.10	.06	-.02	.01	.18	.01	-.02
Shoe 1	.03	-.01	-.02	-.09	.03	.01	-.14
Shoe 2	-.13	-.19	-.00	.46**	.16	.12	-.14
Shoe 3	.05	.03	-.23*	.04	-.01	.05	-.13
Shoe 4	.05	-.05	-.14	.23*	.07	.06	-.14
Apron 1	-.08	.16	-.19	-.17	-.35**	.05	.20
Apron 2	.14	.07	-.21	-.05	-.14	.05	.14
Apron 3	-.05	.16	-.26*	-.08	-.13	-.06	.21
Apron 4	.05	.13	-.23*	-.09	-.17	-.07	.01
Sweater 1	-.10	-.01	.03	.08	.07	.20	-.13
Sweater 2	.10	.10	-.08	-.01	-.19	.13	-.20

Table 29. Continued.

Item	Education	Occupation	Marital Status	Age	Number of Children	Income	Race
Sweater 3	.16	.24*	-.10	-.06	-.16	-.01	-.25*
Sweater 4	.06	.27*	.01	.05	-.13	.06	-.11
Hat 1	.09	.02	-.08	-.08	-.10	.15	-.09
Hat 2	-.15	.14	.11	.27*	.19	.14	.05
Hat 3	-.02	.08	-.14	-.26*	-.26*	-.07	-.17
Hat 4	-.05	.02	-.14	-.10	-.04	.00	-.04

* Significant P = .05 level.

** Significant P = .01 level.

N = 86.

white subjects.

To clarify the nature of any relationship between demographic variables and dollar amounts, stepwise multiple regression analysis was performed on each of the clothing item dollar amounts (Table 30). The amount of variation in the dollar amounts explained by the demographic variables was fairly small. Education and income particularly demonstrated an inability to account for any variation in dollar amounts. Occupation accounted for only 6.3% of the dollar variation for glove 1, 3.7% of shoe 2, 5.5% of sweater 3 and 7.3% of the dollar variation for sweater 4. Marital status only slightly accounted for the variation in dollar amounts for glove 1 (4.5%), shoe 3 (5.4%), apron 3 (6.7%) and apron 4 (5.1%). Age was most predictive of dollar amounts accounting for 21.4% of the variation in shoe 2, 5.2% of shoe 4, 7% of hat 2 and 6.9% of hat 3. The number of children that a subject had explained 12.4% of the dollar variation in apron 1 and 4.4% of the dollar variation in sweater 2. Race accounted for dollar variations in three items, glove 3 (8.3%), sweater 3 (6.2%) and hat 3 (5%).

The overall low level and sporadic nature of relationships between demographic variables and dollar values suggests that the consumer may be more influenced by the aesthetic and utilitarian qualities of the clothing item itself than whether or not one is old or young, black or white. This is not to say that certain demographic

Table 30. Results from multiple regression analysis (r^2) for clothing items with demographic variables.

Item	Education	Occupation	Marital Status	Age	Number of Children	Income	Race
Glove 1		.063*	.045*				
Glove 2		.033					
Glove 3							.083**
Glove 4				.018	.031		
Shoe 1							.020
Shoe 2		.037*		.214***	.029		
Shoe 3			.054*				.026
Shoe 4			.036	.052*			
Apron 1	.024	.020			.124***	.030	.031
Apron 2			.043				
Apron 3		.033	.067**				.033
Apron 4		.024	.051*				
Sweater 1						.038	
Sweater 2					.044*	.022	.040

Table 30. Continued.

Item	Education	Occupation	Marital Status	Age	Number of Children	Income	Race
Sweater 3		.055*	.023				.062
Sweater 4		.073**					
Hat 1					.018	.025	
Hat 2	.020	.025		.070**			
Hat 3				.069**			.050*
Hat 4			.020				

* Significant P = .05 level.

** Significant P = .01 level.

*** Significant P = .001 level.

N = 86.

variables are not important in the selection of clothing but rather that the design quality of an item seems to transcend the influence of these demographic variables. The almost total lack of relationship between income and dollar amounts suggests that the lower income subjects were just as willing to spend more for high aesthetic items as the higher income subjects. These results agree with those of Hall (1955, pp. 190-191) who found that low income subjects placed a high value on aesthetics. The hypothesis that the demographic variables of education, occupation, marital status, age, number of children, income and race would not be significantly related to the dollar amounts consumers were willing to spend for clothing items was therefore accepted.

In part, the findings of the present study would tend to disagree with those of Bonaker (1970, p. 60) and Jenkins and Dickey (1976, p. 160) who found a tendency for the concern with utility to be influenced by socioeconomic variables. However, the results of the present study agreed with Jenkins and Dickey's finding that the concern with aesthetics does not appear to be influenced by socioeconomic factors.

Comparisons of the average dollar amounts that consumers were willing to pay for all the clothing items of each type with the actual average cost of the items is given in Table 31. As illustrated, the largest discrepancy between actual cost and the price consumers were

willing to pay was for the shoe category. The average cost of one pair of shoes was \$37.00 in comparison to the average price of \$13.30 that consumers were willing to pay for a pair of shoes. Consumers were also willing to pay more than twice the actual cost of the aprons (\$5.07 compared with \$2.37).

Table 31. Comparison of average dollar amount consumers were willing to pay for a clothing category with average actual cost of the clothing category.

Clothing Category	Average Dollar Amount Consumers Were Willing To Pay	Average Actual Cost	Difference
Gloves	\$ 7.76	\$ 6.23	\$ 1.53
Shoes	\$13.30	\$37.00	-\$23.70
Aprons	\$ 5.07	\$ 2.37	\$ 2.70
Sweaters	\$16.65	\$17.75	-\$ 1.10
Hats	\$ 4.84	\$ 3.26	\$ 1.58

N = 102.

The large discrepancy between actual cost and the price consumers said they would be willing to pay for the shoes may indicate that consumers were responding to the white color of the shoes. Because white tends to enlarge the foot, many individuals are hesitant to buy such shoes. In addition, consumers may have been willing to pay more than twice the actual cost of the aprons due to unfamiliarity with purchasing aprons. Many subjects mentioned that

they no longer use or buy aprons.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Summary

This study began with a general discussion of the historical and philosophical perspectives on the relationship of beauty to use. Humanists define beauty in relationship to an object's usefulness. To the humanist a beautiful knife is a knife that cuts well. Early 20th Century architects that adhered to the "International Style" of architecture were probably the strongest advocates of such a perspective. These architects believed that function played a superior role to beauty in the design of a building.

In contrast to the humanists, hedonists believe that the goodness of any act or object can be determined on the basis of how much pleasure is derived from such an act or object. To the hedonist, beauty or the aesthetic experience, may be good in and of itself without reference to use. C. I. Lewis (1962) attempted to reconcile these opposing views in his theory of object value. Lewis defined two kinds of object value -- the satisfaction in experience immediately felt when presented with the object and the value that is useful for the production of other

good things but not gratifying in themselves. Boyd (1976) developed a model of object value from Lewis' theory in which she utilized a multidimensional model to assign aesthetic and utilitarian value to everyday household objects.

A review of the pertinent literature revealed that consumers seem to value clothing in relationship to two dominant value orientations. These two orientations are the aesthetic orientation and the utilitarian orientation. Furthermore, several studies seemed to indicate that the consumer operates first from an aesthetic orientation when purchasing clothing. This is not to say that the consumer is not concerned with utility (warmth, ease of care, durability, etc.) in clothing. However, the consumer does appear to place more importance on aesthetics than utility. Such information tends to contradict the theoretical stance of the humanists who place the concern with utility in a superior role to the concern with aesthetics.

The major concern of the present study was to assess which value orientation (aesthetic or utility) is most important to the clothing consumer. Utilizing Boyd's Model of Object Value (1976), comparisons were made of dollar amounts consumers said they would be willing to spend for particular clothing items. These comparisons were made between four categories of items: high aesthetic, high utility; high aesthetic, low utility; low aesthetic, high utility and low aesthetic, low utility.

It was the intent of the researcher to utilize Boyd's model for testing perceived value differences in clothing as reflected in the amount of money consumers were willing to pay for certain clothing items.

Measures of aesthetic and utilitarian qualities in clothing were determined by having nine experts trained in design evaluate the clothing articles on a scale from one to ten. Agreement among the experts was very high with an alpha reliability coefficient of .85 for aesthetics and .97 for utility.

One hundred two female shoppers at a regional mall in Champaign, Illinois were selected to respond to twenty items of clothing, representing five categories of clothing (gloves, shoes, aprons, sweaters and hats). Each consumer was shown one clothing category of items at a time (four gloves for example) including one low aesthetic, low utility item; one low aesthetic, high utility item; one high aesthetic, low utility item and one high aesthetic, high utility item. The four clothing items within each of the clothing categories were similar in color, price and style. The consumer was asked how much she would be willing to pay for each of the clothing items.

The proposed hypotheses, results and conclusions are recorded as follows:

- H_1 : There will be significant differences between the dollar amounts consumers are willing to spend for gloves 1, 2, 3 and 4. The dollar amounts for the low aesthetic gloves will be less than the dollar amounts for the high aesthetic

gloves.

Consumers were willing to pay significantly less for glove 3 (high aesthetic, low utility) than glove 2 (low aesthetic, high utility), glove 1 (low aesthetic, low utility) or glove 4 (high aesthetic, high utility). The dollar amounts for the low aesthetic gloves were less than one of the high aesthetic gloves, therefore H_1 was only partially supported. Glove 3, classified as high on aesthetic quality but low on utility quality was a light-weight loosely crocheted type glove mostly appropriate for spring or summer wear. Apparently the consumer considered this glove so poor in utilitarian quality that its higher aesthetic quality could not outweigh its poor utilitarian quality.

H_2 : There will be significant differences between the dollar amounts consumers are willing to spend for shoes 1, 2, 3 and 4. The dollar amounts for the low aesthetic shoes will be less than the dollar amounts for the high aesthetic shoes.

There was a high degree of difference between the dollar amounts for shoes. Consumers were willing to pay significantly less for shoe 2 (low aesthetic, high utility) than shoe 1 (low aesthetic, low utility), shoe 4 (high aesthetic, high utility) or shoe 3 (high aesthetic, low utility). Dollar amounts for shoe 3 were significantly more than for shoe 1 (low aesthetic, low utility) and shoe 4 (high aesthetic, high utility). The dollar amounts for the low aesthetic shoes were less than the dollar amounts

for the high aesthetic shoes, therefore H_2 was completely accepted.

H_3 : There will be significant differences between the dollar amounts consumers are willing to spend for aprons 1, 2, 3 and 4. The dollar amounts for the low aesthetic aprons will be less than the dollar amounts for the high aesthetic aprons.

Dollar amounts consumers were willing to pay for apron 1 (low aesthetic, low utility) were significantly less than those paid for apron 2 (low aesthetic, high utility), apron 4 (high aesthetic, high utility) or apron 3 (high aesthetic, low utility). As well, the amounts for apron 2 (low aesthetic, high utility) were significantly less than those for apron 4 (high aesthetic, high utility) and apron 3 (high aesthetic, low utility). The dollar amounts for the low aesthetic aprons were less than the dollar amounts for the high aesthetic aprons, therefore H_3 was completely accepted.

H_4 : There will be significant differences between the dollar amounts consumers are willing to spend for sweaters 1, 2, 3 and 4. The dollar amounts for the low aesthetic sweaters will be less than the dollar amounts for the high aesthetic sweaters.

Sweater 3 (high aesthetic, low utility), sweater 4 (high aesthetic, high utility) and sweater 2 (low aesthetic, high utility) had significantly larger dollar amounts than sweater 1 (low aesthetic, low utility). The dollar amounts for the low aesthetic sweaters were less than the dollar amounts for the high aesthetic sweaters, therefore

H₄ was completely supported.

H₅: There will be significant differences between the dollar amounts consumers are willing to spend for hats 1, 2, 3 and 4. The dollar amounts for the low aesthetic hats will be less than the dollar amounts for the high aesthetic hats.

Dollar amounts for hat 1 (low aesthetic, low utility) were found to be significantly different from hat 4 (high aesthetic, high utility), hat 3 (high aesthetic, low utility) and hat 2 (low aesthetic, high utility). The dollar amount for one of the low aesthetic hats was less than the dollar amount for the high aesthetic hats, therefore H₅ was only partially supported. The style of hat 2 was somewhat different from the style of the other three hats and this may have contributed to its more positive rating.

H₆: The demographic variables of education, occupation, marital status, age, number of children, income and race will not be significantly related to the dollar amounts consumers are willing to spend for clothing items.

The results of the correlation coefficients between dollar amounts and demographic variables indicated an overall lack of relationship between the variables. Based on multiple regression analysis, only two demographic variables explained more than 10% of the variance in a particular clothing item's dollar amount [21% of shoe 2 (low aesthetic, high utility) by age and 12% of apron 1 (low aesthetic, low utility) by number of children]. The relatively few and low level of relationships between

dollar amounts and demographic variables led to the acceptance of H_6 .

The results of this study supported four of the six hypotheses completely and two partially. Significant differences in dollar amounts between clothing items were observed in all five of the clothing categories. Consumers were willing to pay significantly more for high aesthetic items in three of the five clothing categories (shoes, aprons and sweaters). Demographic variables such as age, income level and education were not significantly related to dollar amounts.

Limitations

The aesthetic dimension of clothing, like the aesthetic dimension of architecture or sculpture, is not easily defined. Given that few clothing researchers have studied this aspect of clothing, a relatively small body of knowledge is available upon which research can be based. Therefore, in many respects this study could be considered exploratory. The researcher recognizes the need for refining a working definition of aesthetics. However, to begin at the bottom was felt to be better than not beginning at all. Hopefully, the findings from this study might encourage others to investigate this neglected area of clothing research. The difficulty of the task should not hinder pursuance of the task.

The researcher believes that the measures of

aesthetic and utilitarian clothing could be improved by better controlling fashionableness and style differentiation between clothing items in a clothing category. An extreme effort was made to limit the amount of style differentiation but insufficient choices in the market restricted selections greatly. Perhaps using manufacturer's samples or handmade items would better control style differentiation.

Clothing items should be chosen which are equally similar or dissimilar in both dimensions of utility and aesthetics. For example, all low aesthetic gloves within a category would have a rating of 1 on aesthetics and all high aesthetic gloves would have a rating of 9. Correspondingly, the low utility gloves would have a rating of 1, while the high utility gloves would have a rating of 9. The ratings for each of the gloves would then be as follows: glove 1 (1 on aesthetics, 1 on utility), glove 2 (1 on aesthetics, 9 on utility), glove 3 (9 on aesthetics, 1 on utility) and glove 4 (9 on aesthetics, 9 on utility). All clothing items would then be equidistant from the center point of the clothing value model and equidistant from each other.

The researcher's rather narrow definition of utility in clothing as warmth, protection, or usefulness in walking should be expanded to allow for other utility characteristics found in clothing. Coolness for summer clothing and ease of care are just a few of the other

utilitarian characteristics that might be investigated.

Lastly, the problem of quantifying values always seems to lurk in the shadow. This researcher chose a measure of values (willingness to spend a certain dollar amount for an item of clothing) which could be manipulated statistically. Such a "value indicator" can be criticized for its lack of being truly representative of valuing behavior. However, it is a means of measuring values on an interval scale. Thus, the question of "how much" difference in valuing could be addressed.

Implications of Findings

This study began with an investigation into the historical and philosophical perspectives on the relationship of beauty to use. Philosophers such as Socrates, Aristotle and modern day advocates of the "International Style" of architecture all claim the supremacy of use in relationship to beauty. How does such a theory apply to the uses and beauty of clothing?

Advocates of hedonism would claim that beauty does not necessarily find itself subservient to utility. Aesthetic expression is good in and of its own right, and it can be valued as such.

This researcher attempted to analyze in as scientific a manner as possible, the relationship between beauty and use in clothing. The results of this study revealed a definite pattern on the part of female consumers to be

willing to pay more for higher aesthetically pleasing items of clothing. No such pattern was found with respect to utilitarian qualities. Thus, today's clothing consumer values clothing from a completely different perspective than yesterday's humanist. On the basis of this study, supremacy appears to be given to beauty rather than use, aesthetics rather than utility.

A further implication of this effort is that clothing researchers can begin to study and define the aesthetic dimension of clothing. Perhaps this is an obvious statement. Yet it is a needed statement, as viewed by this researcher.

The results also indicate that the willingness to pay more for aesthetically pleasing clothing is not particularly influenced by income level, age, race, marital status, educational level, number of children or occupation. The concern with aesthetics in clothing seems to transcend these "demographic" boundaries.

Practically, clothing producers, manufacturers and retailers should take heed to what seems to be a clear message from the consumer, not only does she want good design in clothing but she is also willing to pay more for it.

Recommendations for Further Study

Hopefully, this study may encourage others to pursue further investigation of the aesthetic dimension in

clothing. However, some very basic research in terms of defining the aesthetic concept must be done first. A large sample of clothing items could be analyzed on the basis of the aesthetic criteria put forth in this study. Aristotle's principle of "organic unity," "doctrine of the mean" and Parker's concept of "unity in variety" might be tested for their relevance in defining the aesthetic dimension of clothing. Such a study could be carried out by asking subjects to select items of clothing that they found most pleasing. Then asking these same subjects why they found these items of clothing pleasing might help clarify what factors contribute to high aesthetic quality in clothing.

The concept of "fashionableness" has been mentioned several times throughout the course of this study. An investigation into the relationship, or lack of relationship, between aesthetics and fashionableness would be profitable. Needless to say, many times the two concepts are used synonymously when in reality they refer to distinct phenomena.

It has been pointed out in this study that the aesthetic response to actual items of clothing may be different from the response to photographs of clothing items. Verification and an analysis of this observation might provide useful information for further research.

Lastly, a replication of the present study utilizing various "subsets" of the population such as men and

teenagers would provide additional information on the relationship of aesthetics to utility in clothing. As well, this relationship could be further clarified by using specific clothing categories such as children's clothing and work clothing as a basis for investigation.

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APPENDICES

APPENDIX A
QUESTIONNAIRES

QUESTIONNAIRE 1

AESTHETIC RATINGS FOR 20 CLOTHING ITEMS

DIRECTIONS: Please rate on a scale from 1 to 10 each of the following items according to how pleasing to look at each appears to you.

1 = very unpleasing
10 = very pleasing

Item # 1 _____
Item # 2 _____
Item # 3 _____
Item # 4 _____
Item # 5 _____
Item # 6 _____
Item # 7 _____
Item # 8 _____
Item # 9 _____
Item #10 _____
Item #11 _____
Item #12 _____
Item #13 _____
Item #14 _____
Item #15 _____
Item #16 _____
Item #17 _____
Item #18 _____
Item #19 _____
Item #20 _____

QUESTIONNAIRE 2

AESTHETIC RATINGS FOR 34 CLOTHING ITEMS

DIRECTIONS: Please rate on a scale from 1 to 10 each of the following items according to how pleasing to look at each appears to you.

1 = very unpleasing
10 = very pleasing

Item # 1	_____	Item #18	_____
Item # 2	_____	Item #19	_____
Item # 3	_____	Item #20	_____
Item # 4	_____	Item #21	_____
Item # 5	_____	Item #22	_____
Item # 6	_____	Item #23	_____
Item # 7	_____	Item #24	_____
Item # 8	_____	Item #25	_____
Item # 9	_____	Item #26	_____
Item #10	_____	Item #27	_____
Item #11	_____	Item #28	_____
Item #12	_____	Item #29	_____
Item #13	_____	Item #30	_____
Item #14	_____	Item #31	_____
Item #15	_____	Item #32	_____
Item #16	_____	Item #33	_____
Item #17	_____	Item #34	_____

QUESTIONNAIRE 3

UTILITY RATINGS FOR 20 CLOTHING ITEMS

DIRECTIONS: Please rate on a scale from 1 to 10 each of the following items according to how useful for keeping warm each appears to you.

1 = very unuseful
10 = very useful

Item # 1 _____
Item # 2 _____
Item # 3 _____
Item # 4 _____
Item # 5 _____
Item # 6 _____
Item # 7 _____
Item # 8 _____
Item # 9 _____
Item #10 _____
Item #11 _____
Item #12 _____

* * * * *

DIRECTIONS: Please rate on a scale from 1 to 10 each of the following items according to how useful for walking each appears to you.

1 = very unuseful
10 = very useful

Item #13 _____
Item #14 _____

Item #15 _____

Item #16 _____

* * * * *

DIRECTIONS: Please rate on a scale from 1 to 10 each of the following items according to how useful for protection while cooking each appears to you.

1 = very unuseful
10 = very useful

Item #17 _____

Item #18 _____

Item #19 _____

Item #20 _____

QUESTIONNAIRE 4

UTILITY RATINGS FOR 34 CLOTHING ITEMS

DIRECTIONS: Please rate on a scale from 1 to 10 each of the following items according to how useful for keeping warm each appears to you.

1 = very unuseful
10 = very useful

Item # 1 _____
Item # 2 _____
Item # 3 _____
Item # 4 _____
Item # 5 _____
Item # 6 _____
Item # 7 _____
Item # 8 _____
Item # 9 _____
Item #10 _____
Item #11 _____
Item #12 _____
Item #13 _____
Item #14 _____
Item #15 _____
Item #16 _____
Item #17 _____
Item #18 _____

* * * * *

DIRECTIONS: Please rate on a scale from 1 to 10 each of the following items according to how useful for walking each appears to you.

1 = very unuseful
10 = very useful

Item #19 _____
Item #20 _____
Item #21 _____
Item #22 _____
Item #23 _____
Item #24 _____
Item #25 _____
Item #26 _____
Item #27 _____

* * * * *

DIRECTIONS: Please rate on a scale from 1 to 10 each of the following items according to how useful for protection while cooking each appears to you.

Item #28 _____
Item #29 _____
Item #30 _____
Item #31 _____
Item #32 _____
Item #33 _____
Item #34 _____

QUESTIONNAIRE 5

CONSUMER SURVEY

_____ Which of these four gloves would you be most likely
to buy?
_____ Which of these four gloves would you be second most
likely to buy?
_____ Which of these four gloves would you be least likely
to buy?

_____ How much would you be willing to pay for glove A?
_____ How much would you be willing to pay for glove B?
_____ How much would you be willing to pay for glove C?
_____ How much would you be willing to pay for glove D?

_____ Which of these four hats would you be most likely
to buy?
_____ Which of these four hats would you be second most
likely to buy?
_____ Which of these four hats would you be least likely
to buy?

_____ How much would you be willing to pay for hat A?
_____ How much would you be willing to pay for hat B?
_____ How much would you be willing to pay for hat C?
_____ How much would you be willing to pay for hat D?

_____ Which of these four shoes would you be most likely
to buy?
_____ Which of these four shoes would you be second most
likely to buy?
_____ Which of these four shoes would you be least likely
to buy?

_____ How much would you be willing to pay for shoe A?
_____ How much would you be willing to pay for shoe B?
_____ How much would you be willing to pay for shoe C?
_____ How much would you be willing to pay for shoe D?

_____ Which of these four sweaters would you be most likely
to buy?
_____ Which of these four sweaters would you be second most
likely to buy?
_____ Which of these four sweaters would you be least
likely to buy?

_____ How much would you be willing to pay for sweater A?
_____ How much would you be willing to pay for sweater B?
_____ How much would you be willing to pay for sweater C?
_____ How much would you be willing to pay for sweater D?

- _____ Which of these four aprons would you be most likely to buy?
- _____ Which of these four aprons would you be second most likely to buy?
- _____ Which of these four aprons would you be least likely to buy?

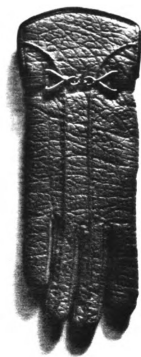
- _____ How much would you be willing to pay for apron A?
- _____ How much would you be willing to pay for apron B?
- _____ How much would you be willing to pay for apron C?
- _____ How much would you be willing to pay for apron D?

- _____ What was the last year of school that you completed?
- _____ What is your occupation?
- _____ What is your marital status?
- _____ What is your age?
- _____ Number of children?
- _____ Approximate yearly household income?
- _____ Race?

APPENDIX B
PHOTOGRAPHS OF CLOTHING ITEMS



Photograph 1. Glove 1 (low aesthetic, low utility).



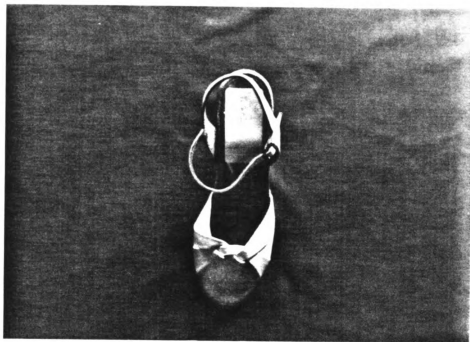
Photograph 2. Glove 2 (low aesthetic, high utility).



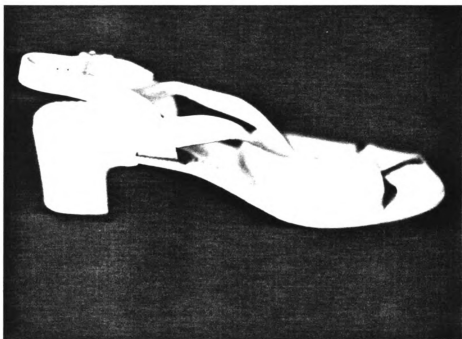
Photograph 3. Glove 3 (high aesthetic, low utility).



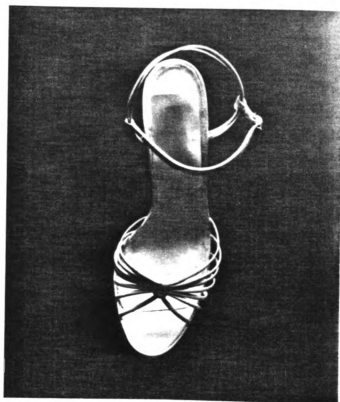
Photograph 4. Glove 4 (high aesthetic, high utility).



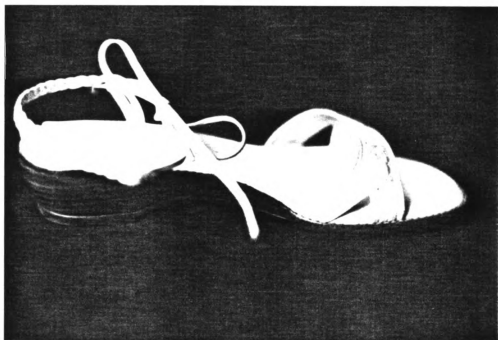
Photograph 5. Shoe 1 (low aesthetic, low utility).



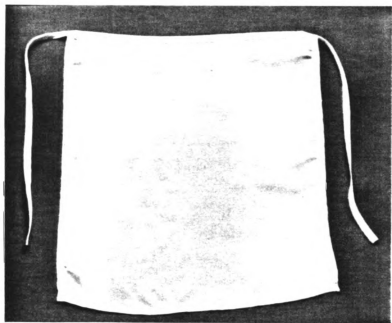
Photograph 6. Shoe 2 (low aesthetic, high utility).



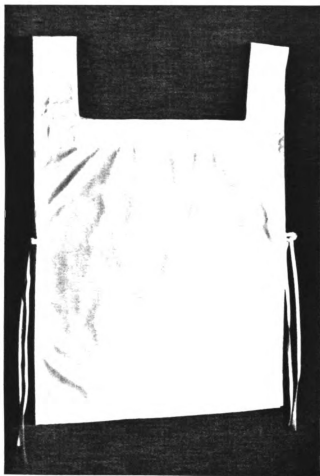
Photograph 7. Shoe 3 (high aesthetic, low utility).



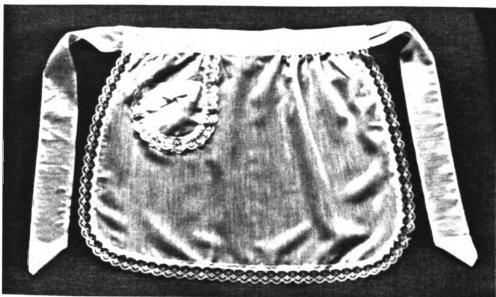
Photograph 8. Shoe 4 (high aesthetic, high utility).



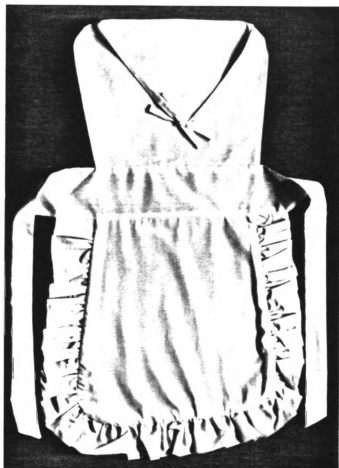
Photograph 9. Apron 1 (low aesthetic, low utility).



Photograph 10. Apron 2 (low aesthetic, high utility).



Photograph 11. Apron 3 (high aesthetic, low utility).



Photograph 12. Apron 4 (high aesthetic, high utility).



Photograph 13. Sweater 1 (low aesthetic, low utility).



Photograph 14. Sweater 2 (low aesthetic, high utility).



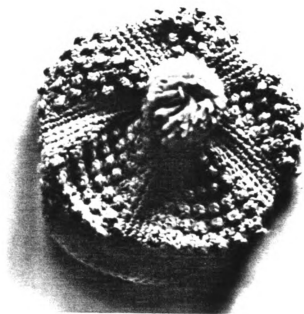
Photograph 15. Sweater 3 (high aesthetic, low utility).



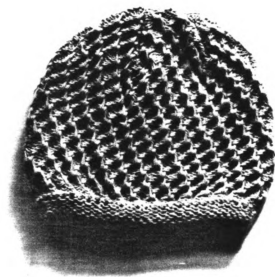
Photograph 16. Sweater 4 (high aesthetic, high utility).



Photograph 17. Hat 1 (low aesthetic, low utility).



Photograph 18. Hat 2 (low aesthetic, high utility).



Photograph 19. Hat 3 (high aesthetic, low utility).



Photograph 20. Hat 4 (high aesthetic, high utility).