THE AUTOMOBILE AND THE CONSUMER: OPERANT MARKET SEGMENTATION

Thesis for the Degree of M. A.
MICHIGAN STATE UNIVERSITY
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THE AUTOMOBILE AND THE CONSUMER: OPERANT MARKET SEGMENTATION

A Thesis

Presented to

the Faculty of the Graduate School

Michigan State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

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Eric D. Fischer

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Approved: Charles K Mauldin

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CHAPTER I

I. Introduction

In today's marketplace there are an increasing number of product choices for the consumer. And every product has a niche, planned or unplanned, perhaps chosen by the marketer but always finally determined through the workings of the marketplace. As Daniel Yankelovich noted in 1964: "In today's economy, each brand appears to sell effectively only to certain segments of any market and not to the whole market." Because of the tremendous costs of product failure, it is essential in today's marketing to find a product's niche, that is, to isolate certain clusters of people as market segments.

The problem of identifying markets as meaningful segments represents a difficult task for marketers. Bass, Tigert, and Lonsdale (1968) stated: "In current marketing practice, there is probably no problem area of greater consequence than the question of how to define market segments." The idea that these markets can be profitably segmented,

¹ Yankelovich, Daniel, "New Criteria for Market Segmentation," Harvard Business Review, XLII No. 2 (March-April 1964), 89.

Bass, Frank M., Tigert, Douglas J., and Lonsdale, Ronalt T., "Market Segmentation: Group Versus Individual Behavior,"

<u>Journal of Marketing Research</u>, Vol. V (August, 1968), 264.

benefiting both the company and the ultimate consumer, has received widespread acceptance throughout marketing. 3,4,5,6,7,8,9

The automobile industry provides an excellent example of the necessity for understanding and implementing market segmentation. Henry Ford's classic "You can have any color you want as long as it's black" is as outdated as the Tin Lizzies he then produced. Even with today's mass production assembly line techniques, the number of options and features auto companies make available attests to the heterogeneous desires and needs of automobile consumers. Because automobile companies can not prepare a special product or communication for every consumer, finding significant, meaningful clusters of people (segments) is very much related to product success or failure. Ford's Mustang found such a segment; the Edsel did not.

Smith, Wendell, "Product Differentiation and Market Segmentation as Alternative Marketing Strategies," <u>Journal of Marketing</u>, 21 (July 1956) 3-8.

Roberts, Alan A., "Applying the Strategy of Market Segmentation," Business Horizons, Vol. 4 (Fall, 1961), 65-72.

Bowman, B., and McCormick, F., "Market Segmentation and Marketing Mixes," <u>Journal of Marketing</u>, Vol. 25, 3 (January 1961) 25-29.

Bauer, Raymond A., "Negro Consumer Behavior" in Joseph Neuman, On Knowing the Consumer, John Wiley and Sons, New York, 1966, 161-166.

⁷ Brandt, Steven C., "Dissecting the Segmentation Syndrome," Journal of Marketing, Vol. 30 (October 1966), 22-27.

Sheth, Jagdish N., "A Review of Buyer Behavior," Management Science, No. 12 (August 1967), 718-756.

Franklin B. Evans, "Psychological and Objective Factors in the Prediction of Brand Choice: Ford vs. Chevrolet," The Journal of Business, XXXII (October 1959), 340-369.

In the extreme, a marketer can divide his market in as many ways as he can describe his prospects. The problem in marketing to date has largely centered around which of the many alternatives are likely to be the most productive for purposes of segmentation.

II. Approaches to Segmentation

A number of approaches to market segmentation have been tried in the past, and many different units of analysis have been used. In marketing practice, segmentation has been limited largely to socioeconomic variables such as occupation, income, and education, and to demographic variables like age, life cycle, and marital status. 10,11,12,13, 14,15 However, studies using demographic and socioeconomic variables have not met with great success in differentiating

¹⁰ Munn, Henry L., "Brand Perception as Related to Age, Income, and Education," <u>Journal of Marketing</u>, Vol. 24 (January, 1960), 29-34.

Harp, J., "Socioeconomic Correlates of Consumer Behavior,"

<u>American Journal of Economics and Sociology</u>, Vol. 20 (1961),

265-270.

Ferber, Robert, "Research on Household Behavior," American Economic Review, LII (March, 1962), 19-63.

Frank, Ronald E., Massey, William F., and Boyd, Harper W., "Correlates of Grocery Product Consumption Rates," Journal of Marketing Research, IV, No. 2 (May 1967), 184-190.

Evans, Franklin B., "Ford Versus Chevrolet: Park Forest Revisited," The Journal of Business, XLI, No. 4 (October 1968), 445-459.

Rich, Stuart U., and Jain, Subhash C., "Social Class and Life Cycle as Predictors of Shopping Behavior," <u>Journal of Marketing Research</u>, IV, No.2 (May 1967), 184-190.

among consumers with different buying behavior. 16, 17

The problem with this approach is that consumers having the same personal characteristics often exhibit different buying behavior. Some scholars have concluded that in many cases socioeconomic/demographic variables, though showing some improvement over chance, were not useful predictors. Frank (1967), for example, concluded: "Based on the research reported...for the most part socioeconomic/demographic characteristics are not particularly effective bases for segmentation. 18

Marketing educators suggested another answer to the problem of meaningful segmentation: that of measuring personality traits. In 1967, Sheth posited that variables such as those which measured the consumer's personality might be useful in distinguishing among buyers showing different behavior.

The relationship of basic personality traits, as units of analysis, to buying behavior has been investigated across a fairly wide range of products and services. Research

¹⁶ Twedt, Dik W., "How Important to Marketing Strategy is the Heavy User," <u>Journal of Marketing</u>, 28 (January 1964), 71-72.

Lessig, V. Parker, <u>Consumer Buying Behavior</u>, Washington State University Press, 1971

Frank, Ronald E., "Market Segmentation Research: Implications and Findings," in Frank M. Bass, Charles W. King, and Edgar A. Pessemier, Application of the Sciences in Marketing Management, New York, John Wiley & Sons, Inc. 1967.

¹⁹ Sheth, Hagdish N., "A Review of Buyer Behavior," Management Science, No. 12 (August 1967). 718-756.

by Tucker and Painter (1961) across a range of products using the Gordon Personal Preference Test found some relationships between personality traits and use or nonuse of products. ²⁰ The authors concluded that "the degree of association was quite modest." ²¹

To date, the use of personality traits as predictors of consumer behavior has met with the same lack of success as socioeconomic/demographic variables.

In reviewing grocery product purchases, Frank (1967) stated: "...personality characteristics appear to have, at best, a relatively low degree of association with total household purchases of any particular grocery product." ²² Recently, Kassargian observed that,

"...for a variety of reasons, variable-to-variable models have yielded highly equivocal results --- for example, a given personality trait rarely explains any appreciable proportion of variation in product usage." 23

Thomas S. Robertson concluded:

"Personality as a predictive variable for consumer actions would appear to be quite unsatisfactory. The available evidence, using a variety of standard personality instruments, is quite discouraging --- reporting a number of negative findings and some contradictory findings. This is not to say that personality is unrelated to consumer actions, but that the re-

Tucker and Painter, "Personality and Product Use," <u>Journal of Applied Psychology</u>, 45: 325-329, 1961.

21 Ibid., p. 329.

Op. Cit. Frank, Ronald E., "Market Segmentation Research: Implications and Findings," Bass, King, and Pessemier, Application of the Sciences in Marketing Management.

Greeno, Daniel, Sommers, Montrose S., and Kernan, Jerome B., "Personality and Implicit Behavior Patterns," <u>Journal of Marketing Research</u> (February, 1963) 63-70.

lationships are limited and tenuous, and not of much practical value." 24

What was needed, investigators felt, was the examination of combinations of units of analysis. Koponen (1960) used the Edwards Personal Preference Test in a study relating personality traits and socioeconomic variables to cigaret smoking. 25 The highest coefficient of determination was 0.13. The author concluded that the relationship of personality traits and socioeconomic variables to the prediction of cigaret brand choice was little better than coincidence. 26

John Myers (1967) attempted to predict consumer attitudes toward private brands. ²⁷ Regression analysis, with personal characteristics and socioeconomic characteristics as independent variables, were used to predict private brand attitudes. The resulting coefficient of determination was quite low (on the order of 0.05). Myers stated: "Whether treated as raw or factored scores, personality differences in respondents explained less than

Robertson, Thomas S., Consumer Behavior, Scott Foresman and Co., Chicago, 1970.

²⁵ Koponen, Arthur, "Personality Characteristics of Purchasers," <u>Journal of Advertising Research I, No. 1</u> (September, 1960), 6-12.

²⁶ Ibid., p. 12

Myers, John G., "Determinants of Private Brand Attitudes," Journal of Marketing Research, I, No. 1 (February, 1967) 73-81.

five percent of the total variance in private brand attitudes." 28

Massey, Frank, and Lodahl (1968) analyzed purchasing behavior for beer, coffee, and tea. The authors found no significant correlations: "At best, only seven percent of variation in total household purchasing for a product is/was accounted for by the net effect of household demographic, socioeconomic, and personality characteristics." 29

The difficulties encountered by the above researchers, attempting to link socioeconomic/demographic variables, personality traits, or a combination of these units of analysis to buyer behavior variables, did not go unnoticed in marketing literature. Scholars have suggested measuring other units of analysis.

Yankelovich emphasized the need for this kind of exploration in 1964. He wrote that markets should be scrutinized for important differences in buyer attitudes and motivations. He felt that segmenting markets on the basis of attitudes relevant to the product being studied "would avoid misleading information derived from attempting to divide people into types." 30

^{28 &}lt;u>Ibid</u>., p. 79

Massey, William F., Frank, Ronald E., and Lodahl, Thomas M., <u>Furchasing Behavior and Personal Attributes</u>, Philadelphia: University of Pennsylvania Press, 1968.

Yankelovich, Daniel, "New Criteria for Market Segmentation," Op. Cit., p. 90.

Studying motivation often focuses on discovering the consumer's goals. Rather than an undefined matching or congruence of personal characteristics and product characteristics, the consumer can be seen to exhibit preferences toward products that would aid him in attaining his goals. These preferences are expressed in an individual through his attitudes, positive or negative, toward products, and it is likely that the consumer seeks to satisfy these preferences.

These conclusions have theoretical underpinnings in attitude theory. Functional attitude theorists, like Smith, Bruner, White, and Katz³¹ suggest a motivational base for attitudes; that attitudes are useful to a person in satisfying his goals.

Katz (1960) discussed some general kinds of functions that attitudes perform. Attitudes (a) help the individual adjust in a complex world --- derived from an individual's tendency to maximize rewards from the external environment, and (b) allow the individual to express his fundamental values.³²

Thus, one might expect attitudes to provide insights into consumer motivation. One might hypothesize that seg-

³¹ Triandis, Harry C., Attitude and Attitude Change, John Wiley and Sons, Inc., New York, 1971. p. 5.

32 Ibid. p. 5-6.

menting groups on the basis of attitudes is tantamount to providing motivational segmentation.

A study by William Stephenson (1967) provides an example. Stephenson used Q-technique to segment audiences on the basis of attitudes. The example appeared in Stephenson's description of a study of housewives' uses of tuna fish:

"In a study on the promotion of tuna fish, one begins by interviewing housewives to elicit from them their opinions about it --- how they use it, what they prefer, what others say about it. From the protocol it is a simple matter to collect statements of opinion, as distinct from fact, about tuna fish. To say "I like white flesh only" is opinion, to say that "the last can I bought was 58 cents" is a matter of fact. Our concern systematically is always with opinion...From the Q-population (of statements of opinion) a Q-sample is drawn; Q-sorts performed by housewives bring two different factors into focus. One, when the factors are examined, indicates that the women of that "group" are interested in tuna fish largely as a "filler" for a staple meal --- to give flavor to a casserole of macaroni or rice; the others use it as a snack only, for a dainty, weight-watching lunch or the like. Obviously different social factors are involved --- women with low incomes and many mouths to feed are less likely to use it for a "snack." 33

Others have used Q-technique to develop such motivational segments for institutions, ³⁴ products, ³⁵ and even

William Stephenson, (Unpublished paper expounding methodological and theoretical foundations in application of Q-methodology in advertising, Columbia, Missouri: University of Missouri) pp. 9-10.

Stephenson, William, "An Image for Missouri's Public Libraries," Columbia, Missouri: University of Missouri, 1962.

Booth, Laurel, "An Image Study of McCall's Magazine," Master's Thesis, University of Missouri, 1968.

for matters of public opinion, 36 to name a few.

A more recent example is provided by Haley (1968), who labeled such motivational segments "benefit segments," a term which has subsequently become popular in marketing and advertising journals. 37, 38 Haley's study concerned toothpaste users. Four segments were identified --- one concerned with decay prevention, which Haley labeled "The Worriers," one with brightness of teeth, "The Sociables," one with the flavor and appearance of the product, "The Sensory Segment," and one with price, "The Independents." Each consumer segment, Haley notes, "represents a potentially productive focal point for marketing efforts." 39

This study will apply such segmentation techniques to automobile consumers, who have been the object of many non-motivational studies, which will be subsequently discussed.

III. Purpose

It is the purpose of this study to divide automobile consumers into motivational or benefit segments and to continue the investigation of the use of Q-methodology

Stephenson, William, "Application of Q to the Assessment of Public Opinion," <u>Psychological Record</u> XIV (1964) 265-273.

Haley, Russell I., "Benefit Segmentation: A Decision Oriented Research Tool," <u>Journal of Marketing</u>, Vol. 32 (July 1968) 30-35.

Haley, Russell I., "Beyond Benefit Segmentation," Journal of Advertising Research, vol. II no. 4 (August 1971) 3-8.

Op. Cit., Haley, "Benefit Segmentation: A Decision Oriented Research Tool," p. 32.

as an instrument for identifying consumer types.

A further purpose of the study will be to examine the usefulness of the methodology in suggesting communication strategy, themes, and specific copy ideas. It is suggested that the data can provide tools for improving communication with the groups of automobile owners and buyers designated as target markets. It is further suggested that the selection of appropriate themes and appeals would improve the chances of capturing the attention of an automobile company's prospects and of involving the consumer in the advertising.

IV. Prior Research

Automobile consumer market segmentation has followed the lines of market segmentation in general, using demographic and personality measures.

In 1959, Franklin B. Evans undertook a study designed to test psychological and/or objective variables as predictors of Ford and Chevrolet automobile ownership.

The researchers collected demographic and factual data relating to automobile ownership from a sample of residents of Park Forest, Illinois. Residents also responded to the Edwards Personal Preference Schedule, designed to measure "personality needs." Evans performed several discriminant

⁴⁰ Evans, Franklin B., Op. Cit., p. 340-369.

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analyses in which the dependent variables were the various psychological and demographic descriptions of the sample members. Based on an analysis of variance performed on each discriminant analysis, Evans concluded that personal characteristics, demographic variables, or a combination of both were doubtful predictors of automobile ownership:

"Taken singly or in linear combination, neither personality needs nor demographic variables assigned brand ownership with any considerable degree of certainty."

41

Replies to Evans' study were immediate. Motivation researchers disagreed. Pierre Martineau, a leading motivation researcher, for example, wrote to the editor of Advertising Age presenting a dissenting opinion. However, as Westfall (1962) summarized: "None of these (motivation researchers) brought forth any evidence to contradict Evans' findings." However,

More thoughtful, empirically based attempts to challenge Evans' study came from Steiner (1961) and Winick (1961).

Both criticized Evans' sample, methods of analysis, and results.

44 But their comments failed to explain consumer

^{41 &}lt;u>Ibid.</u>, p. 368

Westfall, Ralph, "Psychological Factors in Predicting Product Choice," <u>Journal of Marketing</u>, vol. 26 (April, 1962) 34-40.

⁴³ Ibid., p. 35

Winick, Charles, "The Relationship of Personality Needs, Objectives, and Brand Choice: A Reexamination," <u>Journal of Business</u>, vol. 34 (January 1961) 61-67, and Steiner, Gary, "Notes on Franklin B. Evans," <u>Journal of Business</u>, vol. 34 (January 1961) 57-60.

choice. Westfall notes: "These (Steiner and Winick) attempted to explain away Evans' findings rather than bring forth new data." 45

Evans (1961) restated his conclusions from the study summarizing that people select automobiles not because of personal or demographic characteristics, but on the basis of "rational motives and/or small things, peculiar to the individual or the particular buying situation." 46

Kuehn (1963) reinterpreted Evans' data and demonstrated what he thought was a strong association with brand choice based on the two personality variables of "affiliation" and "dominance." However, based on a "thorough reappraisal" of the data, prompted by Kuehn's analysis, Evans and Roberts (1963) reiterated that the conclusions of the original study were valid. 48

Westfall (1962), selecting different models of automobiles (compact, convertible, and standard) for analysis,
attempted to replicate the Evans study using similar objective criteria, but substituting the Thurstone Temperament Schedule for the Edwards Schedule. The former is designed to assess seven traits thought to be relatively per-

⁴⁵ Op. Cit., Westfall, p. 35

Evans, Franklin B., "Reply: You Still Can't Tell A Ford from a Chevrolet," <u>Journal of Business</u>, vol. 34 (January 1961) 34.

Kuehn, Alfred A., "Demonstration of the Relationship Between Psychological Factors and Brand Choice," <u>Journal of Business</u>, vol. 36 (April 1963), 237-241.

Evans, Franklin B., and Roberts, Harry V., "Fords, Chevrolets, and the Problem of Discrimination," <u>Journal of Business</u>, vol. 36 (April 1963) 242-244.

manent over time for each person. Westfall concluded:

"The fact that in this study, as in Evans', no personality differences were found between Ford and Chevrolet owners lends further weight to Evans' conclusions that personality differences do not exist between these two groups." 49

In 1968 Evans published a study, "Park Forest Re-visited," that paralleled his previous research on Ford and Chevrolet owners. 50 The results of the second study closely matched the earlier findings.

Birdwell (1968), using a different approach, attempted to relate a consumer's image to his product choice, i.e., that the consumer would project his image of himself into his product choice. Birdwell based this on his belief that an individual's behavior is in part a function of his self image. Birdwell used a semantic differential scale (as developed by Osgood). A list of twenty-two polar adjectives, or traits, was generated and used to describe an automobile or automobile owner (safe - dangerous; sophisticated - unsophisticated). A random sample of 100 auto mobile owners was drawn representing four groups --- luxury to compact auto owners. In addition, seven diverse automobiles were chosen (e.g., Renault, Cadillac) to which the subjects were also asked to respond. Each subject,

^{49 &}lt;u>Op</u>. <u>Cit</u>., Westfall, p. 39

Evans, Franklin B., "Ford Versus Chevrolet: Park Forest Revisited," <u>Journal of Business</u>, XLI, No. 4 (October 1968), 445-459.

using the semantic differential, judged his own automobile, the automobiles selected for the study, and himself.⁵¹

Birdwell found (1) a high degree of congruence between owners in all four groups and their automobiles, and (2) relatively less conceptual agreement between self image and automobile for the less expensive ownership classes.⁵²

A motivational study having to do with automobiles was completed by the Warner-Gardner-Henry research group and reported by Pierre Martineau in 1954. The researchers used a variety of methods, including projective tests and symbolic analyses. The results of the study indicated five areas of meaning surrounding the automobile:

- (a) its practical value as a piece of machinery that provides transportation.
- (b) it is a major investment. Cost is often a screen that covers the buyer's personal and social ambitions.
- (c) It is an indicator of social status.
- (d) The car is a symbol of self-control and personal mastery.
- (e) The car is a way of revealing personality characteristics, feelings, and motives that typify in-

⁵¹ Birdwell, Al E., "A Study of the Influence of Image Congruence on Consumer Choice," <u>Journal of Business</u>, XLI, No. 1 (January 1968), 76-88.

⁵² <u>Ibid</u>., p. 87-88

Martineau, Pierre, "Automobiles: What They Mean to Americans," in H.W. Hepner, ed. Modern Advertising Practices and Principles, McGraw-Hill, Inc., New York, 1956.

dividuals or groups of individuals.

The fifth category is made up of four subgroupings:

- (1) Those who emphasize "brightness" by buying a big car having costliness and impressive display.
- (2) Those who seek "conspicuous reserve." They want people to know their status, but they express modesty in purchasing automobiles, either by large, dark cars or purposely buying cars cheaper than they can afford.
- (3) Those who show a wish for "sophisticated flair."

 They want smartness, but not gaudiness. They like foreign cars.
- (4) Those who wish for "youthful impulsiveness." This subgroup is made up of hot rodders and youths with signs on their cars and older people who purchase gadget-filled, brightly colored cars. 54

Martineau concluded from his research that advertising should emphasize two basic sets of motivation:

- (1) The basic wish for car ownership.
- (2) What the personality of the particular car expresses.

In summary, the demographic/socioeconomic and personality studies are of historical interest only. Using different units of analysis and methodologies, the studies were

^{54 &}lt;u>Ibid.</u>, p. 392-393.

inconclusive and unsuccessful as predictors of automobile purchasing.

The study by Martineau, although <u>not</u> a segmentation study (the results were posited in general terms) is relevant to this thesis because it attempted to examine similar units of analysis, i.e., motivational segments. And, although the methodologies are different (the Martineau study relied on projective testing and symbolic analysis and the present study intends to deal with motivational segments <u>operantly</u>) we can make an interesting comparison after the interpretation of the data.

CHAPTER II

METHODOLOGY

In Chapter I, the rationale for using Q-technique to identify motivational segments was given. To repeat, Q-technique was chosen because of its successful use in motivational research and because it provides a basis for operantly identifying market segments. By "operant," it is meant that the subjects themselves define the segments, first by providing the opinion statements that comprise the instrument and then by performing the operations. Finally, factor analysis of the data provides groupings of like sorts which are independent of and unexpected by the researcher.

I. Selection of the Q-sample

Subjects were chosen for in-depth interviews to reflect a wide range of opinions about automobiles. They were chosen on the basis of sex, age, income, and occupation, including persons who did and did not work in the automobile industry. In addition, number of cars owned and type of car owned (sports, compact, full-sized) was reflected in the interviewees.

The interview schedule was arranged to elicit the widest range of opinions from the respondents. It began with general questions about automobiles and automobile usage,

ending with specific questions dealing with automobile companies, service, and advertising. Non-directive interviewing techniques were used. The questions were asked neutrally; the prompting minimal. It was the object of each interview to exhaust the respondent's opinions about automobiles.

From a theoretically limitless number of statements of opinion about automobiles, some 400 opinion statements were gathered from thirteen interviews. No more than thirteen interviews were conducted, because the interviewer extracted no "new" opinions from the last two interviews. that is, with wording exceptions, the opinions duplicated those in the previous interviews. The 400 statements were reduced to fifty-nine, eliminating duplications and idiosyncratic statements. The final fifty-nine statements were selected on the basis of self-reference, that is, they allowed respondents to project their own interpretations upon them. The Q-sample can be categorized into statements dealing with automobiles themselves (style, performance, the interior, economy), the automobile manufacturers (product quality, pollution, service), and with peripheral areas such as auto advertising and dealer organizations. It was thought that such a combination would reflect an individual's attitudes toward the automobile's place in society, hence aiding in the interpretation of motivational segments.

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The Q-sample was pre-tested by four persons owning different kinds of automobiles. After reviewing the Q-sample with the pre-testers, the wording of several statements was changed to clarify their meanings.

II. Selection of Respondents

Quota control sampling was used in selecting the respondents, the P-sample. The P-sample was classified into selected categories thought to be relevant to differences in attitudes held about automobiles. The P-sample comprised the following variables: sex, race, age, income/occupation, number of automobiles owned, and type of automobile owned. Many of these variables were represented in the subjects of the depth interviews and all interviewees were included as respondents in the P-sample.

III. Administration of the Q-sample

The Q-sample was administered to fifty-nine persons. Each subject was asked to perform a Q-sort (a ranking of the statements) to describe what seemed to him to be important or significant. The respondents place the statements on a value scale according to their projected interpretation of them. First, an individual in the P-sample was asked to sort the statements into three piles. One pile contained those statements with which he agreed (+), another pile those statements with which he disagreed (-), and a third those statements about which he was neutral or could not make up his mind (0).

The respondents then sorted the statements into piles that satisfied the following frequency distribution:

N = 59	Mos	t Di	sagr	ee	3						Most	Agr	ee
Value:	- (5	- 5	_/4	- 3	- 2	-1	0	+1	+2	+3	+4	+5	+6
Pile number:	1	2	3	4	5	6	7	8	9	10	11	12	13
Number of statements:	2	3	11	5	6	6	7	Ę,	6	5	4	3	2

Respondents were asked to comment on why they had placed statements at the -6 and +6 ends of the continuum. In addition, respondents were asked to indicate their neutral statements in order to discover whether they differed from the column in the sort given neutral (0) scores. Most answers ranged from -1 to -2; that is, subjects generally agreed with more statements than with which they disagreed.

IV. Analysis of the Data

The fifty-nine completed Q-sorts were processed by the University of Missouri IBM 360/65 computer using the QUANAL program developed at the University of Iowa by N. Van Tubergen. The respondents' sorts were intercorrelated to provide a correlation-matrix, which the computer then factored using the principle-axes method. Factors are thus obtained, made up of groups of individuals who have sorted the statements in a similar manner. The factors are then rotated orthogonally through a varimax solution, to obtain mathematically a maximum number of "pure" loadings (significant loadings on one and only one factor).

The Spearman weighting formula 55 was then applied

1927), Appendix XIX.

Significant factor loadings are determined by computing the standard error for a zero correlation coefficient; SE = 1/n, where n = number of statements. In this case, SE = 1/59 = .13. Thus, loadings greater than .32 (2½ SE) are significant at P .01.

Weighting is by means of Spearman's formula: $1-r^2$. Charles Spearman, The Abilities of Man, (New York: MacMillan Company,

to the factor loadings. Individual sorts for each factor were weighted according to the factor loadings. Then the computer added the weighted rankings across each statement, producing an "average" sort for each factor. After converting the arrays to z-scores, the computer arranged statements on a "most agree - most disagree" continuum for each factor. The array for each factor provided the basis for interpretation of the factor.

The factor analysis yielded five factors judged "interpretable," based on two criteria. One interprets only those factors with at least a minimum number of persons with significant "pure" loadings. The number chosen for this study was five persons. Second, the QUANAL program computes eigenvalues, the amount of variance accounted for by each factor, and it is then possible to reject a factor when the amount of variance accounted for is less than a minimum amount of variance, as represented by a designated eigenvalue. It is common for factors with eigenvalues less than 1.000 to be judged as uninterpretable, and that criterion was used in this study. With the data analyzed, one is ready to interpret the data, and that step is reported in the following chapter.

CHAPTER III

INTERPRETATION

I. Introduction

In a study using Q-methodology, individual respondents sort a group of statements into a distribution wherein the placement of all statements constitutes an attitude (the entire sort). Each sort is correlated with each other sort, and those sorts correlating beyond a given level of significance are grouped together, producing fac-The sorts for each factor are then averaged, to produce a "typical" sort representative of that factor. factor is different from every other factor and the "typical" sort represents the attitude for those persons loaded on the factor. Factors are models of how people see the subject matter from their subjective viewpoints, and in representing attitudes, it is stressed, the factors are operant, i.e., concepts determined by the respondents in performing his task, but not by the researcher before the research began.

The process of interpretation of each factor involves seeking the explanation of statements in the sort. Stephenson has defined interpretation as fitting "the meanings of

Q- statements, with their scores, into an overall explanation of the factor." ⁵⁶ Interpretation of Q-factors consists of explaning what the relations of elements within each factor are, what makes them representative, and how factors are related to other factors. While seeking these answers is a subjective task for the researcher, the interpretation must be based on the operant evidence, the data, and the explanation offered must fit that data. Thus, it is common practice in Q to qualify the interpretation as follows: if the reader disagrees with the interpretation, he may seek his own solution from the data listed in the appendices.

As previously noted, five interpretable factors were generated and examined individually. In interpreting the factors, and "if-then" approach is used, i.e., one examines combinations that emerge in the factors, and attempts to explain why these combinations occur. The comparisons involve individual statements, groups of statements, and combinations of comparisons, until conclusions are reached.

Early attention is also given to consensus items, or those statements upon which all the factors essentially agree. ⁵⁷ Inter-factor agreement upon opinion statements

⁵⁶ Stephenson, William, "Immediate Experience of Movies," Columbia, Missouri: University of Missouri, 1962.

⁵⁷ A consensus item is defined as a statement where factor scores differ by less than 1.0 standard score across the five factors.

can be of great importance in improving communication with automobile consumers. Special attention is also afforded to discriminating items, or those statements ranked significantly higher or lower by one factor than by other factors. Finally, one arrives at a generalized explanation for the factor, an algorithm, that explains the schema represented by the factor array in question.

The interpretation is offered in three parts: (1) a two word label which supplies a convenient "handle" or reference point for the factor, (2) a brief thumbnail sketch describing each factor, and (3) an expanded sketch, with evidence, providing a more detailed explanation and discussion of the factor. Finally, because the sort for each factor represents a "typical" attitude, and because the algorithm given for each factor represents a hypothetical person (The Disillusioned Humanist), the factor is referred to in the third person. ("Hypothetical" is meant to refer only to the interpretation. Presumably, persons with significant loadings on a single factor are "real" holders of the typical attitude.)

Taken in toto, the interpretation, made up of consensus items and factor explanations, is used in various ways. Certain interesting theoretical implications are drawn, e.g., a comparison with Martineau's earlier motivation research, and many practical implications are suggested.

Practically, the interpretation is used in generating communication approaches to reach automobile consumers, and creative communication ideas are formulated. These are described in detail in the Conclusions chapter. As Haley (1971) notes, this kind of study can be used "as a tool for improving communications with the group or groups of consumers selected as the market target by selecting themes which improve the chances of capturing the attention of your prospects." ⁵⁸

II. Brief Sketches

As stated, the factor analysis yielded five interpretable factors. The following are brief descriptions designed to familiarize the reader with the factors before proceeding with a more detailed presentation.

Factor I, The Substantial Citizen

Persons on Factor I see themselves as substantial citizens, established and enjoying the freedom of choice, the independence of being substantial. He expects to pay for what he gets, but then that entitles him to get what he pays for. The Substantial Citizen appreciates and respects bigness. He feels that you get better value and higher quality in an automobile, for example, if you're willing to pay more and buy a full-sized, expensive car.

⁵⁸ Op. Cit., Haley, Beyond Benefit Segmentation, pp. 3-4.

Factor II, The Eager Truster

The Eager Truster approaches decision-making a little bit impulsively. He's anxious to have the decision over with, the immediate gratification of the material possession in hand. But many times he just doesn't have as much information as he might really like. In such cases there is always the possibility of acting too quickly and making a bad buy, so the Eager Truster approaches a car-buying situation by trusting the at-hand advice of friends or the person selling him the automobile. The Eager Truster is aware that such reliance can be dangerous, and he reserves part of his commitment: if those whom he has trusted "betray" him (if their advice turns out to be false) he takes his revenge by taking his business elsewhere.

Factor III, The Self-Reliant Functionalist

The Self-Reliant Functionalist compares the world around him to a personal standard: fitness. He evaluates automobiles and many other things in terms of performance --- the ability to get the job done right. He has measured his own worth and accomplishments against such a yardstick, never paying much attention to social frivolities. Yet the Self-Reliant Functionalist doesn't totally rely on his clear cut assessment of the environment; he sees another level of value, and some amenities the automobile has to offer attract him.

Factor IV, The Disillusioned Humanist

The Disillusioned Humanist is a person who continually contrasts the "what-should-be" with the "what-is." He is characterized by a feeling of discontent with the automobile industry --- the automobile manufacturers, the automobiles, dealers, and service.

Factor V, The Sensual Gourmet

The Sensual Gourmet is acutely sensitive to the physical and psychological impressions his automobile makes upon him, and those which he makes upon his automobile. He responds to his automobile physically, at the tactile level, and expresses a self image through his car, based on his knowledge of the impact his automobile has on others.

III. Consensus Items

In any Q-study, the consensus items, or those statements about which the factors agree, are important. These
statements can provide the basis for communication strategy.
Of most importance are those statements scored highly positive; these statements are not only agreed upon, but valued. Conversely, negitively scored consensus items are to
be avoided in communication strategy. Those items surrounding the neutral point offer least in terms of communication.
The study yielded six consensus items and this section examines those items.

Items of General Consensus

All factors could agree upon only six statements, one of which is high positive and the remainder slightly positive or negative. The highly positive "agree" statement does not concern the auto industry; it reflects an outlook toward a personal attribute:

(33) It takes skill to drive really well. It's something to be proud of if you have it.

FI FII FIII FIV FV 1.4 1.1 1.2 1.1 2.0

The most highly valued consensus item is that of having mastered the intricacies of driving; being competent at maneuvering the automobile through traffic or maximizing the car's performance, for example, appeals to all the factors. One can look back to pre-automobile days and see the same pride reflected in horsemanship, that particular skill still valued in rodeos. One is praised for being a "good defensive driver," or criticized as a "back seat driver," if too forward in his comments about another's driving. As one amateur racer interviewed commented:

"Driving is one of the most demanding tasks that a person encounters in his daily life. It takes skill to drive among a sea of other drivers."

The five remaining consensus items are of lesser importance, two being positive, three negative. Statement (56), whether because people appreciate self-reliance or because of an overall negative reaction toward the high

cost of servicing, emphasizes respect for that sort of mechanical ability. Statement (7), barely positive, shows a somewhat negative view of auto advertising. Its neutral position suggests that people may find some ads interesting, some uninformative, but that in their entirety, auto ads are not of much salience.

Statement (30), ranked most negatively by the factors, probably indicates that people simply are aware that automobiles differ from one another in styling, rather than criticizing the manufacturers. Statement (45) shows that giving up an older automobile is not a personally moving experience, nor is there much personification of the automobile. Finally, item (14) occupies a similarly neutral position as statement (7), ranked only marginally negatively. It is reasonable to assume that people balance both the individual automobile to be purchased with its brand and company association before selection.

(56) I think a person should be proud if he's able to work on his car himself, to help it run better and look better.

FI FII FIII FIV FV 0.5 1.2 0.2 0.6 1.0

(7) It seems that auto ads always talk about little things, instead of stressing really important information.

FI FII FIII FIV FV 0.1 0.5 0.1 -0.3 0.2

(30) Styling is based on a follow-the-leader approach, with the auto companies copying each other's ideas. As a result, new cars look too much alike.

FI FII FIII FIV FV 0.1 -0.5 -0.2 0.0 -0.6

(45) There's something sad about trading in a car. It's like losing an old friend.

FI FII FIII FIV FV 0.1 -0.5 -0.7 -0.7 0.1

(14) In buying an automobile, what's really important is the car itself. You're buying a car; not a brand and not a company.

FI FII FIII FIV FV -0.1 0.2 -0.3 -0.2 0.1

IV. Factor I

The Substantial Citizen

The Substantial Citizen is staunchly uncritical of the automobile industry. He identifies with big business and looks at the American auto industry as an excellent symbol of the good free enterprise, big business can do. His support of the American auto manufacturers extends to his purchases: an American automobile, a product of our auto industry, is simply going to be a better made automobile.

As indicated, the Substantial Citizen will probably own a full-sized automobile. He feels they're more comfortable, give a better ride, more what the automobile should offer. The Substantial Citizen likes to relax in the privacy his car affords, much like his easy chair at home. He rolls up the windows to drown out unwanted noise, enjoys the comforts of climate control and power accessories, and settles into the luxuriousness of a well-appointed interior.

The Substantial Citizen expects his automobile to

run right; he's paid for it and that's what he expects. If the automobile does need servicing, he takes it to his authorized dealer where, again, he expects proper service when he spends money for it; he expects the dealer to do his job. Apt to be brand conscious as well, the Substantial Citizen will be a repeat customer at his dealer. He has a favorable image toward dealers and servicing, even if he grumbles a bit about high prices, because he expects his dealer, just as he expects his power seat to function, to perform when the Substantial Citizen pays his dollars: "You get what you pay for."

FACTOR I

Evidence for Sketch

Factor I, the Substantial Citizen, is made up of fourteen persons, ten males and four females. Nine persons on the factor are directly involved with the auto industry, previously mentioned as "insiders." This factor had the highest average age, 36, and every person over 45 years of age, save for one, loaded on this factor. In addition, this factor was comprised of the highest income respondents, with an average reported income of \$27,000 per year. And if two students are deleted from this factor, the average climbs to \$32,000 annual family income. Factor I is called "substantial" because he is established, at least in terms of income, and because he identifies with bigness; big cars and big business.

Factor I is referred to as a "citizen" because of his faith in American products, specifically the automobile, and the American way of doing business, e.g., dealer networks.

In the preceding sketch of the Substantial Citizen, certain statements and conclusions about the factor are given. The following evidence is cited:

Factor I thinks of himself as a good American; he supports the freedom of free enterprise (statement 42) and in so doing will "buy American," (statements 16, 9).

Statement Standard Score

- (42) Having a car means freedom. It means not having to depend on somebody else for transportation. 1.50
 - (9) When you buy a foreign car you have to worry about service.

 There may not be a dealer nearby, and you may not be able to get parts for it.

 0.52
- (16) When I'm buying a car, I don't really care where it was made, whether it's American or foreign. -1.94

It is also stated that the Substantial Citizen "appreciates and respects bigness." Thus, he's a solid
supporter of the American auto industry. Factor I disagrees with every statement critical of the industry (statements 41, 54, 4, 35, and 40).

Statement

Standard Score

(41) The auto companies suffer from bigness. As producers they are clumsy, unwieldy --- and that fact shows up in the products they produce.

- (54) When auto companies try to satisfy the consumer, it's because of pressure from the competition or the government.
- -1.54
- (4) The auto companies are deliberately making cars that won't last so that we have to keep replacing them.
- -1.39
- (35) Auto companies are just part of a much larger problem --- the problem of endangering the environment.
- -0.84

(40) The auto companies are far more profit-oriented than people oriented.

-0.43

The Substantial Citizen's concern for bigness is also reflected in his view towards automobiles themselves: he likes driving a big car (statements 47, 49).

Statement

Standard Score

(47) I like the solid, substantial feeling of a big car on the highway.

1.66

(49) I don't like to drive a car that's too big. It makes me feel like I'm taking up too much of the road.

-1.68

The Substantial Citizen expects to pay more for a bigger car, but as related in the shetch, he expects to "get what he pays for." While he may not enjoy spending money on his automobile (statements 27, 20) he recognizes that expende is necessary and the Substantial Citizen doesn't view car payments or servicing in a negative way (statements 38, 5, 3, and 57).

Statement

Standard Score

(57) Euying a car may be expensive, but I don't think of it as

		20
	sacrificing other things.	1.01
(27)	A major problem is service and repairs. You're lucky to find anybody who will do a good job whatever the price.	0.61
(20)	When a dealership services or repairs your car and you go to pick it up, you expect the bill to be too high.	0.59
(38)	I hate to think of the amount of money you have to spend for a car the financial obligation you're getting yourself into.	-1.09
(5)	When I think about how much I have to pay out to drive in payments, in gasoline, in insurance it frustrates me.	-0.95
(3)	Taking care of a car getting the oil changed and all the other things is a nuisance. Necessary, but a nuisance.	-0.40
One i	reason for a positive approach to servici	ng is
that he ha	as paid his money and expects the service	to be
commensura	ately good. Hence, he can rely on his de	aler-
ship (stat	tements 50, 44, 28) to treat him as a goo	d cus-
tomer (sta	atement 22).	
State	ement Standard	Score
(50)	One ought to be able to rely on the dealership for service and repairs. Who ought to know more about your make of car than the people who spe-	2,07
(00)	cialize in that make?	2.07
(28)	It just does not make sense to trust an automobile dealer. He's in business to make money as much as he possibly can.	-1.47
(44)	You should never rely completely upon a dealership for information about the car you're going to buy.	- 0 . 05

(22) It's impossible to get a dealer interested in my individual problems. To a dealer, I'm just one customer among many.

-0.04

So Factor I approaches the dealership as a potential confident (statements 59, 25), but if he doesn't get what he paid for, he'll turn to another service outlet for satisfaction (statement 26), just as he would switch automobiles (statement 13).

Statement

Standard Score

(13) I don't know at all what my next car will be. I don't feel bound to any one make of car.

-0.99

(59) It's important to realize that the auto salesman is really an adversary. You want the lowest price, he wants the highest.

Someone has to give, and if you're not tough, it will be you.

-0.99

(25) It doesn't pay to be a nice guy with dealers; the only solution for good service is to be tough.

-0.58

(26) Auto dealers are not all alike.
It makes a great deal of difference which one you buy your car from.

1.43

As previously noted, when Factor I thinks about automobiles, he thinks about big ones; they feel better to him. And a bigger automobile has more to offer, which the Substantial Citizen demands (statements 58, 21)

Statement

Standard Score

(58) Most of us buy cars that we can afford, that do the job. But we'd really like to have more from a car than just getting the job done.

1.15

(21) A well designed car has nothing on it that isn't functional --- no useless chrome, no fake hood scoops, nothing that doesn't contribute to the car's performance.

-0.72

When Factor I rides in his car, he wants it to be comfortable, "his own easy chair." His attention to the interior (statement 10) is demonstrated by his responses to traffic noise and power accessories (statements 24, 34).

Statement Standard Score

(10) In an automobile, I appreciate a fine interior: an example of taste and care in design and engineering.

0.99

(24) I like driving with the windows up. It shuts out the rest of the world --- the traffic noises, the smells.

0.12

(34) I like a car that you <u>drive</u>. One that <u>performs</u>. All that power steering and all those gadgets --- they're extras. They get between you and the machine.

-1.85

FACTOR II

The Eager Truster

In choosing a car, the Eager Truster eschews making a big commitment in relation to price or size. He realizes the import such an investment has, economically and physically, and the Eager Truster isn't likely to latch on to something too costly, gaudy, or foreign. He'll shop different makes, take a long look at used cars, and if he does decide on a new automobile, it won't be lush with options —— a car is for transportation, primarily, and the

Eager Truster tries to avoid committing a lot of extra money to the purchase.

One way the Eager Truster seeks to resolve his prepurchase conflict is to find a helpful salesman and/or dealership that he can trust, be friends with. His is a positive view of service and dealerships, for the Eager Truster feels that if he takes the time to find a trustworthy dealer, the dealer will reciprocate by treating the Eager Truster as his friend. Thus, getting his automobile serviced doesn't force the Eager Truster into another commitment; he can rely on his friend the dealer to do a good job, because the dealer has taken the time to set up an amicable partnership with the Eager Truster.

Evidence for the Sketch

Factor II, named the Eager Truster, is comprised of seven persons, four men and three women. Two are students, one is a housewife, one a stewardess, one a truck driver, one a college professor, and one a veterinarian. The age range of the factor is from fifteen years to forty-four years, with the average age being thirty-one. The average annual income of the factor is \$ 15,000. Factor II is called "eager" because of his desire to own a car without waiting for the long process of ordering. The Factor II consumer is called "trusting" because of his expressed desire to be friendly with and trustful of the dealer. The following is offered as evidence for the previous sketch:

The Eager Truster is said to approach decision-making "a little bit impulsively." Factor II is the only factor to give a positive ranking to statement 18:

Statement

Standard Score

(18) When I buy a car, I'm eager to own it. I prefer not to order it. You have to wait so long.

0.05

The Eager Truster approaches his automobile decisions with as much information as he can muster, positively ranking statements 44 and 8:

Statement

Standard Score

(44) You should never rely complete—
ly upon a dealership for infor—
mation about the car you're go—
ing to buy.

1.07

(8) Euying a car is not a simple proposition. You can't know too much about the car you're going to buy.

0.55

But his eagerness forestalls any really in-depth research and he tends to rely on the advice of others, specifically the people selling him the car. He thinks dealers are trustworthy (statement 28) and has quite a positive attitude toward automobile salesmen (statements 59 and 1).

Statement

Standard Score

(28) It just does not make sense to trust an automobile dealer. He's in business to make money --- as much as he possibly can.

- -2.05
- (59) It's important to realize that the auto salesman is really an adversary. You want the lowest price, he wants the highest. Someone has to give, and if you're not tough,

it will be you.

-0.94

(1) I enjoy talking to auto salesmen when I buy cars. I get a lot of worthwhile information.

0.22

Decause Factor II has a negative attitude toward servicing his car (statement 3), relying on dealers for service is very important to the Eager Truster, (statement 50), and he exhibits the same friendly attitude when it comes to maintenance (statements 25 and 22).

Statement

Standard Score

(50) One ought to be able to rely on the dealership for service and repairs. Who ought to know more about your make of car than the people who specialize in that make?

1.74

(3) Taking care of a car --- getting the oil changed and all the other things --- is a nuisance. Necessary, but a nuisance.

0.62

- (22) It's impossible to get a dealer interested in my individual problems. To a dealer, I'm just one customer among many.
- -1.81

(25) It doesn't pay to be a nice guy with dealers; the only solution for good service is to be tough.

-2.02

The Eager Truster, because of this feeling of comaraderie with the dealer, expects a fair shake on price; Factor II was the only Factor to negatively rank statement 20.

Statement

Standard Score

(20) When a dealership services or repairs your car and you go to pick it up, you expect the bill to be too high.

-0.60

Factor II realizes that "reliance can be dangerous" and stands ready to shop around for a dealer (statement 27). And, if his reliance is taken for granted, he "takes his business elsewhere" (statement 26). Yet, the Eager Truster's desire to trust his automobile to the dealer is expressed in an overall positive feeling toward dealers in general (statement 2).

Statement

Standard Score

(2) The difficulty that consumers have with the auto industry is mostly because of dealers; not the auto manufacturers themselves.

-1.46

Shying away from major commitments also is apparant in Factor II's choice of automobile. As noted in the sketch, The Eager Truster, avoiding a large commitment and hence a more difficult decision, tends toward smaller cars (statements 31, 47).

Statement

Standard Score

(31) Buying a small car has a lot of advantages over a big car. It parks better than a big car, gets better gas milage, and has lower upkeep.

1.79

(47) I like the solid, substantial feeling of a big car on the high-way.

-0.54

Factor II looks at his car as basic transportation (statements 53 and 58) and doesn't want to tie up a lot of money in it unnecessarily (statements 5, 57, 37).

Statement

Standard Score

(53) I want a car I can trust, one that will behave itself and do what it's supposed to do. I don't think that's

	asking too much	2.46		
(5)	When I think about how much I have to pay out to drive in payments, in gasoline, in insurance it frustrates me.	0.30		
(58)	Most of us buy cars that we can afford, that do the job. But we'd really like to have more from a car than just getting the job done.	-0.11		
(57)	Buying a car may be expensive, but I don't think of it as sacrifice.	-0.38		
(37)	A thing about today's cars is that there is so much variety. By selecting a car and the options for it, you can have a virtually unique car. Nobody else would have one exactly like it, and I like the idea of that.	-1.30		
Brand switching and used cars offer attractive econ-				
omic alter	matives to the Eager Truster (statements	13, 43).		
And, whoth	or le distrusts his information hase, or	his a-		
bility to communicate with them, Factor II avoids foreign				
car dealers (statements 9 and 10).				
Ducto	nront Standard	Score		
(13)	I don't know at all what my next car will be. I don't feel bound to any one make of car.	1.5 6		
(9)	When you buy a foreign car you have to worry about service. There may not be a dealer nearby, and you may not be able to get parts for it.	0.89		
(15)	When I'm buying a car, I don't really care where it was made, whether it's American or foreign.	0.63		
(43)	You can have a lot more confidence in a new car than a used car.	- 0.07		

FACTOR III

The Self-Reliant Functionalist

As a whole, the Self-Reliant Functionalist judges a car strictly by its performance. He wants it to move when he touches the gas. He doesn't want it cluttered with tail fins and chrome --- form must follow function. For the same reasons, he's less likely to buy a small car; economy isn't as functional to the Self-Reliant Functionalist as the roominess and power of a bigger car. An automobile's function is utilitarian: to transport its occupants quickly, comfortably --- and powerfully --- to their destination.

To Factor III, the world is a place where there is work to be done, where a man should be judged by what he produces, by the results of his efforts. There is a certain austerity and seriousness to this viewpoint, but the Self-Reliant Functionalist is not without an appreciation for "the finer things," a well-appointed interior for example. It's just that they are less important than performance. They are, for him, a private matter.

The Self-Reliant Functionalist is on more comfortable ground with his opinions and judgements about the automobile industry. He can appraise it using his familiar performance criteria. The Self-Reliant Functionalist's image of the industry is positive; auto companies neither pollute nor purposely make inferior products; that would be dysfunctional. The Self-Reliant Functionalist views deal-

erships in a slightly negative way; he doesn't look for help from them or others. It's not that he doesn't think maintenance and service are important; on the contrary, they're mandatory to keep his automobile functioning properly. But he looks at them as his responsibility and as is his wont, he relies on his own capabilities.

Evidence for the Sketch

The Self-Reliant Functionalist type includes five males, ranging in age from twenty-five to fifty-five years. One is a manufacturing vice president, one a writer, one a mechanic, one a student, and the other a newspaper advertising manager. All make in excess of \$12,000 per year, the highest salary being \$40,000 per year. The Factor III type is called "self-reliant" because he depends on himself for information, decisions, and maintenance regarding automobiles. The label "functionalist" is used because the Factor views his surroundings in terms of accomplishments, of utility.

One of Factor III's most distinguishing characteristics is his dependence upon his own resources, his "self-reliance." When he examines automobiles, he amasses information (statement 8), and a primary source is his own knowledge; not the persons selling him the car (statements 44, 1).

Statement

Standard Score

(8) Buying a car is not a simple

proposition. You can't know too much about the car you're going to buy.

1.87

(44) You should never rely completely upon a dealership for information about the car you're going to buy.

1.30

(1) I enjoy talking to auto salesmen when I buy cars. I get a lot of worthwhile information.

-0.90

His attitude of independence is emphasized by his positive ranking of statement 42.

Duatement

Standard Score

(#2) Having a car mean freedom. It means not having to depend on somebody else for transportation.

0.25

The other half of Factor III's label as "functionalist." As noted in the factor sketch, value for the Self-Reliant Functionalist is commensurate with fitness. Factor III sees automobiles as having a definite purpose: you step on the gas and the car moves (statement 12), with as few non-essential extras as possible (statements 21, 34, 37).

Statement

Standard Score

(12) 1 like a car that moves when you touch the gas --- instantly, quickly.

2.07

(21) A well-designed car has nothing on it that isn't functional --- no useless chrome, no fake hood scoops, nothing that doesn't contribute to the car's periormance.

1.70

(34) I like a car that you drive. One that performs. All that power steering and all those gadgets --- they're extras. They get between you and the machine.

U.41

(37) A thing about today's cars is that there is so much variety. By selecting a car and the options for it, you can have a virtually unique car. Nobody else would have one exactly like it, and I like the idea of that.

-0.62

Thus, Factor III was the only factor to negatively rank statement 53. He relies on himself; he doesn't "trust" a car and he doesn't view an automobile as "behaving;" it's silly to personify an inanimate object.

Statement

Standard Score

(53) I want a car I can trust, one that will behave itself and do what it's supposed to do. I don't think that's asking too much.

-0.23

His functionalist viewpoint accounts for a positive attitude toward auto manufacturers. He disagrees with those statements critical of auto manufacturers on the grounds that such actions would be dysfunctional, e.g., "deliberately making cars that won't last."

<u>Statement</u>

Standard Score

(4) The auto companies are deliberately making cars that won't last so that we have to keep replacing them.

-1.71

(35) Auto companies are just part of a much larger problem --- the problem of endangering the environment.

-1.32

(41) The auto companies suffer from bigness. As producers they are clumsy, unwieldy --- and that fact shows up in the products they produce.

- -0.80
- (54) When auto companies try to satisfy the consumer, it's because of

pressure from the competition or the government.

-U.06

Similarly, the Self-Reliant Functionalist agrees with statement 40; the whole idea or entering into business to make money.

Statement

Standard Score

(40) The auto companies are far more profit-oriented than people-oriented.

0.83

when it comes to dealing with dealerships and salesmen, Factor III disagrees with items stating that those
ones are the "enemy," to be opposed (statements 25, 59).
His practical viewpoint is that that kind of behavior will
only hinder what business needs to be done; hence, dysfunctionality.

Statement

Standard Score

(25) It doesn't pay to be a nice guy with dealers; the only solution for good service is to be tough.

-0.23

(59) It's important to realize that the auto salesman is really an adversary. You want the lowest price, he wants the highest. Someone has to give, and if you're not tough, it will be you.

-0.15

Factor III's overall view of servicing his automobile is reflected in his negative ranking of statements 3 and 39. To heap the car functioning properly, it is necessary to service at.

Statement

Standard Score

(3) Taking care of a car --- getting the oil changed and all the other trangs --- is a muisance. Necessary, but a nuisance.

-1.20

(39) You shouldn't have to worry about a car mechanically --- it should run right --- and it will if it's built right.

-0.12

The Self-Reliant Functionalist has a somewhat negative view or dealer servicing (statement 27, 20), again because he feels he can rely on himself for repairs (statement 50).

Statement

Standard Score

(27) A major problem is service and repairs. You're lucky to find anybody who will do a good job---whatever the price.

1.54

(20) When a dealership services or repairs your car and you go to pick it up, you expect the bill to be too high.

0.70

(50) One ought to be able to rely on the dealership for service and repairs. Who ought to know more about your make of car than the people who specialize in that make?

-0.10

Any automobile is evaluated on its own merits by Factor III. He is not brand conscious (statement 13), probably examining individual advances and innovations for many automobile makes, including foreign cars (statements 16, 9).

Statement

Standard Score

(10) When I'm buying a car, I don't really care where it was node, whether it's American or foreign.

().74

(13) I don't 'mow at all what my neutron will be. I don't feel bound to any one make of car.

0.69

(9) When you buy a foreign car you have to worms about service. There may not be a dealer nearby, and you may

not be able to get parts for it.

-0.72

Sports cars are viewed positively by Factor 111; he can see a utilitarian performance in them rather than frivolity for the serious driver (statements 52, 19).

Statement

Standard Score

(52) Sports cars are really just expensive toys. You spend all your time fiddling with the engines or waxing them. They're something to play with.

-2.29

(19) Owning a sports car means you're carefree. A sports car's the car for good times, for driving through the country with the top down.

-2.25

In choosing his own vehicle, the Self-Reliant Functionalist tends toward big cars, (statements 47 and 49), valuing performance and full-sized comfort as more functional than economy, (statement 31).

Statement

Stanuard Score

- (47) I like the solid, substantial feet-
- 0.21
- (49) I don't like to drive a car that's too big. It makes me feel like I'm taking up too much of the road.

-1.26

(31) Buying a small car has a lot of advantages over a big car. It parks better than a big car, gets better gas mileage, and has lower uphcep.

-0.04

On the surface, styling is not of major concern to Factor III, unless it is a cluttered, gaudy design serving no purpose --- where form wouldn't follow function (statements 23, 51).

Statement

(23) I can't see buging a car if you don't like the way it looks.

U.90

(51) I like a car that stands out when at's parked anone others.

-0.06

Amidst this somewhat spartan view of automobiles, as noted in the sketch, the Self-Reliant Functionalist sees some "amenities" as attractive (statement 53). Eschewing power steering and "extra gadgets," the Factor III type does concern hamself with an automobile's interior, either because luxury may appeal to him at some level, or more probably because being seated in comfort makes both driving and riding easier, less straining, and hence more functional (statements 10, 6).

Statement

Standard Score

- (10) In an automobile, I appreciate a fine interior: an example of taste and care in design and engineering.
- 1.34
- (6) When you're buying a car, you should pay a lot of attention to the interior. After all, you spend a lot more time in the car than outside the car.

0.71

FACTOR IV

The Disillusioned Humanist

The Disillusioned Humanist distrusts auto companies for not trying harder to build better cars, hence satisfying the consumer, especially him. He expects the worst: the automobile companies overprice, build shoddy cars, and pollute. The Disillusioned Humanist would like to feel able to turn to the dealers for help, but he feels that

dealerships are in business to make a buck, and a single customer just doesn't carry much weight. The Disillusioned Humanist would like to be able to get a square deal from the dealer, but he feels that they're really all alike, uncaring. From buying the car to servicing it, auto companies and dealerships can't be trusted, from the Disillusioned Humanist's point of view. No matter how much money be pumps anto the car, the Disillusioned Humanist feels at's probably going down the drain.

The Disillusioned Humanist has similar negative feetings towards auto advertising. He doesn't trust the information they contain, especially claims of helping the
consumer; he sees through them, discrediting the motivation behind them.

Finally, the Disiliusioned Humanist ends up being frustrated. It doesn't make any difference what kind of car he buys, or what he does to make it run right, or how carefully he tries to select it, an automobile is going to let him down. The automobile companies let him down, the dealers let him down, the service people let him down. The Disillusioned Humanist basically doubts their motivation; they're trying to help themselves, not the consumer. The Disillusioned Humanist wants the ideal automobile --- free from breakdowns and maladies --- a car he can trust. So far, he's found the whole business untrustworthy, and for him, that's the outlook for the forseeable future.

Evidence for the Sketch

Six persons make up Factor IV, three males and three females. The youngest is twenty-three years of age, the oldest is forty-four, with the average age being thirty years. Three persons on the factor are students, one is a policeman, one an educational administrator, and one a housewife. The Factor's average income is 3 14,000. Factor IV is called "disillusioned" because of his expressed disenchantment with the automobile industry as a whole and "numanist" because of his concern for the rights of the consumer.

The outstanding characteristic of Factor IV is a completely negative view of automobile manufacturers (statement 2). Their product is inadequate (statements 41, 4, 45), they are "endangering the environment (statement 35), and worst of all show little concern for the consumer (statements 40, 54).

Statement Standard Score

- (40) The auto companies are far more profit-oriented than people-orlented.
- 2.15

(41) The auto companies suffer from bigness. As producers they are clumsy, unwieldy --- and that fact shows up in the products they produce.

- 1.49
- (4) The auto companies are deliberately making cars that won't last so that we have to keep replacing them.
- U.90
- (54) When auto companies try to saussy one consumer, it's because of pres-

•

sure from the competition or the government.

- (35) Auto companies are just part of a much larger problem --- the problem of engangering the environment.

 0.38
 - (2) The difficulty that consumers have with the auto industry is mostly because of dealers; not the auto manufacturers themselves.

 -0.16
- (43) You can have a lot more confidence in a new car than in a used car. -0.59

The Disillusioned Humanist harbors the same ill-feeling toward dealer networks. He'd like to be able to rely
on dealers for service or auto information (statements 50,
44), but so far Factor IV has found them lacking (statements
20, 22, 59, 28, 25, 1).

Statement Standard Score

- (20) When a dealership services or repairs your car and you go to pick it up, you expect the bill to be to high.
- (22) It's impossible to get a dealer enterested in my individual probtens. To a dealer, I'm just one customer among many. 1.01
- (59) It's apportant to realize that the auto salesman is an adversary. You want the lowest price, he wants the highest price. Someone has to give, and if you don't get tough, it will be you.
- (50) One ought to be able to rely on the dealership for service and repairs.

 Who ought to know more about your make of car than the people who specialize in that make?

 0.88
- (28) It just does not make sense to trust an automobile dealer. He's in bus-

iness to make money --- as much as he possibly can.

U. ೮೮

(25) It doesn't pay to be a nice guy with dealers; the only solution for good service is to be tough.

U.10

(44) rou should never rely completely on a dealership for information about the car you're going to buy.

-0.68

(1) I enjoy talking to auto salesmen when I buy cars. I get a lot of worthwhile information.

-0.87

Factor IV thinks that no matter what dealer he patronizes (statement 26), or for that matter, wherever he takes
his car for service (statement 27), he'll get the same
negative results.

Statement

Standard Score

(27) A major problem is service and repairs. You're lucky to find anybody who will do a good job --- whatever the price.

1.78

(26) Auto dealers are not all alike. It makes a great deal of difference which one you buy your car from.

-0.93

Just as bad as improper servicing for an automobile that malfunctions is that the Disillusioned Humanist feels he's throwing good money after bad (statements 5, 38, 3). Factor IV is wasting money that could be more profitably spent elsewhere (statement 57).

<u>Statement</u>

Standard Score

- (5) When I think about how much I have to pay out to drave --- in payments, an (asolane, an insurance --- at iraghtens ne.
- 1.03

(38) I have to thaink of the anomat of

the financial obligation you're getting yourself into.

1.00

- (3) Taking care of a car --- getting the oil changed and all the other things --- is a nuisance. necessary, but a nuisance. 0.29
- (57) Buying a car may be expensive, but I don't think of it as sacrificing other things. -0.74

Auto advertising is another sore spot with the Disillusioned Humanist. Instead of relying on them for information (statement 32), he doubts their sincerity of purpose, as actually helping the consumer. They become one more automotive disappointment.

Statement

Standard Score

(52) I like auto advertising. The ads are usually pleasant and informative.

- -1.56
- (55) I dislike the kind of auto adverursing that tells you the company cares about you. I'll take action over words anytime.

0.43

Finally, Factor IV is characterized as "frustrated" born from an idealism that he can't find in reality. The Distilusioned Humanist can't understand why auto manufacturers don't build a car that runs right (statements 53, 58, 39) so the consumer doesn't have to fool with it (statement 11). There isn't anyone to rely on, so it really doesn't make any difference to the consumer, as far as the Distilusioned Humanist can see, what kind of automobile is bought.

Statement

Standard Score

(53) I want a car I can trust, one that

- will behave itself and do what it's supposed to do. I don't think that's asking too much.
- 2.27
- (50) Host of us buy cars we can afford, that do the job. But we'd really like to have more from a car than just jettamit the job done.
- 1.15
- (39) You shouldn't have to worry about a car necessatily --- it should run right --- and it will if it's built right.
- 1.16
- (11) The owner is to blame for many of the things that go wrong with a car. If the owner takes good care of a car, it will henerally take good care of him.
- -1.03
- (15) You can tell a low about the person by the kind of car he buys.

-1.b8

FACTOR v

The Sensual Gournet

Of all the factors, the Sensual Gourmet is most concerned with style. Not the lines of the car, or how aesthetically pleasing it might be, but the automobile's "flavor," its image. For the gourmet, a car has to have a mystique, a personality of its own. A racing heritage, perhaps, or superb craftsmanship. Not something radical or gauche, but a uniqueness that makes the automobile stand out to those who know what a fine automobile is. The Sensual Gourmet would have a specially designed shift knob; not because it's easier to shift, but because it's interesting, it's different —— people would look at it. And that's the attitude of the Sensual Gourmet, that his automobile be recognized as a sign of good taste by the people "in the know," conveying his discriminating taste

to others of such standards.

To the Sensual Gourmet, the experience of driving is of high importance. When he controls the car --- shifting, steering, accelerating, throwing the car into corners --- he can feel the car respond to his efforts, the tires pulling, the automobile swaying. Factor V would like to drive smaller, manual-shift sports cars; he abhors the full-sized leviathons. Big cars blunt the feeling of the road, of driving; he demands a sensitive, maneuverable small car. The Sensual Gourmet delights in driving, handling the automobile's controls, feeling it perform under his guidance, and luxuriating, perhaps, in leather seats with the wind blowing through his hair.

And because of his automobile's importance to him, the Sensual Gourmet lavishes all the attention on it he thinks it needs. He'll take as long as necessary, at whatever cost, to search out a mechanic, simply, someone who cares, someone who appreciates the automobile, someone who is "in the know." The Sensual Gourmet experiences his car, its image, its responsiveness; for to him the car is an extension of himself.

Evidence for the Sketch

Factor V is made up of six persons, five males and one female. Factor V is the youngest factor, ranging in age from twenty-one years to thirty-two; the average age being twenty-four. All but one of the respondents is single; that one being married less than one year. Four per-

1.96

sons are students, one a freelance writer, and one works in public relations. With an average income under \$ 10,000, it can be said that this factor represents a person free from major responsibilities, younger and unencumbered with family. Factor V is called "sensual" because he is a person of pleasure, revelling in the physical and emotional aspects of an automobile. "Gourmet" is applicable in that Factor V has a knowledge and appreciation of what he considers fine automobiles. The following evidence is offered in support of the interpretation:

Factor V is said to "respond" to his automobile, and this comes first and foremost from his love of driving --the two highest positively ranked statements, 33 and 46, express his feelings.

Statement Standard Score

- (33) It takes skill to drive really well. It's something to be proud of if you have it.
- (46) Many people only drive to get somewhere. I drive because of that too, but I really enjoy driving itself.

When actually driving, it is the physical response that intrigues Factor V. He has to be able to "feel" the road when controlling the automobile (statement 34), when eliciting its performance (statement 12). The Sensual Gourmet relishes leather upholstery (statement 10) and a fresh breeze (statement 24).

Statement

Standard Score

(34) I like a car that you drive. One

	that performs. All that power steering and all those gadgets they're extras. They get between you and the machine.	1.53
(12)	I like a car that moves when you touch the gas instantly, quickly.	1.12
(10)	In an automobile, I appreciate a fine interior: an example of taste and care in design and engineering.	0.42
(24)	I like driving with the windows up. It shuts out the rest of the world the traffic noises, the smells.	-1.72

His desire for maneuverability dictates that Factor V prefer smaller, more responsive automobiles (statements 31, 49, 47) to medium or full-sized ones.

Statement

Standard Score

- (31) Buying a small car has a lot of advantages over a big car. It parks better than a big car, gets better gas mileage, and has lower upkeep.
- 1.47
- (49) I don't like to drive a car that's too big. It makes me feel like I'm taking up too much of the road.
- 0.37
- (47) I like the solid, substantial feeling of a big car on the highway.
- -2.12

As noted in the sketch, a second major criterion for the Sensual Gourmet's choice of automobiles is its "style." He recognizes that there is more to an automobile than meets the eye, an added value associated with it (statements 51, 48, 58) that he isn't above emphasizing with a racing stripe, for example (statement 21).

Statement

Standard Score

(51) I like a car that stands out when it's parked among others.

1.44

(48) Cars and sex are not unrelated. A pretty girl is more eye-catching in a good looking car. A guy in a sports car gets more attention than the same guy in a Volkswagen. 1.03 (58) Most of us buy cars that we can afford, that do the job. But we'd really like to have more from a car than just getting the job done. 0.86 (21) A well-designed car has nothing on it that isn't functional --- no useless chrome, no fake hood scoops, nothing that doesn't contribute to the car's performance. 0.41 The Sensual Gourmet will likely be brand conscious (statement 13), having taken the time to learn about such attributes beforehand (statements 8, 44). Statement Standard Score (13) I don't know at all what my next car will be. I don't feel bound to any one make of car. -0.72 (8) Buying a car is not a simple proposition. You can't know too much about the car you're going to buy. 1.84 (44) You should never rely completely upon a dealership for information 1.18 about the car you're going to buy.

His car reflects his knowledge and good taste and he looks at other people and their automobiles in the same way (statement 15). In essence, Factor V's positive ranking of statement 36 reflects his own wish for a personal, special kind of car.

Statement

Standard Score

(15) You can tell a lot about the person by the kind of car he buys.

1.04

(36) I like a car that <u>fits</u> me physically --- in size, in style, in character. 0.83

In regards to automobile manufacturers, most statements, positive or negative, were ranked relatively neutrally by Factor V, showing that these are not highly
salient. It is with service and dealerships that the
Sensual Gourmet concerns himself.

To Factor V, keeping his automobile in top running condition is paramount: it is vitally necessary to keep it serviced (statements 3, 39).

Statement

Standard Score

- (3) Taking care of a car --- getting the oil changed and all the other things --- is a nuisance. Necessary, but a nuisance.
- -1.52

(39) You shouldn't have to worry about a car mechanically --- it should run right --- and it will if it's built right.

-0.91

The Sensual Gourmet doesn't trust his car to just anybody, he seeks out a mechanic who has the same feelings about the automobile that he has (statement 27). If the Sensual Gourmet does go to a dealership, he'll shop around until he finds one that meets his standards (statement 26). The result is a service operation that a Factor V type can have confidence in, leading to a positive feeling about dealerships (statements 25, 22).

Statement

Standard Score

(25) It doesn't pay to be a nice guy with dealers; the only solution for good service is to be tough.

-0.73

(22) It's impossible to get a dealer interested in my individual problems. To a dealer, I'm just one customer among many.

-0.32

CHAPTER IV

CONCLUSIONS

This study sought to divide automobile consumers into benefit segments on the basis of attitudes. As Bruner stated, attitudes are functional, meaning that one holds and uses attitudes for reasons; to acheive some gain or minimize some loss.

The present study provides evidence that Bruner was right. That is, motivations were identified that underlie and presumably define the attitudes of persons in the study. Segments were differentiated on the basis of attitudes and there are not an unlimited number of such segments.

A second purpose of this study was to examine its usefulness in terms of theoretical and practical implications.

Theoretical implications cover broad areas of application;

practical implications have specific application to individual segments.

One outgrowth of the study can be a comparison of results with Martineau's earlier findings. Martineau indicated five areas of meaning for the automobile: (1) practical value as machinery, (2) major family investment, (3) indicator of social meaning, (4) symbol of self-control and personal mastery, and (5) revealer of personality characteristics.

Martineau suggests some, but not all, motivations. This study found that the motivations suggested were dominant in some factors, e.g., practical value was of high importance to the Self-Reliant Functionalist, but other equally important motivations, like the sense of touch to the Sensual Gourmet, were found. In addition, Martineau gives no clue as to the relative importance of such motivations, where this thesis is based on factors giving hierarchial importance to such motivations: a factor is a "package" of such motivations.

Martineau's categories are also dimensions rather than segments. Evidently his motivations are elemental to all automobile consumers, where segments, for marketing purposes, must be based on differences. That is, Martineau's approach suggests that optimizing all five categoiles would produce a perfect advertisement; the problem being that its appeal would be too broad, ranging across all automobile consumers.

Also, Martineau's study, based on analysis of depth interviews, is subject to the errors and limitations of the researcher's bias. The fact that this study is based on operant evidence, interpreted within the constraints of the data, is stressed as providing a more accurate view of the consumer.

But most importantly, Martineau's categories fall into the same impractical trap as that marketing literature which

attempts to understand consumer behavior from a static viewpoint. For example, the problems associated with the personality theorists described in the first chapter are a result of defining "personality" as denoting consistent patterns of response to internal and external stimuli. Personality "typing" of consumers fails to account not only for invariance in behavior because of too rigid labeling, but also for hierarchical importance of traits over time.

One way in which the dynamics of behavior have been examined is through the field theory approach as outlined by Kurt Lewin. (1935). 59

As this school of thought sees it, behavior is a function of the situation which exists at the time the behavior occurs, where the causes of behavior are forces in a psychological "field" of an individual. This "field" is a totality of all simultaneously existing facts and perceptions of the individual. Field theorists would say that to understand behavior, one must understand all the forces in the life space "field" --- the foals, positive and negative aspects, the forces pushing and pulling the individual in various directions, and the barriers that block his efforts to reach his goals.

The preceding paragraph emphasizes the need not simply to label these forces, but to understand their nature. It is thought that the functional nature of an individuals at
59 Kurt Lewin, A Dynamic Theory of Personality, ed. D.K. Adams and K.E. Zener, McGraw-Hill, 1935.

titudes provides an answer.

Andreason (1965)⁶⁰ describes attitudes as systems whose components vary in valence, or the degree to which the attitude is favorable or unfavorable toward the attitude-object, as measured by an arbitrary scale, c.g., -1 to +1. That this disposition toward an object is variable, depending on time and situation, can be examined by reviewing the study of housewives using tuna fish in Chapter 1.

Stephenson indicates two groups of users, the "snackers" and the "fillers." These groups are evident at the broadest level, where the housewives sorted statements, like respondents in this thesis, without regard to a specific situation.

Thus, keeping in mind field theory and the functional nature of attitudes, one can visualize a continuum for the automobile consumer, ranging from a broad, abstract view of automobiles to the actual purchase decision. In the ideal situation, a consumer may like tinted windows or radial tires, whereas the actual auto purchased has to be bought within dealership constraints like inventory and price. The question arises of how to measure the different steps along the continuum.

Q-technique, segmenting the audience in terms of attitudes, can be used as a tool. Attitude disposition valences, their positive and negative balue, can be modeled by Q-sorts; over time or with different conditions of instruction to the respondents. The respondents can be told to arrange the Q-

Alan R. Andreason, New Research in Marketing, ed. Lee E. Preston, University of California, Berkeley, 1965.

sort in terms of what they would like in an automobile, or how they would describe their behavior in a buying situation. The most specific behavior can be modeled by asking questions like: "The salesman has just said 'X' to you, how do you react?" Points along the continuum, represented as different behavior, can be analyzed with Q-technique to show the salience of certain items and their situational importance.

Practical implications of this study arise from the interpretation of the factors. The attitudes modeled by the factors represent those motivations, ranked by the respondents, that are important to them in satisfying goals. The functional nature of attitudes, that they are put to use, results in behavior: the factors have chosen among positive benefits and negative deficits as they perceive them in regards to an automobile. Because a factor provides a total array of items placed according to importance the consumer proceeds by maximizing the ratio of benefits to deficits.

It is this ratio that is important to communication. Two aspects of communication, personal selling and advertising, can be examined in relation to the individual factors.

In reviewing this data, the areas of selling and servicing the automobile seemed to hold the most interest for all factors. Each area is a situation in which the factors could be involved, and certain attributes and aspects of those situations, on the basis of benefits to be sought, or deficits to be avoided, can be examined.

The salesman is the initial contact when the customer decides to purchase. The sales situation should become that of the salesman attempting to aid the consumer in satisfying his "package" of benefits from the automobile. There exists the problem of identifying the segment with which the salesman is dealing; hence it might be possible to generate a series of questions designed to elicit the customer's type.

If the assessment can be made, the conversation should follow the lines laid down in the factor interpretations. For example, a salesman dealing with a Substantial Citizen should emphasize value in terms of plush interiors, power accessories, and air conditioning. The Eager Truster should be handled firmly, the salesman emphasizing economy. Even the physical area of the dealership could be part of the proper selling situation. The Sensual Gourmet would be more inclined to read an auto buff magazine, the Disillusioned Humanist would prefer something along the lines of Consumer Reports; hence placement of these magazines in and around the dealership is suggested.

The consensus items also provide areas of interest. Pride in driving can be reinforced in the test drive situation, for example. At some point, the salesman could say in regard to an adjustment in traffic by the driver, "You handled that very well."

Servicing the automobile has different reactions from

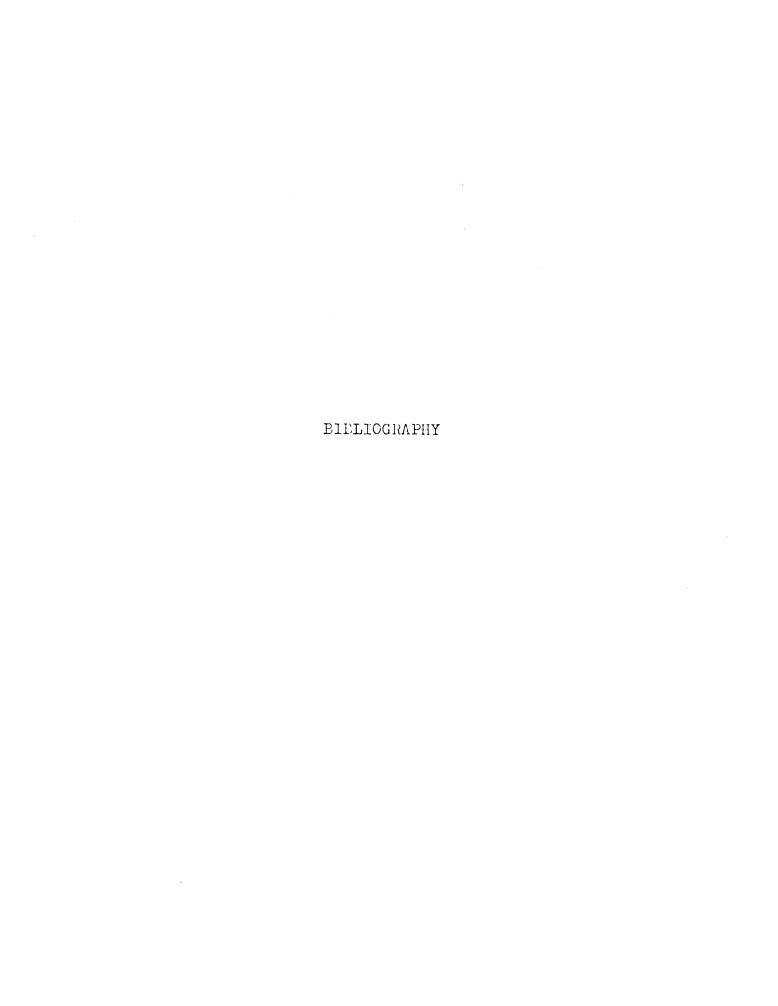
each factor. To Factor I, the Substantial Citizen, it should be explained that the service is of high quality, and that a valued customer gets that little bit of extra attention. The Self-Reliant Functionalist might like to be appraised of the service area itself, examining the operation.

The above provides only brief examples of how communication with individual factors might aid in setting up a profitable selling situation. One could examine a continuum of such behavior, involving the condition of choosing the automobile; from pre-conditioned behavior that might rely heavily on advertising, to post-conditioned behavior in the area of service.

Advertising takes similar advantage of the benefits/
deficits ratio. The interpretation of each factor vividly points out the areas on interest to the factor, and
those points should be emphasized in mass media. A television commercial aimed at the Sensual Gournet might open with a shot of hands drawing on leather driving gloves;
a driver and automobile silhouetted against the sun. A
close-up shot of the automobile's interior follows, taking in leather upholstery and wooden steering wheel. As
the driver quickly familiarizes himself with the gears, a
hand in close-up running through the gears, the scene
cuts to a front-on view of the automobile, wheels turning
as the engine roars into life and the car accelerates past
the camera. The rest of the commercial follows the automobile through twisting roads, cutting to the driver down

and up-shifting, utilizing many camera angles to emphasize the road handling capabilities of the automobile.

Such a sample commercial is only speculative, of course, but the points emphasized follow those benefits demanded by such a consumer. In such a manner might benefit segmentation help the marketer, manufacturer, and dealer organizations better appeal to their target markets.



BTELTOGRAPHY

A. BOOKS

- Andreason, Alan R. New Research in Marketing. University of California, Berkeley, 1965.
- Bauer, Raymond A., "Negro Consumer Behavior" in Joseph Neuman, On Knowing the Consumer. New York, John Wiley & Sons, 1966.
- Lessig, V. Parker. Consumer Buying Behavior. Washington State University Press, 1971.
- Lewin, Kurt. A <u>Dynamic Theory of Personality</u>. New York, McGraw-Hill, 1935.
- Martineau, Pierre. "Automobiles: What They Mean to Americans" in H.W. Hepner, ed. Modern Advertising Practices and Principles. New York, McGraw-Hill, 1956.
- Massey, William F., Frank, Ronald E., and Lodahl, Thomas M., Purchasing Behavior and Personal Attributes. Philadelphia, University of Pennsylvania Press, 1966.
- Robertson, Thomas S. Consumer Behavior. Chicago, Scott Foresman and Co., 1970.
- Stephenson, William. An Image for Missouri's Public Libraries. Columbia, Missouri, University of Missouri, 1962.
- Triandis, Harry C. Attitude and Attitude Change. New York, John Wiley & Sons, 1971.

B. PERIODICALS

- Bass, Frank M., Tigert, Douglas J., and Lonsdale, Ronalt T.,
 "Earket Segmentation: Group Versus Individual Behavior,"

 Journal of Marketing Research, V (August, 1968) p.204.
- Birdwell, Al E., "A Study of the Influence of Image Congruence on Consumer Choice," Hournal of Business, XLI (January, 1968) p. 76-88.
- Bowman, B., and McCormick, F., "Market Segmentation and Marheting Mixes," Journal of Marketing, XXV (January 1961) p. 25-29

- Brandt, Steven C., "Dissecting the Segmentation Syndrome,"

 Journal of Marketing, XXX (October, 1904) p. 22-27.
- Evans, Franklin B., "Psychological and Objective Factors in the Prediction of Brand Choice: Ford vs. Chevrolet," The Journal of Business, XXXII (October, 1959), p. 340-369.
- Evans, Franklin B., "Ford vs. Chevrolet: Park Forest Revisited,"

 The Journal of Business, XLI, 4, (October, 1968) p.445-459.
- Evans, Franklin B., and Roberts, Harry V., "Fords, Chevrolets, and the Problem of Discrimination," <u>Journal of Business</u>, XXXVI (April, 1963) p. 242-244.
- Evans, Franklin B., "Reply: You Still Can't Tell a Ford From a Chevrolet," <u>Journal of Business</u>, XXXIV (January, 1961), p. 54.
- Ferber, Robert, "Research on Household Behavior," American Ecomomic Review, LII (March, 1962), p. 19-63.
- Frank, Ronald E., Massey, William F., and Boyd, Harper W.,
 "Correlates of Grocery Product Consumption Rates," <u>Hournal</u>
 of <u>Marketing Research</u>, IV, 2, (May, 1967) p. 194-190.
- Frank, Ronald E., "Market Segmentation Research: Implications and Findings," in Frank M. Bass, Charles W. King, and Edgar A. Pessencier, Application of the Sciences in Marketing Havagement, New York, John Wiley & Sons, 1997.
- Greeno, Daniel, Sommers, Montrose S., and Kernan, Jerome B.,
 "Personality and Implicit Behavior Patterns," <u>Journal of Marketing Research</u>, (February, 1963) p. 63-70.
- Haley, Russell I., "Benefit Segmentation: A Decision Oriented Research Tool," <u>Journal of Marketing</u>, XXXII (July 1968) p. 30-35.
- Haloy, Russell I., "Benefit Segmentation," <u>Journal of Advertising Research</u>, II (August 1971) p. 3-0.
- Harp, J., "Secioeconomic Correlates of Consumer Behavior,"

 <u>American Journal of Economics and Sociology</u>, XX (1901),
 p. 205, 270.
- Keponen, Arthur, "Personality Charactic ristics of Purchasers,"

 Journal of Advertising Research I, (Spptember 1900), p. 6-12.
- Kuelm, Alfred A., "Demonstration of the Relationship Between Psychological Factors and Brand Choice," <u>Journal of Business</u>, XXXVI (April 1963) p. 237-241.
- Hunn, Henry L., "Brand Perception as Related to Age, Income, and Education," <u>Hournal of Marketing XXIV</u> (January 1960) p. 29-34.

- Hyers, John G., "Determinants of Private Frank Attitudes,"

 Journal of Marketing Research, I, No. 1, (February 1967)

 p. 74-01.
- Rich, Stuart U., and Jain, Subhash C., "Social Class and Life Cycle as Predictors of Shopping Belavior," Journal of Marketing Research, IV, No. 2 (Ma. 1907), p. 184-190.
- Roberts, Alan A., "Applying the Strategy of Market Segmentation," <u>Business Morizons</u>, Vol. 4 (Fall, 1961) p. 65-72.
- Sheth, Jagdish N., "A Review of Buyer Behavior," <u>Management</u> <u>Science</u>, No. 12 (August 1967), p. 718-756.
- Shoth, Jagdish N., "A Review of Buyer Behavior," <u>Management</u> Science, No. 12 (August 1967), p. 718-750.
- Smith, Wendell, "Product Differentiation and Market Segmentation as Alternative Marketing Strategies," <u>Journal of Harketing</u>, XXI (July, 1956) p. 5-8.
- Stephenson, William, "Application of Q to the Assessment of Public Opinion," <u>Psychological Record XIV</u> (1964) 265-273.
- Twedt, Dik W., "How Important to Marketing Strategy is the Heavy User," <u>Journal of Marketing</u>, XXVIII (January 1964) p. 71-72.
- Westfall, Ralph, "Psychological Factors in Predicting Product Choice," <u>Journal of Marketing</u>, xxvi (April, 1962) p. 34-40.
- Winick, Charles, "The Relationship of Personality Needs, Objectives, and Brand Choice: A Reexamination," <u>Journal of Eusiness</u>, XXXIV (January, 1901) p. 01-07.
- Yankelovich, Daniel, "New Criteria for Market Segmentation,"
 <u>Harvard Pusiness Review</u>, XLII, (March-April 1964) p. 89.

C. UNPUBLISHED MATERIALS

- Steplenson, William, Unpublished paper expounding methodological and theoretical foundations in application of Q-methodology in advertising, Columbia, Missouri: University of Missouri, pp. 9-10.
- Booth, Laurel, "An Image Study of EcCall's Magazine," Masters Thesis, University of Missouri, 1988.

APPENDIX A

APPENDIX A: STATEMENTS IN THE Q-SAMPLE

- 1. I enjoy talking to auto salesmen when I buy cars. I get a lot of worthwhile information.
- 2. The difficulty that consumers have with the auto industry is mostly because of dealers; not the auto manufacturers themselves.
- 3. Taking care of a car --- getting the oil changed and all the other things --- is a nuisance. Necessary, but a nuisance.
- 4. The auto companies are deliberately making cars that won't last so that we have to keep replacing them.
- 5. When I think about how much I have to pay out to drive -- in payments, in gasoline, in insurance -- it frustrates me.
- 6. When you're buying a car, you should pay a lot of attention to the interior. After all, you spend a lot more time in the car than <u>outside</u> the car.
- 7. It seems that auto ads always talk about little things, instead of stressing really important information.
- 8. Buying a car is not a simple proposition. You can't know too much about the car you're going to buy.
- 9. When you buy a foreign car you have to worry about service. There may not be a dealer nearby, and you may not be able to get parts for it.
- 10. In an automobile, I appreciate a fine interior: an example of taste and care in design and in engineering.
- 11. The owner is to blame for many of the things that go wrong with a car. If the owner takes good care of a car, it will generally take good care of him.
- 12. I like a car that moves when you touch the gas --- instantly, quickly.
- 13. I don't know at all what my next car will be. I don't feel bound to any one make of car.
- 14. In buying an automobile, what's really important is the car itself. You're buying a car; not a brand and not a company.

- 15. You can tell a lot about a person by the kind of car he buys.
- 16. When I'm buying a car, I don't really care where it was made, whether it's American or foreign.
- 17. You don't worry about looks when you're buying a small car; you buy a small car for basic transportation.
- 13. When I buy a car, I'm eager to own it. I prefer not to order it. You have to wait so long.
- 19. Owning a sports car means you're carefree. A sports car's the car for good times, for driving through the country with the top down.
- 20. When a dealership services or repairs your car and you go to pick it up, you expect the bill to be too high.
- 21. A well-designed car has nothing on it that isn't functional --- no useless chrome, no fake hood scoops, nothing that doesn't contribute to the car's performance.
- 22. It's impossible to get a dealer interested in my individual problems. To a dealer, I'm just one customer among many.
- 23. I can't see buying a car if you don't like the way it looks.
- 24. I like driving with the windows up. It shuts out the rest of the world --- the traffic noises, the smells.
- 25. It doesn't pay to be a nice guy with dealers; the only solution for good service is to be tough.
- 26. Auto dealers are not all alike. It makes a great deal of difference which one you buy your car from.
- 27. A major problem is service and repairs. You're lucky to find anybody who will do a good job --- whatever the price.
- 28. It just does not make sense to trust an automobile dealer. He's in business to make money --- as much as he possibly can.
- 29. There really is no such thing as a "family car." Even for a married couple, a car always belongs more to one person than to both.
- 30. Styling is based on a follow-the-leader approach, with

- the auto companies copying each other's ideas. As a result, new cars look too much alike.
- 31. Buying a small car has a lot of advantages over a big car. It parks better than a big car, gets better gas mileage, and has lower upkeep.
- 32. I like auto advertising. The ads are usually pleasant and informative.
- 33. It takes skill to drive really well. It's something to be proud of if you have it.
- 34. I like a car that you drive. One that performs. All that power steering and all those gadgets --- they're extras. They get between you and the machine.
- 35. Auto companies are just part of a much larger problem --- the problem of endangering the environment.
- 36. I like a car that <u>fits</u> me physically --- in size, in style, in character.
- 37. A thing about today's cars is that there is so much variety. By selecting a car and the options for it, you can have a virtually unique car. Nobody else would have one exactly like it, and I like the idea of that.
- 38. I hate to think of the amount of money you have to spend for a car --- the financial obligation you're getting yourself into.
- 39. You shouldn't have to worry about a car mechanically --- it should run right --- and it will if it's built right.
- 40. The auto companies are far more profit-oriented than people-oriented.
- 41. The auto companies suffer from bigness. As producers they are clumsy, unwieldy --- and that fact shows up in the products they produce.
- 42. Having a car means freedom. It means not having to depend on somebody else for transportation.
- 43. You can have a lot more confidence in a new car than a used car.
- 44. You should never rely completely upon a dealership for information about the car you're going to buy.
- 45. There's something sad about trading in an old car. It's like losing a friend.

- 46. Many people only drive to get somewhere. I drive be-cause of that too, but I really enjoy driving itself.
- 47. I like the solid, substantial feeling of a big car on the highway.
- 48. Cars and sex are not unrelated. A pretty girl is more eye-catching in a good looking car. A guy in a sports car gets more attention than the same guy in a Volks-wagen.
- 49. I don't like to drive a car that's too big. It makes me feel like I'm taking up too much of the road.
- 50. One ought to be able to rely on the dealership for service and repairs. Who ought to know more about your make of car than the people who specialize in that make?
- 51. I like a car that stands out when it's parked among others.
- 52. Sports cars are really just expensive toys. You spend all your time fiddling with the engines or waxing them. They're something to play with.
- 53. I want a car I can trust, one that will behave itself and do what it's supposed to do. I don't think that's asking too much.
- 54. When auto companies try to satisfy the consumer, it's because of pressure from the competition or the government.
- 55. I dislike the kind of auto advertising that tells you the auto company cares about you. I'll take action over words anytime.
- 56. I think a person should be proud if he's able to work on his car himself, to help it run better and look better.
- 57. Buying a car may be expensive, but I don't think of it as sacrificing other things.
- 58. Most of us buy cars that we can afford, that do the job. But we'd really like to have more from a car than just getting the job done.
- 59. It's important to realize that the auto salesman is an adversary. You want the lowest price; he wants the highest price. Someone has to give, and it you don't get tough, it will be you.



APPENDIX B: SAMPLE SCORE SHEET

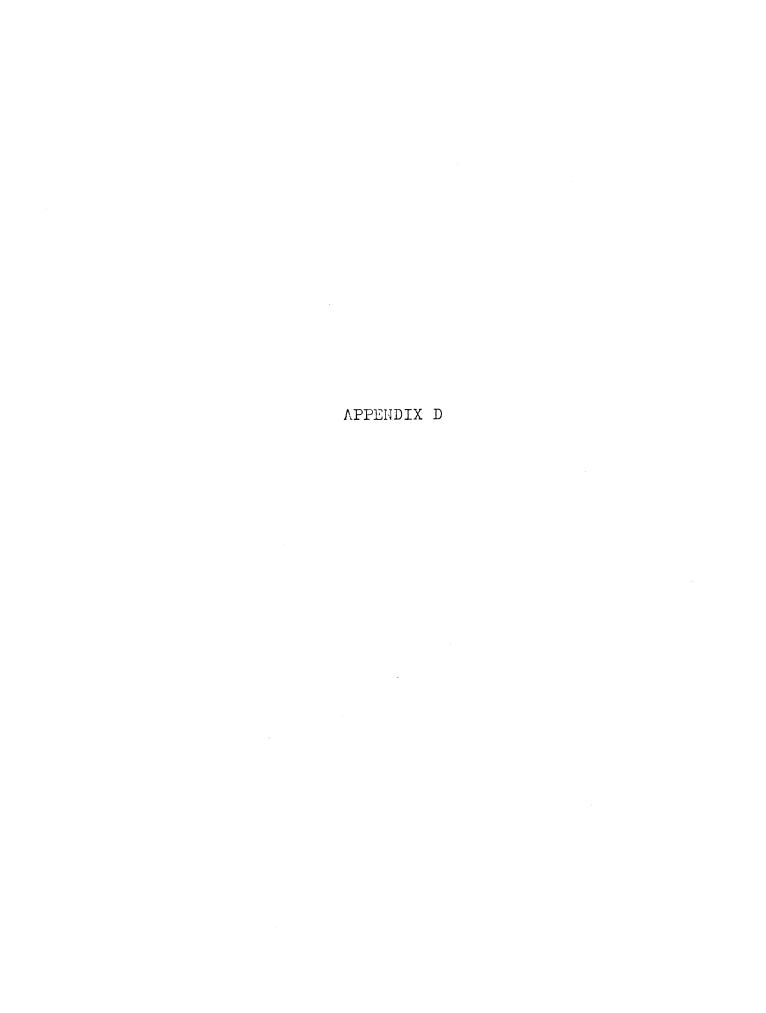
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APPENDIX C

APPENDIX C: DEMOGRAPHIC DATA ON RECPONDENTS

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Variable	Λge	Ѕех	Education	Occupation		Number of Autos Owned
1	23	M	16	Student	\$ 3,000) 1
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1 2 3 4	23 22	\mathbf{F}	16	Journalist	12,000	1
71		F	17	Student	\$ 5,00C) 1
5	26	Μ	12	Tire Store Manager	\$14 , 000) 2
6	22	\mathbf{F}	12	Bank Teller	~\$14.000) 2
7	4.4	M	12	Truck	#13,000	
•		••	2. C	Driver	11 2. 7 1 0 0 0	_
8	4 4	\mathbf{F}	12	Housewife	\$13,000) 2
9	33	$I \cdot I$	19	Teacher	\$33,000) 2
10	21	М		Student	\$ 3,000) 1
11	19	М	15 12	Auto As-	\$ 3,000)
				sembler		
12	22	${f F}$	16	Student	\$ 5,000) 2
13	23	11	15	Student	\$ 5 , 000) 2
14	49	${f F}$	12	Housewife	\$25 , 000) う
15	49	11	12	Auto Mer-	\$25 , 000) ろ
			_	chandiser		_
16	52	\mathbf{F}	12	Housewife	\$45,000))) 2
17	29	<u>M</u>	18	Teacher	\$24,000) 2
18	30	न्	17	School Ad-	\$33,000) 2
				ministra-		
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21	28	$\overset{\mathbf{r}}{\mathrm{F}}$	13	Student	\$ 3,000))
22 21	20	M	14	Student	\$ 4,000) 2
23	21	М	15	Student	\$ 4,000 \$ 3,000 \$ 4,000 \$ 5,000) <u> </u>
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<i>L</i>)		11	1)	arian	1,20,000	,
26	32	14	16	Writer	\$12,000) 1
27	50	ŀi	16	Auto Sales		
<i>-</i> /		• •	20	man	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
28	47	\mathbf{F}	16	Housewife	\$50,000) 3
29	25	14	12	Mechanic	\$15,000) 2
3Ó	2 6	\mathbf{F}	12	Housewife	\$10,000	
31	23	$\tilde{\mathbf{F}}$	<u>1</u> 6	Retail	\$ 7,000) 1
> -	- /	_	-	Sales	. ,	
32	25	1-1	17	TV Camera-	\$ 9,000) 1
				man		
<i>3</i> 3	32	I-I	19	Teacher	\$20,000) 2
34	28	\mathbf{F}	12	Secretary	\$10,000	
34 35	50	1.1	12	Sales	\$30,000) 2
				Manager		

Variable	Age	Sex	Education	Occupation		Number of Autos Owned
36 37 38	23 25 24	F M F	12 14 13	Secretary Student Airline Reserva-	\$10,000 \$10,000 \$22,000	2
39 40	25 28	14 M	13 12	tionist Policeman Auto Les- sor	\$22,000 \$12,000	
41	26	\mathbf{F}	17	Speech Therapist	\$20,000	2
42 43	15 33	M M	10 17	Student Advertis- ing Exec-	\$35 , 000	1
<i>L</i> ₋ <i>L</i> ₋	29	M	16	utive Newspaper Advertis- ing Direc-	\$15,000	1
45	55	M	12	tor Real Estate	\$15 , 000	2
46 47 48 49 50	21 23 29 55	F M M M M	15 18 16 16 8	Agent Student Student CPA CPA Manufac-	\$3,000 \$25,000 \$50,000 \$40,000	2 1 3
51 52 53	23 37 24	M M M	17 20 16	turer Student Doctor Auto Sales-	\$ 3,000 \$40,000 -\$15,000	2
54	23	M	16	man Public Re-	\$11,000	1
55	23 21	\mathbf{F}	16	lations Housewife	\$11,000	1
55 56 57	28	M	15 16	Student Advertis- ing Media	\$ 3,000	
53	<i>!</i> ! O	II	114	Analyst Truck Les-	\$20,000	2
59	45	H	20	sor Dentist	\$30 , 000	3



APPENDIX D: UNROTATED FACTOR LOADINGS

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