A Q-STUDY IN ROLE IDENTIFICATION USING A SAMPLE OF ADVERTISING PHOTOGRAPHS

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By

Elke Koch-Weser

AN ABSTRACT OF A THESIS

Submitted to
Michigan State University
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Approved: Malcolm S. MacLean, Jr.

ABSTRACT

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by Elke Koch-Weser

This pilot study is concerned with the operation of identification mechanisms in the message-receiver relationship in one instance of mass communication, that is, pictorial advertising.

It has been found that pictures presenting human models in combination with the advertised product attract more attention and are better recalled than pictures showing the advertised product alone. This phenomenon has been attributed to identification mechanisms which occur whenever the reader, who sees the model in a picture, imagines himself in the place of the depicted model and thus experiences this model's satisfaction from the use of the advertised product.

The general hypothesis of the study was that the more closely characteristics of the model correspond to those of the reader himself, the deeper the identificatory response will be. A distinction was made between the reader's identification with a depicted model in reference to his actual way of life and in reference to his ideal way of life. Accordingly, the extent to which persons choose different models as objects of identification when comparing them to actual self notions and when comparing them to ideal self notions has been investigated. The main variables studied were age correspondence and sex correspondence. Since it was anticipated that colored pictures would stimulate identification more successfully than black and white pictures, the color variable was also introduced into the study in order to control for its effects. A typology of the audience segmentation with respect

to identificatory reactions to advertising messages has also been attempted.

Stephenson's Q-technique was chosen as an instrument not only because of its particular use in assessing unobservable phenomena, such as identification, but also because it allows one to investigate how individual persons relate themselves to the stimuli they find in the messages. For Q-sorting purposes a Q-sample of full-page advertising photographs from Look and Life magazines was composed on the basis of a factorial design which included the selected picture variables (sex of model, age of model, color of picture). Fifteen pairs of young, middle-aged, and old husbands and wives performed Q-sorts where they described their actual and ideal self notions by means of the picture cards. The data were processed by means of analysis of variance and factor analytic methods.

The findings from this Q-study show that identification in respect to actual as well as ideal self notions tended to be facilitated if sex and age correspondences prevailed between the receivers of the message and the depicted model. Concerning the color variable it was found that men and women of all age groups gave a striking advantage to colored pictures when they chose their ideal objects of identification, which was not the case when they chose their actual objects of identification. When audience segmentations were assessed by grouping persons into particular "types" according to their identification with similar models, six "types" of actual self notions and six "types" of ideal self notions could be distinguished. Each "type" was tentatively named by referring back to the original Q-sorts.

Though the generalizability of these results is restricted due to the limited size of the subject sample, and though advertising illustrations were studied in isolation from headlines and copy, these phenomena merit the attention of the art director who wishes to integrate models into an illustration in order to elicit identification mechanisms in a special group of readers within a larger audience.

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LIST OF ABBREVIATIONS APPEARING IN FIGURES AND TABLES

C	Color Variable
S	Sex Variable
A	Age Variable

Subject Variables

	Sex Variable
M	male subjects
F	female subjects
	Age Variable
Y	young subjects
M	middle-aged subjects
O	old subjects
	Sex-Age Combinations
YF	young female subjects
MF	middle-aged female subjects
OF	old female subjects
YM	young male subjects
MM	middle-aged male subjects
OM	old male subjects

Picture Variables

	Sex Variable
m	male models
f	female models
	Age Variable
y	young models
m	middle-aged models
o	old models
	Sex-Age Combinations
yf	young female models
mf	middle-aged female models
of	old female models
ym	young male models
mm	middle-aged male models
om	old male models
	Color Variable
c	colored pictures
bw	black and white pictures

Numeration of Subjects

even numbers = female subjects
uneven numbers = male subjects

INTRODUCTION

Role identification is generally conceived of as a fundamental process in the socialization of an individual. People, it is often said, evaluate themselves and orient their behavior either by reference to groups to which they belong, or by reference to groups to which they aspire to belong.

With the framework of mass media communication, the concept of role-identification helps explain how the individual relates himself to messages conveyed by the mass media. Most of these messages contain verbal or pictorial descriptions of persons, which may stimulate identification mechanisms in the individual.

The problem with which this pilot study[1] is concerned is the operation of identification mechanisms in the message-receiver relationship in one instance of mass communication, that is, pictorial advertising.

A study of people's reactions to certain models in advertising illustrations is important in view of the fact that an increasing number of advertisements show portraits of human beings. It has been found

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[1]The present study centers upon one part of a larger research project in role identification during the preparations for which the author assisted Prof. Malcolm S. MacLean, Jr. in the Communication Research Center at Michigan State University. - Together with the Q-sample of advertising photographs a Q-sample of adjectives was used in order to obtain qualitative self descriptions from each subject. Furthermore, Osgood's Semantic Differential was employed to assess connotative meanings for self notions and for advertisements eliciting most and least identification in reference to each self notion. In addition, a projective technique developed by Atkinson et al. was introduced in order to estimate the subjects' motivation to fantasy the way of life of the models shown in each picture.

that pictures presenting human models in combination with the advertised product attract more attention and are better recalled than pictures presenting the advertised product alone. One reason for this may be that readers, who see a model in a picture, imagine themselves in the place of the depicted model, and thus experience this model's satisfaction from the use of the product.

Certain qualities and actions of a model are more likely to elicit identification in the reader than others. It was expected that the more closely these qualities and actions of the model correspond to qualities and actions of the reader himself, the deeper the reader's involvement in the identificatory response will be. The qualities and actions of the reader may be conceived as being of two kinds: either they characterize him in actuality at the time he finds himself confronting the model, or they characterize him in his ideal notions of how he would like to be. On the basis of this difference, we may distinguish between the reader's identification with a model in reference to his actual way of life and in reference to his ideal way of life.

Although this study will not consider whether a model appealing to a reader's actual way of life has more or less persuasive power than a model appealing to a reader's ideal way of life, the extent to which persons choose different models as objects of identification when they are comparing them to actual self notions and when comparing them to ideal self notions will be investigated.

One aspect of the problem may be approached by asking if similarity of characteristics in the models and the readers enhances identification. Here it was examined whether identification is facilitated when a correspondence in sex and/or in age characteristics prevails.

Sex and age are, however, only two out of a large set of characteristics in the model and in the reader. As these two sets will never correspond perfectly, all identification is bound to remain

partial identification. Nevertheless, such partial identification may vary in intensity, depending upon the importance the reader attributed to the shared characteristics.

It is clear that while some qualities and actions of the model may describe some aspects of the actual or the ideal way of life of one reader, they may not be at all descriptive of the actual or ideal way of life of another reader. Thus the first reader is likely to accept the model as an object of identification, while the second reader would reject it. When a model is to be used in an advertisement to elicit identification mechanisms in a maximum number of people, the prediction of their heterogeneous identificatory reactions becomes the problem.

This suggests a second aspect, which has been approached in a preliminary fashion by asking whether identificatory reactions are heterogeneous, or whether there are clusters of persons who choose their objects of identification in a fairly homogeneous way. Again, a distinction was made between "types" of persons on the basis of identification with certain models rather than with others in respect to the reader's actual and ideal ways of life.

In order to prevent colored pictures from having a different effect upon identification than black and white pictures, the color variable was introduced into the study where its effect could be controlled.

This Q-study is based upon a picture sample composed of full page advertisements from Look and Life magazines which, in their illustrations, showed one or more persons in relationship to the advertised products. The group of readers, whose reactions to the depicted models were studied, was composed of men and women of different age-groups, but of similar socio-economic status.

Stephenson's Q-technique served as the instrument because it is of particular use in assessing non-observable phenomena, such as identification. Moreover, it permits the discrimination of the two kinds of identification processes under study, and it provides the data which allow both an analysis of the effect of similarity in characteristics and an analysis of "types" of persons in respect to identification. And finally, its most fundamental asset is that it helps to investigate how individual persons relate themselves to the stimuli they find in the message.[1]

It was anticipated that the findings from this Q-study would show that people identify preferably with models similar to themselves, that people identify with some models in reference to their actual way of life and with other models in reference to their ideal way of life, and that there are clusters of readers in an audience who select similar objects of identification when their actual or ideal self notions are involved. These phenomena would merit the attention of the art director who integrates models into an illustration in order to elicit identification mechanisms in a special group of readers within a larger audience.

However, due to the fact that a very small number of people was studied and, also, that the pictorial section of the advertisements was considered in isolation, caution is demanded in the generalization of the findings.

After some remarks concerning the background and the relevance of the present study (Chapter I), the central concepts will be defined, the place of personal identification in the communication process will be pointed out, and a model, which may help to show some ways a person identifies with another person, will be introduced (Chapter II).

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[1] W. Stephenson, The Study of Behavior: Q-Technique and Its Methodology (Chicago: The University of Chicago Press, 1953), pp. 47-61.

In Chapter III a number of previous empirical investigations will be mentioned, which either shed some light upon our hypotheses or may be of help in the interpretation of the findings. In this Chapter, the hypotheses are formally introduced, experimental controls are discussed, and the limitations of the study are pointed out. Chapter IV explains the design of the study, Q-sorting procedures, data collection and statistical analyses, in addition to the major aspects of Q-methodology.

Findings concerning the effect of "sex of the model," "age of the model," and "color of the picture" upon identificatory reactions in men and women of various age groups will be presented in Chapter V. A brief discussion of "types" of persons who identify with similar models in reference to their actual self notions and "types" of persons who identify with similar models in reference to their ideal self notions follows (Chapter VI). Chapter VII contains some supplementary results.

The conclusions will be presented in Chapter VIII, and some implications for practical advertising will be indicated within the limits of generalizability. Some propositions for more rigorous investigation and testing will be added.

CHAPTER I

BACKGROUND AND IMPORTANCE OF THE STUDY

Research shows that pictures of people appear in advertisements with increasing frequency. Klapp studied this trend over a period of 40 years. In 1900 only 22% of all advertisements in four magazines showed pictures of human beings, while the other 78% either showed illustrations without human models or lacked pictures of any sort. In 1915 38% of the advertisements in the same magazines incorporated pictures of people. In 1930 the figure had grown to 55%, reaching the considerable amount of 74% in 1940.[1]

A comparable trend was found by Kitson and Allen in a somewhat different selection of magazines. They noticed that, while in women's magazines there was a predominance of female models in advertising illustrations, in men's magazines there was a predominance of male models.[2]

In 1925, the same year in which the latter study was undertaken, another investigation was made of the effectiveness of showing portraits of people in advertising illustrations. For instance, Nixon undertook a comparison of the attention-value of illustrations showing pictures of people and the attention-value of pictures showing the advertised product

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[1]O. E. Klapp, "Imitation -Value in Advertising," Journal of Applied Psychology, XXV (1941), pp. 243-50.

[2]H. D. Kitson and I. Allen, "Minor Studies in the Psychology of Advertising from the Laboratory of Indiana University: XIII. Pictures of People in Magazine Advertising," Journal of Applied Psychology, IX (1925), pp. 367-70.

alone. Registering the sequence and duration of "eye-fixations" of his subjects, he showed them a picture of each group simultaneously. The results revealed that pictures of people more often received the first "eye-fixation" and were looked at longer during a limited exposure interval than pictures of the product alone. Furthermore, he found that pictures of people were studied with increasing interest for a considerable time and that they were better recalled at a later stage. Thus, he concluded that advertisements showing portraits of people are the more successful attention devices.[1] A later study, concerned with the impact of outdoor billboard advertising, supports these findings.[2]

However, advertising textbooks still show little interest in the issue of why portraits of people in advertising illustrations increase the ads' attention-value. Various authors have treated this matter incidentally, particularly in reference to the problem of how the viewer of the illustration is expected to relate himself to the depicted model.

Among the earliest comments on this issue is Scott's. He suggests that the advertiser should provide the reader with a "disposition to action," which will operate whenever such action can be completed. He explains that our actions are affected most by what is suggested to us through the words and actions of others, particularly people we

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[1]H. K. Nixon, "Two Studies of Attention to Advertisements," Journal of Applied Psychology, IX (1925), pp. 176-87. A similar finding concerning the attention to pictures of people in comparison to pictures of objects or animals in a study by: G. Gallup, Factors of Reader Interest in 261 Advertisements (Published by Liberty Magazine, 1932), p. 50, reported in D. B. Lucas and S. H. Britt, Advertising Psychology and Research (New York: McGraw-Hill Book Company, Inc., 1950), pp. 273-74.

[2]H. E. Burtt and T. S. Crockett, "A Technique for Psychological Study of Poster Board Advertising and Some Preliminary Results," Journal of Applied Psychology, XII (1928), pp. 43-55.

know and whose judgments we respect.[1] This author, however, does not point out how he expects the reader to relate himself to the model so that his actions may become influenced by what the depicted model does about the advertised product or idea.

In his aforementioned study, Klapp proposed that the reader reacts to the model through identification, which means that he implicitly puts himself into the model's place and imagines having experiences similar to the model's in connection with the product or idea. When identification with a model occurs, imitation follows. Thus, Klapp sees "imitation-value" as the main asset of portraits of people shown using the advertised product.[2]

Here, it seems to be expected that "imitation" occurs on two different levels. During the identification process, a covert imitation is at issue, which eventually may become overt imitation when the initial response leads to the proposed buying or adoption behavior. In other words, our actions are affected by the actions of the model, because once we have, in fantasy, experienced the benefits that come from using a certain product (covert imitation), we will try to secure this benefit for ourselves in reality (overt imitation).

The same point is discussed by Crawford, when he explains what the art director is trying to elicit in the reader by means of the advertising illustration:

> The tendency today is towards realism in presentation--real people doing real things with real products in real situations. We try to create pictures of situations that the reader can

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[1]W. D. Scott, The Psychology of Advertising, completely revised edition by D. T. Howard (New York: Dodd, Mead, and Company, 1931), pp. 183-85.

[2]Klapp, op. cit., p. 249.

> project himself into, because this increases the opportunity for the reader to understand how readily our product can fit into his life.[1]

The art director succeeds in creating an illustration into which the reader can project himself insofar as he presents models with which the reader may identify himself. These models may have attributes or hold commodities which the reader shares with them; thus the model's situation is characteristic of the actual circumstances in which the reader finds himself. They may also have attributes or commodities which the reader aspires to have for himself, but which he has so far not acquired. In both cases, whether identification occurs through comparison of the model's way of life with the reader's actual way of life or through comparison of an idealized model with the reader's ideal way of life, projection or identification may contribute to the reader's understanding of how he can integrate the product into his life. In the former case, such integration may confirm the status quo, while in the latter, change is brought about in the direction of ideal circumstances.

Lucas and Britt, in agreement with Klapp, attribute the effectiveness of pictures of people to an imitation-tendency in the reader. They expect this tendency to be reinforced if the reader can also project himself into or identify himself with one of the depicted characters. They note that if envy were aroused in the reader, the effectiveness of the advertisement could be expected to be further increased.[2] In this case, when the model arouses envy in the reader, the identification is likely to take place in connection with the reader's ideal way of life:

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[1]J. W. Crawford, Advertising: Communications for Management (Boston: Allyn and Bacon, Inc., 1960), p. 225.

[2]D. B. Lucas and S. H. Britt, Advertising Psychology and Research (New York: McGraw-Hill Book Company, Inc., 1950), p. 271.

> . . . when an advertisement shows a picture of someone handsome and important-looking, you identify yourself in your mind as that person, and you become handsome and important-looking.[1]

On the other hand, the identification can take place on the basis of the actual characteristics of the reader.

In his Q-methodology and Q-technique, Stephenson offers a suitable approach and instrument for the investigation of how individual persons, in the complexity of their actual and ideal characteristics, relate themselves to various kinds of messages. Because of its interest in individual human beings, it differs from traditional approaches where certain characteristics or attributes are measured in isolation for "populations" of people under the assumption that each person has the attribute to some extent. By means of Q-technique we do not study the impact an advertising illustration has upon its total audience, but rather, how it is grasped by individual persons in this audience.[2]

In a recent manuscript, in which Stephenson discusses communication theory and research in the light of Q-methodology, the phenomenon of identification is extensively discussed.

> Fundamentally, the whole domain of the mass media is one essentially of fantasy . . . [The mass media] are engaged in a vast game, into which audiences project, identifying with this or that, and enjoying this or that in so far as they so identify.[3]

The importance of the identificatory reaction in the reader lies in the fact that the reader, through identification, becomes "apperceptive" for the message intended to persuade him. Persons are selective about

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[1]M. S. Hattwick, How to Use Psychology for Better Advertising (New York: Prentice Hall, Inc., 1950), p. 160.

[2]Stephenson, op. cit., p. 58.

[3]Stephenson, A General Theory of Mass Communication (unpublished manuscript for a book, 1960), p. 129.

who they identify with, so we need to know which models are likely to stimulate identification in whom. Furthermore, we need to know which persons in the audience identify with a given model and which do not identify with him. According to Stephenson, there is no homogeneous audience which reacts to advertising messages.[1] By means of Q-studies of readers it is possible to find "types" of persons which lead to a segmentation of the audience. Each "type" would include those persons having similar selective criteria in choosing their objects of identification. In order to formulate more successful advertising messages, one should know about prevailing audience segmentations.

> . . . with respect to the mass media, a vast domain of identification-possibilities exist which the advertiser . . . [and others] must come to terms with if they wish to communicate, and in tune, with the audience of convergent selectivity.[2]

The present study is concerned with the identificatory relationship between the individual reader and the photographic representations of people in advertising illustrations. Two lines of investigation centered upon the following questions:

1. Which characteristics of the depicted models facilitate identification in readers of different age and sex?
2. What kind of audience segmentation is possible on the basis of grouping persons into particular "types" according to their identification with similar models?

As shall be explained in more detail, Stephenson's Q-technique makes the investigation of these questions possible, as it helps to operationalize the identification process. It also allows for a distinction to be made between identification in reference to actual and ideal self notions. The importance of this distinction will be pointed out more carefully later.

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[1]Ibid., p. 57.

[2]Ibid., p. 118.

Although we would expect a relationship between the identification-variable and the attention-variable to prevail, the assessment of the extent of such a relationship has to be postponed to further investigations.

Questions may also be raised concerning the selling-effect of the identification mechanism, which means, the more intense the identification, the greater the persuasive effect becomes. We have limited identification to the reader's reaction to the model in the picture, which is only a section of the total advertisement. On the other hand, the persuasive effect of the advertisement may be due not only to the illustration, but also to headlines, text, and the relevance of all three to the advertised product. Hence, a positive correlation between the identification-variable and the persuasion-variable is difficult to obtain.

This indicates the major limitation of the present study, namely, that from the effectiveness of certain models in stimulating identification in certain groups of persons, we cannot infer that the advertisements in which the models appear will fulfill their purpose.[1]

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[1]"But the illustration must also be relevant to the product and to the idea of the advertisement, so that it can help select out of the great mass of readers those who can be turned into customers, right now. One of the easiest ways to get attention is to picture a pretty girl--and the fewer clothes she is wearing the more attention the picture gets. But if the product we are selling is spark plugs, or hammers, or house paint, the viewers we get for the pretty girl are not necessarily converted into readers for our advertising message. The illustration must be relevant; it must increase the reader's interest in the product, intensity his desire to own it, persuade him to want it, and contribute to the buying decision." Crawford, op. cit., pp. 222-23.

CHAPTER II

THE BASIC FRAMEWORK

This chapter introduces the basic framework of the study. The concepts used during the investigation are defined and the assumptions are made explicit. In conclusion, the identification mechanism will be discussed at length.

Definition of Concepts and Assumptions

Basic to this investigation of the identificatory relationship between the viewer and a model in an advertising picture is the assumption that the careful viewer of the illustration will at least momentarily identify with the depicted model.

Like Maccoby and Wilson, we mean by identification that the viewer, in fantasy, takes the place of the model and momentarily feels that what is happening to the model is happening to himself. Thus, he covertly reproduces behavior-elements and emotions he attributes to the model with whom identification is said to occur.[1]

The viewer's disposition to imitate the model in fantasy (and, on occasion, in reality) is likely to be enhanced only if the model shares certain "qualities" with the viewer.[2] Now, if an individual's

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[1]E. E. Maccoby and W. C. Wilson, "Identification and Observational Learning from Films," Journal of Abnormal and Social Psychology, LV (1957), pp. 76-87.

[2]S. Freud, Group Psychology and the Analysis of the Ego (London: The Hogarth Press and The Institute of Psycho-Analysis, 1949), p. 149. Here a distinction is made between identification with persons

organization of "qualities" defines his self,[1] then the choice of the object with which the individual identifies himself depends upon his self-notions. This explains why the investigation of the self, both actual and ideal, is crucial to an understanding of the identification mechanism.

In addition, the disposition for identification may be enhanced when the model is shown performing "actions" which the viewer himself can occasionally perform. In this case, there is a correspondence in roles.[2]

Each viewer plays a multitude of roles according to the positions he occupies in everyday life. The set of behaviors characterizing each role is dependent upon the counterparts with whom the individual interacts, upon their mutual expectations in particular contexts, and upon their attitude toward the prevailing group norms.[3] For instance, one may play different roles with his child and with his employer. Thus, in

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who are objects of a sexual instinct and those who are not. Concerning the latter case it is said that identification ". . . may arise with every new perception of a common quality shared with some other person who is not an object of the sexual instinct. The most important this common quality is, the more successful may this partial identification become, and it may thus represent the beginning of a new tie."

[1]T. R. Sarbin, "Role Theory," in G. Lindzey, (ed.), Handbook of Social Psychology (Cambridge, Mass.: Addison-Wesley Publishing Company, Inc., 1954), I, p. 244. ". . . the self is what the person 'is,' . . . When interested in the self, we regard the person as an organization of qualities."

[2]Ibid., ". . . the role is what a person 'does' . . . When we study roles, we regard the person as an organization of acts. Parenthetically, direct observation reveals only action systems resulting from the interplay of self and role."

[3]N. Gross, W. S. Mason, and A. W. McEachern, Explorations in Role Analysis: Studies of the School Superintendency Role (New York: John Wiley and Sons, Inc., 1958), p. 48. See also, J. W. Thibaut, and H. H. Kelley, The Social Psychology of Groups (London: John Wiley and Sons, Inc., 1959), p. 143.

his role as a father, one may identify with a man in a picture who is playing with his child, while in his role as an employee, one may identify with a model shown in the office of his boss. This way it is possible to assume that a person can identify with a number of different models which are presented in advertising pictures.

Furthermore, for each person we will distinguish between an actual self and an ideal self. Actual self means that set of qualities which the individual perceives as characteristic of himself at the time of the interview, while ideal self means that set of qualities which the individual would like to be characteristic of himself. The two self-notions may differ in congruence, as has been pointed out by Butler and Haigh.[1]

Similarly we will discriminate between an ideal role-configuration and an actual role-configuration. By the former, we mean the multitude of roles the individual would ideally like to play; by the latter, we mean the set of roles the individual actually plays in his interrelationships with other persons. Congruence between these role-configurations would be dependent upon how closely the individual perceives his actual way of life as approaching his ideal way of life.

Considering this distinction, an elaboration of the previous assumption becomes necessary. Now, it is expected that a viewer can identify with a person in a picture by either comparing the model's role to one of his actual roles, or by comparing it to one of his ideal roles. In doing so, he will implicitly relate his own actual and ideal qualities to those

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[1]J. M. Butler and G. V. Haigh, "Changes in the Relation Between Self-Concepts and Ideal Concepts Consequent upon Client-Centered Counseling," in C. R. Rogers and R. F. Dymond (eds.), Psychotherapy and Personality Change (Chicago: University of Chicago Press, 1954), pp. 55-76.

Here it was found that client-centered therapy achieves a decrease in discrepancies among, what we are calling, actual self and ideal self notions.

he perceives in the model. If, for instance, a factory worker sees a picture of a sun-tanned, well-to-do gentleman enjoying his leisure on a fancy beach, he may wish to play that role, although it is remote from his actual way of life.

Thus identification is a matter of degree. The same model may elicit intense identification in reference to the ideal self, while it stimulates negligible identification in reference to the actual self, and *vice versa*. Or, if only one self notion is considered, one model may elicit more intense identification than others do.

This leads into the last assumption: that people are able to compare different intensities of identification, and thus can be asked to rank pictures showing human models, with "intensity of identification" as a criterion.

Personal Identification in the Communication Process

As Crawford has defined it, "advertising is the art of persuading people to do with frequency and in large numbers something you want them to do."[1] Advertising thus provides a vehicle by means of which the seller of the product enters into communication with the potential buyers and promises to satisfy their needs and wants by accelerating the circulation of the product in the market.

According to a popular formula in the advertising business, an advertisement should request attention, arouse interest, stimulate desire, and lead the reader to buy the product in order to achieve its purpose as a persuasive message.

The communication process relating the seller of a product to the potential buyer may be said to involve three different stages which follow each other in time. First, there are those who have the product

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[1]Crawford, *op. cit.*, p. 4.

for sale. As they cannot make immediate contact with the large number of potential consumers, they delegate their functions as a persuasive "source"--to a copywriter who produces an advertising message.

The copywriter may again delegate some of his functions as a persuasive source by incorporating into his advertisement a famous personality, who is shown enjoying the benefits of smoking a new brand of filter cigarettes. The model in the illustration is the person the reader of the advertisement associates with the product, when his attention, interest, desire, and actions are stimulated.

Thus, the stages of the communication process range first, from the seller to the copywriter, second, from the copywriter to the model shown in the message and, third, from the model shown in the message to the reader of the advertisement.

Our main concern lies in this third stage of the communication process, that is, in the message-receiver relationship. It should be stressed that the model depicted in the message may be thought of as a source, to which the viewer relates himself when he is shown the advertising photograph. This fictitious source, which has a highly persuasive character, could, in addition, be thought by the unsophisticated receiver to be the real source of the message. As was suggested earlier, this model is characterized by certain qualities and by the suggestion of a role-behavior which is chosen in such a way that it could be productive of opinion change in the viewer, and thus lead him to the adoption of the new product.

According to Hovland *et al.*, changes in opinion follow new learning experiences, which have to be motivated by the message.[1] An advertisement may persuade the receiver to adopt a favorable opinion toward

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[1]C. I. Hovland, I. L. Janis, and H. H. Kelley, Communication and Persuasion: Psychological Studies in Opinion Change (New Haven: Yale University Press, 1953), p. 10.

a new product when it provides him with a motivation to learn what the benefits of using the product are. In choosing the model in the picture, one motive can be provided by stressing the receiver's group-membership. This way, the model shown may remind the reader of his actual and/or ideal reference-group from which he derives gratifications for obeying the prevailing group norms.

Thus, not only successful businessmen may switch to a new brand of cigarettes introduced through advertising as "The Executive's Cigarette," but also the young fellow who is just starting his business career. While the decision of the business executive has to be traced to his achieved group-membership, the decision of the young fellow was motivated by his aspired group-membership.

If a new learning experience is necessary to make the receiver shift from his initial opinion to a recommended opinion, we should suppose that identification with the depicted model provides the receiver with at least some of the required learning experience. When the young fellow identifies with the successful business executive in an advertising photograph and thus reproduces in fantasy the model's behavior and emotions, his efforts to become a business executive himself may become intensified, and he may, in the meanwhile, start to acquire the external symbols of such a role, such as, "The Business Executive's Cigarette."

Intensity of identification and persuasibility depend, on the one hand, upon the depicted model's qualities and role and, on the other hand, upon the receiver's qualities and roles, or his "predispositions,"[1] which actually or ideally characterize him and which underlie his responsiveness to the advertising message.

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[1]Ibid., p. 12.

We expected that similarities in the model and in the reader enhance identification, provided that these similarities are restricted to actions and qualities accepted by the reader's actual or ideal reference groups. As affiliation with the aspired reference-group is likely to satisfy more needs and wants in the reader than the already accomplished affiliation with the actual reference-group, "role-idealization" may be a variable worth the attention of the art director and the copywriter when they are choosing a model. But, as an ideal role is only an ideal role for those who aspire to it, the copywriter must know the segmentation of his audience with respect to choice of ideal objects of identification.

Three Different Ways of Identification

The identification process may take place in many different ways. Distinctions could be made on the basis of whether the object of identification is an individual or a model and whether the reference is to the actual or the ideal self. In this study, two ways in which the identification process can be actualized are of specific relevance, that is, the identification with a model in reference to one's actual or ideal self.

Yet, in order to outline the generality of the identification mechanism, the basic process of identifying with an individual in reference to one's actual self is also set forth.[1]

The first model in FIG. I shows John in his actual role-configuration which includes the roles of a son, a brother, a baseball player, and a lazy pupil. In his role of a lazy pupil, John is facing his teacher,

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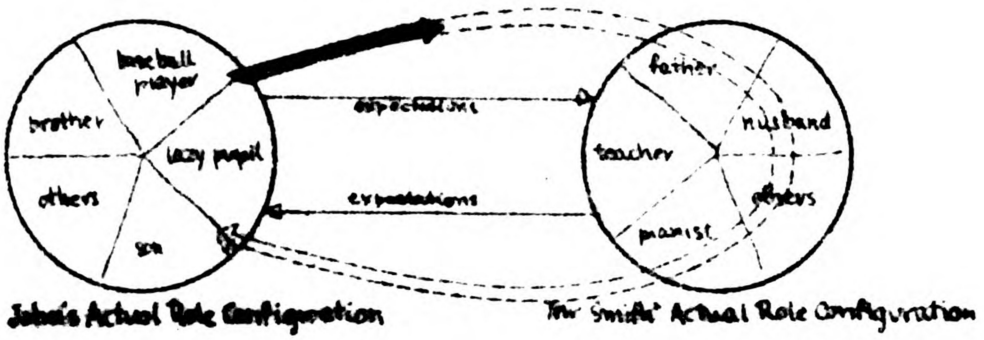
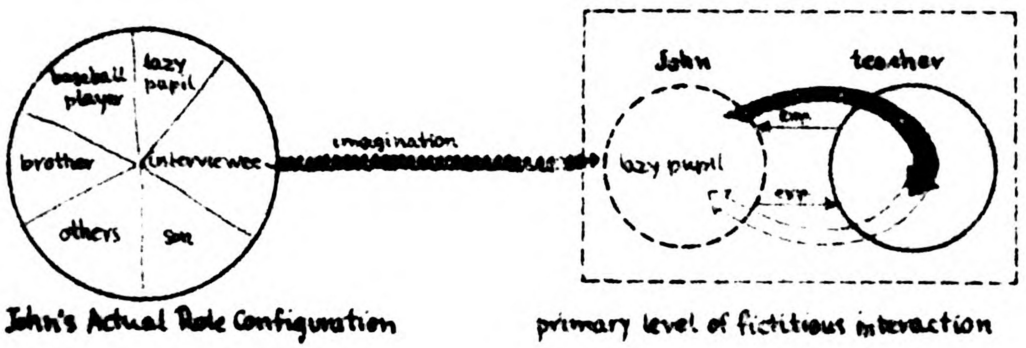
[1]Though in the present context only the basic process of identifying with an individual in reference to one's actual self is outlined for purposes of comparison, it is clear that also the parallel process of identifying with an individual in reference to one's ideal self could be shown in a model.

FIG. I: THREE WAYS OF IDENTIFICATION

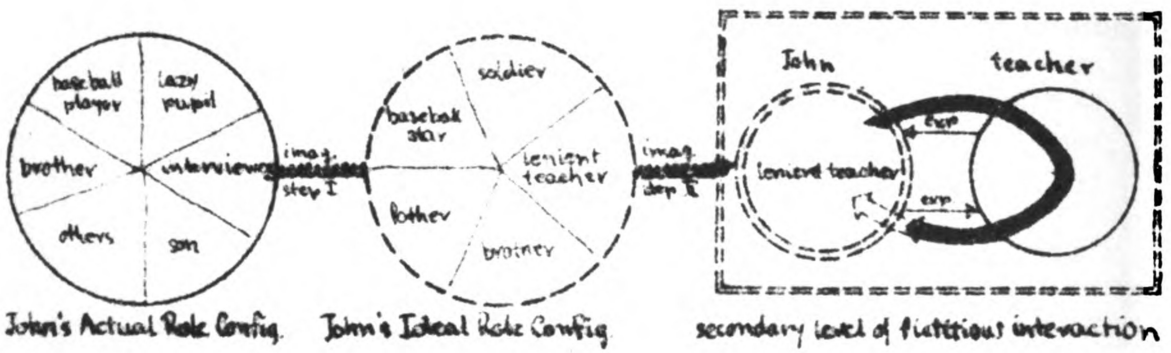
1. Actual Self Identification with an Individual



2. Actual Self Identification with a Model



3. Ideal Self Identification with a Model



Mr. Smith, whose role-configuration includes, in addition to his role as a teacher, the roles of a husband, a father, and of a pianist. While the teacher expects his pupil to be studious, the latter prefers not to be bothered. These mutual expectations characterizing their role-relationship may have been made explicit, or they may be guessed by each partner. In each case, these expectations affect John's perceptions of his teacher, and Mr. Smith's perceptions of his pupil.

John, being a lazy pupil, probably will not identify with his teacher, as illustrated by the short bold arrow in the model. He will have difficulty imagining[1] himself in the place of the teacher because the two are very dissimilar, John being lazy and Mr. Smith being ambitious. Furthermore, the pupil and the teacher may find their sources of gratification in different groups to which they respectively belong, as indicated by the lack of correspondence in their mutual expectations.

The second model again shows John in his actual role-configuration, only now he takes the role of an interviewee who is asked how intensely he identifies with an anonymous teacher portrayed in a picture. As John is now not performing his potential role of a pupil, he has to project himself onto a fictitious level where, in his imagination, he actualizes

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[1]By the verb "to imagine" is meant "to form a mental image of; to represent or picture to oneself; to produce by the imagination." Accordingly, by "imagination" is meant "the act or power of imagining; formation of mental images of objects not present to the senses, esp. of those never perceived in their entirety; hence, mental synthesis of new ideas from elements experienced separately." Definitions from: Webster's New Collegiate Dictionary (London: G. Bell & Sons, Ltd., 1951), p. 414.

John's act of imagination may depend upon an "inferential set," which, according to E. E. Jones and R. deCharms, is assumed to have selective as well as transformative functions in the process of forming impressions of personality. "The Organizing Function of Interaction Roles in Person Perception," Journal of Abnormal and Social Psychology, LVII (1958), pp. 155-164.

this role by drawing upon his previous experiences. On this fictitious level, John imagines not only what he would expect from this teacher, who is not Mr. Smith, but also what this anonymous teacher would expect from him. The teacher in the picture may look lenient and easy-going in comparison to Mr. Smith, so that John may think that this teacher would not demand much effort from his pupils. Thus, he is likely to identify more intensely with the depicted teacher than with Mr. Smith.

The first model differs from the second one in two respects. First, in the case where persons interact, there is an immediate role-correspondence between the role-incumbent and his counterpart, which is not present when a person is confronted with a model in a picture. In this latter case, the person has to select a suitable, latent role from his total role-repertoire, and he has to imagine himself playing this role in a fictitious interaction with the depicted model.

Second, each individual in the first model has his own expectations vis-à-vis his counterpart, and he actually communicates to him; in the second model, such mutual expectations are absent, just because the person and the depicted model have never interacted in reality. Drawing upon his previous experiences with various teachers, the pupil, as a role-incumbent in a fictitious setting, has to attribute certain expectations to his counterpart, which he thinks the latter may have vis-à-vis him.

The third model shows John when he is asked how much he identifies with the same portrait of the lenient and easy-going teacher in reference to his <u>ideal set of roles</u>. John again is shown in his actual role-configuration, presently playing the role of an interviewee. In order to answer the question, a preliminary step of imagination is required, that is, John has to imagine his <u>ideal</u> set of roles. Besides the roles of a baseball star, a soldier, a father, and a brother, even the

role of a lenient and easy-going teacher may be included in his ideal repertoire.

From this ideal set of roles, John will select the role of a teacher, and, in another step of imagination, he will actualize this role in a fictitious interaction situation similar to the one described in the second model. Now that a correspondence in roles as well as in personal attributes is achieved, John may attribute to his fictitious counterpart the same expectations he himself would have vis-à-vis him. When John also thinks that he and his counterpart would find their sources of gratification in the same reference-group, identification at the level of his ideal self is likely to become very intense.

Thus, the third model differs from the second one in that, whenever a person relates a depicted model to his ideal self, an additional step of imagination is required. Although it seems that, whenever John identifies with the portrait of another person, more complex identification processes are at issue, in this case a simplification is actually involved.

First, the complexity of the stimulus is reduced, because John hardly knows about the other roles performed by the depicted model and thus has to limit his role-comparison to the role the model overtly enacts in the picture. Second, John's problem of guessing what role-expectations the identificand may actually have vis-à-vis him is eliminated: only those expectations which he himself attributes to the model in the fictitious interaction context will prevail. Third, Mr. Smith's expectations vis-à-vis John may change over time and simultaneously John's degree of identification may vary over time. However, no such variability in identification occurs when a person's portrait is involved.

CHAPTER III

IDENTIFICATION AND MODELS

In this chapter, a few studies are discussed which have some bearing upon the issues under investigation. The hypotheses are introduced, experimental controls are pointed out, and the limitations of the study are indicated.

Implications from Previous Studies

There are few studies in the advertising field, which go beyond a comparison of readership scores, to ask why certain advertisements have a greater impact than others.

Among these few studies, there is a multiple factor analytic investigation by Twedt, which justifies to some extent our intention to consider the pictorial part of each advertisement in isolation. Twedt defined and measured 34 variables in business magazine advertising, and correlated these with readership scores provided by the Advertising Research Foundation. A factor analysis, performed on those variables which were found to be significantly interrelated with the readership variable, identified six factors. One of these factors, namely, the "Pictorial-Color" factor, alone explained 41% of the variance in readership scores. The "Pictorial-Color" factor was composed of the cluster of "readership," "square inches of illustration," "number of pictures showing product in use," and "number of colors" and other variables.

While a second, "Size," also had considerable loadings on the readership variable, loadings by any other factors were found negligible.[1]

These findings indicate the impact of pictorial variables upon readership scores, and suggest how carefully they have to be taken into consideration, especially in the case of advertising illustrations showing pictures of human models.

Recent studies have some bearing upon one aspect of the problem investigated in this study, that is, whether the similarity of characteristics in the reader and the depicted model does or does not facilitate identification.

Rudolph reports that illustration-subjects most effective in attracting women are, in the following order, pictures of babies, pictures of children, pictures of women with children, pictures of woman alone. Attractive to men rather than women are pictures of men, pictures of objects, pictures of men and women.[2] The phenomenon, that male models appeal strongly to men and female models appeal strongly to women, is not explained by the author. However, Lucas and Britt, as well as Hattwick, suggest that sex-correspondence facilitates projection or identification and, hence, increases the appeal of a model for the like-sexed audience.[3]

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[1]D. W. Twedt, "A Multiple Factor Analysis of Advertising Readership," Journal of Applied Psychology, XXXVI (1952), pp. 207-15.

Criterion scores from the Advertising Research Foundation's continuing studies of business magazine readership were of the type "Any this AD," that is, percentages of people who remembered reading or seeing any part of the advertisement.--Readership had negligible loadings on factors: T (Typographic Size and Variety), In (Informational), F (Field Factor or the Influence of Surrounding Field of Ad.), and A (Advertising Schedule Previously Run).

[2]H. J. Rudolph, Attention and Interest Factors in Advertising: Survey. Analysis. Interpretation. (New York: Funk & Wagnalls Company with Printers' Ink Publishing Company, Inc., 1947), pp. 66-89.

[3]Lucas and Britt, op. cit., p. 274. Also, Hattwick, op. cit., p. 160.

In a study outside the advertising field, Maccoby and Wilson were concerned with the identification variable in adolescents' reactions to leading characters in films. They investigated if similarity in sex and in socio-economic status in their subjects and in the leading characters was a criterion of choosing the identificand.[1]

Three major findings were published. First, in films with a female and a male protagonist, viewers identified themselves with the like-sexed leading character. This tends to support the aforementioned interpretation of Rudolph's findings.

Second, in films showing a male protagonist of lower socio-economic status and a male protagonist of upper socio-economic status, the protagonist chosen as identificand was the one whose social class corresponded to the subject's aspired social class rather than his current status. This result, which represents a break with the similarity criterion, was unexpected by the authors. Yet, in our opinion, this result may be due to their disregard of a distinction between identification in reference to actual self notions and ideal self notions. Maccoby and Wilson's index of identification was based on which protagonist's name appeared in two out of three answers to the following questions:

1. Which of the two main characters did you like best?
2. Which of the two main characters would you like to be like?
3. Which of the two main characters do you feel is most like you?[2]

The third question appeals to actual self notions, and here a lower class interviewee may have given the name of the lower class protagonist. The second question appeals to ideal self notions, and thus may have been answered with the name of the protagonist in the aspired social class. The first question becomes the decisive one and is probably

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[1]Maccoby and Wilson, op. cit.

[2]Ibid.

biased in favor of ideal self involvement because it is likely that the interviewee is oriented toward the character who represents his aspired class rather than the one who represents his own unsatisfactory group affiliation.

Therefore, a break with the similarity criterion may not have occurred if only actual self notions had been tapped for all answers. As soon as ideal self notions enter into consideration, the qualities of the identificand have to be compared with the ideal qualities of the subject, and, at this level, the similarity criterion still is likely to be operative. As the authors compared qualities of an ideal identificand with the actual qualities of the subjects, the similarity criterion did not seem to prevail. This may emphasize the importance of the distinction between the two different kinds of identification processes in the present context.

The third finding of Maccoby and Wilson was that people tended to better remember actions and words of the character with whom they identified. Although this point would have to be tested in the advertising situation, it strengthens the expectation that people are more likely to learn the message conveyed once they have, through identification, covertly reproduced actions and emotions of the model presented in an advertising illustration. The interrelationship of the identification-variable with the learning-variable, however, is left to further investigations.

Two other studies bear upon the second aspect of the problem investigated in this study which concerns possible kinds of audience segmentation obtained when persons are grouped into "types" according to their identification with similar models.

MacLean and Hazard have studied women's interest in a variety of pictures from Time and U.S. News & World Report. They also dealt with the message-receiver interrelationship, but, while they

approached the issue of differences in interest scores from the message's side, we have approached the similar issue of differences in identification scores from the reader's side. In this study, "types" of actual and ideal selves of persons were assessed on the basis of the variance in identification scores, while the MacLean and Hazard study sought "types" of picture appeals on the basis of variance in interest scores.

Six major types of picture appeals were found by MacLean and Hazard. Among these are three which may also be responsible for interest variations (and, perhaps, also identification variations) in advertising illustrations:

I. Idolatry: successful, glamorous, wealthy women, especially in "happy family" situation. Adolescent girl's dream.

III. Picturesque: salon pictures, moody pictures, dynamic pictures, pictures portraying loneliness and escape from other people, doing things with hands.

VI. Spectator Sports: action pictures of sports which command big audiences.[1]

The three omitted types of picture appeals (II. Social Problems, IV. War, V. Blood and Violence) are more likely to be found in news photographs than in advertising photographs. The present study will take up later the question whether there are "types" of persons who identify with pictures where one of the three aforementioned appeals predominates.

Another very recent study approximates closely the problem of how an audience can be segmented according to identification with models in advertising pictures. Social Research, Inc., assessed,

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[1]M. S. MacLean, Jr. and W. R. Hazard, "Women's Interest In Pictures: The Badger Village Study," Journalism Quarterly, XXX (1953), pp. 139-62.

by means of depth interviews, women's reactions to certain types of models. Here is a summary of their major findings:

1. The fun-loving, out-door kind of girl--the All-American type--was not appreciated by most women for being "unladylike." However, if these models appeared with children, their appeal was increased.
2. The college co-ed was an effective model for those to whom college is somewhat more than a distant ideal, because it suggests good up-bringing.
3. The fashion model appeared to represent an ideal role for younger women, as well as for older women of higher income.
4. Only as a saleswoman for products involving self-indulgence or any creative activity was the suburban socialite a successful model.
5. The executive wife had an appeal when she was shown in relation to decision-making problems.[1]

Although a detailed report on the project is not yet available, identification mechanisms seem to be the main issue. Again, these partial results seem to suggest that a more rigorous distinction between identification in reference to actual and ideal self notions should be made. For instance, it may be found that the All-American type of girl is not an ideal object of identification, but that it describes well the actual way of life particularly of the younger ones among the subjects. On the other hand, the fashion model may correspond to the ideal self notions rather than to the actual self notions.

This crucial point once more should be emphasized: one may find a very different audience segmentation when one is concerned with the impact of certain models upon the actual self notions of the readers and upon the ideal self notions of the readers. If the prevalence of such audience segmentations were supported by research findings, it would

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[1]R. Alden, "Advertising: Survey Looks at the Models," The New York Times, April 11, 1961.

mean that the copywriter who is interested in identification mechanisms, should be aware of the two different identification processes between which he may choose. One person may be stimulated by an exceptionally handsome model in an "idealized role," while another may be stimulated by a not-too-handsome model in everyday circumstances.

An ideal role could be an ideal role only for certain people, and, at the same time, be an actually played role for others who may or may not find it very ideal. Therefore, once the copywriter has decided upon which self notion he wishes to appeal to, he needs to know about the potential buyers of the product before he can select the model which is likely to appeal to the maximum number of self notions involved.

A Statement of Propositions

The first part of this pilot study is concerned with the question of whether similarity of characteristics of the reader of an advertisement and of the model shown in the illustration can facilitate identification. In other words, this study is an attempt to replicate Maccoby and Wilson's findings concerning similarity as a criterion of choice of the identificand in the advertising context.[1]

As in their study, the impact of sex-correspondence upon identification was investigated. But, instead of studying their second characteristic, which was socio-economic level, the effect of age-correspondence upon identification was investigated.

Hence, the main hypotheses are:

1. Persons tend to identify with like-sexed models rather than with models of the opposite sex.
2. Persons tend to identify with models of their own age-group rather than with models of different age-groups.

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[1]Maccoby and Wilson, op. cit.

It was expected that pictures showing a man as well as a woman would obtain somewhat higher average identification scores in an audience composed of men and women because identification would be facilitated for persons of both sexes.[1]

Corresponding to the above hypotheses, the statistical (or null) hypotheses were the following:

1. Sex of models in advertising pictures has no effect upon identification in men and women.
2. Age of models in pictures has no effect upon identification in persons of different age-groups.

In the second part of this pilot study, an exploratory procedure was adopted. Because, at this stage, theory and research do not provide a satisfactory basis for the deduction of hypotheses concerning a segmentation of the audience with respect to identification with models in pictures, no hypotheses were stated beforehand. The intention was to discover hypotheses for further, more rigorous testing.[2]

Some of the questions, which we tried to answer, were: Are there "types" of persons who identify with different kinds of models in pictures? Are there persons who are of the same "type" in their preference for certain models, both in reference to their actual selves and to their ideal selves? Which models elicit most and least intense

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[1]Rudolph, op. cit., Findings from this study indicate that, while men are particularly interested in male models, and women in female models, men and women are about equally interested in pictures showing a male and a female model together.

[2]Stephenson, The Study of Behavior, p. 329. "An overweening curiosity, we said, rather than reasoning within a formal hypothetico-deductive framework only, is to be welcomed and encouraged. An experiment, therefore, is much more than the fulfillment of predictions, or of the empirical testing of previously asserted propositions. It is an opportunity for making discoveries."

identification with respect to each of the self notions? Which models appeal with similar intensity to both self notions, and which appeal intensely to one self notion but not to the other? About which models do men and women agree best, and about which ones do they disagree most in their identification? Which models cause most disagreement and most agreement in terms of identification among persons belonging to different age-groups?

Experimental Controls

Research shows that an important variable in an advertising illustration is whether it is colored or black and white. It is maintained that the value of color rests in making the depicted models or products look more "realistic." The use of four color reproductions is reported to affect the attention-value, therefore producing a significant increase in the size of the audience.[1] Colored advertisements were also found to be more successful in respect to recall as measured by naming the advertised product.[2]

From this evidence it can be expected that the color variable may also affect identification, as realism in the presentation of a model is likely to facilitate the reader's imagination of his interaction with the depicted model.[3]

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[1]Rudolph, op. cit., p. 37. See also, D. B. Lucas, The Controlled Recognition Method for Checking Magazine Advertising Readership (New York: The Crowell-Collier Publishing Company, 1942), pp. 1-6, reported in Lucas and Britt, op. cit., pp. 303-304.

[2]Nixon, op. cit., p. 186. See algo, H. N. Gilbert, "An Experiment with Colored and Uncolored Advertisements," Journal of Applied Psychology, XVII (1933), pp. 49-54.

[3]Refer to FIG. I, Models 2 and 3, p. 20, supra.

In this study the effect of color was controlled by incorporating it into the factorial design underlying the picture sample, which will be presented in the next chapter. Through this procedure, the effect becomes controlled without being eliminated, thus indicating its enhancing or restricting influence upon identification in reference to actual and ideal self notions.

The size of the total advertisement (including headlines, illustration and copy), as well as the size of the illustration itself was found to affect readership scores.[1] Because it is difficult to control both variables simultaneously, in this research only the size of the total advertisement has been standardized through the selection of one-page advertisements only.[2] The size of the illustration differed across advertisements. The effect of the position variable, that is, whether the advertisement was published on a left hand or right hand page in the original magazine, was eliminated through the mounting of pictures on separate cardboards.

As the subjects were presented with the pictures in their original context, other elements of the advertisements, such as headlines, sub-headlines, captions, logotypes, and signatures[3] may have affected identification with the depicted models. An attempt was made to reduce such an influence by asking subjects to consider the pictorial element alone in estimating intensities of identification. Considering the speed at which Q-sorts were performed, it is very unlikely that

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[1]Twedt, op. cit.

[2]In choosing full-page advertisements the small difference in format of Life and Look magazines was neglected. Thus a standardization of size of the advertisements was only approximative.

[3]In enumerating the elements of an advertisement we follow Crawford, op. cit., pp. 163-164, where also the necessary explanations are to be found.

copy was read, although headlines and logotypes may have been considered by the subjects.

We are aware that, in a more rigorous study, better controls for non-pictorial elements are necessary. Possibly, the pictorial elements should be presented in isolation, but this is often difficult, as copy and headlines may run into the pictorial field. The restriction of the stimuli to the illustration alone also seems to indicate the necessity of a control for the size of the illustration rather than for the size of the advertisement as a whole.

Limitations of the Study

In the interpretation and generalization of the results from this study, one needs to be careful for several reasons:

1. When one studies people's identification with models in advertising pictures and when one finds that some features in models appeal more than others to certain "types" of persons, one cannot predict the effectiveness of the total advertisement in which the model appeared. As the impact of an advertisement depends upon the successful combination of illustration, headlines, captions, logotype, and signature, one should not infer from the effectiveness of an isolated element, such as the illustration, the effectiveness of the advertisement as a whole. For instance, an illustration which is a successful attention-device with reference to a "Thunderbird" may be a poor one with reference to "Lux Detergents," even though identification with the model could be the same.

2. One should be careful in generalizing results concerning certain pictures. If, for instance, one finds that the model depicted in one illustration obtained the highest average identification score with respect to either the actual or the ideal self notions, one should

keep in mind that this picture is the most effective stimulus of identification only in the set of pictures studied and for the persons interviewed.

3. In view of the fact that this Q-study investigates only a small number of men and women of different age-groups, who were not meant to be representative of a defined population, a distinction must be made between the generalizability of two kinds of results.

On the one hand, findings like "Men tend to identify with male models and women tend to identify with female models" can be generalized, because such sex-distinction in the choice of objects of identification is likely to hold whenever men and women are compared. Here the concern is not so much with specific intensities of identification as with two manifestations of the same process.

On the other hand, findings like "Men and women identified most intensely with one model in a set of pictures" should not be generalized to larger audiences composed of man and women, because here it would be necessary for the small audience studied to be representative of the larger audiences. However, results of the latter kind may be of interest when they are evaluated with caution.

CHAPTER IV

THE DESIGN OF THE Q-STUDY

Before some of the characteristics of Stephenson's Q-methodology are pointed out, it will be explained how the Q-sample was composed, what the Q-sorting instructions were, and how each subject performed the Q-sorts.[1]

A Q-sample can be composed of either statements, which most frequently has been the case in Q-studies, or pictures, each of which must have some reference to the self, so that a subject can describe himself by ranking the items according to a scale ranging from "most similar" to "least similar." The present Q-sample of 72 advertising photographs was chosen from a Q-population defined as all full-page advertisements in recent[2] issues of Look and Life magazines showing portraits of one or more persons in the ad illustrations.

The picture sample was stratified according to three variables: color of the advertisement, sex of the model, and age of the model. As indicated in the factorial design reproduced in TABLE 1, a distinction was made between colored and black and white pictures. In respect to the sex variable, one group of pictures showed a man as

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[1]For a quick introduction to Q-technique and its major methodological implications, refer to W. Stephenson, "Some Observations on Q-Technique," Psychological Bulletin, XL (1952), pp. 183-98. For a detailed study refer to Stephenson, The Study of Behavior, op. cit. For discussion and criticism of the approach, where persons instead of tests are correlated, see C. Burt, The Factors of the Mind (London: London University Press, 1946), and R. B. Cattell, Factor Analysis (New York: Harper & Bros., 1952).

[2]Look and Life magazines from April, 1958 to April, 1960.

Table 1.--Factorial Design of Picture Sample

Independencies	Levels			No.	D.F.
X, Color	a) colored	b) black & white		2	1
Y, Sex of Model(s)	c) male	d) female	e) male & female	3	2
Z, Age of Model(s)	f) 15-22	g) 23-25	h) 36-70	3	2

the only or the central model, while another group showed a woman as the model, and still another group showed a man and a woman in the same picture. The three age-brackets chosen for grouping models in pictures were found to correspond approximately to the age distribution of models in the magazines under study. TABLE 2 indicates all the possible combinations of effects or 18 different picture groups.[1]

Table 2.--Combinations of levels of independencies

a a a	a a a	a a a	b b b	b b b	b b b
c c c	d d d	e e e	c c c	d d d	e e e
f g h	f g h	f g h	f g h	f g h	f g h

Each picture was mounted separately on cardboard in its original form and was numbered on its backside. In the interview the pile of picture cards was handed to the subject, who was asked to Q-sort the pictures according to a quasi-normal forced frequency scale (TABLE 3) which was placed in front of him.

[1]The number of combinations, where everyone encompasses one level of each independency, should have been replicated six times in order to provide a total of 72 pictures. However, at a later stage in the study, some restructuring became necessary, such that the number of replications for the different combinations became unequal. Thus it was necessary to use Weighted Mean procedures in the Analyses of Variance.

Table 3.--Frequency Distribution

	"most"												"least"
Score	12	11	10	9	8	7	6	5	4	3	2	1	0
Frequency	1	2	4	6	8	9	12	9	8	6	4	2	1 (N=72)

In order to perform the ideal self Q-sort the subject was given the following instructions:

> Imagine for a moment what kind of person or what kind of persons you see in the pictures, and imagine the way of life of each of these persons.
>
> Now, we would like to have you distribute the picture-cards along the scale as to "How much would I like my way of life to be like the way of life of the person(s) in the picture?" Place those you would like to be like to your left, giving those you would like to be most like the score-value 12. Place those you would not like to be like to your right, giving those you would like to be least like the score value of 0. Distribute the cards such that for each of the given score-numbers you find the required amount of cards.

At a later stage the subject was given the following instructions in order to perform the actual self Q-sort.

> Again, imagine for a moment what kind of person or what kind of persons you see in the pictures, and imagine the way of life of each of these persons.
>
> Now, we would like to have you distribute the picture-cards along the scale as to "How similar is my present way of life to the way of life of the person(s) in the picture?"

Assume for the moment that a jeweller had only one person, Mrs. X, in mind when he produced an extremely valuable piece, which only she could afford to buy, and he wishes to advertise the jewelry in a magazine read by Mrs. X. The art director in charge may intend to appeal to Mrs. X's ideal self with the help of a model. Under some pretext, he may have asked Mrs. X to perform an ideal self Q-sort as outlined above.

After replacing the pictorial description provided by Mrs. X with a statistical one provided by the coding interviewer, the data could first be analyzed by variance methods. The question of whether or not the pictorial variables underlying the structure of the picture sample affected Mrs. X's identificatory reactions could be studied. For instance, the data would show whether Mrs. X preferred colored illustrations, where models and objects seem more "realistic," or black and white reproductions which appealed more to her sophisticated taste. Along the same line, it may be found which sex- and age-characteristics in the model enhance her identificatory reactions.

In order to elaborate this example, let it be assumed that Mrs. X performed a total of 12 Q-sorts under 12 different conditions of instructions. Besides actual and ideal self descriptions, she may have described herself as a young girl, as the person she hopes to be in the eyes of her friends and others. It is clear that, under each of the 12 different conditions, each picture may receive very different scores.

The 12 arrays obtained could constitute 12 "variates" for correlational purposes, providing a 12x12 table. Through factor analysis, the correlation coefficients in this matrix would be subsumed into perhaps three factors, which would indicate three possible "explanations" for the identificatory reactions of Mrs. X. For an interpretation of the clusters of self-descriptions defined by the factors, one would have to refer back to the Q-sorts in order to see which pictures ranked highest and lowest under the various conditions of instructions. Here the advertiser would find to which cluster of self concepts he should appeal and with which kind of model.

This example demonstrates that in Q-studies (dealing with samples of pictures and not with samples of persons) propositions for the

"single case"[1] could be tested.

In Q-sorting, each subject describes himself in terms of his own frame of reference. No normative judgments are involved when the importance of a characteristic is judged in relation to a reference-group. This point, that persons' attributes and beliefs are measured from the basis of "centrality-to-the-self," is fundamental to Stephenson's methodology.[2] If differs from the traditional approach, where attributes or beliefs are measured on the basis of a generality of population attributes or beliefs.

Stephenson points out that the meaning and effect of a mass media message is always a matter of beliefs and attitudes of persons and never a matter of beliefs and attitudes of a collective, such as an "audience." Persons have to be persuaded individually and the success of persuasion depends upon how they, as human beings in toto, relate themselves to the message's content.[3] This is why he proposes a new orientation in communication research based on Q-methodology and on Q-technique.

It is clear that Q-studies can be concerned with a number of "single cases." When in the present study, the intention was to see if women identify with different models than man do, then certainly male, as well as female, subjects had to be asked to Q-sort the pictures.

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[1]For an exemplary Q-study of the "single case" see J. C. Nunnally, "An Investigation of Some Propositions of Self-Conception: The Case of Miss Sun," Journal of Abnormal and Social Psychology, L (1955), pp. 87-92.

[2]Stephenson, A General Theory of Mass Communication, pp. 72-107. ". . . our concern with Q is . . . with a complete methodology--that of measuring from the centrality-of-self standpoint as prior to, and in principal totally different from the century-old methodology of measuring isolated attributes for population of people." P. 77.

[3]Ibid., p. 127.

In order to show that such a sex-difference in the choice of objects of identification prevails, any woman and any man could be asked to do the Q-sorts. Similarly, one should be able to validate the proposition that persons identify with models of their own age-group for any person. Hence, "one chooses examples, not samples, of persons, according to a specified factorial design which seeks to be comprehensive rather than representative."[1]

The factorial design underlying the selection of subjects studied in this research is given in TABLE 4. Fifteen pairs of husbands and wives in the East Lansing area were interviewed. Groups of five pairs represented the age-groups, which were defined in correspondence with the ones used to group models in pictures. The range of occupational activity for nine out of the fifteen men was large, while the other six were students. Among the wives, only a few of the younger ones were professionally active as secretaries.

Table 4.--Factorial Design of Subject Sample

Independencies	Levels			No.
X, Sex of Subject	a) male	b) female		2
Y, Age of Subject	c) 15-22	d) 23-35	e) 36-70	3

As before, in the outline of a Q-study of a "single case," a number of Q-sorts describing various self-notions of Mrs. X were compared, in this Q-study of several "single cases," corresponding self-descriptions obtained from thirty subjects were analyzed.

Again, variance methods were employed to investigate if the picture variables underlying the structure of the picture sample affected

[1]Ibid., p. 9 (footnote)

identification. Separate analyses were performed for groups of five subjects each, in order to find out about their relative effect upon identification among young men and women, middle-aged men and women, and old men and women.

In order to find "types" of persons, both the actual self Q-sorts and the ideal self Q-sorts obtained from the thirty subjects were correlated, and the two 30x30 matrixes were factor analyzed. The emerging "types" of persons had to be tentatively named by referring back to the original Q-sorts and to additional data available on each subject. The discovery of an order underlying the reactions of persons to models in advertising pictures would then allow the statement of hypotheses for further investigations of the phenomenon.[1]

Q-technique has the advantage of assessing non-observable phenomena, such as the identification process. Subjects do not have to verbalize or to justify rationally their preferences for certain models. According to instructions, they relate themselves to the content of each item and state their reactions in terms of sorting operations. The assumption, however, that persons can evaluate the intensity of identification with one model in reference to the intensity of identification with each of the other models appearing in the set is necessary.[2]

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[1]Refer to footnote 1, page 31, supra.

[2]While in Q-studies this assumption or "transitive postulate" refers to intra-individual differences, it refers to individual differences in traditional studies, or R-studies, as Stephenson calls them.

In Q-technique a person finds item X more descriptive of himself than item Y or Z. In R-technique one person A obtains a larger score on a particular test than person B or C. In Q-studies persons are correlated, i.e. the scores one person gives to all items are correlated with those another person gives to all items (or those the first person gave to all items under different conditions of instruction). In R-studies tests are correlated, i.e. the scores obtained in one test from all persons are correlated with those obtained on another test from all persons. For a concise summary of postulates underlying Q in contradistinction from R, see Stephenson, The Study of Behavior, p. 58.

Data Collection

Since it has already been explained how the picture sample was composed and which subjects were interviewed, only a few additional remarks need to be made on this point.

In order to contact persons who would cover the factorial design in TABLE 4, an interviewer made telephone-calls in the East Lansing area. She inquired about the age-group of the respondent and the respondent's partner and asked if they would agree to participate in a study concerned with people's reactions to advertising pictures.

Interviews were held in the interviewees' homes. As each test sequence made use of other instruments not reported in the present study, most interviews were held in two sessions. In no case was the husband present when his wife performed her Q-sorts, nor was the wife present when the husband sorted the pictures.

Statistical Analyses

In order to decide whether color of picture, sex of model, and age of model affected identification, analysis of variance methods were adopted. Sets of actual and ideal self descriptions were held separate. For each set, six analyses were performed, so that groups of five Q-sorts provided by young, middle-aged, and old men and women independently were treated in a three-way classification set-up.[1] The sources of variance became the picture variables of color, sex of model, age of model, with their double and triple interactions.

Once a source of variance was found to have a significant effect upon identification, the underlying means were compared and significant

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[1]E. F. Lindquist, Design and Analysis of Experiments in Psychology and Education (Boston: Houghton Mifflin Company, 1956), pp. 220-28.

differences were determined by means of Duncan's "Multiple Range Test."[1] Thus, if age of the model had been found to affect picture scores obtained from a certain group of subjects, this test served to show the particular age-group of models with which identification had been predominant.

Eta-coefficients[2] were computed as estimates of the relative contribution of each picture variable to the total variance of Q-scores. Here it was seen which of the picture variables had the most decisive effect upon identification in reference to actual and ideal self notions.

Factor analytic methods were used to answer the question of whether there are "types" of persons who provide similar Q-sorts, and thus give similar descriptions of themselves. Each person's Q-sort was correlated with all other persons' Q-sorts for actual self notions and for ideal self notions. The resulting correlation matrixes were submitted to a Principal Axis factor analysis involving the computation of "Eigenvalues." After Varimax Rotations had been performed, clusters of persons were found. In order to define such clusters, factor loadings of each person were compared across factors and each person's largest loading was check-marked. Subsequently, the checkmarked loadings on each factor were compared with each other, and the two most sizable loadings were checkmarked a second time. The two persons corresponding to the double checked loadings on each factor were taken as best describing the factors. No weighting procedures were employed.[2]

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[1]D. B. Duncan, "Multiple Range Tests for Correlated and Heteroscedastic Means," Biometrics, XIII (1957), pp. 164-176.

[2]Q. McNemar, Psychological Statistics (New York: John Wiley & Sons, Inc., 1955), pp. 272-75.

[3]L. L. Thurstone, Multiple-Factor Analysis (Chicago: University of Chicago Press, 1947), Chapter 20: "The Principal Axes." See also, H. F. Kaiser, "The Varimax Criterion for Analytic Rotation in Factor Analysis," Psychometrika, XXIII (1958), pp. 187-200.

CHAPTER V

RESULTS: PICTURE EFFECTS AND IDENTIFICATION

Our major findings concerning the influence of the picture variables--"color, " "sex of models" and "age of models"--upon the identification processes of men and women of three age groups are presented in this chapter. The two hypotheses are that similarity of characteristics in the reader of an advertisement and in the model shown in the illustration facilitates identification:

1) Persons tend to identify with like-sexed models rather than with models of the opposite sex.
2) Persons tend to identify with models of their own age-group rather than with models of a different age-group.

We further expect that pictures showing a man and a woman will get somewhat higher average identification scores than pictures showing a man alone or a woman alone, as identification would be facilitated for men and for women in the audience.

TABLE 5 represents a summary of the analysis of variance results listed in more detail in Appendix I A, 1 and 2. It shows the distribution of significant F-ratios (.05 and .01 level of confidence) for subject groups and for picture effects. Results obtained for the set of Q-sorts describing the actual self and the set of Q-sorts describing the ideal self are shown separately.

The pattern of F-ratios found significant when identification occurs in reference to actual self notions is different from the pattern of F-ratios found significant when identification occurs in reference to ideal self notions in terms of the number of recognized effects.

Table 5.--Distribution of Significant Picture Effects for Young, Middle-Aged, and Old Men and Women[1]

Subject Variables	Picture Variables						
	Age	Sex	Color	A.-S.	A.-C.	S.-C.	A.-S.-C.
				Actual Self			
YM	-	-	-	-	-	-	-
YF	X(.05)	-	-	-	-	-	-
MM	-	-	-	X(.05)	-	-	-
MF	-	X(.01)	-	X(.05)	-	X(.05)	-
OM	X(.01)	X(.05)	X(.05)	-	-	X(.01)	-
OF	X(.01)	X(.01)	-	-	-	X(.05)	-
				Ideal Self			
YM	-	X(.01)	X(.01)	-	X(.01)	X(.05)	-
YF	-	X(.01)	X(.01)	-	-	-	-
MM	-	X(.05)	X(.01)	X(.05)	X(.05)	X(.01)	-
MF	-	X(.01)	X(.01)	X(.05)	-	X(.05)	-
OM	X(.01)	-	X(.01)	-	-	X(.01)	-
OF	X(.01)	X(.01)	X(.01)	-	-	-	-

Note: Refer to Appendix I, A 1 and 2, for variance estimates underlying each significant picture effect (F-ratio) reported here.

[1]Example of interpretation: the X(.05) in the top left corner of the actual self table. It indicates that young women (YF) recognized an "Age"-effect in the picture set, i.e. they identified preferably with either "young," "middle-aged" or "old" models. Provided they identified preferably with "young" models, then the mean score given to "young" models was significantly different from the mean-scores given to "middle-aged" and/or "old" models. For underlying mean relationships refer to TABLE 6a and 6b.

Since each recorded "X" indicates that the presence of the corresponding picture-effect (or combination of picture effects) makes a difference in the identificatory reactions of the corresponding subject group, we have to interpret the pattern with the larger number of "X's" to mean that the three picture variables affect intensity of identification more often when ideal self notions are involved than when actual self notions are addressed.

This suggests that whether an illustration is colored or black and white and whether a male model or a female model is shown will be of greater impact if an appeal to the ideal instead of the actual way of life of our subjects is intended.

So far, however, we have not yet considered if colored or black and white pictures were more successful in stimulating identification, or if persons tend to match their own sex and age characteristics with those of the models. Let us refer to TABLE 6a and 6b, in order to interpret each **F**-ratio listed in TABLE 5 by considering the underlying mean relationships.

A. Choice of Identificand in Reference to Actual Self Notions.

1. Young Men: No preferences concerning the three picture variables or their combinations.

2. Young Women: Preference for young models.

3. Middle-aged Men: Preference for a combination of age and sex characteristics in the models. Pictures showing old men and pictures showing both a young man and woman were significantly overchosen in comparison to pictures showing middle-aged male models, which is contrary to our expectations.

4. Middle-aged Women: Preference for women as models. Middle-aged female models elicit significantly more identification than male models of any age-group. Black and white portraits of women were more successful than pictures characterized by any other combinations of the sex and color variables.

Table 6a.--Relationships Between Mean Picture Scores for Significant Effects in Table 5

Subject Variables	Actual Self Picture Variables
	"Age":
YF	(0 m) (y)
OF	(m) (y o)
OM	(m y) (o)
	"Sex":
MF	(m) (mf) (f)
OF	(m) (mf f)
OM	(f) (mf m)
	"Color":
OM	(bw) (c)
	"Age" and "Sex":
MF	(m-m y-m m-mf o-m) (o-f y-mf o-mf y-f m-f)
MM	(m-m) (o-mf y-f y-m o-f m-mf m-f y-mf o-m)
	"Sex" and "Color":
MF	(c-m bw-m bw-mf c-f c-mf) (bw-f)
OF	(bw-m c-m bw-mf) (c-f c-mf bw-f)
OM	(c-f bw-mf bw-f) (bw-m c-m c-mf)

Note: Any means not appearing together with the sublined means within the same parentheses are significantly different at the .05 level of confidence. Any means appearing together with the sublined means within the same parentheses are not significantly different.

Table 6b.--Relationships Between Mean Picture Scores for Significant Effects in Table 5

Subject Variables	Ideal Self Picture Variables
	"Age":
OF	(m f) (o)
OM	(m y) (o)
	"Sex":
YF	(m) (f mf)
MF	(m) (mf f)
OF	(m) (mf f)
YM	(f) (mf m)
MM	(f) (m mf)
	"Color":
YF	(bw) (c)
MF	(bw) (c)
OF	(bw) (c)
YM	(bw) (c)
MM	(bw) (c)
OM	(bw) (c)
	"Age" and "Sex":
MF	(m-m o-m y-m) (o -f o-mf m-mf y-f m-f y-mf)
MM	(o-f m-f o-mf y-f) (y-m m-m y-mf o-m m-mf)
	"Age" and "Color":
YM	(c-o c-m c-y bw-m bw-y) (bw-o)
MM	(bw-o bw-y) (bw-m c-y c-m c-o)
	"Sex" and "Color":
MF	(bw-m c-m bw-mf bw-f) (c-f c-mf)
YM	(bw-mf c-f bw-f bw-m) (c-mf c-m)
MM	(bw-mf bw-f c-f bw-m) (c-m c-mf)
OM	(bw-mf c-f bw-m bw-f) (c-m c-mf)

Note: Any means not appearing together with the sublined means within the same parentheses are significantly different at the .05 level of confidence. Any means appearing together with the sublined means within the same parentheses are not significantly different.

5. Old Men: Preference for old models independent of their sex, and preference for male models independent of their age. Greater appeal of colored pictures. Selection of colored pictures showing both a man and a woman over colored, as well as black and white portraits of women alone.

6. Old Women: Preference for old models[1] independent of their sex, and for women as models, independent of their age. Black and white portraits of women have a greater appeal than either black and white or colored portraits of men.

Summarizing our findings, we see that whenever our subjects recognize an age-effect or a sex-effect in models, they identify preferably with models of their own age and sex. Also in four cases out of five, where certain combinations of picture-effects were liked better than others, our hypotheses tend to be supported. Let us compare these results with those obtained for the Q-sorts describing the ideal self notions.

B. Choice of Identificand in Reference to Ideal Self Notions.

1. Young Men: Preference for male models and for colored pictures. Preference of old models in black and white pictures over all other combinations of the age and color variables, and of colored portraits of men alone, or of both men and women, over all other combinations of sex and color characteristics.

2. Young Women: Preference for female models in general, and for colored pictures in general.

3. Middle-aged Men: Preference for male models and for colored pictures. Pictures showing both a middle-aged man and woman elicit significantly more identification than pictures showing women of the three age-groups. Colored portraits of old men are not significantly

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[1]Although the mean identification score for "old" models is higher than the mean scores for "middle-aged" and "young" models, there is no significant difference between mean scores for "old" and "young" models. Still, both these mean scores are significantly different from the mean score for "middle-aged" models.

preferred over colored or even black and white portraits of medium-old men, but this still runs somewhat contrary to our expectations. Colored pictures of both a man and a woman, and of men alone, are preferred over all other combinations of the sex and color variables.

4. Middle-aged Women: Preference for female models and for colored pictures. Pictures showing both a young man and a woman are significantly overchosen in comparison to pictures showing men of the three age-groups, but they are not significantly preferred over pictures showing middle-aged female models. This latter result does not support our hypothesis concerning the age variable as well as it does the hypothesis concerning the sex variable. Furthermore, there is a preference for colored pictures of both a man and a woman, and of women alone.

5. Old Men: Preference for old models and for colored pictures. Colored portraits of both a man and a woman, as well as of men alone, elicit stronger identification than pictures characterized by all other combinations of the sex and color variables.

6. Old Women: Preference for old models, for women as models, and for colored pictures.

Summarizing once more, we see that wherever subjects have any consistent preference for models of a certain age, they choose those in which they find their own actual age-characteristic. Similarly, we see that where sex of the model influences identification with any significance, persons choose like-sexed models rather than models of the opposite sex. Also, in four cases out of seven, where some combinations of picture-effects were preferred in the objects of identification, our hypotheses tend to be supported.

For both sets of data we can conclude that, for those groups of subjects where we can reject our first statistical hypothesis by saying that sex of models in advertising pictures has an effect upon identication, persons identify with like-sexed models rather than with models of the opposite sex. Further, we conclude that, for those groups of

subjects where we have to reject the second statistical hypothesis by stating that the age of models in pictures has an effect on identification, persons identify with models of their own age-group.

After having presented the evidence which tends to support our theoretical hypotheses, we wish to return to TABLE 5 in order to point out in which cases the statistical hypotheses could not be rejected.

Although the results for the actual self and for the ideal self differ in respect to the number of significant F-ratios, as noted earlier, there is also a similarity between the two patterns insofar as location of the "X's" is concerned. Comparing the data for young, middle-aged, and old persons, we find the following results for the actual self and, to a lesser degree, the ideal self:

1. Young subjects are relatively little affected by the age and the sex of the model, and by whether a picture is colored or not. This means that young subjects have few consistent preferences concerning the characteristics of the identificand. .
2. Middle-aged subjects look for certain combinations in picture-effects in their choice of objects of identification, but they do not yet have consistent preferences for independent criteria. Thus, although they prefer certain combinations of sex and age in their models, we do not find a predominance of models of a particular age-group when sex-differences are left out of consideration.
3. Old subjects tend to have consistent preferences for certain picture characteristics. They evaluate each picture effect independently and with greater consistency.

We venture an intriguing conclusion, even if it provokes arguments in the light of the rather frail evidence: that discrimination of characteristics in the identificand and their independent and consistent evaluation is a learned skill.

We have explained before that when the sex and age characteristics of the models affect the identificatory reactions at all in a subject group, then there is a tendency for persons to identify with models

of their own sex and age. As we now find that the choice of sex and age characteristics more often has a significant impact upon old subjects than upon young subjects, we infer that older persons are more likely to identify with models of their sex and age, which is probably due to an increased self- and role-consciousness. This suggests that our hypotheses are more likely to hold for older people than for younger ones.

After finding that persons identify preferably with models of their own sex, we want to know if pictures showing both a man and a woman receive somewhat higher average identification scores than pictures showing a man or a woman alone, which only enhance identification for either male or female readers. Appendix B contains the pertinent means for each group of pictures, for each group of subjects, and for each self-concept.

Male models alone receive low identification scores from women, though high ones from men, while female models alone receive low scores from men and high ones from women. Pictures showing a man and a woman simultaneously gain, in a male audience, identification scores almost as high as, or sometimes even higher than, pictures showing a man alone. But their success lies in the fact that they gain identification scores of about the same size in audiences composed of woman. The clue to their effectiveness is that they offer to both men and women their preferred objects of identification.

One more aspect of TABLE 5 deserves comment--the "color" variable, which was made a criterion for structuring the picture sample in order to become experimentally controlled.

It has already been noticed (TABLE 6a and 6b) that whenever the fact of whether a picture is black and white or colored has had a significant influence upon the intensity of the identificatory reaction, colored pictures were preferred. But, while only one group of subjects

gave a significant advantage to colored portraits of their actual objects of identification, all groups, without exception, preferred colored portraits of their ideal objects of identification.

Thus it seems that it is much more important that an illustration be colored when the depicted model is meant to appeal to ideal self notions than when it is meant to appeal to actual self notions.

The general preference for colored illustrations may, to some extent be due to a sample-bias, as black and white advertisements are often less pretentious in their models, composition, or photographic quality.

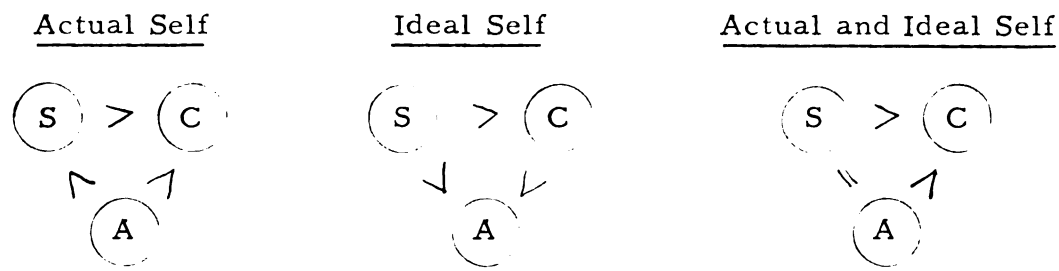
For the more specific success of colored portraits where ideal self notions are involved in the identification process, we suspect that color enhances the imagination of the subjects' ideal role-configurations, prior to identification with the depicted model on the fictitious level. Additionally, it is likely that colors symbolize an ideal role rather than an actual one.

Finally, we turn to a consideration of the relative importance of each of our three picture variables. Eta-coefficients in Appendix I, C, indicate how much of the total variance in identification scores is explained by each picture-effect. FIG. II gives a summary of variable relationships, but as most differences between the obtained Eta-coefficients were small, we should be cautious in generalizing our interpretation.

Both sub-sets of Q-sorts (actual self and ideal self), as well as the total set, indicate that decisions concerning the choice of a male or a female model are more important than decisions concerning the choice of a colored or a black and white illustration in the composition of advertisements to stimulate identification.

If identification in reference to actual self notions is to be elicited, the age attributed to the model is likely to have the predominant impact,

FIG. II. Comparison of Picture Effects in Terms of Magnitude of Contribution to Total Variance in Q-Sort Sets



Note: S = "Sex of Model," A = "Age of Model," C = "Color of Picture" Symbols of relationship (< , > , =) indicate whether one picture effect explains less, more, or an equal amount of the variance in identification scores for actual and/or ideal self than another picture effect.

next to the sex of the model, while the color of the illustration is least important.

However, if identification in reference to the ideal self notions is to be stimulated, the choice of a male or a female model is likely to have the predominant impact, followed by color of the illustration, while the age attributed to the model has only a minor influence.

When a simultaneous appeal to both self-notions is intended, the sex and age characteristics in the model are of equal effect, while the color of the illustration has a smaller impact upon identification.[1]

This chapter dealt with the first part of the results. It should be emphasized that the three picture variables--"color," "sex of model," and "age of model"--explain only a small part of the total variance in

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[1]The relatively small impact of color upon identification, however, does not suggest that color is superfluous, as here its influence upon attention or recall is left out of consideration. Our findings only indicate the relative importance of color among the three picture variables studied. They do not indicate any magnitudes of effects.

identification scores. This can be seen from the considerable residual variances reported in Appendix I, A 1 and 2. Criteria like "socio-economic status," "occupational activity," "beauty," among others, can be expected to have affected the subjects' choice of their objects of identification. To some extent, these will be considered in the next section of results.

Once more the reader should be reminded that particularly those findings reported so far which do not relate to the two hypotheses do not necessarily apply to persons other than those from whom the Q-sorts were obtained.

CHAPTER VI

RESULTS: TYPES OF ACTUAL AND IDEAL SELF NOTIONS

Our major findings concerning the segmentation of the "audience" composed of our 30 subjects will subsequently be presented. Some questions will be answered in the following sequence: Of how many different types are our subjects when we consider their pictorial descriptions of their actual ways of life, and of how many types are they, when we consider pictorial descriptions of their ideal ways of life? Of what age and sex are the persons in each type? Of what age and sex are those two persons most typical of each type? Which models elicit most and least intense identification in different types of persons, when ideal self notions are involved, and when actual self notions are involved?

Number of Types of Actual Selves and of Ideal Selves

The 30 Q-sorts describing the ideal selves of our subjects were intercorrelated, producing the matrix shown in Appendix I, D 1, which indicates similarities of each person's ideal self notion with every other person's ideal self notion. A similar matrix is shown in Appendix I, D 2, where each correlation coefficient stands for the similarity of one person's actual self description with another person's actual self description.

Although ten factors were extracted from each matrix, only six factor solutions were adopted for both sets of data, because in each case no more than six factors could be defined by highest loadings of

at least two persons. The adopted factor matrixes (Appendix I, E) summarize the Q-sort to group of Q-sort relationships, or, in other words, the person to type of person relationships. As the obtained factors are orthogonal factors, no group to group relationships or type with type correlations were to be expected.

Each set of factors was rotated and the results are found in TABLE 7. The purpose of rotation was, as usual, to differentiate more sharply between types. Here a single asterisk indicates the factor on which the respective person has the most sizable loading; the position of the asterisk shows under which type of actual self and under which type of ideal self the corresponding person will be subsumed. Thus, subject number 2 contributes to the definition of ideal self Type I' as well as to the definition of actual self Type IV'.

However, when we classify persons so that each person belongs to one type only in his actual self notion and one in his ideal self notion, we must keep in mind that each person is only best characterized by this type, while to a minor extent he is also characterized by other types of self notions, as an examination of any person's factor loadings across columns will show in TABLE 7.

We find those two persons indicated by two asterisks most characteristic of each group of persons. Only these two best representatives of each type will be considered when we later turn to "naming" each factor, as they produce a clearer factor differentiation than will all persons who contribute to the definition of each group. Thus, we shall study the Q-sorts of 12 persons out of 30 with particular attention.

Although there are six types of ideal selves and six types of actual selves among our "audience," it is readily seen that persons who together define an ideal self type, do not also define a type through a similarity in their actual ways of life. This, certainly, is not amazing, as individuals with very similar actual role-configurations may

Table 7.--Rotated Factor Loadings for Two Sets of Picture Q-Sorts Provided by 30 Subjects.

	Ideal Self						Actual Self					
Subjects:	I'	II'	III'	IV'	V'	VI'	I'	II'	III'	IV'	V'	VI'
1	+11	-39	-02	+05	+12	-39*	-03	+11	-05	+47**	-03	+22
2	+51*	+05	-41	+02	+04	-46	-11	-29	+00	+42*	-31	+00
3	-05	-21	+12	-05	+05	-67**	+02	-13	-69**	+15	-00	-24
4	+48	-16	-54*	-22	+15	-18	+27	-12	-71**	+11	-06	-23
5	+59**	-25	-04	-30	+08	-07	+32	-63**	-14	-03	-07	-06
6	+27	-17	-66*	-16	+22	-30	+18	-53*	-25	-09	+19	-19
7	+24	-70**	-10	-04	+14	+02	-03	-12	+04	-18	-16	-57**
8	+29	-71**	-29	-10	+13	+05	+33	-46*	-30	-06	-23	+04
9	+23	-27	+06	+03	+04	-65**	-04	-29	-05	+15	-59**	-16
10	+16	+14	-49*	-16	+32	+13	+03	+07	-23	+60**	-02	-18
11	-17	-44*	-18	-20	+01	-11	+41*	+02	-25	+11	+00	-29
12	-07	+00	-83**	-23	+07	+01	+18	-47*	-22	+38	-12	-33
13	-15	-39	-28	-18	-04	-46*	-11	-08	+02	+34*	-02	+26
14	-12	-09	-52*	-45	-11	-05	-06	-42*	+12	+16	-20	+16
15	+14	-36	-07	-18	+34	-42*	+25	-08	-56*	+01	+07	-20
16	+12	-10	-35	-13	+59**	-08	+23	-23	-47*	+15	+05	-21
17	+16	-19	-27	-16	+13	-51*	+08	-22	-61*	-04	-16	+12
18	+57*	-11	-46	+14	+16	-11	+25	-34*	-24	+31	+07	-28
19	+08	-06	-27	+02	+53**	-44	+05	-56**	-32	+07	-02	-31
20	+25	-38	-76*	+17	+07	-18	+48*	-20	-31	+01	+03	-31
21	+39*	-26	-06	-03	+05	-28	+39*	-04	-25	-21	-34	+28
22	+44	-23	-09	-22	+52*	+05	+67**	-28	-08	+10	+02	+02
23	-05	-19	-46	-06	+52*	-40	+32	-10	-18	-07	-07	-65**
24	+07	-08	-85**	+03	+13	-03	+27	-18	-08	+30	+08	-50*
25	+22	-11	-14	-63**	+23	-04	+36	+10	-00	-07	-52**	-15
26	+45*	-23	-42	-41	+28	+16	+59*	-16	-12	+18	-38	-07
27	+04	-02	-08	-57**	-01	-26	-09	+21	-08	+07	-43+	+23
28	+08	+11	-58+	-21	+13	+25	+41*	-07	-17	+38	-24	-27
29	+71**	-22	-00	-10	+04	-07	+45	-46+	-30	-10	-18	-20
30	+43	-23	-24	+06	+47*	+06	+71**	-06	-18	-10	+09	-21

Note: * Indicates the factor on which the corresponding person has the highest loading, i.e. the "type" with which he is most correlated.

** Indicates the two persons most representative of each "type."

have very dissimilar ideal role-configurations. How congruent or incongruent both role-configurations are in each individual is likely to depend upon his degree of adjustment to the status quo.[1]

Age and Sex of Persons Representing Each Type

TABLE 8 is nothing more than an excerpt from TABLE 7; here a person's factor loadings are shown only for the actual and ideal factors which explain most of the variance in his identification scores. As subjects here are grouped by their sex and age, it is easily seen that some factors are predominantly or exclusively "male" or "female," while others are defined by persons of one age-group rather than the others. TABLE 9 summarizes these relationships:

1. While five out of six types of actual selves are to be found in both men and women, only three out of six types of ideal selves are shared by men and women. While there is only one exclusively "male" type of actual self, there are two such exclusively "male" types of ideal selves, and while there is not a single exclusively "female" type of actual self, there is one such type of ideal self.
2. While the actual self notions of our male subjects are of six different types, their ideal self notions are of only five different types. Similarly, while our female subjects' actual selves are of five types, their ideal selves are of four types only.

These observations suggest, first, that the actual ways of life of men and women are more similar than they wished they were, and second, that men's actual and ideal ways of life are slightly more diversified than the corresponding ones of their wives, which does not seem amazing when we recall the wide occupational spread in our male subjects in contrast with the "homemaker's" role in all female subjects.

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[1]I. D. Nahinsky, "The Relationship Between the Self-Concept and the Ideal as a Measure of Adjustment," Journal of Clinical Psychology, XIV (1958), pp. 360-64.

Table 8.--Clusters of Persons Defining Factors in Table 7.

		Actual Self						Ideal Self					
Factors:		I	II	III	IV	V	VI	I	II	III	IV	V	VI
	1				+47								-39
	3			-69									-67
YM	5		-63					+59					
	7						-57		-70				
	9					-59							-65
	11	+41							-44				
	13				+34								-46
MM	15			-56									-42
	17			-61									-51
	19		-56									+53	
	21	+39						+39					
	23						-65					+52	
OM	25					-52					-63		
	27					-43					-57		
	29		-46					+71					
Sub-total:		2	3	3	2	3	2	3	2	0	2	2	6
	2				+42			+51					
	4			-71						-54			
YF	6		-53							-66			
	8		-46						-71				
	10				+60					-49			
	12		-47							-83			
	14		-42							-52			
MF	16			-47								+59	
	18		-34					+57					
	20	+48								-76			
	22	+67										+52	
	24					-50				-85			
OF	26	+59						+45					
	28	+41								-58			
	30	+71										+47	
Sub-total:		5	5	2	2	0	1	3	1	8	0	3	0
Total:		7	8	5	4	3	3	6	3	8	2	5	6

Note: Underlined factor loadings indicate the two persons most representative of each "type" because of their highest or second highest correlation with the group.

Sub-totals indicate the number of men and the number of women found in each cluster of persons. The total indicates the number of persons defining each factor.

Table 9.--Sex and Age Characteristics of Persons Defining Different Types of Self Descriptions

Factors:	I	II	III	IV	V	VI
			Sex Characteristics			
Actual Self	M+F	M+F	M+F	M+F	M	M+F
Ideal Self	M+F	M+F	F	M	M+F	M
			Age Characteristics			
Actual Self	M+O	Y+M+O	Y+M	Y+M	Y+O	Y+O
Ideal Self	Y+M+O	Y+M	Y+M+O	O	M+O	Y+M

If we study the age characteristics of the persons included in each type, we make the following observations:

1. Two types of actual self notions and two types of ideal self notions are shared by young and middle-aged subjects. One type of actual self and also one type of ideal self is common to middle-aged and old subjects.

2. While there are two kinds of actual selves shared by young and old people, these age-groups have no ideal self in common. While only one type of actual self is found among subjects of all three age-groups, two types of ideal selves are defined by young, middle-aged, and old people simultaneously. Some old persons have a special type of ideal self, while they have no special kind of actual self.

Our observations vaguely indicate that ideal ways of life are not as often bound to specific age-groups, as actual ways of life are. This is plausible, because roles actually performed at work and at home are likely to vary more across age-groups than ideal roles, proposing happiness, leisure, or entertainment. The type of ideal self, which was only encountered among old people, will probably be concerned with retirement expectations.

Age and Sex of Persons Most Typical of Each Type

Special marks symbolize those persons in TABLE 8, who, in their actual selves or in their ideal selves, are most representative of each type. We note, however, that the "representative power" is extremely variable. Thus, we note, that subject number 1 in his actual self is a very poor representative of his type, although he is still the second best in his group. No more than 22% of the variance in his identification scores can be predicted by the particular factor he himself helps to define. For contrast's sake, the ideal self of subject number 24 has to be mentioned as a very powerful representative of its type; here as much as 72% of the variance in identification scores can be predicted by the particular factor defined.[1]

Those persons singled out as being most representative of their types are, at the same time, relatively "pure" in their self notions, which is indicated by a tendency toward small loadings on all factors but one. They probably have very set ideas about what they are at the time of the interview, or about what they would like to be, either in the future or if circumstances allowed.

TABLE 10 shows the sex and age of the subjects in our sample who have the more typical actual and ideal self notions. It is interesting to note how similar the patterns obtained for actual and ideal selves are.

1. When we consider types of actual self notions as well as types of ideal self notions, we find that in two-thirds of the cases the highest loadings are contributed by men, while only in one-third of the cases are they contributed by women.

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[1]The percentage of variance of a given measurement which may be predicted by a particular factor is calculated by squaring the respective factor loading, thus obtaining the necessary coefficients of determination.

Table 10.--Number of Men and Women of Three Age Groups Most Representative of Each Type

Actual Selves				Ideal Selves			
Sex / Age	M	F	M+F	Sex / Age	M	F	M+F
Y	5	2	7	Y	4	1	5
M	1	0	1	M	1	2	3
O	2	2	4	O	3	1	4
Y+M+O	8	4	12	Y+M+O	8	4	12

2. When we consider types of actual selves as well as types of ideal selves, there is a tendency for young subjects to provide the largest number of highest loadings, with old subjects providing a somewhat smaller number, and with middle-aged subjects providing least.

3. When we consider types of actual selves, more than one-third of the total number of highest loadings are traceable to young men, while for types of ideal selves, exactly one-third of the total number is traceable to young men.

To some extent our first observation is explained by the fact, reported earlier, that our women's actual and ideal ways of life are less diversified than those of their husbands, or, in statistical terms, as women's self-notions are of fewer types than their husbands, their chances are smaller to be among the best representatives of a type.

One possible interpretation of our second observation--that young people tend to have very determined ideas concerning their actual and ideal ways of life, which is rare among middle-aged people, but appears again, to some degree, among old people--is the following:

Lacking experience, our young subjects perceive themselves in their actual and ideal roles in a stereotyped[1] fashion. Our middle-aged

[1]Lippman used the term "stereotype" to designate standardized and rigid "pictures in our head," which persist because they often

subjects may be in a stage of redefining their actual and ideal roles, after becoming aware of limitations in some of their abilities through accumulated experience in all kinds of interpersonal relations. Their self-notions may have become a compromise in the face of contradictory expectations, thus losing consistency. Old men, however, with additional experience, may have regained a consistency for their self-notions which no longer is due to stereotyped perceptions of actual and ideal roles.

The fact that each of the five young men included in our sample not only has a different self concept but also represents his respective type best or second best (with one exception, where ideal selves are involved) would then be due to the combined phenomena we just have discussed.

Again, we note that the basis for the foregoing interpretations is rather frail due to the extremely small number of persons in each subject group; even if the interpretations were acceptable for the "audience" under study, no generalizations to larger audiences should be attempted.

Six Types of Ideal Self Notions

In this section, a tentative interpretation and "name" for each factor is proposed on the basis of those three pictures which stimulated most intense identification (top pictures) and those which stimulated least intense identification (bottom pictures) in the representatives of each cluster of persons when they were asked: "How much I would like my way of life to be like the way of life of the person(s) in the pictures?"

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provide us with a consistent picture of the world in which we live. Any disturbance of these stereotypes becomes an attack upon the foundations of our universe, particularly because they become emotionally charged. W. Lippman, Public Opinion (New York: Harcourt, Brace & Co., Inc., 1922), pp. 89-96. Here we mean by "stereotype" a standardized and rigid picture of ourselves.

Appendix I, F, presents in "standard scores" to what extent the representatives of each cluster identified with each of the 72 pictures. Positive algebraic signs indicate that the respective groups of persons perceived the model's way of life as similar to their own ideal ways of life, while negative algebraic signs indicate dissimilarity. Pictures producing a very narrow range of standard scores across factors were excluded from further consideration because of a lack in discriminatory power.

FIG. III offers reproductions of those three pictures which obtained the largest positive scores (top pictures), and of those which obtained the largest negative scores (bottom pictures) for each of the six types of ideal self notions.

When in the following each type of ideal self notion is introduced, the tentative "name" is given first. Then it will be reported how many persons were found to possess ideal self notions of that type, and what their age and sex had been. Occupations of the major representatives of each cluster will be mentioned. We shall also describe briefly the three top and bottom pictures, as this may help the reader in his own evaluation of the rather small pictorial reproductions in FIG. III.

1. Happy Family Life versus Status Seeking

Six men and women of all age-groups aspire to a happy family life. Among them an old engineer and a young physical education student are the most typical representatives.

Top pictures:

(a) elderly parents with their four children among a confusion of luggage and household goods about to move into a new home in an unfamiliar town (TIME INC.)
(b) parents with their little boy and girl relaxing happily on their lawn (GOLDEN VIGORO lawn food).
(c) two boys in letter sports shirts playing word games with ALPHA-BITS at the breakfast table.

FIG. III. TOP AND BOTTOM PICTURES OF IDEAL SELF FACTOR ARRAYS

I'

69
bw

26
c

2
c

14
c

43
bw

40
bw

II'

31
c

26
c

32
c

17
c

1
c

42
bw

III'

23
c

30
c

20
c

35
bw

5
c

41
bw

IV'	V'	VI'
33 c	18 c	8 c
6 c	31 c	43 bw
48 c	34 bw	41 bw
64 bw	44 bw	71 bw
21 c	66 bw	58 bw
5 c	68 bw	68 bw

Bottom pictures:

(x) women in riding habit jumping a horse over a hurdle, watched by friends in the background (UNITED STATES BREWERS FOUNDATION).

(y) driver of a racing car surrounded by a swarm of mechanics after winning the race (CHAMPION spark plugs).

(z) self-confident man with glass (SCHENLEY'S whisky on the rocks) in front of heavily framed picture and friends in an art museum.

2. Home and Good Job versus Financial Worries

The ideal selves of a young air force sergant and his wife are most representative of this factor, which otherwise is also defined by the ideal self of a middle-aged gas station owner.

Top pictures:

(a) elderly couple looking at the foundations of their new home piled high with FLINT-KOTE products.

(b) parents with their little boy and girl relaxing happily on their lawn (same as in factor 1).

(c) two men in shirts and ties discussing design problems with a woman in an architect's office, she holding her glasses, they smoking LUCKY STRIKE.

Bottom pictures:

(x) woman, classically draped in black, hit by a limelight in a lonely atmosphere with a SMIRNOFF VODKA martini.

(y) young fellow in painter's garb, sitting down among buckets of paint and ladder, being brought a ROYAL CROWN COLA.

(z) middle-aged man sitting hunched over in a hospital setting, smoking nervously a cigarette, and wondering how to pay the hospital bill and household expenses at the same time (MONEY).

3. Women's Luxury and Romance versus Rugged Men

Among fifteen women interviewed, eight had ideal self notions of this type and were of all three age-groups. Most typical, however, were the middle-aged wife of the gas station owner and the old wife of a high school teacher.

Top pictures:
(a) woman in evening dress being waited on at beach table for SMIRNOFF cocktail. Colorful fruit on surrounding trees gleam in the light of the sinking sun.
(b) a couple traveling in a BOEING 707, the man looking out of the window, the woman talking to stewardess while knitting.
(c) "A Diamond is Forever." A girl on the top of a hill sitting against the trunk of a round tree and a man lying down with his head in her lap. Among the red fruit in the tree they see a sparkling diamond.

Bottom pictures:
(x) two men in band uniforms. The older one, with a tattooed hand, offers the younger a light for his cigarette (MARLBORO).
(y) a man washing fire truck while another man stands by to talk for the length of a cigarette (LUCKY STRIKE).
(z) football player being carried by an enthusiastic crowd (LIFE).

4. Old Men's Luxury versus Youth and Dating

Only two old men--an executive director and a sales manager, both close to retirement--form this cluster of persons.

Top pictures:
(a) elderly couple sitting on a white carpet in front of a large MAGNAVOX dreaming of symphony orchestras, jazz bands, and folk music in foreign countries.
(b) pilot adventuring with airplane in the rugged arctic, camping with his crew around fire at night (CAMELS).
(c) elderly grey-haired man smiling behind the wheel of his open-topped CHRYSLER.

Bottom pictures: (x) young man in sports shirt leaning against a wall close to a young blonde, both smiling (LISTERINE).
(y) boy and girl kissing over an open Lane Sweetheart Chest crowded with things marked "his" and "hers."
(z) a man washing a fire truck while another man stands by to talk for the length of a cigarette (LUCKY STRIKE)--same as in factor 3.

5. Home, Family, and Possessions versus Whiskey and "Odd" Situations

Two men and three women, all middle-aged or old would like their ways of life to be of this type. Most prominent among these are a middle-aged engineering teacher and the wife of a secretary.

Top pictures: (a) mother surrounded by five children who play with a variety of trading stamp rewards in a comfortable, rustic living-room (S & H GREEN STAMPS).
(b) elderly couple looking at the foundations of their new home piled high with FLINT-KOTE products (same as in factor 2).
(c) boy surrounded by 30 volumes of the Encyclopedia Americana dreaming of his future as a successful scientist or captain of industry.

Bottom pictures: (x) two men in cowboy attire loading a case of IMPERIAL whiskey onto the back of a mule.
(y) man riding a motor scooter with a case of IMPERIAL whiskey on the back and waving to a couple on another scooter coming towards him.
(z) old man and woman, he in undershirt and suspenders washing a sweater in WOOLITE Cold Water Soap with old-fashioned spectacles on the forehead, she reading a racing form to him.

6. Sports versus Dieting and Old Age

Out of ten young and middle-aged men interviewed, six have ideal roles of being admired sportsmen. Most typical among this group of men are the ideal self notions of a young student and of a young policeman.

Top pictures:

(a) Tommy Bolt in a McGREGOR DRIZZLER finishing a golf swing with a gallery of fans in the background.
(b) driver of a racing car surrounded by a swarm of mechanics after winning the race (CHAMPION spark plugs). This picture was second lowest in factor 1.
(c) football player being carried by an enthusiastic crowd (LIFE). Same picture was lowest in factor 3.

Bottom pictures:

(x) old man and woman, each with a grocery cart looking at box of Kellog's Special K in a context of other material on diet and exercise.
(y) "Fitness is for Everyone." Stout woman in leotard energetically doing her setting-up exercises.
(z) old man and woman, he in undershirt and suspenders washing a sweater in WOOLITE Cold Water Soap with old-fashioned spectacles on the forehead, she reading a racing form to him (same picture was lowest in factor 5).

Summarizing these findings it is noteworthy that certain pictures elicit identification mechanisms only among women, while others only among men. Also, while some pictures are successful only among younger subjects, others appeal predominantly to older subjects. This highlights the importance of model selection when identification in reference to ideal self notions is intended for a specific group of potential buyers in an audience where not everybody is expected to be interested in the product.

When ideal self notions were involved, more than half of the married women of all age-groups identified themselves with pictures showing "Women's Luxury," where the most appealing motives were "holidays," "travels," and "love." Here, no pictures showing men and women in association with children ranged high in identification.

Two groups of pictures elicited identification in men only, when their ideal self notions were involved. More than half of the young and middle-aged married men identified themselves with pictures showing "Sports" scenes. Old men preferred models suggesting "Men's Luxury." Again, these two groups of men did not rank pictures showing adults in association with children very high.

Among the three other factors, which were defined by men as well as women, one was composed of men and women of all age-groups, another of younger men and women, and a last one of older men and women. Here identification occurred very often with pictures showing parent-children relationships and the motives were "home" and "family." When these three groups of persons are fairly similar in their acceptance of "Happy Family" type pictures, they are more dissimilar in what they reject as objects of identification. In the first case, "Status Seeking" is rejected, in the second "Financial Worries," and in the third "Whiskey and 'Odd' Situations."

Six Types of Actual Self Notions

In this section, the tentative interpretations and "names" for the second set of six factors are proposed, on the basis of those pictures which stimulated most and least identification in the representatives of each cluster of persons when they were asked: "How similar is my present way of life to the way of life of the person(s) in the picture?"

Appendix I, F 2, presents in "standard scores" to what extent each picture was identified with, across subject groups. Again, pictures producing a very narrow range of standard scores across factors were eliminated from further consideration.

FIG. IV shows the pictures which obtained most and least intense identification in reference to actual self notions.

1. Popularity versus Wild West and High Society

Four out of five old women interviewed define this type, in addition to an old man and a middle-aged man and woman. Most typical in their actual ways of life are the wife of a retired State Employment Commissioner and the wife of an old engineer. In their ideal self-notions, both were of the type "Home, Family and Possessions versus Whiskey and 'Odd' Situations" (Factor 5).

Top pictures:

(a) mother surrounded by five children who play with a variety of trading stamp rewards in a comfortable, rustic living-room (S & H GREEN STAMPS. Same as top picture in ideal self Factor 5).

(b) man next to his FORD station wagon surrounded by a crowd of friends and goods he has transported in it during one year's time.

(c) elderly parents with their four children among a confusion of luggage and household goods about to move into a new home in an unfamiliar town (TIME INC. Same as top picture in ideal self Factor 1).

Bottom pictures:

(x) portrait of Walt Disney's TEXAS JOHN SLAUGHTER against a background fighting scene in a Western village.

(y) woman, classically draped in black, hit by a limelight in a lonely atmosphere with a SMIRNOFF VODKA martini.(Same picture among bottom pictures in ideal self Factor 2).

(z) elegant couple being served BOURBON on the rocks in a fashionable restaurant in front of a framed mirror reflecting a chandelier.

FIG. IV. TOP AND BOTTOM PICTURES OF ACTUAL SELF FACTOR ARRAYS

I'	II'	III'
18 c	26 c	28 c
7 c	39 bw	26 c
69 bw	2 c	13 c
39 bw	24 c	68 bw
17 c	7 c	17 c
67 bw	68 bw	23 c

IV'

13
c

54
bw

21
c

14
c

43
bw

6
c

V'

3
c

33
c

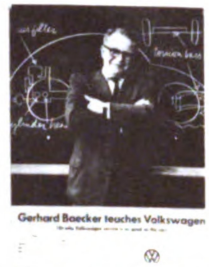
34
bw

14
c

23
c

43
bw

VI'



46
bw

69
bw

1
c

38
bw

54
bw

41
bw

2. Children versus Romance, Wealth, and "Odd" Old Age

Predominantly young and middle-aged women define this type, along with one man of each of the three age-groups. Most typical, however, are a young student of physical education and a middle-aged teacher of engineering. In his ideal self, the former was of the "Happy Family Life versus Status Seeking" type, while the latter was of the "Home, Family and Possessions versus Whiskey and 'Odd' Situations" type (Factors 1 and 5).

Top pictures:

(a) parents with their little boy and girl relaxing happily on their lawn (GOLDEN VIGORO lawn food. Same picture among top pictures in ideal self factors 1 and 2).
(b) boy surrounded by 30 volumes of the Encyclopedia Americana dreaming of his future as a successful scientist or captain of industry (Same picture among top pictures in ideal self Factor 5).
(c) two boys in letter sports shirts playing word games with ALPHA-BITS at the breakfast table (Same picture among top pictures in ideal self Factor 1).

Bottom pictures:

(x) "Evening in Paris." Couple in evening robes leaning out of a window at Manguin's into a snowy Paris night lit by antique lantern.
(y) man next to his FORD station wagon surrounded by a crowd of friends and goods he has transported in it during one year's time (Same picture among top pictures in actual self Factor 1).
(z) old man and woman, he in undershirt and suspenders washing a sweater in WOOLITE Cold Water Soap with old fashioned spectacles on the forehead, she reading a racing form to him (Same picture was lowest in ideal self Factors 5 and 6).

3. Married Life versus "Odd" Old Age and Lonesome Women with Drinks

Members of this group were five young and middle-aged men and women, who were best represented in their actual ways of life by a young student and his wife. The husband's ideal self

was of the type "Sports versus Dieting and Old Age," while his wife's ideal self was of the type "Women's Luxury versus Rugged Men" (Factors 3 and 6).

Top pictures:

(a) parents at breakfast table spelling "LETS GO" with ALPHA-BITS to their son who plays with a new toy train instead of hurrying to school with the books his mother holds for him.

(b) parents with their little boy and girl relaxing happily on their lawn (GOLDEN VIGORO lawn food. Same picture was among top pictures in ideal self Factors 1 and 2, and was top picture in actual self Factor 2).

(c) two women preparing a picnic on the beach for two men who are waiting at a distance (COCA COLA).

Bottom pictures:

(x) old man and woman, he in undershirt and suspenders washing a sweater in WOOLITE Cold Water Soap with old-fashioned spectacles on the forehead, she reading a racing form to him (Same picture was lowest in ideal self Factors 5 and 6, and in actual self Factor 2).

(y) woman, classically draped in black, hit by a limelight in a lonely atmosphere with a SMIRNOFF VODKA martini (Same Picture among bottom pictures in ideal self Factor 2 and in actual self Factor 1).

(z) women in evening dress being waited on at beach table for SMIRNOFF cocktail. Colorful fruit on surrounding trees gleam in the light of the sinking sun (Same picture was top picture in ideal self Factor 3).

4. Courtship versus Sporty Adventures

Young and middle-aged men and women define this factor in their actual ways of life. A young student of police administration and the wife of another policeman are most representative in their group. In his ideal self the man was of the "Sports versus Dieting and Old Age" type, while the woman was of the "Women's Luxury versus Rugged Man" type (Factors 6 and 3).

Top pictures:

(a) two women preparing a picnic on the beach for two men who are waiting at a distance (COCA COLA. Same among top pictures in actual self Factor 3).

(b) woman behind wheel of a CHRYSLER driving her husband to his office, he in a hat with his face half hidden by the morning newspaper he is reading.

(c) boy and girl kissing over an open Lane Sweetheart Chest crowded with things marked "his" and "hers" (Same picture among bottom pictures in ideal self Factor 4).

Bottom pictures:

(x) woman in riding habit jumping a horse over a hurdle, watched by friends in the background (UNITED STATES BREWERS FOUNDATION. Same among bottom pictures in ideal self Factor 1).

(y) driver of a racing car surrounded by a swarm of mechanics after winning the race (CHAMPION spark plugs. Same among bottom pictures in ideal self Factor 1, and among top pictures in ideal self Factor 6).

(z) pilot adventuring with airplane in rugged arctic, camping with his crew around fire at night (CAMELS. Same among top pictures in ideal self Factor 4).

5. Leisure versus Sporty and Elegant Entertainments

The actual self notions of two old men--an executive director and a sales manager both close to retirement--and of a policeman are of this type. One of the old men and the policeman are most representative. The latter had an ideal self of the "Sports versus Dieting and Old Age" type, while both businessmen had ideal selves of the "Old Men's Luxury versus Youth and Dating" kind (Factors 6 and 4).

Top pictures:

(a) young soldier on leave in his room, which is decorated with trophies, stretching out on a BEAUTYREST by SIMMONS mattress with his dog climbing upon him.

(b) elderly couple sitting on a white carpet in front of a large MAGNAVOX dreaming of symphony orchestras, jazz bands, and folk music in foreign countries (Same as top picture in ideal self Factor 4).

(c) boy surrounded by 30 volumes of the Encyclopedia Americana dreaming of his future as a successful scientist or captain of industry (Same picture among top pictures among ideal self Factor 5 and actual self Factor 2).

Bottom pictures:

(x) woman in riding habit jumping a horse over a hurdle, watched by friends in the background (UNITED STATES BREWERS FOUNDATION. Same among bottom pictures in ideal self Factor 1 and in actual self Factor 4).

(y) woman in evening dress being waited on at beach table for SMIRNOFF cocktail. Colorful fruit on surrounding trees gleam in the sinking sun (Same as top picture in ideal self Factor 3 and as lowest picture in actual self Factor 3).

(z) driver of a racing car surrounded by a swarm of mechanics after winning the race (CHAMPION spark plugs. Same among bottom pictures in ideal self Factor 1, among top pictures in ideal self Factor 6, and among bottom pictures in actual self Factor 4).

6. Work versus Sports

A young man, an old man, and an old woman are of this type in their actual ways of life. Most representative are the two men. The young one, an Air Force sergeant, had an ideal self of the "Home and Good Job versus Financial Worries" type, while the other, a high school teacher, had an ideal self of the "Home, Family and Possessions versus Whiskey and 'Odd' Situations" type (Factors 2 and 5).

Top pictures:

(a) "Gerhard Baecker teaches Volkswagen." Man with his arms crossed in front of his chest standing in front of blackboard showing schemes of motor parts.

(b) elderly parents with their four children among a confusion of luggage and household goods about to move into a new home in an unfamiliar town (TIME INC. Same as top picture in ideal self Factor 1 and among top pictures in actual self Factor 1).

(c) young fellow in painter's garb, sitting down among buckets of paint and ladder, being brought a ROYAL CROWN COLA (Same among bottom pictures in ideal self Factor 2).

Bottom pictures:

(x) baseball-star swinging the bat. BANTRON "If you want to stop smoking."

(y) woman behind wheel of a CHRYSLER driving her husband to his office, he in a hat, with his face half hidden by the morning newspaper he is reading (Same among top pictures in actual self Factor 4).

(z) football player being carried by an enthusiastic crowd (LIFE. Same picture lowest in ideal self Factor 3, and among top pictures in ideal self Factor 6).

Summarizing once more, it seems remarkable that there is no type of actual self notion to be found exclusively among women, similar to the type of ideal self strongly prevailing among the women interviewed. Still, two types of actual selves were found among two-thirds of the female subjects. The first, "Popularity versus Wild West and High Society," was found particularly among old ladies, while the second, "Children versus Romance, Wealth, and 'Odd' Old Age," was represented mostly by young and middle-aged married women, who are likely to have children at home in their actual ways of life.

Only one type of actual self was exclusively found in men, where two out of three were old, and it was "Leisure versus Sporty and Elegant Entertainments." It is interesting that the actual selves of men were of a large variety of types; that is, they were much more diversified in their actual self notions than in their ideal self notions where the "Sports versus Dieting and Old Age" type united six self notions into a group.

It may be more difficult to choose a model for actual self identification with the intention to appeal to a specific group of potential buyers in an audience where not everybody is expected to be interested in the product. This is suggested not only by the finding that actual self factors more often cut across sex and age differentiations, but also by the greater similarity of the picture groups which elicited most and least identification when actual selves are involved than when ideal selves are involved.

Among the pictures which stimulated most intense identification in reference to the actual selves of persons in the various groups, there are, in all cases, pictures showing "happy family life" and/or pictures showing "parent-children relationships." Because all the interviewed persons were married, it is not amazing that these pictures were more often identified with in reference to actual self notions than to ideal self notions. This shows that everyday situations are most indicative to the subjects of their actual ways of life, and to a minor extent to their ideal ways of life.

CHAPTER VII

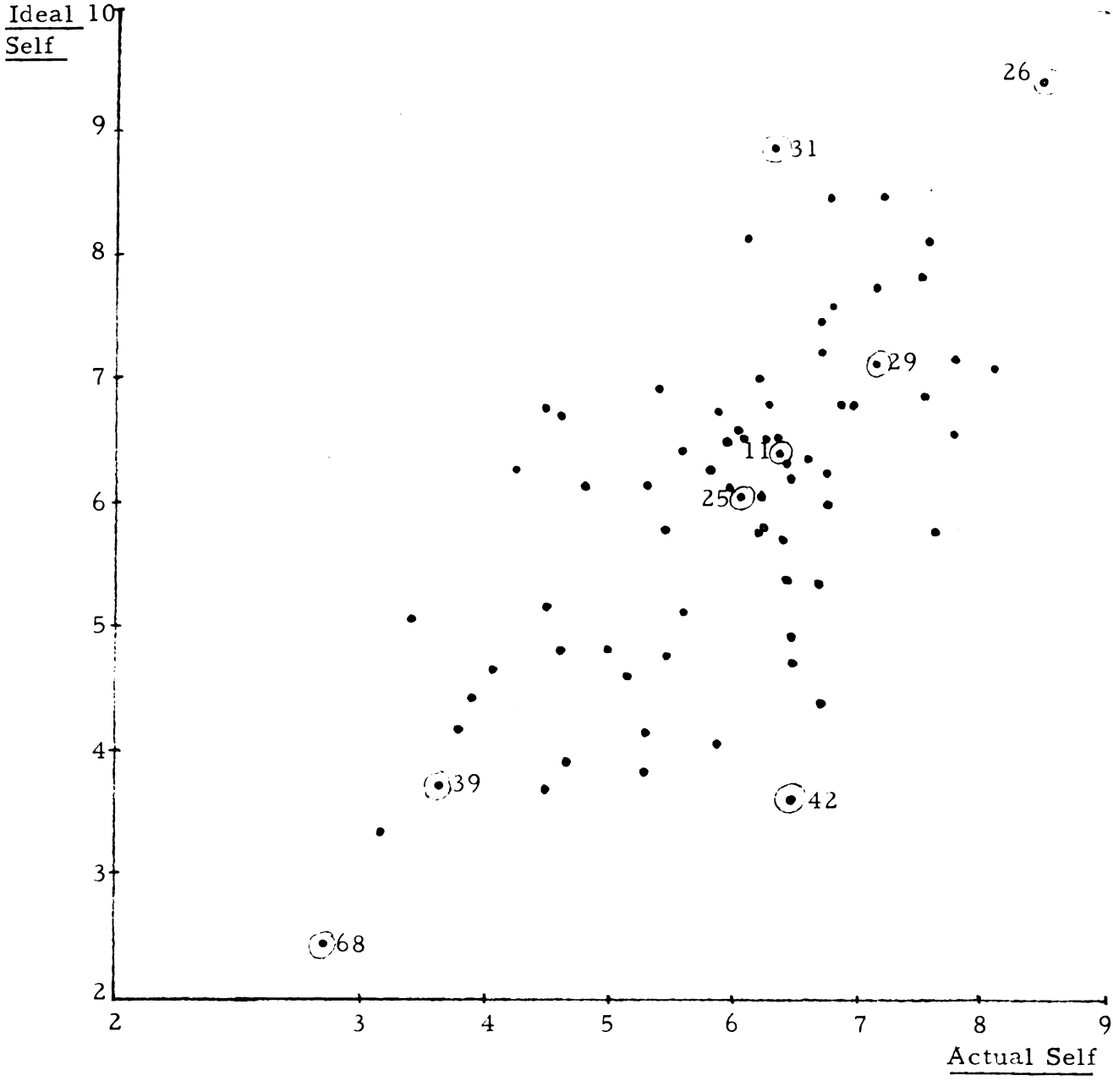
SUPPLEMENTARY FINDINGS

Some supplementary findings will be reported in this chapter. To what extent each of the 72 pictures included in the Q-sample stimulated identification in respect to actual and ideal self notions will be discussed, and a few outstanding pictures are pointed out.

FIG. V indicates that there is a substantial correlation between the average Q-scores each picture obtained when the pictures were sorted according to the instruction, "How much would I like my way of life to be like the way of life of the person(s) in the picture?" and the average Q-scores it obtained when sorted on the basis of the instruction, "How similar is my present way of life to the way of life of the person(s) in the picture?" This suggests that models who appealed to actual self notions in our 30 subjects also tended to appeal to their ideal self notions.

Despite this general tendency, however, it can be seen from FIG. V that some models were more successful objects of identication in reference to ideal self notions than in reference to actual self notions (e.g. picture no. 31). Others appealed to actual self notions more than to ideal self notions (e.g. picture no. 42). Still others aroused similar intensities of identification in respect to both self notions (e.g. pictures no. 39, 27, 11, 29). We shall briefly describe the exemplary pictures, which can be found reproduced in Appendix I, Fig. 1.

FIG. V. Scatterdiagram Comparing Average Ideal and Actual Q-Scores Obtained for 72 Pictures



1. High "ideal self" identification but low "actual self" identification.

Picture No. 31	Elderly couple looking at the foundations of their new home piled high with FLINTKOTE products.	
	Average "ideal" Q-score:	8.9
	Average "actual" Q-score:	6.3

2. Low "ideal self" identification but high "actual self" identification.

Picture No. 42	Middle-aged man sitting hunched over in a hospital setting, nervously smoking a cigarette and wondering how to pay the hospital bill and household expenses at the same time (MONY).	
	Average "ideal" Q-score:	3.6
	Average "actual" Q-score:	6.4

3. Similar intensities of "ideal self" and "actual self" identification.

Picture No. 39	Portrait of Walt Disney's TEXAS JOHN SLAUGHTER against a background fighting scene in a Western village.	
	Average "ideal" Q-score:	3.5
	Average "actual" Q-score:	3.5
Picture No. 27	Young couple admiring balloons with two little boys--one is riding on daddy's shoulders. Accompanied by their dog they stand close to a shiny blue RENAULT Dauphine.	
	Average "ideal" Q-score:	6.0
	Average "actual" Q-score:	6.1
Picture No. 11	Girl typing while stretched out on a shadowy lawn in front of her CHEVROLET, which sits in the background close to the woods.	
	Average "ideal" Q-score:	6.4
	Average "actual" Q-score:	6.3

Picture No. 29	Happily smiling grey-haired couple, he in shirtsleeves and tie standing close to his wife, who is engaged in a long distance call, while an album with photographs of children lies open in front of her. (BELL TELEPHONE SYSTEM).	
	Average "ideal" Q-score:	7.1
	Average "actual" Q-score:	7.2.

FIG. V also shows which pictures stimulated most and least identification in respect to the ideal ways of life of the men and women interviewed. Similarly, the most and least appealing pictures in reference to actual ways of life can be found. It happened that in the present picture set the same picture has been most successful in eliciting identification in connection with both self notions, and the same picture has been least successful in connection with both self notions.

4. Highest "ideal self" as well as "actual self" identification.

Picture No. 26	Parents with their little boy and girl relaxing happily on their lawn (GOLDEN VIGORO lawn food.	
	Average "ideal" Q-score:	9.4
	Average "actual" Q-score:	8.5

5. Lowest "ideal self" as well as "actual self" identification.

Picture No. 68	Old man and woman, he in undershirt and suspenders washing a sweater in WOOLITE Cold Water Soap with old fashioned spectacles on the forehead, she reading a racing form to him.	
	Average "ideal" Q-score:	2.5
	Average "actual" Q-score:	2.7

It should be noted that pictures 26 and 68 obtained respectively highest and lowest average identification scores in relation to ideal selves of young and middle aged subjects. In relation to their actual selves, picture 26 again was most successful in eliciting identification among young and middle-aged persons, while picture 68 was least

successful only for middle-aged subjects, since young subjects rejected another picture more intensely.

Neither in respect to their ideal selves nor in respect to their actual selves did old people provide highest or lowest average scores for pictures 26 and 68 respectively. This suggests that the "happy parents" role describes their actual and ideal ways of life to a more minor extent than it does the actual and ideal ways of life of younger people, which is plausible in view of the fact that all subjects were married. Similarly, the role of the "odd" old couple is less vehemently rejected by old people than by young ones, even if they are not at all fond of it.

It may be asked which pictures, as objects of identification, discriminated most between men's and women's actual and ideal selves, even if FIG. V fails to provide a clue to this matter. Here, a distinction has to be made between whether a model facilitated identification in men, while it restricted it in women, or whether it facilitated identification in women and restricted it in men. Such pictures, with differential appeal to male and female audiences, may be particularly useful in winning a desired audience for a certain product.

6. <u>High "male" identification but low "female" identification in respect to ideal self notions.</u>

Picture No. 6	Pilot adventuring with airplane in the rugged arctic, camping with his crew around fire at night (CAMELS).	
	Average "male" Q-score:	8.5
	Average "female" Q-score:	3.8

7. <u>High "female" identification but low "male" identification in respect to ideal self notions.</u>

Picture No. 15	Portrait of a bare-shouldered blonde bending over a golden embroidered cushion against a golden background, holding a flask of perfume on a thin golden chain, hypnotizing the reader

with her staring eyes: "he'll concentrate . . . concentrate . . . concentrate on you--when you wear HYPNOTIQUE."
Average "male" Q-score: 3.7
Average "female" Q-score: 5.9

8. High "male" identification but low "female" identification in respect to actual self notions.

Picture No. 9 Elderly retired man in sportshirt sitting in a basement on a working bench well equipped with tools. He is building and painting an elaborate, small sailing boat.
Average "male" Q-score: 7.3
Average "female" Q-score: 4.5

9. High "female" identification but low "male" identification in respect to actual self notions.

Picture No. 50 Portrait of a young girl with closed eyes and appreciative smile, her face and neck sprinkled with drops of water and partly covered with the foam of DIAL soap, her hair tied up on her head.
Average "male" Q-score: 5.7
Average "female" Q-score: 8.3

It appears that by means of Q-sorts an evaluation of the stimulating potential of single pictures in reference to other pictures included in the Q-sample becomes possible. Q-sorting procedures provide estimates of average scores of actual and/or ideal self involvement in the identificatory reactions of individual subjects or subject groups. Thus Q-technique may be a useful tool for pretesting pictures for their effectiveness in respect to identification.

CHAPTER VIII

CONCLUSIONS

In this last chapter, the main conclusions from the reported findings will be drawn, and some of their implications for practical advertising will be pointed out. In addition, a few propositions for further investigation will be discussed.

Through an empirical investigation of identification mechanisms, a contribution has been made to the understanding of how the receiver of a pictorial message may relate himself to human models depicted in such messages.

It has been found that at least two different ways of identification with a pictorial role-stimulus must be distinguished. That is, the viewer may either identify himself with the model by comparing it in its qualities and actions to himself in his actual way of life, or he may identify himself with the model by comparing it in its qualities and actions to himself in his ideal way of life.

Identification in respect to actual as well as ideal self notions was found to be facilitated if sex and age correspondences prevailed between the receivers of the message and the depicted models. Thus, women tended to identify with female models, while men preferred to identify with male models. Young subjects chose young models as their objects of identification, middle-aged subjects chose middle-aged models, and old subjects chose old models. Hence, similarity appears to be a criterion of choice of the identificand insofar as sex and age characteristics are concerned.

However, the results suggest that the presence of correspondences in sex and age characteristics among viewers and models increasingly enhances identification when persons grow older.

Concerning the relative effect of the three picture variables--"sex of model," "age of model," and "color of the picture"--upon the intensity of identification, it was found that whether the model is a man or a woman is more influential than whether the picture is colored or in black and white. This seemed to hold for identification in reference to actual self notions as well as ideal self notions.

The age of the depicted model affected identification in particular where actual self notions were involved. Actually, the age of the model here became more influential than the sex of the model or the color of the picture. This, however, was not the case when ideal self notions were involved. Here, the age of the model became the least important determinant of identification.

Men and women of all age-groups gave a striking advantage to colored pictures when they chose their ideal objects of identification, which was not the case when they chose their actual objects of identification.

Since it was expected that persons are selective in respect to the role-stimuli in pictures which they accept or reject as their objects of identification, audience segmentations were assessed by grouping persons into particular "types" according to their identification with similar models.

In the hypothetical audience studies, six "types" of persons could be distinguished when identification on the basis of their ideal self notions was at issue. These "types" were given the following, tentative names:

1. Happy Family Life versus Status Seeking.
2. Home and Good Job versus Financial Worries.
3. Women's Luxury and Romance versus Rugged Men.
4. Old Men's Luxury versus Youth and Dating.
5. Home, Family, and Possessions versus Whiskey and "Odd" Situations.
6. Sports versus Dieting and Old Age.

Three of these "types" were defined by both men and women, while the other three were either exclusively male or exclusively female. The "Happy Family Life" Factor was comprised of men and women of all age-groups, while the "Home and Good Job" Factor was comprised of younger men and women, and the "Home, Family, and Possessions" Factor, of older men and women.

The "Women's Luxury and Romance" Factor included exclusively women of all age-groups. Actually more than half of the women interviewed were of this "type."

A few old men were included in the "Old Men's Luxury" Factor, while half of the young and middle-aged men interviewed belonged to the "Sports" Factor.

The three Factors, "Happy Family Life," "Women's Luxury and Romance," and "Sports," alone accounted for two-thirds of the ideal self notions represented among the 30 persons who were interviewed.

The segmentation of the audience was found to be a different one when identification on the basis of actual self notions was at issue, although there happened to be the same number of "types." These "types" were given the following, tentative names:

1. Popularity versus Wild West and High Society.
2. Children versus Romance, Wealth, and "Odd" Old Age.
3. Married Life versus "Odd" Old Age and Lonesome Women with Drinks.
4. Courtship versus Sporty Adventures.
5. Leisure versus Sporty and Elegant Entertainment.
6. Work versus Sports.

Here, only the "Leisure" Factor was exclusively composed by men, while all others were comprised of men as well as women.

Predominantly older persons had loadings on the "Popularity" Factor, while predominantly younger persons had loadings on the "Married Life" and the "Courtship" Factors. People of all age-groups made up the "Children," "Leisure" and "work" Factors.

The most prominent Factors were "Popularity," "Children" and "Married Life," because they accounted together for two-thirds of the actual self notions represented among all the subjects interviewed.

On the whole, the six "types" of ideal self notions were more different from each other than were the six "types" of actual self notions.

A Discussion of Implications for Practical Advertising

Two major obstacles make it difficult to point out implications our findings may have for practical advertising.

The first obstacle is a lack in evidence on the question of whether the advertiser should try to elicit identification in the reader at all, in order to gain attention, obtain interest, stimulate desire, enhance recall, or persuade to buying actions. In addition, more specific evidence is needed on whether he should appeal to actual self notions, ideal self notions or to both simultaneously in his attempts to fulfill his purposes. This lack in evidence requires that any implications drawn from the results of this study be introduced by the conditional phrase: "If the advertiser intends to elicit identification in respect to actual and/or ideal self notions, then. . . ."

The second obstacle is to be found in the limitations of this study, in regard to the specific set of pictures employed, the small number of persons interviewed, and the consideration of advertising illustrations

in isolation from headlines, copy, and, most important, the advertised product.

Still, a few suggestions may be made where relatively little risk is involved.

The finding that people identify with models of their own sex hardly will be of interest to the advertiser who knows from previous research[1] that women are more interested in female models and men in male models. He may, therefore, already have selected women as models when he wished to sell products to women, and men as models when he intended to sell products to men.

From the theoretical standpoint, however, the finding is important, because it supports especially Hattwick's interpretation of this phenomenon, when he explained it as due to identification mechanisms.[2]

Also, the finding that people identify with models of their own age-group has more theoretical than practical importance, as the art director may already have selected young models in order to appeal to young potential consumers, or old models for older potential consumers.

A frequently discussed issue is whether or not the increase in audience size attributable to colored pictures, as opposed to black and white pictures, justifies the augmentation in printing expenditures.

The present findings suggest that the art director, who intends to enhance identification in reference to ideal self notions, should be aware that colored pictures are much more likely to be of help in achieving his purpose than black and white pictures are.

If, however, he plans to elicit identification in reference to actual self notions, color appears to be of minor importance, and thus the

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[1]Rudolph, op. cit., pp. 72-73.

[2]Hattwick, op. cit., p. 160.

increase of costs is less likely to be defensible in this case. Certainly, this only concerns the impact of color upon identification and does not take into account the impact upon attention, recall, and other variables which apply to the illustration.

Also, the noted tendency that with growing age it becomes more important that the pictures be colored and that the models be of the age and sex of the readers in order to enhance identification may merit the attention of the art director, even when a more rigorous investigation of this phenomenon is necessary.

In regard to a segmentation of the audience on the basis of the selective reactions of people to models in advertising pictures, the art director should be aware that persons are of one "type" when they identify with models on the basis of their ideal selves, and of another when they identify with models on the basis of their actual selves. Thus, a certain model may elicit identification in some of the persons in a larger audience when ideal self notions are at issue, while it may elicit intense identification in other persons when actual self notions are involved.

How many different "types" of actual and ideal self notions are to be dealt with in audiences other than the hypothetical one studied here cannot be estimated from our results. Still, the evidence obtained suggests that at least the six "types" of actual and ideal self notions assessed and provisionally named in this study will have to be counted with among men and women of middle socio-economic level living in an urban environment.

In general, pictures concerning "home," "happy family," and "parent-child" relationships enhanced identification, though more persons chose them in reference to their actual self notions than to their ideal self notions. Thus, we find only one actual self factor which does not exhibit a single picture showing a child among the three top

pictures. But there are three "types" of ideal selves where no children are depicted in the three pictures best describing each of the prevailing ideal ways of life. In order to make these results plausible, it has to be stressed again, that all subjects were married and most of them probably had children.

Thus evidence from previous research suggesting that pictures showing adults with children rank high in interest, may be explainable, to some extent, by the fact that such picture subjects are successful in eliciting identification.[1]

Among the three "types" of ideal selves which were found to be less concerned with "home," "happy family," and, especially, the "parent-child" motives, two deserve the special interest of the advertiser because they discriminate sharply between men and women, and because they may be rather widely represented in advertising audiences. The ideal self notions of younger men seemed to center upon "Sports," so that pictures showing sports scenes stimulated their identification successfully. A large number of women of all ages described their ideal ways of life with pictures showing "Women's Luxury and Romance."

Hence, the "Spectator Sports" appeal, which, according to MacLean and Hazard, accounted for some of women's interest in pictures, also appears to enhance identification in young men, while the reported "Idolatry" picture appeal enhances identification among women.[2]

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[1]Rudolph, op. cit., p. 74. See also, G. Gallup, "Let 4,979,855 Readers Tell You What They Read on Sunday." Survey made by the Gallup Research Bureau for Kimberly-Clark Corporation, reported in Hattwick, op. cit., p. 157. Pictures of children were highest in attention, followed by those of groups of adults, sports scenes, animals, natural scenery.

[2]MacLean and Hazard, op. cit. The present Q-data could be factor-analyzed on the basis of picture with picture correlations. First, it would be interesting to compare kinds of picture-appeals in respect to actual and ideal self notions. Second, it could be seen whether or not

The most general result is that the "everyday situation" tends to facilitate identification, while uncommon, extravagant, or odd situations or roles inhibit identification. This result agrees with those reported from an investigation under taken by True Story magazine.[1]

Because persons seemed to be more different in their "types" of ideal selves than in their "types" of actual selves, role-idealization may turn out to be the more predictive attribute of the depicted model, when identification in a particular audience group is sought.

Further research is necessary to suggest whether the art director should aim at actual and/or ideal self involvement, when he attempts to elicit identification in order to better achieve persuasion of the potential consumer.

Assuming the art director wished to select the model which most enhances actual and ideal self identification in younger men out of a set of pictures created to advertise the same product, actual and ideal Q-sort scores may be obtained for each picture from a number of subjects who are young men. Scatterdiagrams should be drawn for each picture, on which the scores for actual and ideal Q-sorts would be compared. The scatterplot most resembling the one shown in FIG. VI would then indicate the picture which would fulfill his purpose best.

Appendix I, FIG 2, shows, as an example, the scatterdiagram for one of the pictures included in the present Q-sample. From it, one can see that not one of our subjects rejected the depicted "parent-child"

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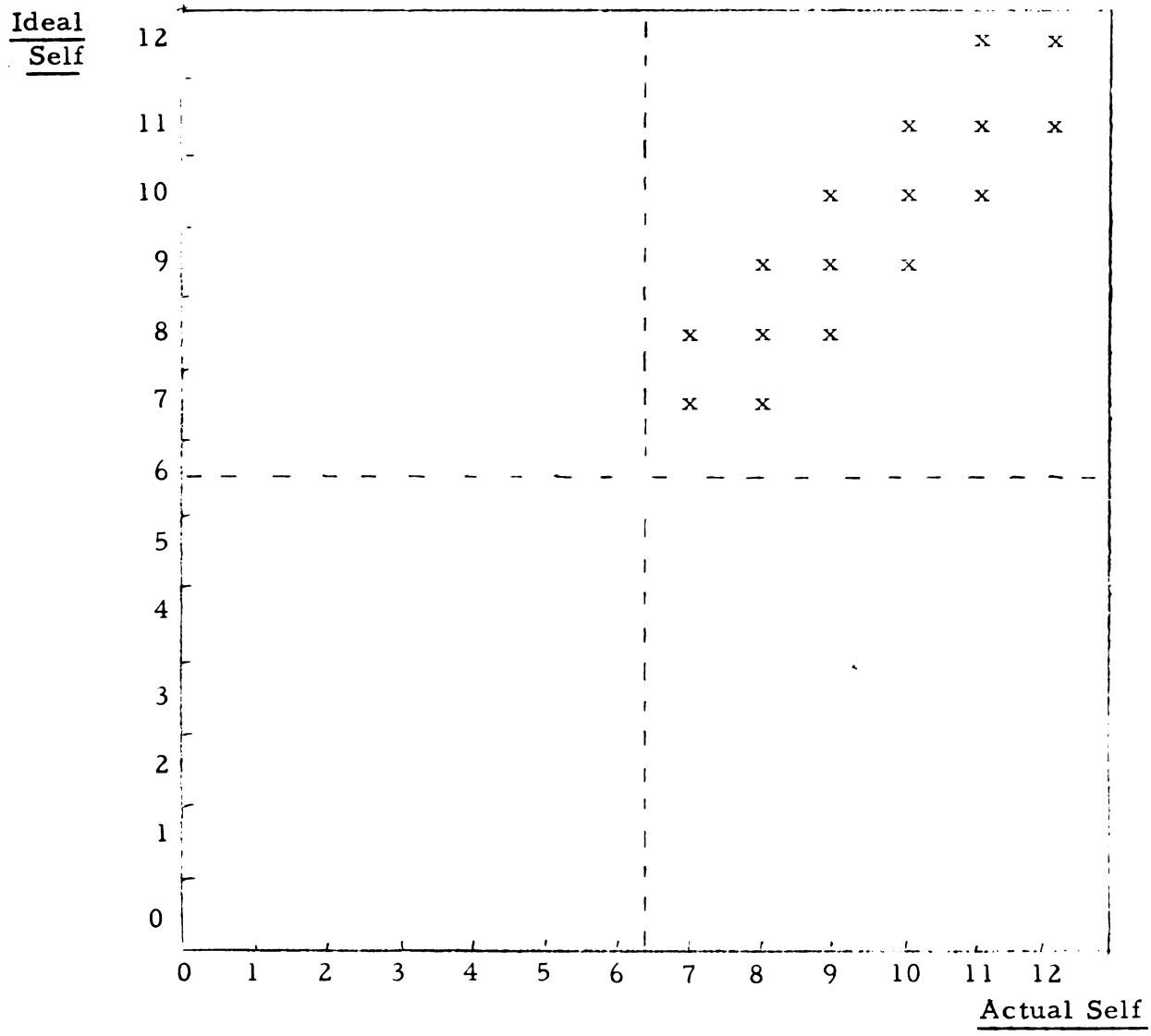
certain kinds of picture-appeals elicit identification in certain kinds of self notions, which were reported earlier. Third, kinds of picture-appeals in respect to identification could be compared with kinds of picture-appeals in respect to interest, which were found by MacLean and Hazard.

[1]How to Get People Excited. Especially prepared by the editors of the best selling magazine on America's newsstands for others whose occupation is Arousing People to Buy. (Published by True Story, 1937).

FIG. VI. Scatterdiagram Showing Size and Similarity of Ideal and Actual Q-Sort Scores for a Single Picture in a Set.



role in respect to both self notions. Some accepted it in respect to both self notions. Others rejected it in reference to ideal but not to actual self notions, while still others rejected it in reference to actual but not to ideal self notions. In the diagram, it can easily be checked if men or women or even persons of the same age-group reacted similarly to the depicted role or not.

This little test may be of help in the selection of models and roles, after the art director has decided to which self notions he wishes to address the stimulus.

Propositions for Further Research

On the basis of a discrimination between identification mechanisms in reference to actual and ideal self notions, further research should investigate if a positive correlation between interest in advertising illustrations and identification with the depicted models exists.

FIG. VII proposes how illustrations could be grouped according to the identificatory reactions which are stimulated by the models they show:

1. A model may elicit identification neither in reference to actual self notions nor in reference to ideal self notions.
2. A model may elicit identification in reference to actual self notions but not in reference to ideal self notions.
3. A model may elicit identification in reference to actual and ideal self notions simultaneously.
4. A model may elicit identification in reference to ideal self notions but not in reference to actual self notions.

When we interpret this scheme according to Festinger's theory of "cognitive dissonance,"[1] it appears that neither consonance nor dissonance is at issue when no identification with the model occurs

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[1]L. Festinger, A Theory of Cognitive Dissonance (Evanston, Ill.: Row, Peterson and Company, 1957).

FIG. VII. Four Combinations of Identificatory Reactions in Reference to Actual and Ideal Self Notions.

Ideal Self		
high	model appeals to ideal self but not to actual self: "dissonance" (4)	model appeals to actual self and to ideal self: "consonance" (3)
low	model appeals neither to actual self nor to ideal self: neither "consonance" nor "dissonance" (1)	model appeals to actual self but not to ideal self: "dissonance" (2)
	low	high — Actual Self

(1), because the viewer will not be led to compare any of his actually played roles with any of his ideal roles.

When a model stimulates identification in reference to one self notion, but not in reference to the other, cognitive dissonance occurs, because either the viewer is reminded of a role which he has to play in his actual way of life, but which he does not like to play (2), or he is reminded of a role he ideally wished to play without presently having the opportunity to do so (4).

Consonance is at issue when the model appeals to both self notions with similar intensity, thus reminding the viewer of his actual position, where he actually can perform a role which he likes to perform (3).

When the two kinds of models who, through identification, produce cognitive dissonance in the viewer, i.e. (2) and (4), were compared with each other in respect to their efficiency in arousing interest in the viewer, the following could be predicted:

> Persons will show less interest in pictures showing models with whom they identify in respect to their actual self notions but not to their ideal self notions (2) than they will in pictures showing models with whom they identify in respect to their ideal self notions but not to their actual self notions (4).

Drawing upon Festinger's basic hypotheses,[1] a rationale would be that, in the first case (2), persons tend to avoid information producing the psychologically uncomfortable dissonance, which cannot be substituted for consonance, because they may be forced by external circumstances to play the unsatisfactory role.

In the second case, information may not be avoided, since here some opportunity is given to reduce dissonance (4). Here the model exhibits a role which is aspired to by the viewer, who, when he takes the place of the model in fantasy, may at least momentarily reduce dissonance. Furthermore, these models often bear the promise that the viewer can reduce dissonance if he acquires the external attributes of his aspired role, that is, if he buys the advertised product.

Also, an empirical investigation of the relative interest in models appealing to both self notions simultaneously (3) and models appealing to ideal self notions rather than to actual self notions (4) needs to be undertaken. Here the concern is with the comparative interest in models producing cognitive consonance and in one kind of models producing cognitive dissonance. The following could be hypothesized:

> Persons will exhibit more interest in pictures showing models with whom they identify in respect to both self notions simultaneously (3) than they will in pictures showing models with whom they identify in respect to their ideal self notions but not to their actual self notions (4).

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[1] Ibid., p. 3.

Since persons are thought to be motivated to maintain consonance through the avoidance of all information which threatens dissonance, and to reduce dissonance wherever it occurs, models of simultaneous appeal to both self notions should be particularly interesting to the reader, as they reinforce his satisfaction with the status quo.

Pictures stimulating identification in respect to neither actual nor ideal self notions (1) would provide a suitable control-group, where it could be seen what the interest is in pictures which do not stimulate identification.

It is clear that most pictures will belong to more than one of the four groups, depending upon the persons who judge their identification with these pictures. Thus, the same picture may appeal to both self notions in one person and, at the same time, to none in another person.

Also further studies are needed to find out if a positive correlation between recall of advertising illustrations and previous identification with the depicted models exists. Here, again, models who appeal to each self notion with different intensity, thus producing dissonance, may be forgotten sooner then models who appeal to both self notions simultaneously and to a similar extent, thus producing consonance.

But even if identification were found to be correlated with interest and recall, the advertiser who intended to incorporate a stimulus of identification into his message should always keep in mind that he has to match the illustration with the headlines and the copy and that all three need to be relevant to the product.

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APPENDICES

Table A, 1.--Variance Estimates and F-ratios for Subject Groups

Source	df	SS	V	F	P
Five Young Male Subjects on the Actual Self Q-Sort					
Rows (color)	1	1.11	1.11	.16	--
Columns (sex)	2	4.86	2.43	.35	--
Slices (age)	2	27.67	13.84	2.00	--
C.xS.	2	29.29	14.65	2.12	--
C.xA.	2	9.11	4.56	.66	--
S.xA.	4	13.70	3.43	.49	--
C.xS.xA.	4	6.44	1.61	.23	--
Within cells	342	2357.82	6.89		
Total	359	2450.00			
Five Middle-Aged Male Subjects on the Actual Self Q-Sort					
Rows (color)	1	24.89	24.89	3.70	--
Columns (sex)	2	2.26	1.13	.16	--
Slices (age)	2	3.30	1.65	.24	--
C.xS.	2	7.50	3.75	.55	--
C.xA.	2	10.39	5.20	.77	--
S.xA.	4	79.88	19.97	2.97	<.05
C.xS.xA.	4	22.92	5.73	.85	--
Within cells	342	2298.82	6.72		
Total	359	2449.96			
Five Old Male Subjects on the Actual Self Q-Sort					
Rows (color)	1	19.73	19.73	5.93	<.05
Columns (sex)	2	56.30	28.15	4.62	<.05
Slices (age)	2	147.01	73.51	12.07	<.01
C.xS.	2	72.87	36.44	5.98	<.01
C.xA.	2	10.74	5.37	.88	--
S.xA.	4	22.18	5.55	.91	--
C.xS.xA.	4	37.64	9.41	1.54	--
Within cells	342	2083.53	6.09		
Total	359	2450.00			

Continued

Table A, 1.--Continued

Source	df	SS	V	F	P
Five Young Female Subjects on the Actual Self Q-Sort					
Rows (color	1	3.23	3.23	.46	--
Columns (sex)	2	3.20	1.60	.23	--
Slices (age)	2	60.06	30.03	4.48	<.05
C.xS.	2	36.13	18.07	2.70	--
C.xA.	2	4.54	2.27	.33	--
S.xA.	4	8.19	2.05	.30	--
C.xS.xA.	4	47.35	11.84	1.76	--
Within cells	342	2287.30	6.69		
Total	359	2450.00			
Five Middle-Aged Female Subjects on the Actual Self Q-Sort					
Rows (color)	1	6.35	6.35	1.01	--
Columns (sex)	2	155.19	77.59	12.39	<.01
Slices (age)	2	8.46	4.23	.67	--
C.xS.	2	50.52	25.26	4.03	<.05
C.xA.	2	3.50	1.75	.27	--
S.xA.	4	66.51	16.63	2.65	<.05
C.xS.xA.	4	24.74	6.19	.98	--
Within cells	342	2142.69	6.26		
Total	359	2457.96			
Five Old Female Subjects on the Actual Self Q-Sort					
Rows (color)	1	2.31	2.31	.37	--
Columns (sex)	2	109.02	54.51	8.79	<.01
Slices (age)	2	122.41	61.20	9.87	<.01
C.xS.	2	51.54	25.77	4.15	<.05
C.xA.	2	3.15	1.58	.25	--
S.xA.	4	14.60	3.65	.58	--
C.xS.xA.	4	52.44	13.11	2.11	--
Within cells	342	2121.51	6.20		
Total	359	2476.98			

Table A, 2.--Variance Estimates and F-Ratios for Subject Groups

Source	df	SS	V	F	P
Five Young Male Subjects on the Ideal Self Q-Sort					
Rows (color)	1	54.81	54.81	8.71	<.01
Columns (sex)	2	78.51	39.26	6.24	<.01
Slices (age)	2	2.73	1.37	.21	--
C.xS.	2	40.47	20.24	3.21	<.05
C.xA.	2	60.50	30.25	4.80	<.01
S.xA.	4	23.52	5.88	0.93	--
C.xS.xA.	4	35.62	8.90	1.41	--
Within cells	342	2153.84	6.29		
Total	359	2450.00			
Five Middle-Aged Male Subjects on the Ideal Self Q-Sort					
Rows (color)	1	139.93	139.93	23.16	<.01
Columns (sex)	2	41.49	20.75	3.43	<.05
Slices (age)	2	6.87	3.44	.56	--
C.xS.	2	61.26	30.63	5.02	<.01
C.xA.	2	38.12	19.06	3.15	<.05
S.xA.	4	68.33	17.08	2.82	<.05
C.xS.xA.	4	30.34	7.58	1.25	--
Within cells	342	2067.62	6.04		
Total	359	2453.96			
Five Old Male Subjects on the Ideal Self Q-Sort					
Rows (color)	1	57.86	57.86	9.51	<.01
Columns (sex)	2	19.19	9.59	1.57	--
Slices (age)	2	81.44	40.72	6.69	<.01
C.xS.	2	118.21	59.11	9.72	<.01
C.xA.	2	30.79	15.39	2.53	--
S.xA.	4	43.57	10.89	1.79	--
C.xS.xA.	4	11.18	2.79	.45	--
Within cells	342	2079.75	6.08		
Total	359	2441.99			

Continued

Table A, 2--Continued

Source	df	SS	V	F	P
Five Young Female Subjects on the Ideal Self Q-Sort					
Rows (color)	1	132.92	132.92	22.3	<.01
Columns (sex)	2	169.83	84.92	14.24	<.01
Slices (age)	2	19.29	9.65	1.61	--
C.xS.	2	34.83	17.42	2.92	--
C.xA.	2	7.33	3.67	.61	--
S.xA.	4	33.50	8.37	1.40	--
C.xS.xA.	4	11.82	2.95	0.49	--
Within cells	342	2040.48	5.96		
Total	359	2450.00			
Five Middle-Aged Female Subjects on the Ideal Self Q-Sort					
Rows (color)	1	122.47	122.47	22.22	<.01
Columns (sex)	2	336.25	168.13	30.51	<.01
Slices (age)	2	6.62	3.31	.60	--
C.xS.	2	39.09	19.55	3.54	--
C.xA.	2	13.09	6.55	1.18	<.05
S.xA.	4	53.66	13.41	2.43	--
C.xS.xA.	4	7.91	1.97	.35	<.05
Within cells	342	1885.89	5.51		
Total	359	2464.98			
Five Old Female Subjects on the Ideal Self Q-Sort					
Rows (color)	1	51.73	51.73	9.09	<.01
Columns (sex)	2	299.51	149.76	26.31	<.01
Slices (age)	2	56.57	28.29	4.97	<.01
C.xS.	2	21.50	10.75	1.88	--
C.xA.	2	7.35	3.68	.64	--
S.xA.	4	25.89	6.47	1.13	--
C.xS.xA.	4	38.65	9.66	1.69	--
Within cells	342	1948.80	5.69		
Total	359	2450.00			

Table B.--Mean Scores Obtained from Subject Groups in Q-Sorting Pictures of Different Color, Showing Models of Different Age and Sex

Groups of Subjects	c	bw	m	f	mf	y	m	o	Picture Variables
				Mean Score Distribution: Actual Self					
YF	5.90	6.09	5.93	6.13	5.94	6.56	5.71	5.69	
MF	5.87	6.13	5.21	6.82	6.01	6.19	5.82	6.02	
OF	6.08	5.92	5.25	6.57	6.16	6.24	5.22	6.59	
YM	6.06	5.95	6.13	5.85	6.02	6.32	5.66	6.03	
MM	6.30	5.77	5.93	5.99	6.12	6.07	5.88	6.09	
OM	6.25	5.78	6.31	5.44	6.25	5.80	5.38	6.93	
				Mean Score Distribution: Ideal Self					
YF	6.66	5.44	5.04	6.34	6.62	6.22	5.69	6.11	
MF	6.64	5.47	4.64	6.71	6.67	6.19	5.94	5.88	
OF	6.41	5.65	4.74	6.88	6.38	5.99	5.54	6.53	
YM	6.42	5.64	6.55	5.41	6.04	5.89	6.02	6.10	
MM	6.67	5.42	6.15	5.52	6.30	6.02	6.13	5.79	
OM	6.43	5.63	5.94	5.74	6.30	5.82	5.55	6.69	

Table C.--Eta Coefficient Estimates (η) of Variable Contribution To Total Variance in Q-Sort Scores

Subject Variables	Picture Variables Color	Sex	Age	C x S	C x A	S x A
			Actual Self			
YM	.022	.045	.106	- +	- +	- +
MM	.101	.030	.036	+ -	+ -	- +
OM	.090	.152	.245	- +	- +	- +
YF	.0363	.0360	.157	+ -	- +	- +
MF	.051	.251	.058	- +	- +	+ -
OF	.030	.210	.222	- +	- +	- +
Variable Relationships:				C < S	C < A	S < A
			Ideal Self			
YM	.150	.179	.033	- +	+ -	+ -
MM	.239	.130	.053	+ -	+ -	+ -
OM	.154	.089	.182	+ -	- +	- +
YF	.233	.263	.089	- +	+ -	+ -
MF	.223	.370	.052	- +	+ -	+ -
OF	.145	.350	.152	- +	- +	+ -
Variable Relationships:				C < S	C > A	S > A

Note: Algebraic signs designate directions of relationship: (+) designates the larger effect and (-) the smaller effect in a pair of effects.
The symbols (>, <, =) summarize directions of relationship.

Table D, 1* --Correlation Coefficients for Ideal Self Q-Sorts of 30 Subjects
(n = 72 Pictures)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	-	+25	+22	+21	+21	+17	+33	+32	+43	-00	+20	-03	+38	-07	+33	+19	+32	+19	+28	+22	+27	+11	+32	+14	+07	+08	+15	-10	+18	+15
2		-	+16	+54	+25	+61	+17	+20	+37	+27	-07	+32	+26	+12	+30	+32	+42	+42	+34	+51	+42	+25	+33	+38	+09	+35	+22	+15	+38	+27
3			-	+13	+08	+17	+10	+05	+54	-22	+22	-06	+39	-00	+39	-02	+42	+04	+33	+10	+22	+04	+31	-05	+13	-15	+16	-26	+08	+06
4				-	+34	+58	+32	+42	+23	+42	+19	+48	+23	+33	+28	+39	+41	+55	+29	+61	+26	+34	+47	+54	+44	+57	+23	+25	+49	+49
5					-	+33	+33	+32	+19	+17	+14	+02	+09	+08	+28	+02	+25	+31	+22	+24	+27	+34	+14	+10	+41	+44	+19	+16	+48	+32
6						-	+26	+48	+23	+35	+24	+57	+37	+43	+38	+47	+49	+51	+47	+65	+26	+33	+61	+58	+30	+51	+20	+40	+31	+39
7							-	+62	+19	+12	+28	+06	+29	+07	+39	+21	+29	+24	+16	+43	+20	+29	+20	+13	+25	+38	-01	+01	+33	+36
8								-	+18	+10	+35	+25	+34	+26	+32	+36	+26	+39	+16	+51	+40	+42	+33	+25	+20	+48	+09	+23	+40	+40
9									-	-06	+19	-08	+43	+01	+39	+13	+39	+30	+31	+21	+38	+16	+27	-03	+07	+05	+13	-19	+29	+13
10										-	+00	+42	+03	+25	+11	+40	+19	+30	+19	+33	-01	+21	+36	+41	+29	+39	+06	+50	+05	+33
11											-	+22	+29	+26	+17	+14	+16	+02	+17	+24	+13	+14	+34	+23	+22	+22	+11	+04	-01	+05
12												-	+29	+53	+10	+33	+31	+32	+24	+59	+03	+13	+39	+71	+27	+50	+20	+53	-09	+28
13													-	+29	+38	+17	+35	+12	+18	+39	+06	+09	+41	+27	+16	+12	+32	+08	+01	+00
14														-	+18	+18	+28	+09	+12	+34	+01	+09	+21	+41	+28	+28	+32	+43	+03	-06
15															-	+44	+35	+18	+39	+34	+34	+37	+37	+18	+22	+27	+29	-07	+22	+33
16																-	+20	+30	+44	+35	+26	+49	+48	+37	+26	+40	+20	+38	+13	+39
17																	-	+21	+41	+35	+23	+20	+42	+20	+23	+23	+14	+10	+24	+24
18																		-	+38	+60	+29	+35	+35	+49	+21	+43	+01	+34	+51	+40
19																			-	+40	+15	+32	+61	+31	+21	+26	+09	+12	+11	+25
20																				-	+36	+24	+48	+76	+13	+46	+02	+32	+21	+42
21																					-	+29	+18	+15	+17	+24	+19	-03	+30	+18
22																						-	+29	+20	+33	+60	+13	+21	+45	+52
23																							-	+51	+31	+30	+15	+19	+06	+37
24																								-	+18	+47	+08	+45	+09	+31
25																									-	+51	+43	+22	+26	+24
26																										-	+29	+32	+39	+44
27																											-	+06	+07	-06
28																												-	+06	+17
29																													-	+36
30																														-

Note: Subject Numbers 1, 3, 5, . . . 19 are men.
2, 4, 6, . . . 30 are women.
1 - 10 are young.
11 - 20 are middle-aged.
21 - 30 are old.

*Decimal points are omitted.

Table D, 2* --Correlation Coefficients for Actual Self Q-Sorts of 30 Subjects
(n = 72 Pictures)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	-	+24	+02	+07	-15	-10	-32	-06	-07	+42	+05	+04	+17	+01	-03	-05	-01	+05	-04	-14	+04	-11	-19	+02	+12	+07	+01	+02	-08	-07
2		-	+08	-00	+10	+04	-02	+09	+39	+17	-06	+29	+11	+30	+03	+19	+12	+10	+10	-01	-08	+15	+05	+11	+06	+09	+15	+23	+11	-01
3			-	+67	+16	+29	+07	+28	+16	+28	+28	+41	+06	-07	+45	+42	+34	+20	+36	+34	+06	+21	+29	+22	+05	+14	+01	+18	+20	+24
4				-	+29	+40	+02	+38	+18	+30	+36	+44	-12	-11	+45	+42	+42	+35	+38	+33	+24	+21	+32	+34	+17	+39	-02	+33	+35	+43
5					-	+43	+09	+51	+23	-14	+20	+37	+03	+28	+16	+33	+27	+36	+39	+34	+18	+41	+26	+37	+12	+25	-06	+22	+46	+28
6						-	+06	+34	+06	-07	+20	+36	-09	+11	+24	+31	+14	+19	+51	+22	+07	+26	+32	+27	+01	+18	-33	+08	+47	+24
7							-	+10	+20	-09	+08	+27	-18	-02	+18	+08	-05	+19	+28	+17	-12	-02	+39	+15	+20	+07	-15	+18	+18	+05
8								-	+24	+13	+11	+31	-12	+07	+22	+10	+35	+34	+31	+31	+34	+37	+14	+16	+20	+39	-08	+21	+56	+22
9									-	+13	+03	+30	+02	+26	-07	+12	+14	+09	+23	+16	+19	+03	+17	+23	+32	+31	+15	+22	+29	-01
10										-	+19	+21	+12	-07	+18	+14	+07	+42	+19	+12	-13	+03	+13	+37	-02	+23	+02	+38	+05	-02
11											-	+26	+09	+02	+29	+23	+20	+16	+20	+34	+10	+23	+46	+34	+21	+27	-02	+29	+33	+41
12												-	+08	+23	+23	+42	+16	+44	+36	+45	-11	+29	+26	+34	+08	+45	-08	+43	+42	+26
13													-	+30	-06	+03	+01	-12	-00	-11	-03	+07	-18	-10	-12	-10	+18	+11	-20	-11
14														-	-02	+00	+01	+02	+24	-04	+05	+09	-04	-06	+00	+13	+06	-05	+09	+02
15															-	+50	+42	+24	+33	+40	+06	+26	+24	+11	+08	+20	-00	+37	+40	+37
16																-	+39	+37	+23	+42	+17	+24	+30	+28	+09	+22	-16	+35	+33	+32
17																	-	+31	+29	+32	+40	+10	+10	+03	-05	+12	+24	+14	+40	+13
18																		-	+40	+40	+08	+28	+25	+42	+03	+32	-27	+38	+37	+18
19																			-	+30	+11	+26	+42	+26	+04	+24	-24	+22	+47	+11
20																				-	+18	+49	+48	+27	+11	+37	-16	+34	+38	+41
21																					-	+32	+09	-11	+34	+31	+15	+14	+23	+20
22																						-	+26	+26	+13	+47	-10	+42	+34	+52
23																							-	+50	+25	+18	-06	+32	+34	+41
24																								-	+05	+19	-09	+32	+28	+37
25																									-	+44	+12	+27	+24	+25
26																										-	+07	+45	+47	+42
27																											-	+08	-13	-13
28																												-	+28	+29
29																													-	+50
30																														-

Note: Subject Numbers 1, 3, 5, . . . 29 are men.
2, 4, 6, . . . 30 are women.
1 - 10 are young.
11 - 20 are middle-aged.
21 - 30 are old.

*Decimal points are omitted.

Table E.--Factor Loadings for Two Sets of Picture Q-Sorts Provided by 30 Subjects

	Ideal Self						Actual Self					
Subjects:	I	II	III	IV	V	VI	I	II	III	IV	V	VI
1	+35	-42	-10	+05	-12	+06	-05	-50	-05	+01	+00	+19
2	+60	-10	-03	+33	+23	-32	+18	-43	+18	-34	-06	-03
3	+22	-58	-36	-02	+11	-02	+55	-17	-32	+13	-27	-21
4	+76	+09	+10	+03	+07	-20	+69	-13	-22	+26	-16	-14
5	+44	-18	+35	-17	+06	-17	+57	+16	+27	-20	-20	+14
6	+81	+12	-15	+08	+05	-09	+51	+28	-06	-17	-28	+10
7	+48	-26	+24	-13	-44	+12	+24	+27	-08	-25	+22	-38
8	+62	-13	+22	-15	-47	+06	+56	+03	+32	+03	-21	+01
9	+36	-60	-16	+12	+07	-13	+32	-26	+34	-27	+05	-36
10	+44	+43	+05	+03	+19	+10	+27	-50	-32	-08	+12	+06
11	+31	-10	-20	-28	-26	+12	+48	+01	-14	+16	+21	+04
12	+58	+55	-32	-05	-06	-08	+64	-19	-04	-35	-02	+02
13	+43	-24	-43	-17	-18	-07	-08	-35	+06	-12	-13	+18
14	+40	+31	-30	-34	-06	-21	+09	-16	+33	-33	-17	+08
15	+53	-38	-08	-11	+07	+16	+54	+01	-23	+25	-14	-06
16	+58	+12	+01	-00	+17	+38	+58	-06	-18	+06	-13	+01
17	+54	-25	-23	-01	+10	-09	+43	-14	+07	+26	-40	-15
18	+63	+06	+23	+36	+01	-13	+37	-09	-15	-19	-01	+14
19	+54	-16	-21	+17	+26	+30	+59	+07	-06	-30	-26	-10
20	+78	+14	-13	+30	-34	-09	+65	+15	-08	+10	+10	+07
21	+41	-31	+13	+07	-00	-13	+27	-01	+44	+42	-07	-04
22	+55	-07	+41	-11	+15	+25	+55	+08	+22	+11	+12	+41
23	+67	-04	-33	+07	+11	+34	+57	+25	-19	-06	+31	-21
24	+66	+46	-23	+30	-14	-03	+51	-01	-26	-24	+26	+08
25	+47	+04	+14	-48	+24	-03	+28	-05	+34	+18	+38	-24
26	+69	+22	+34	-24	+03	-02	+58	-16	+34	+11	+27	+08
27	+28	-08	-14	-44	+25	-20	-12	-36	+25	+19	+03	-24
28	+39	+57	+01	-06	+03	-01	+55	-27	+00	-01	+31	+04
29	+44	-24	+50	+06	+05	-24	+71	+17	+22	+00	-07	-01
30	+55	+01	+35	+16	+01	+26	+57	+27	+02	+29	+25	+24

Table F, 1.--Factor Scores in Standard Terms for Ideal Self Q-Sorts

Picture Number	Factors I	II	III	IV	V	VI
1	+1.34	-2.39	-1.04	- .23	- .68	- .25
2	+1.79	+1.09	+ .41	+ .91	+ .68	± .00
3	+ .45	+ .65	- .62	± .00	+ .45	+ .74
4	- .22	± .00	-1.45	- .68	- .23	- .50
5	+ .22	- .22	-1.66	-1.59	-1.58	+1.24
6	+ .89	+ .87	-1.04	+1.81	-1.13	+2.23
7	- .22	+ .65	- .21	- .68	+ .23	+ .50
8	+ .22	-1.09	+ .21	+1.81	+1.58	+2.48
9	+1.12	+ .43	-1.24	+1.59	- .45	+1.49
10	-1.34	-1.52	+1.04	-1.13	± .00	- .74
11*	+ .45	± .00	+ .83	+ .91	± .00	+ .50
12*	± .00	+ .22	+ .41	+ .23	- .45	- .25
13	+1.12	+1.52	+1.04	+ .23	+ .45	+1.49
14	-1.56	± .00	+ .21	± .00	± .00	- .99
15	- .89	-1.09	+ .62	- .91	-1.35	- .99
16	+1.34	+ .43	+1.04	-1.36	- .23	- .25
17	-1.56	-1.95	± .00	- .45	-1.80	-1.74
18	+ .89	+ .87	+1.04	- .68	+2.25	+ .25
19*	± .00	+ .43	+ .21	- .45	+ .23	- .25
20	-1.56	- .65	+1.66	+ .23	+ .45	+ .99
21	-1.12	± .00	+1.24	-1.59	+ .90	+ .50
22	- .67	+1.30	+ .83	- .91	+ .23	+1.24
23	-1.56	- .65	+2.28	- .23	+ .23	- .74
24	-1.12	- .43	+1.04	+1.13	+ .90	+ .50
25	+1.56	+1.09	± .00	+ .91	- .90	- .50
26	+2.01	+2.17	+1.24	+ .91	+1.13	+1.74
27	+ .89	± .00	± .00	- .23	± .00	-1.24
28	+ .89	+1.30	- .21	+ .68	-1.35	+1.49
29	+1.79	+1.30	- .62	+1.13	- .23	- .25
30	+ .89	± .00	+2.07	+1.81	± .00	+1.49
31	- .67	+2.17	+1.45	+1.36	+2.03	- .25
32	-1.34	+1.52	± .00	± .00	+1.35	-1.49
33	± .00	+1.09	+1.24	+2.72	+ .90	± .00
34	+ .89	+ .87	+ .41	+ .23	+1.80	+ .25
35	- .67	- .65	-1.66	-1.13	- .45	+ .25
36*	± .00	- .22	- .41	± .00	± .00	+ .50
37	- .22	- .43	- .41	± .00	+ .90	- .50
38	+ .22	- .43	-1.45	± .00	+ .45	+2.23
39	- .89	- .43	-1.45	-1.36	-1.58	- .50
40	-2.68	-1.74	- .41	± .00	- .45	- .50
41	+ .67	+1.30	-1.87	-1.13	+1.58	+2.23

(continued)

Table F, 1.--Continued

Picture Number	Factors I	II	III	IV	V	VI
42	+ .45	-2.39	-1.24	- .23	- .90	- .50
43	-1.79	-1.30	-1.66	-1.36	+ .90	+2.23
44	± .00	+ .87	-1.66	-1.13	-2.03	+ .99
45	+ .22	- .22	- .83	+1.59	+ .23	- .50
46	- .67	-1.09	- .83	-1.36	+ .68	+1.49
47	- .89	-1.30	- .83	+ .91	-1.13	- .50
48	± .00	± .00	- .83	+1.81	+ .23	+ .74
49	+ .45	+ .22	+ .62	+ .91	+1.13	- .25
50	+ .22	+ .87	+1.04	± .00	- .90	+ .25
51	- .45	- .65	+ .21	+ .68	+ .45	± .00
52	± .00	- .43	+ .41	- .23	- .68	- .25
53	- .22	- .22	+ .21	-1.36	- .68	-1.74
54	- .22	+ .65	+ .62	- .45	+ .23	± .00
55	+1.34	- .43	+1.04	+ .45	+ .45	- .50
56	+1.34	+ .65	+ .62	+ .45	+ .90	- .50
57	± .00	- .65	+ .62	+ .45	+1.35	- .99
58	+ .22	+ .87	- .62	-1.36	- .68	-2.23
59	+ .45	- .43	+ .21	+ .23	- .68	+ .25
60	+ .45	+ .65	- .21	+ .68	- .23	- .74
61	+ .67	+1.52	± .00	+ .45	+1.13	-1.99
62	- .89	-1.30	- .41	+ .23	+ .23	- .50
63	+ .67	+ .43	- .21	+ .23	- .45	-1.49
64	- .67	- .22	- .62	-1.59	± .00	- .74
65	+ .45	+1.30	+1.45	-1.36	- .45	+ .25
66	- .89	- .65	- .83	-1.36	-2.03	+ .99
67	- .89	-1.30	+1.66	+ .91	+ .68	± .00
68	- .89	-1.30	-1.66	+ .23	-2.25	-2.98
69	+2.23	-1.09	+ .41	+ .23	+1.13	+ .25
70	± .00	+ .43	- .62	-1.13	± .00	- .25
71	- .67	± .00	± .00	- .68	-1.80	-1.99
72*	-1.34	- .87	- .41	-1.13	-1.13	-1.24
Standard Deviations:	2.24	2.30	2.41	2.21	2.22	2.01

Note: Positive algebraic signs in connection with standard scores indicate that the respective picture was accepted as object of identification by the corresponding type of persons. Negative algebraic signs indicate rejection of the picture as object of identification. Sizes of standard scores represent intensities of identification.

*Pictures lacking in discriminatory power across types.

Table F, 2.--Factor Scores in Standard Terms for Actual Self Q-Sorts

Picture Number	Factors I	II	III	IV	V	VI
1	+ .88	+1.38	+ .21	- .46	- .47	+1.61
2	+ .66	+2.07	+1.05	- .46	- .24	+1.15
3	- .22	- .46	± .00	+1.37	+2.12	+ .23
4	- .22	± .00	- .42	- .91	± .00	-1.61
5	-1.32	- .32	± .00	+ .23	± .00	-1.38
6	+ .22	- .69	-1.47	-2.28	+1.18	+1.38
7	+1.76	-1.84	+ .42	+ .91	+ .47	+ .23
8	- .44	+ .69	+1.47	-1.37	+1.89	- .92
9	- .66	+ .23	± .00	- .68	+ .71	- .46
10	-1.10	-1.15	± .00	- .46	- .47	- .46
11	+ .88	+ .46	- .42	+ .23	-1.42	+ .23
12	+ .22	+ .46	+1.26	+1.14	-1.42	- .23
13	+ .66	+ .92	+1.89	+2.05	+1.18	± .00
14	± .00	-1.15	-1.47	-2.05	-1.89	- .92
15	- .66	- .69	-1.47	- .46	-1.42	± .00
16	- .44	+1.61	+1.05	+1.14	+ .24	+1.15
17	-1.97	- .92	-1.68	+ .23	-1.42	- .46
18	+2.63	+ .46	+1.05	- .23	- .24	+ .23
19	+ .22	± .00	- .21	+ .91	+ .24	-1.61
20	+ .22	- .69	+ .42	+ .68	- .94	± .00
21	± .00	-1.38	+ .84	+1.82	- .71	- .92
22	- .44	- .23	+1.68	+1.59	+ .47	- .69
23	- .66	- .92	-2.10	+ .91	-2.12	- .69
24	- .44	-1.84	± .00	- .46	-1.18	- .69
25	- .44	- .92	- .42	- .23	- .24	+ .46
26	+1.76	+2.30	+2.10	-1.14	+ .94	+1.61
27	- .44	- .69	+1.05	- .68	- .24	- .23
28	+ .88	+1.84	+2.51	- .68	- .24	+1.38
29	+ .66	- .46	- .42	+ .23	+1.65	+ .23
30	- .88	- .23	+ .42	-1.59	+1.18	+ .69
31	+ .88	- .69	- .42	+ .68	+ .24	± .00
32	-1.54	- .92	± .00	+ .68	+1.89	+1.38
33	+ .88	- .69	- .42	+ .23	+2.12	± .00
34	+ .88	+2.07	- .42	- .23	+2.12	+ .46
35	-1.10	- .69	-1.47	-1.14	- .47	- .23
36	+1.54	+ .23	+1.05	+ .46	+ .47	- .69
37	+1.10	+1.61	+ .42	+1.37	+ .24	+ .92
38	- .88	+ .92	- .84	+ .23	± .00	-1.61
39	-1.76	- .69	-1.05	+1.37	-1.18	-1.61
40	-1.32	- .69	+ .63	+1.37	+ .94	± .00
41	+ .88	+ .23	- .21	- .91	- .71	-2.53

(continued)

Table F, 2.--Continued

Picture Number	Factors I	II	III	IV	V	VI
42	-1.54	+1.84	- .42	+ .23	+ .24	+1.15
43	± .00	- .23	-1.47	-2.28	-2.36	-1.61
44	-1.32	-1.15	- .84	-1.14	+ .24	-1.15
45	+ .44	± .00	- .21	+ .91	+ .71	- .69
46	- .88	+ .92	- .63	- .23	+1.42	+2.07
47	-1.32	+ .69	- .42	- .23	+ .24	± .00
48	+ .66	+ .69	± .00	- .91	± .00	+ .23
49	+ .66	+ .46	+ .84	+ .91	- .24	- .69
50	+ .88	+1.15	- .42	+ .23	+ .24	+ .46
51	+ .66	-1.15	+1.05	-1.37	- .24	+1.15
52	+ .22	± .00	- .21	- .23	± .00	+1.15
53	+ .22	- .92	- .21	- .23	+1.18	+ .46
54	+ .22	+ .46	- .42	+2.05	- .47	-1.84
55	+ .88	+ .92	+1.68	- .23	-1.42	+ .92
56	+ .22	+1.38	+1.68	-1.37	- .47	+ .92
57	± .00	- .23	-1.05	- .23	-1.18	+1.38
58	- .44	- .23	- .63	- .68	- .24	-1.38
59	- .22	± .00	+1.05	+ .68	- .24	- .46
60*	± .00	+ .23	+ .21	+ .46	- .47	+ .23
61	+1.32	± .00	± .00	+ .23	+ .24	- .23
62	+1.32	± .00	+ .63	± .00	- .24	- .46
63	+ .88	+ .69	- .84	- .23	± .00	+1.15
64	± .00	- .69	+ .21	± .00	-1.18	+ .23
65	+ .44	- .23	+ .63	+1.59	+ .24	± .00
66	-1.32	- .69	± .00	- .68	- .47	± .00
67	-2.41	- .69	+ .63	+1.59	- .47	+ .23
68	-1.10	-2.53	-1.68	+ .46	- .47	-1.61
69	+1.76	+ .92	-1.26	-1.37	+1.18	+2.07
70	+ .66	± .00	+ .42	- .46	+ .71	+1.15
71	- .22	+ .69	-1.47	- .68	+ .94	- .23
72	-1.54	-1.38	-1.47	- .23	- .71	± .00
Standard Deviations:	2.28	2.17	2.39	2.20	2.12	2.18

Note: Positive algebraic signs in connection with standard scores indicate that the respective picture was accepted as object of identification by the corresponding type of persons. Negative algebraic signs indicate rejection of the picture as object of identification. Sizes of standard scores represent intensities of identification.

* Picture lacking in discriminatory power across types.

FIG. A. REPRODUCTION OF PICTURES DESCRIBED IN CHAPTER VII

6
c

26
c

39
bw

9
c

27
c

42
bw

11
c

29
c

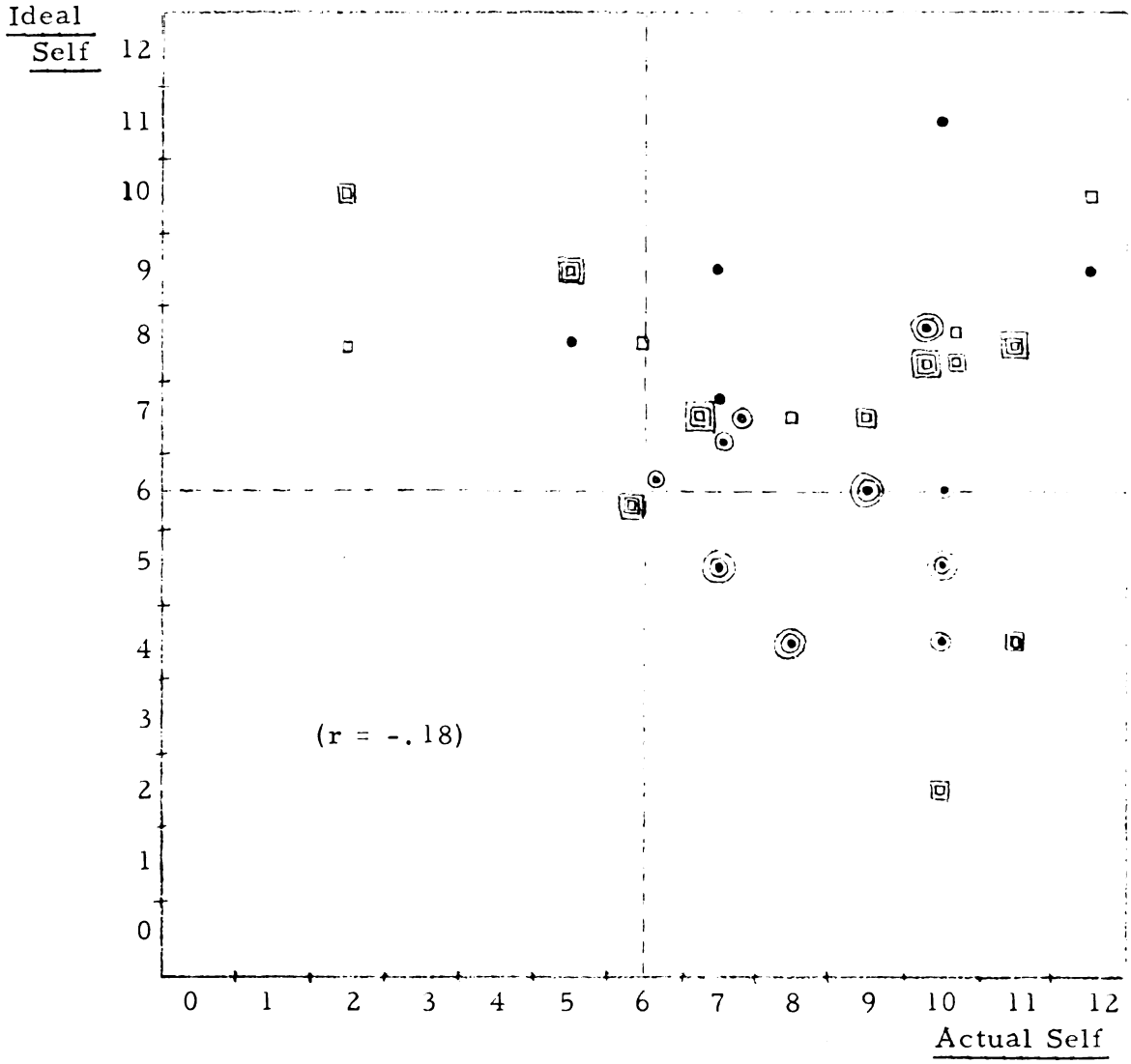
50
bw

15
c

31
c

68
bw

FIG. B. Scatterdiagram Showing Size and Similarity of Ideal and Actual Q-Scores Obtained for Picture No. 28.



Picture Description: Parents at breakfast table spelling "LETS GO" with ALPHA-BITS to their son who plays with a new toy train instead of hurrying to school with the books his mother holds for him. (Same as top picture in Factor 3, FIG. IV).

Symbols for Subjects:

	Men	Women
Young	▫	•
Middle-Aged	▣	⊙
Old	◎	◉

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MAY 5 1966

JUL 25 1966

ROOM USE ONLY

OCT 14 '68

DEC 6 1968

NOV 14 1969

12/3

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