

1947

Measurement of the effects of advertising

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THESIS

The Measurement of the Effects of Advertising
by

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submitted in partial fulfillment of
the requirements for the degree of
MASTER OF BUSINESS ADMINISTRATION



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INTRODUCTION

How do we know, as advertisers, what effect our advertisements are having on the buying public? In this thesis I intend to answer this question and bring in a rather detailed study as to how measurement of advertising takes place. Most people believe that an advertisement appears in a paper, magazine, or other periodical, and that is the end of it. They are not aware of the great deal of work involved in making surveys, sending questionnaires, giving tests in various colleges, and plowing deep into the consumer's mind to see just how useful advertising may be.

As will be pointed out in the text, a number of types of advertising have been tested; newspaper, radio, magazine, outdoor and car card displays. It is not an easy thing to make a survey on products advertised if the questionnaire method is used, but some organizations have had some very successful results. The questionnaire type of survey serves a double purpose. It not only gets the information sought, but also serves as a further advertisement.

Tests have been given in a number of colleges in studying the association of brand names. This type of survey is rather effective because it gets the information from everyone that is contacted, while questionnaires may not be returned by all those consumers who receive them.

The Crosley Radio poll has done a large volume of work in compiling information as to what programs

are best received on the air, and thereby getting the figures of the potential number of the listening public.

Mr. Richard Webster has studied the field of car card advertising effectiveness. The first bus and car card studies have reached a new high in findings. Mr. Webster revealed that the advertising Research Foundation in cooperation with the National Association of Transportation Advertising has published a report (24 pages, 9,3-8 by 12,1-2 inches, clear explanatory text) called "The Continuing Study of Transportation Advertising". The report is the first of a series of car card display advertising measurements and it goes into the study of twelve picked car card advertisements.

In making these surveys, researchers are very careful in making certain that they segregate the men from the women. Of course there are many articles that would not appeal to one or the other sex, but in measuring products of equal value to each, usually the figures are kept separate so that remedies can be made in the advertising procedures to help sell both to men and women.

1

"Readers have not been asked what they think or how they feel about advertisements, but whether or not they have seen them, read them, and can identify their subjects. These data are records of performed acts as recalled by the actors. Opinion tests may have their value in certain instances, but to rely upon them for evidence of advertising response would be like relying upon

the answer of a chemist who is asked, "what do you think will happen when you mix Unknown 'A' with Unknown 'X' and heat to 600 degrees?" The chemist may have a hypothesis, but to get an answer he must make the experiment: mix the unknowns, heat them, and analyze the result.

Once the advertising data have been obtained, however, the parallel with the chemist's technique ends. Every time the chemist mixes the same quantities of the same ingredients and heats them to the same temperature, he will get the same result. In advertising research, we never have the same basic ingredients to work with: samples differ in personnel; media differ in content; advertisements for the same products differ in text, illustrations, and arrangement. Consequently, for answers to basic problems, we must deal in averages, and expect exceptions. For example, average observations by men for half-page, black-and-white magazine advertisements in the Saturday Evening Post is about 24%. But many half-page, black-and-white advertisements in the Post are observed by 30%, 35%, 40%; and others are observed by 10 or 12%. The average reading of strip captions is considerably higher than that of formal body text; but occasional formal texts are as well read as the average caption, and the difference between the reading of some captions and others may be as much as 1000%."

However, let us not go into detail here in the introduction for I will show you how the measurement of the effects of advertising is done in the next four chapters, by means of a compilation of various groups of studies, including surveys, questionnaires, and polls.

Chapter I .

NEWSPAPER ADVERTISING1. An Index of Advertising Effectiveness

(1)

Readers and audience measurement studies which long have been the sole measuring stick of advertising copy, have been the object of severe criticism by advertising managers, market researchers and advertising agencies. The main point of criticism is that such readership studies are not the true measurements of the actual sales creating effectiveness of advertising copy, but instead are merely counts of the number of impressions received by the advertisements.

The major fault of such simple counting devices is that they neglect one important element. They do nothing toward revealing the ability of the copy to perform its basic function, to induce the consumer to buy the advertised product. As such, the only ability that these current procedures serve is to enable the advertiser to know the number of individuals who have read, observed and listened, liked, remembered, or can recall his advertising copy. They do not tell him the number of individuals who are persuaded by the copy to purchase the item. The number of impressions must be considered, but, in itself, constitutes only a single factor; whereas the complexity of the problem necessitates inclusion of additional factors.

1. "Printers' Ink"- May 17, 1946

The important problem then, is to find out how many who have read an "ad" were moved by the "ad" to buy the advertised product, which, otherwise, they would not have bought.

As one possible method it would seem to be a relatively simple matter to ask people whether advertising influenced them to buy the product. But attempts to do this are soon found to be unsuccessful. Human memory being unreliable, people forget "ads", and, moreover, they forget completely how they came to buy a product.

Another method could be to compare sales before and after a campaign. However, if sales did increase, there is no way of knowing just how much the increase was affected by such outside influences as favorable trends; and social influences may have contributed to it.

A third method would seem to be to find out the proportion of buyers among those who were exposed to the "ad", the excess over the proportion in the other group indicates the effect of the "ad".

This method follows a generally recognized principle of research. In order to determine whether a specific phenomenon has a specific effect, the scientists analyze two groups, the experimental group and the control group.

For example, in medicine, if the project is to determine whether a certain remedy can cure a specific

disease, the procedure is to observe a number of cases of recovery that occur among a group of people suffering from the disease who have been treated by the remedy (the experimental group) and the number of cases of recovery that occur among a group of people, similarly stricken who are not treated with the remedy (the control group). If a higher proportion of recovery cases is noted within the experimental group than in the control group, we assume that the remedy has a curative influence.

We cannot say, of course, that all the members of the experimental group were cured by the new remedy, for the same proportion would have recovered without the remedy as did recover in the control group when the remedy was not used, only the surplus over this control group percentage can be attributed to the use of the remedy.

It is not easy to apply this technique to the measurement of advertising effectiveness. Strictly speaking there is hardly ever a control group because the all-pervading nature of modern advertising exposes practically everybody to most forms of advertising.

It seems necessary, therefore, to create a control group. In a model of this type of approach, Frank Stanton overcame this difficulty by analyzing the sale of a product in a city that had not been exposed to any advertising for the product in a city that had been exposed to advertising. This gave him the required experimental and

control groups from which comparative measurements of the effect of advertising could be made.

We can simplify this technique by using as an experimental group those who are able to identify an "ad"; as a control group, those who are not able to do so. Sponsor identification is preferable to alleged recognition of an "ad", for what people say about recognition generally is not reliable. The difference between the identifiers and the non-identifiers is called, that is in percentage, the conversion difference.

A study of such type, however, is open to a serious criticism. Those who know the sponsor of an "ad" may have bought the advertised product before they saw the "ad"; and after coming across the "ad", they were more likely to associate "ad" and product than others who had not bought the product. How much conversion difference is due to this fact and not because purchase resulted from the "ad"?

It would be impossible to find the answer by asking people themselves. Most of them would not be able to recall correctly which had happened first, seeing the "ad" or buying the product.

But we can do at least one thing. If we are unable to measure a phenomenon in absolute terms, we may at least consider it on a relative basis. We may safely say that the above phenomenon occurs to the same degree for all brands of the same product.

Moreover, to find a reliable yardstick of advertising effectiveness it is not enough to compute the conversion difference, for that shows only the difference between the two groups and does not take into account the relative size of the two groups. Therefore, we have an identification ratio. For example, we have a group of 1,000 persons. Two hundred could and eight hundred could not identify an "ad", and 30% of the identifiers and 20% of the non-identifiers were buyers of the advertised product, the conversion difference being 10% and the absolute number of conversions being twenty.

Both factors, conversion difference and identification ratio, must be considered to get a good measurement of effectiveness. By multiplying the conversion difference by the identification ratio, we construct a valid index of advertising effectiveness. For example, if a certain advertisement has an identification ratio of 67%, and the conversion difference is 120%, multiplying these two figures, we get 8.0 as its index of advertising effectiveness. We can make a comparative analysis by placing figures in contrast.

Here is an example of a series of figures which were found in a study of the slogans for a number of leading brands of beer.

Table I

Slogans	I.R.	C.D.	Index of advertising effectiveness
A	67	12	8.0
B	73	9	6.5
C	17	20	3.4
D	74	3	2.2
E	13	11	1.4
F	11	13	1.4

Slogan D with the highest identification ratio was quite low in effectiveness.

The virtue and value of this index of advertising effectiveness is that it brings all advertisements down to a common combined base enabling the researcher to examine and determine the relative worth of the advertisements being studied.

The index helps in selecting the most effective media, and it is a basis for continuing or changing slogans or specific advertising features.

2. Leading Newspaper Advertisements

"Readership attracted by outstanding advertisements in daily newspapers compares favorably with that of top-notch news stories, according to the 100-Study Summary of the Continuing Study of Newspaper Reading", says A.W. Lehman, Managing Director of the Advertising Research Foundation.

The Foundation has published a 64-page report of the results of examination of 100 newspapers throughout the country. The papers ranging in size from 16 to 56 pages and in circulation from 8,570 to 264,287. The survey covered a period of seven years ending in 1946. The cost of making such surveys has been over \$350,000. Therefore, one can readily see that much is being done to see how effective advertising in newspapers can be.

Averages for the 100 studies show that 60% of the women and 53% of the men read some national advertising in a typical newspaper. Readership results reflect a wide variation in percentage scores for every size group and classification. This is a strong indication that the most important factor affecting readership is the advertisement itself.

The advertisement to rank number one, was a Sunoco advertisement which appeared in the Cincinnati Times-Star on December 2, 1943. It was classified as an automotive "ad" and it had a readership of 71% men, and 43% women. The "ad" contained a border of silhouettes of our combat airplanes, which was quite effective at the time and naturally the readership was expected to be quite high, at least among men readers.

The advertisement that ranked second was another which took advantage of the wartime conditions. It was put out by the Bethlehem Steel Company and appeared in the Johnstown (Pa.) Tribune on November 19, 1942 and was

classified as Industrial and Institutional. The "ad" showed pictures of naval warships and tied in the importance of the Steel Company in building such vessels. Readership showed men 68% and women 66%, a rather equal readership percentage.

Third ranking advertisement was found in the Daily Oklahoma of Oklahoma City and it had a readership of 46% men and 66% women. It was a Chesterfield Cigarette Advertisement and the reason it appealed more to the women was that it showed a love scene from a movie starring Bette Davis and Errol Flynn. The advertisement appeared in the paper on October 5, 1939. Of the eight other leading "ads" it was seen that of this number, six came during the war years and of the six, four tied in the war to gain more readership.

3. Newspaper Techniques to Obtain Advertising

Newspaper advertising is the main source of income for a newspaper. Of course, one knows that if the profit from the sale of newspapers was the only income of that newspaper company, it would be out of business or operating in the "red". It is the advertising that keeps the newspaper publishers in the higher brackets of income. The more advertising-space a paper can sell, the greater its income. That is why we see so many newspaper surveys. Even newspapers must advertise. Many dollars are spent by the newspapers themselves to advertise and make surveys to see just how large a readership they have and try to show the

The first of these is the fact that the
government has been unable to secure
the necessary funds to carry out its
policy of expansion. This is due to the
fact that the government has been unable to
secure the necessary funds to carry out its
policy of expansion.

The second of these is the fact that the
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advertiser why their paper is the best one in which to advertise.

A few specific examples will be brought out here. The Boston Globe, through the research of L.M.Clark, Inc., published a colorful pamphlet which said that it (the Globe) was "America's Most Exasperating Newspaper". A cartoon technique is used to illustrate the text. This study was one of readership and its object was to discover exactly how well read newspapers are. The study was based on personal interviews with readers; with men primarily in places of business, and with housewives in homes and employed women in places of business. The study included 23 newspapers throughout the country. An adequate number of readers of both sexes were interviewed. Several different studies were made of each newspaper. The newspaper as it originally appeared was used for interviewing, and no distinction was made between editorial matter and advertisements. Interviewing was conducted on the day following publication.

(1) Having ascertained that the interviewee had read the issue of the paper being studied, the interviewer asked on each page studied:

(2) "Did you look at this page?" If the answer was "yes", the interviewer asked:

(3) "Please tell me everything you looked at on this page".

(4) As the reader mentioned the items noted on the page,

THE UNIVERSITY OF CHICAGO

CHICAGO, ILL.

DECEMBER 15, 1914

PROFESSOR J. H. COOPER, JR.

DEPARTMENT OF CHEMISTRY

UNIVERSITY OF CHICAGO

CHICAGO, ILL.

DEAR PROFESSOR COOPER:

I have the pleasure to acknowledge the receipt of your letter of the 12th inst.

and in reply to inform you that the same has been forwarded to the proper authorities.

I am, Sir, very respectfully,
Yours truly,
J. H. COOPER, JR.

Enclosed for you are two copies of the report of the Committee on the

University of Chicago, which was presented to the Board of Trustees at its meeting

on December 10th, 1914. The report contains a full statement of the facts and

of the recommendations of the Committee.

I am, Sir, very respectfully,
Yours truly,
J. H. COOPER, JR.

Enclosed for you are two copies of the report of the Committee on the

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J. H. COOPER, JR.

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the interviewer recorded the observation of all elements which were being studied on that page.

The reader traffic was broken down into the following classifications:

- (1) Pages 2-9
- (2) Other news
- (3) All news
- (4) Woman's pages
- (5) Society pages
- (6) Entertainment pages
- (7) Radio pages
- (8) Sports pages
- (9) Financial pages
- (10) Classified pages
- (11) Last page

The Boston Globe claimed that it had a ranking of the five firsts, four seconds, one tie for second, and one third among the twenty-three newspapers. The point I am bringing out here is that with this type of advertising by a newspaper publisher, there's going to be more advertisements by retailers. The facts are quite faithful.

Other newspapers put out other types of advertising. A study of the Los Angeles newspapers readers is made by the Los Angeles Times. This book contains findings on readers by papers, by method purchased, by age and sex, etc. Numerous tables show all types of statistics on each newspaper in the area of Los Angeles.

THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY

RECEIVED

NOV 10 1964

11:00 AM

FROM

JOHN D. COOPER

TO

DR. ROBERT M. HARRIS

RE

YOUR LETTER OF NOV 5

RECEIVED

NOV 10 1964

11:00 AM

YOUR LETTER OF NOV 5 HAS BEEN RECEIVED AND THE
MATTER IS BEING HANDLED BY THE APPROPRIATE
DEPARTMENT.

THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY

RECEIVED

NOV 10 1964

11:00 AM

FROM

JOHN D. COOPER

TO

DR. ROBERT M. HARRIS

RE

The Milwaukee Journal publishes a magazine called "Consumer Analysis". It deals with the Greater Milwaukee Market and presents a clear-cut picture of the current buying habits of all Greater Milwaukee families in regard to hundreds of products. The data covers the number of brands, number of families using each brand from year to year, average monthly purchases per family, trend of package and bulk volume and percent of store distribution of brands. Truly a fine publication and a great deal of help to many market research men.

The Newark Evening News follows the pattern of the Milwaukee Journal with a pamphlet publication called "Market Folder". It is divided into four sections:

- (1) Market data
- (2) Circulation
- (3) Advertisings
- (4) Editorial

All these papers are doing something to benefit themselves as well as educate people. Although the cases just studied are not really direct methods of measuring the effects of advertising, they had to be mentioned here since they definitely are indirect methods, shall we say, of measuring advertising effectiveness.

II. MAGAZINE ADVERTISING

1. How An "Ad's" Sales Power Compares with Its Readership.

(1)

One of the best studies made on the effectiveness of magazine advertising was that of Dr. Daniel Starch, who has conducted studies of readership of advertising in magazines. It is quite true that the advertisement that has the highest readership is not necessarily the one that sells the most goods.

It is not necessarily the one that sells the most goods, but generally it is. That is why it becomes necessary to study the sales power of advertisements. High readership and strong sales power go hand-in-hand. Dr. Starch tabulated 227 advertisements for seven different products averaging thirteen to eighteen advertisements for each product. Each of the seven series of advertisements were then divided into three groups in order of their readership. Corresponding data on sales power of the same advertisements were also tabulated, with the following results:

Table II

	% Readership	Buyers per dollar of advertising cost
76 Most-Read "Ads"	44	11
75 Most-Read "Ads"	37	8

Table II (con't)

	% Readership	Buyers per dollar of advertising cost
76 Least-read "Ads"	32	5

The term buyers refers to the number of readers of the advertisements who bought the product shortly after the appearance of the advertisements and as a result of reading them.

The results here show that the advertisements ranking highest in readership had comparably high rank in sales power. However, there are certain exceptions, that will be shown later.

At the same time that this readership interview is made, interviews on an advertisement's sales power are also made. The sales power information is obtained from the same people, although they are done independently of each other. Why is it necessary to find out what the sales power of an advertisement may be? Well, the answer to this is to estimate the advertising cost per buyer.

Usually two questions are asked the person being interviewed in determining sales power: (1) "Do you use (product mentioned by brand name) at the present time?", and (2) if so, when did you buy it last?"

The answers received here are then correlated with the answers received in the readership survey so that

it can be determined how many persons read a particular advertisement and then bought the product that it advertised.

Since July 1, 1944, the sales power of 3,000 advertisements appearing in the Saturday Evening Post and Womans' Home Companion have been tested through 35,000 interviews.

In making such studies, it is necessary to consider carefully the factors that influence the purchases. It is obvious that not everyone who reads an advertisement and buys its products does so merely because he reads the advertisement. There are some who read the advertisement because they already use the product. Moreover, there are persons who both read and buy because external factors impel them to these factors. Finally, a certain number who read them and buy, would buy anyway, whether or not they read the advertisement.

On the basis of 30,000 interviews covering 2,000 advertisements in 96 issues of the Saturday Evening Post, typical results were found to be as follows:

Of 1,000 persons interviewed who have read this publication,

330 read the average advertisement, one half page or larger, of products purchased frequently, such as dentifrices, soaps, breakfast foods, cigarettes.

42 read the advertisement and buy the product within 10 days after the advertisement has appeared. Of these

42 readers who buy,

24 would buy anyway, whether or not they read the advertisement;

7 read the advertisement because they use the product.

2 read and buy because of external factors

9 buy as the result of reading the advertisement.

Knowing the number of persons who buy the product as the result of reading the advertisement, we can estimate the cost per reader who is actually impelled to buy; an index of the sales power of the advertisement can be obtained.

In getting the data on readership from the reader and the answers to the two questions previously stated on the use and purchase of the products, nine basic facts are developed:

(1) Percent of persons interviewed who read the advertisement.

(2) Percent of readers of the advertisement who bought within ten days of the appearance of advertisement.

(3) Percent of those who did not read the advertisement who bought within the same ten day period.

(4) Percent of readers who bought within a specified period before the advertisement appeared.

(5) Percent of non-readers who bought in the same period before the advertisement appeared.

(6) Percent of users of the product who read the advertisement.

(7) Percent of non-users of the product who read the advertisement.

(8) Percent of all readers of the magazine who use the product.

(9) Percent of all readers of the magazine who bought the product within ten days of the appearance of the advertisement.

Reading an advertisement for this purpose means seeing an advertisement and associating it with the product or company. The period of ten days for purchases after the appearance of the advertisement is determined by the length of interviewing period in the case of weekly magazines. In the case of monthly magazines the period of record is thirty days.

By means of these inter-relationships, it is possible to determine the total number of persons who read the advertisements and bought the product. Those who bought the product directly as a result of reading the advertisements are determined by eliminating the group which would have purchased anyhow. This is the same percentage as those who did not read the advertisement but bought in the same period of time.. Also eliminated are those who read the advertisements because they are users of the product, and who read them because of external factors. This process can best be described in an example.

2. Study of Dentifrices

A group of thirty dentifrice advertisements which appeared in the Saturday Evening Post in the two years between July, 1944 and July, 1946. Nine thousand men and women readers of those issues of the Post in which the advertisement appeared were interviewed. Of those interviewed, 1440 or 16% had seen the advertisements and associated them with the products. One hundred and seventy-nine, or 12.4% of the 1440 readers of the advertisements, bought the product within ten days.

Obviously, not all of the 178 persons bought the product as the result of reading the advertisement. There are four conceivable factors that cause the same persons to read the advertisements and buy the products. These are as follows:

(1) BUY ANYWAY- There are persons who buy the product whether or not they read the advertisement. They are influenced by prior causes, that is, causes prior to the present advertisement and hence without its influence. For the purposes of this computation, the percentage of these persons is considered to be the same as those who buy without reading the advertisement.

(2) USE OF THE PRODUCT- causes some persons to read the advertisements of the product.

(3) COMMON CAUSES- Reading and buying may both be caused by outside influences. These common causes fell into two

groups: buying capacity, such as income and buying interest, due to sex, age, occupation, marital status, children, holidays, seasons, religion, which cause the person to do both things, read and buy. For example, greater income or buying capacity may cause a person to buy products requiring larger income and also cause him to read advertisements about these most costly products without any direct causal relationship between buying and reading. St. Valentine's Day may cause both buying of candy and the reading of advertisements about candy.

(4) READING OF ADVERTISEMENT- causes persons to buy products.

In order to determine who among the 179 persons read the advertisements and bought directly as a result, was necessary to eliminate from that number those who bought from these other causes. First to be eliminated among the 179 persons who read the advertisements and bought the product are those who would have bought the product anyway whether or not they had read the advertisements. The percentage of readers can be considered to be the same as the percentage of the non-readers of the advertisements who bought the product, as both were activated by causes other than advertising. This is 5.9% of the total readers or 85 persons. These persons would have bought the product anyway without the effect of reading the advertisements, that is, they would have bought from whatever past causes, such as previous sales promotions,

advertising, use of product, display of product, recommendations by others and miscellaneous causes.

Hence, subtracting from the 179 persons who read these advertisements and bought the product the 85 who bought it without any influence of reading the advertisements leaves 94 persons who read and bought from some causal relationship.

Of these 94 persons, some read the advertisements because they used the product. Data collected in the survey revealed that among the users of this dentifrice there were 89% more persons who read the advertisements than among a like number of persons who did not use the dentifrice. This ratio indicates that among the 94 persons, 44 read the advertisements because they used the product. This leaves fifty.

However, some of those 50 persons read and bought because of outside causes. There, common causes influence approximately 15% of the 50, or 8 persons. This number subtracted from fifty leaves forty-two (42).

The figure 42 persons represents those who actually bought the dentifrice as a result of reading the advertisements. This is 2.9% of the total number of readers. This is the measure of the sales power of these advertisements, namely, those who actually bought the product as a direct result of advertising.

As a check on the formula and as a means of

determining whether and to what extent readers of an advertisement would buy more anyway than non-readers, a comparison was made of these dentifrice advertisements between the proportion of readers who bought before they read the advertisement with the proportion who bought after they read the advertisement in a comparable period of time. The comparison shows that 9.3% of the readers bought before and 12.4% of the readers bought after they read the advertisements. The difference of 3.1% is comparable with the 2.9% of the readers, as determined by the formula, who bought as the result of reading the advertisement.

This 2.9% is probably not the total number of persons influenced to buy, because some persons who see advertisements would buy after the interview had taken place even during a single ten day period.

Studies of the sales power of advertising, especially when pursued over a significant period of time, reveal trends that are of utmost importance to the advertiser.

For example, it is found that some types of advertising that are good tend to lose their influence when used over an extended period. In the case of one type of toilet soap advertising, for example, 9.3 buyers per dollar of advertising were won during the early course of this advertising. The same type of advertising, too long pursued, now brings only 4 buyers per dollar spent. On the other hand, when sales power of particular copy appears

to wane, sales can be stimulated by a change in advertising. In the case of one dentifrice, sales power of advertising increased from five to eight buyers per dollar when the style of copy was changed.

Other matters that such studies reveal are whether large or small space is more effective for advertising a particular product, whether cartoon-type is as effective for a particular product in getting sales as it is in securing readership. It has been apparent that these studies show that newer products require advertising that wins more thorough readership than is necessary in the case of older products where often a type of copy that merely reminds the reader to buy is sufficient to achieve the desired results.

Finally, these studies reveal other significant matters, such as whether users and current buyers of a product are on the rise or decline in the market of that particular medium.

This new technique for measuring the sales influence of advertisements gives promise of being the most important development in business research in the fifteen years since the inauguration of the continuing readership program in 1932. If the technique is fundamentally sound, as a large mass of data accumulated within the past two years indicates, this development should be a milestone in the course of studies of advertising effectiveness.

3. Comparing Advertising Effectiveness

Having studied Dr. Starch's method of measuring advertising effectiveness in relation to expendable items, let us look at the effectiveness of advertising in relation to industrial and engineering items. How does one advertisement gain more effectiveness than another?

(1)

Two salesmen may call on a prospect. Each spends twenty minutes telling his story. The products are comparable; the manufacturers are reputable. One salesman gets the order; the other does not. Why?

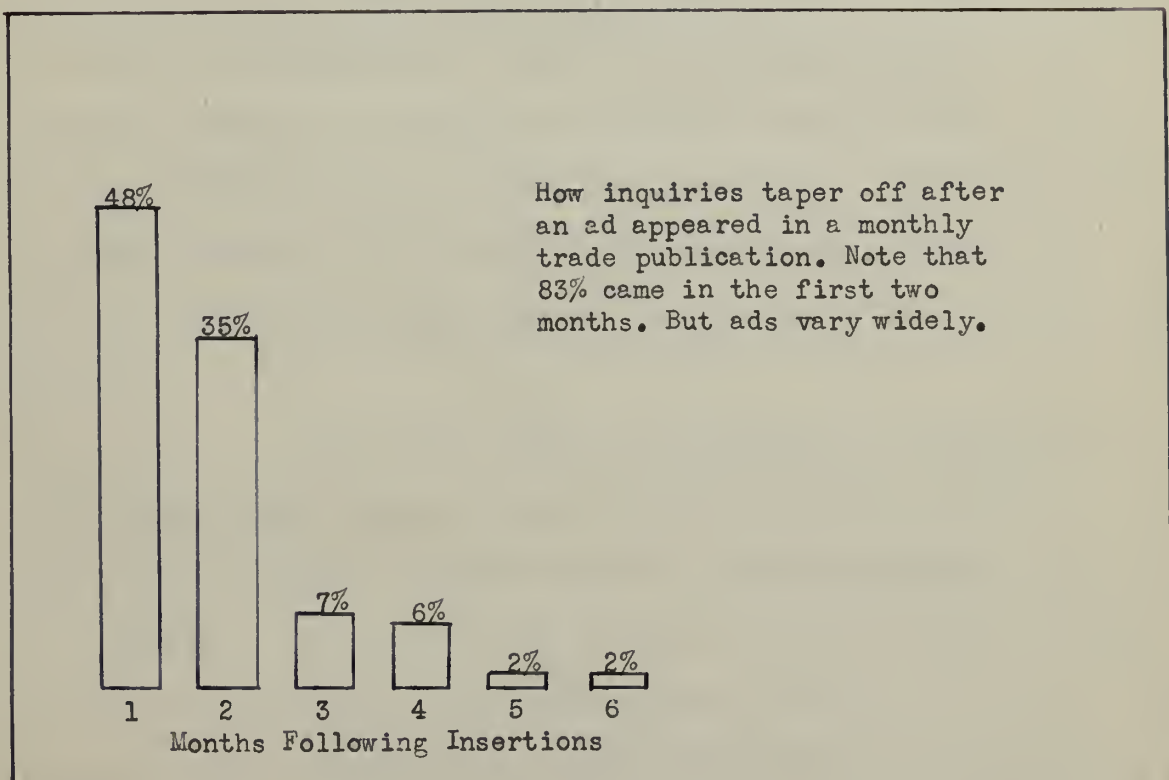
A prospect reads two advertisements. The products are comparable; the manufacturers reputable. The "ads" are equal length. One "ad" stirs the prospect to action; the other does not. Why?

If you study inquiries, you may be able to learn why one "ad" produces better results than the other. Even if you don't learn why it does, you learn that it does, which is nearly as important.

Unless two "ads" differ widely in pulling power, it may be hard to compare them accurately. Frequency of running an "ad" has great bearing on the effectiveness of the "ad". (See Chart I) The question here arises, should an advertisement be repeated? If repeated, how often and how soon.

1. "Printers' Ink" - March 29, 1946

CHART I
HOW INQUIRIES TAPER OFF ...



By checking the response from each "ad", month by month, it will soon be discovered that a January "ad" may still be producing inquiries in July. One advertiser offering a book in February 1944, was still receiving \$150 a month in orders, in March 1946. But in general, most of the inquiries will turn up in about two or three months of a monthly publication. Chart I shows quite clearly how inquiries tapered off rapidly after the second month. (This was in reference to an industrial product.) Thus by checking the results it is possible to determine how long one should wait before repeating an "ad" to get the most for his money.

The next thing to determine is how long a particular offer can be used before it wears out. (See Chart II) In some classifications - correspondence schools, for example - one will find the same advertisements appearing year in and year out because they get good results.

It must be remembered that even though an advertisement may produce fewer returns when repeated, the cost per inquiry may be lower because of the savings on production expense and on creative time, both of which might be profitably employed in other activities.

This study of advertising effectiveness is easily checked, especially when offers are made. It does not require the research man to go directly to the reader personally to find out how the "ad" has affected him. If

CHART II
TOTAL INQUIRIES FROM ONE AD...

First appearance

631 Inquiries

Second appearance

580 Inquiries

Total inquiries from one ad run on the first
of April and repeated the next December in
the same publication.

the reader has been affected by the "ad's" power he will inquire about it. A very easy way to measuring advertising effectiveness.

4. Local Advertising

We have come to the conclusion that the favorite method of some advertising agencies, and a few advertisers, in measuring advertising effectiveness is use of surveys. However, there is a defect in the survey method that is worthy of mention. If the magazine circulates to a class of people, such as an income group, who would buy the commodity whether advertised or not, the advertising and the magazine will be given more credit than is due them. This is repeated here since it is a big defect in the survey type of measuring advertising effectiveness. The methods studied thus far have been based on national advertising effect. The simplest method is usually sufficient for a test of the effectiveness of local advertising.

Donald R.G.Cowan, of the Commercial Research Department, Swift and Company, and professional lecturer in marketing at the University of Chicago made a study of the effect of local advertising by the distribution of coupons from door to door upon the sales of three products of general household use. A bearer of a coupon is entitled to a free sample of the article when he or she buys another specified article from the local dealer or retailer. The con-

sumer acceptance and sales of Product I were already well established when couponing was undertaken and the results of the effort were not apparent except in a few areas. Variation of the sales of Product II showed a measurable dependence upon variations in its couponing in corresponding areas. Product III, a new product previously having low sales, showed a decided response to the couponing. In each case parallel tests were made by comparing per cent increase in total sales of all areas couponed with corresponding figures for all areas not couponed and the same conclusions were drawn about the effectiveness of couponing the respective products.

This is introduced here to show us that it is another method of measuring advertising effectiveness and is used usually in local advertising only.

5. Magazine Surveys

Mark Wiseman, in his book, "The Anatomy of Advertising", tells us that "advertising does not produce sales-its purpose is to influence people to want and look. If it is able to do this, it facilitates, hastens, promotes, sales." He shows the results of a few surveys made in National magazines.

A comparison of head-line reading between "product-pushing" and "reader service" headlines in one issue each of the Saturday Evening Post and the Woman's Home Com-

panion produced the following averages:

Table III

Head-line Reading

	Product-pushing		Reader-service	
	Men	Women	Men	Women
Saturday Evening Post	41%	34%	60%	61%
Woman's Home Companion	--	34%	--	60%

Reader interest in the service headlines was 50% greater among men, and nearly 100% greater among women. In their ability to induce reading of the body-text lead, the service headlines were 17% stronger for men and 150% stronger for women.

A comparison of two types of headline for Ford advertisements showed the following advantages in favor of reader-interest headlines over competitive (boastful) headlines among men readers: Observation, 15%; Correct identification, 11%; Body-text reading, 31%.

A comparison of data on 25 food advertisements in McCall's (women only) indicated a higher response to advertisements having strong appetite appeal in the headline than to those in which the headline pushed the product:

Table IV

	Observation	Body-text Reading
Appetite group	61%	9.3%

Table IV (con't)

	Observation	Body-text Reading
Non-appetite group	53%	7.5%

An issue of Life contained 19 advertisements with a stronger reader interest idea in headline or illustration, and 46 advertisements which lacked such an idea. The following figures indicate the differences in average response in terms of observation and product-identification:

Table V

	Observation		Identification	
	Men	Women	Men	Women
19 strong-idea advertisements	55%	48%	63%	60%
46 weak-idea advertisements	32%	33%	34%	32%

A similar comparison of 80 advertisements in an issue of the Saturday Evening Post, classified separately under the heads of men's and women's advertisements, showed the following differences:

Table VI

	Observation		Identification	
	Men	Women	Men	Women
Strong-idea advertisements	39%	46%	59%	57%
Weak-idea advertisements	32%	31%	38%	25%

These data do not argue against the presentation, in headline, illustrations, or text-lead, of a strong product-story, but merely against what may be called

a "factory-minded" story or a story which contains no element with strong reader-attraction.

Chapter III

RADIO ADVERTISING1. Evaluation of Commercials

The previous two chapters have discussed the various methods that have been used in evaluating the effects of advertising in newspapers and magazines. Now, we turn to radio advertising. It generally is true that most large companies with advertising campaigns that cost them millions of dollars usually use all types of advertising to put their products over. Of course, some products such as whiskey are not advertised over the radio, depend mostly on four-color magazine advertisements to do their selling. It is not very often, however, that surveys are made on whiskey advertisements.

It is quite true that surveys and polls in radio advertising effectiveness have not been as extensive as those in the newspapers and magazines. ⁽¹⁾ Marion Harper, Jr., Manager of the Radio Research Division of McCann-Erickson, Inc., has studied radio advertising quite fully and some of his findings will be related here.

What are some of the factors responsible for the success or failure of a given radio commercial? This question is one of the most perplexing of the problems faced by sponsors, producers, and researchers.

1. "Advertising and Selling", April, 1945. p.47

Let us sketch one or two of the results of many tests of the effectiveness of commercials. Most of the attempts that have been traditionally made to evaluate radio commercials have depended solely on the questionnaire or interview technique. The results have seldom proved thoroughly satisfactory largely due to limitations inherent in such methods of approach to the problem. One of the major difficulties has to do with the fact that the responses obtained through questionnaires or interviews are based either on the memory of the listener or upon his reaction to a commercial presented to him in written form and out of context.

A far more desirable method of dealing with the problem is provided by the Larzfeld-Stanton Program Analyzer. The Analyzer records the like and dislike responses to a commercial in context, as it was actually broadcast.

The Program Analyzer, which will be discussed here was developed in 1937 by Frank Stanton, CBS vice-president and general manager, and Dr. Paul Lazerfeld, of Columbia University, is probably the most useful work-kit of qualitative radio research. The latest of these Analyzers is called the "Big Annie", and is totalizes the second-by-second individual reactions of 100 listeners at a time.

The machine is operated by having the person in a test group hold two electric push-buttons that are

connected with wire to the machine. Impulses from these buttons are recorded through moving fountain pens on slowly revolving rolls of graph paper. Pressure on one button is registered as favorable reaction; pressure on the other, unfavorable. Respondents are instructed to leave both buttons untouched if they are indifferent to what they hear.

Program Analyzers have been used in the selection of new talent and proposed new shows. They have been used to pre-test programs in various stages of production before they are broadcast. They can also be used at rehearsals to reveal unsuspected weak spots in a program in time for them to be corrected before going on the air. Most frequently, however, they have been used to test the appeals and weaknesses of already-established programs.

(1)

Program Analyzer tests of commercial announcements strongly indicate that listener tolerance of a program's advertising content depends largely on how well it is suited to the program mood. Whereas, certain commercials shatter the mood of the entertainment content, others, often due to some form of integration, do not have a disruptive effect.

An interesting finding from numerous tests is that certain cue-words frequently used in radio advertising have a negative effect on most listeners. Such expres-

1. "Advertising and Selling", August, 1945, p.69.

sions as, "And remember", "So when you", "So don't forget", seem to warn listeners that a summary or repetition of selling points previously given is about to follow. As soon as they are heard, these words almost invariably produce an increase of indifferent or disapproval reactions on the Analyzer.

Repetition of the same argument within a commercial, or from one commercial to another, gives listeners the impression that there is too much advertising on the program. The Program-Analyzer has also shown that the frequent mention of the sponsor or the product, and the use of a passive style with many adjectives, have the same negative effect on the listener. Actually the impression of too-long commercials is a lost one; other longer commercials, acceptably presented, produce no such complaint.

In the case of news programs, various aspects have been found to have a negative influence on listener reactions. Among those most frequently revealed by the Analyzer are predictions by commentators who are not considered authorities by most persons. Other "rejects" that have been noticed include news items that use statistics in a confusing manner, items poorly related in time, space, or in a topical sense, items dramatized to a point of losing authenticity, and items that are repetitious.

The Analyzer takes into account the important psychological fact that reactions to what is being listened

to may be quite different from reactions to written material. Another advantage in the new technique lies in the fact that it makes possible a study of the commercial as an integral part of the total program,, and not as an artificially isolated entity. The approach brings into light the extent and nature of the influences that are exerted on each other by the various items in a given program. Furthermore, the Program Analyzer test is conducted in a setting that closely approximates the actual listening experience of the radio audience.

In general, the three major functions of a radio department are: program producing, time buying, and writing of commercials. Very often the activities of the divisions of commercial writing and program producing on particular assignments are carried on independently, or, at least are "spliced". Their work is seldom fully integrated. There is reason to believe that closer cooperation between the two divisions is likely to result in greater effectiveness of both programs and commercials.

On most of the entertainment items there is a significant gap between those who like a program as a whole and those who dislike it. The difference is further accentuated in the case of the two commercials of the liked program and the disliked program. It is clear that, in terms of interest and favorable reaction, the level of liking reached by the entertainment portion definitely affects the

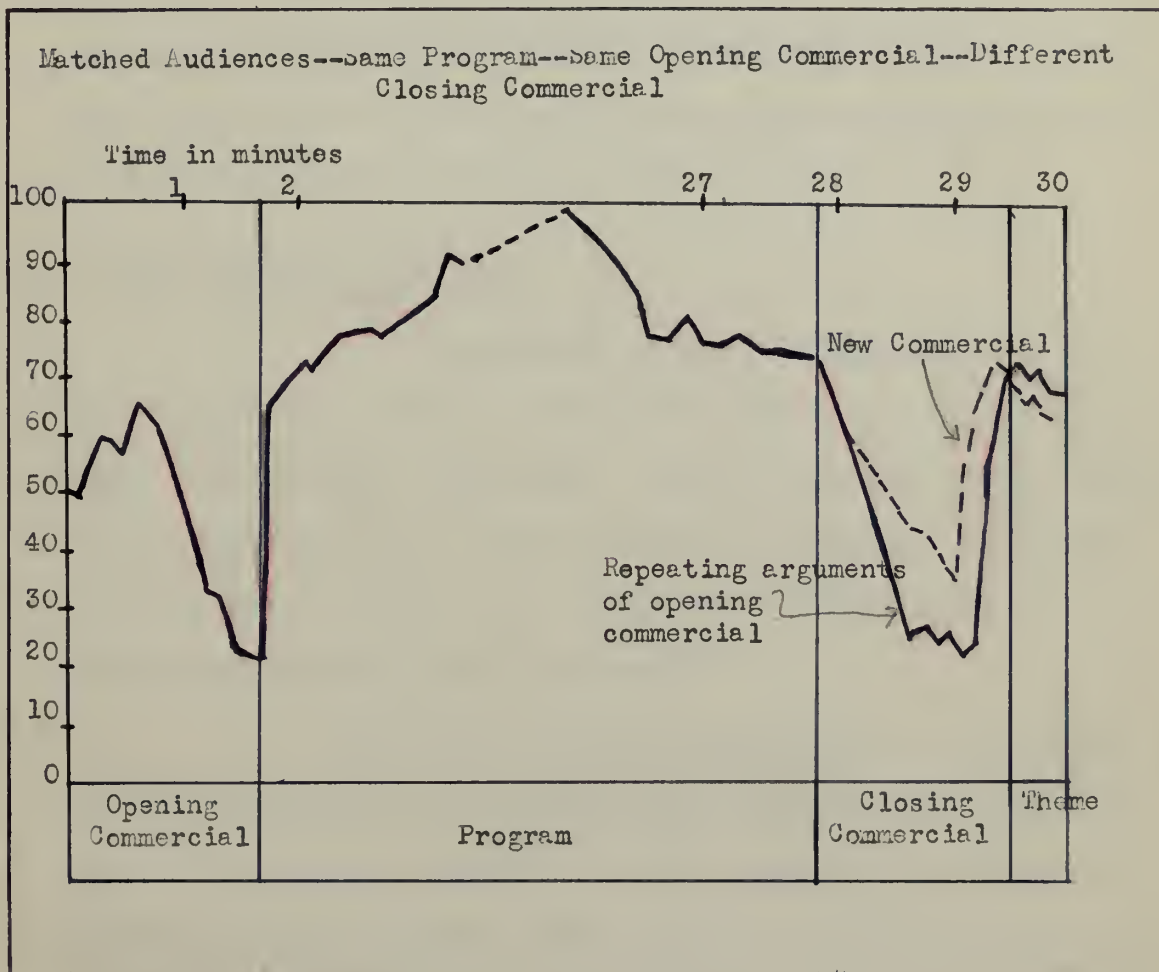
level of the response to commercials.

The Radio Research Division conducts experiments with any program. Another test made by the Division had to do with the measurement of the possible effect of repeating the arguments of the opening commercial in the second commercial. The level of attention and interest was approximately 50% higher in the opening commercial than in the closing one. In a second experiment, while the same opening commercial was used again, a new closing commercial was introduced. No changes were made in the other items of the program. Using matched audiences, the whole program was re-tested. The results indicated that the new commercial has been able to sustain interest at a much higher level. (See Chart III)

The reactions to the amount of advertising in this program are of particular interest. The time consumed by the commercials was the same in the two tests. In the first case, where the arguments of the opening and closing commercials were the same, 70% of those interviewed were of the opinion that there was too much advertising. In the second test less than one-half of the respondents expressed this objection. Thus, it may be said that by avoiding repetition, and without sacrificing time, the advertising content of the program can be made more acceptable to the audience.

This is one of the latest methods used in

CHART III
AVOID REPETITIOUSNESS...





measuring radio advertising effectiveness. Radio research today offers ample evidence of a growing tendency to adopt and follow methods that mark objective and responsible investigations in other fields of scientific inquiry. This trend is even more encouraging than the many valuable results that particular radio studies have yielded already. Research in the field of radio perhaps still lacks wisdom teeth, but there is no doubt that it is rapidly growing in the right direction, toward fuller maturity.

2. Some Specific Surveys

(1)

A special study of radio commercials, resulting from a year's survey was completed by the Radio Council of Greater Cleveland. Eight thousand questionnaires were distributed to a cross-section of Greater Cleveland covering all economic and educational backgrounds, and about 2,000 answers were reported.

Of those who answered the first question, on singing commercials, 15% expressed approval, calling them appealing, amusing, catchy, clever, cheerful, change from talking, children enjoy them, easy to remember, light and refreshing, tricky, more interesting, and so on. But 60% of these that answered, "would ban most of the singing commercials", calling them absurd, badly sung, boring, cheapens product and program, cheap attention catchers, crude, conde-

scending, inconsistent with program, inharmonious, juvenile, monotonous, silly, spoils effect of program, too noisy, undignified, wears a good thing out. About 25% preferred "some of the singing to the plain spoken commercial", calling them lively, jolly swing, more timely, original, pleasant to ears, snappy, humorous, etc.

Question 2 asked for expression on straight spoken commercial. Of the replies, 75% "prefer them to other kinds", 22% "dislike them".

Of those who answered the next query, 56% "like commercials that are worked in with the program character of broadcast", and 44% dislike that type of commercial.

To question 4, answers were given by 7 out of 8 total replies. Of these, 95% "prefer commercials only at beginning and end of programs". Some of the reasons included: continuity preserved, can catch program even if late, continued interest in program, easy to identify program, easier to follow, remember them better, less confusing, logical place, more coherence in program, more effective, program seems more of a gift from the sponsor, middle commercials interfere with a good act. Some persons in this category said that middle commercials are "annoying and irritating". But 50% prefer the middle commercials and give as reasons: arrests your

attention, adds to program if "worked in" effectively, break like curtain call in play, do not have to wait for program to start, encourages listening to them, fills in psychological pause, fits into program when dealt with lightly, gives break for listener to comment on program, in 30 minute program sponsor is entitled to a middle commercial.

The fifth question sought reaction to commercials on news programs and got about 9 out of 10 answers. Of these, more than 6% preferred the middle commercials on a news program because: "it affords opportunity to comment on news, gives one time to look up places on map, one commercial sufficient, prefer break between war news and other news, relief from concentrated listening, news starts immediately, seems shorter". The 93% objecting to middle commercials declared that they are distracting, encourage lack of concentration on commercials, too long for 15 minute program, interrupt program, spoil continuity, and said: "interest is lost in last half of program, like continuous summary of news", less coherence; news is news, and soap is soap; news too vital to be interrupted; often said in same tone as news report; out of character; prefer all news; too much suspense in some programs.

Next question asked if the individual made an effort to buy products of those sponsors whose shows

he liked. Of the total answers, 69% said yes, 6% said occasionally, and 25% said no.

Of those who answered whether some commercials turn a listener against buying a product advertised, 72% said yes and 28% said no.

The top sponsors or programs, presenting commercials in a way that appeals, in order of listener preference were:

Johnson's Wax, Pepsodent, Sunoco, General Electric, Kraft Music Hall, Lux Radio Theater, Telephone Hour, Swan Soap, Information Please.

The last survey question asked for objectionable commercials. Included in the last were: programs that never change mode of advertising, exaggerated claims for a product, high pressure salesmanship, middle commercials, newscasters on commercials, poor voices, poor grammar, poor taste, poor music, repetition of identical phrases, repulsive subject matter, spelling trade names, singing commercials, same tone and enthusiasm for advertisements as for news, sound effects, shouting and gushing announcers, too much repetition, too long and detailed, too personal in tone, and application, too loud (louder than rest of program), too much description talk.

Thus, this type of survey can give the sponsor a lot of good information to help correct his program, if it needs to be improved. Many surveys do

not bring such good results, because of the failure of many people to take a deep interest in the questions asked, that is why most surveys are compiled over a long period of time, as was the case here, in which it took a whole year to conduct.

3. NAB'S First Retail Radio Test

(1)

In January of 1945, the National Association of Broadcasters set up an organization for the measurement of radio broadcast advertising. The first report of results of the test clinic, held by Joske's Department Store, San Antonio, Texas, was made in the latter part of May, 1945.

The clinic is part of the NAB'S study to ascertain how broadcast advertising can be of greater value to retailers and to see what contributions can be made to retail sales and profits. A 16-month survey study by the radio industry, under guidance of the N.A.B., was completed in October, 1943.

Before going into the details of the study , let us look at the aims of the N.A.B. First, its aim is to educate retailers to possibilities of radio advertising and second, to educate broadcasters as to problems of retailers. Although radio has made great strides in

1. "Printers' Ink" - June 1, 1945. p.100.

national advertising, it is generally admitted that acceptance of the medium by the retail trade has lagged. Radio spokesmen claim that retailers should be prepared to use this medium for no less than six months before they can determine significant results. Occasional, spotty use of radio at irregular intervals is bound to be ineffectual, it is said.

Now let us see, step by step, how Joske's radio campaign had been planned. To begin with, the store agreed to allot 20% of its advertising and promotion budget for the radio experiment. (Actually more than 20% of the budget was going into radio).

A study of San Antonio was first conducted. There was little help from the Department of Commerce, since there was little information available of the kind that was required. A group of women was assembled, comprising representatives of every type and class in the city. Through these representatives, questionnaires were sent to women in the different classifications. Object was to learn about the people and then, their customs, habits, mode of living and their desires and needs in shopping.

Next, the store itself came under close scrutiny. Its assets were determined and listed. The fact that it is a beautiful store, over 70 years old, located in one of the most historical and attractive

sections of the city were some of the listed assets. On the other hand, the defects and problems were noted too. The store suffers from lack of space, as do many department stores today. Parking space was not sufficient. Furthermore, although the store is in a beautiful place in San Antonio, it is removed from the shopping center. Rapid turnover of personnel was also a problem.

Following this preliminary work, the aims of the prospective campaign, based on information secured from the survey, were outlined in detail. The following was recommended:

(1) Programs that will give greater identity and further individuality to Joske's of Texas, "The Largest Store in the Largest State", with distinction between the upstairs store and the basement store.

(2) Programs that will establish Joske's of Texas as a leader and power in the civic and educational accomplishments of Texas women.

(3) Programs that will have appeal and personality for young married Texans as well as programs for and about boys and girls.

(4) Programs that will establish the store as a source of "news" about the newest.

(5) Programs that will help to sell it as a fashion store, as well as a home furnishings store and a store for all the people of Texas.

1. The first part of the paper is devoted to a general discussion of the problem.

2. In the second part, we consider the case of a single particle in a magnetic field. We show that the energy levels are given by the Landau levels, which are equally spaced in energy.

3. In the third part, we consider the case of a system of many particles. We show that the energy levels are given by the Landau levels, which are equally spaced in energy.

4. In the fourth part, we consider the case of a system of many particles in a magnetic field. We show that the energy levels are given by the Landau levels, which are equally spaced in energy.

5. In the fifth part, we consider the case of a system of many particles in a magnetic field. We show that the energy levels are given by the Landau levels, which are equally spaced in energy.

6. In the sixth part, we consider the case of a system of many particles in a magnetic field. We show that the energy levels are given by the Landau levels, which are equally spaced in energy.

7. In the seventh part, we consider the case of a system of many particles in a magnetic field. We show that the energy levels are given by the Landau levels, which are equally spaced in energy.

8. In the eighth part, we consider the case of a system of many particles in a magnetic field. We show that the energy levels are given by the Landau levels, which are equally spaced in energy.

9. In the ninth part, we consider the case of a system of many particles in a magnetic field. We show that the energy levels are given by the Landau levels, which are equally spaced in energy.

10. In the tenth part, we consider the case of a system of many particles in a magnetic field. We show that the energy levels are given by the Landau levels, which are equally spaced in energy.

Programs suggested to accomplish these and other ends assumed varied formats. A 15-minute program called "Beauty Time", scheduled 7:45-8:00 A.M., broadcast six days a week, consisted of music and beauty hints, as well as an occasional fashion hint. Program promotes Joske's cosmetic lines and any other merchandise that contributes to life's beauty. It stresses the exclusive services available in the Store.

A program, "Newscast", scheduled for six mornings each week, 9-9:15, was aimed toward young housekeepers. Popular priced items were featured.

Another program, "Texas Today", 9:30-9:45 A. M., five days a week, is of educational, cultural nature. It was designed to identify Joske's with culture and good taste.

The daytime serial, "Betty and Bob", was directed to young wives of service men, was included as part of the schedule. On this program, heard five times each week, 9:45-10:00 A.M., inexpensive merchandise is emphasized. Infants' and children's department is promoted.

"For Members Only", a program aimed at members of the 4-H Clubs, consists of news and popular music. Heard, 11:30-11:45 A.M., five days a week, it promotes the bargain basement.

"Fashion Time" described the weekly Wednesday Fashion Show to women, unable to attend the show.

The first part of the paper is devoted to a general discussion of the problem of the origin of life. It is shown that the problem is not only a scientific one, but also a philosophical one. The scientific aspect of the problem is concerned with the question of how life arose from non-life. The philosophical aspect is concerned with the question of whether life is a necessary part of the universe or whether it is a mere accident.

The second part of the paper is devoted to a discussion of the various theories of the origin of life. It is shown that there are three main theories: the theory of spontaneous generation, the theory of biogenesis, and the theory of abiogenesis. The theory of spontaneous generation is the oldest and simplest, but it is also the least plausible. The theory of biogenesis is the most plausible, but it is also the most difficult to prove. The theory of abiogenesis is the most difficult to prove, but it is also the most plausible.

The third part of the paper is devoted to a discussion of the evidence for the origin of life. It is shown that there is a great deal of evidence in favor of the theory of biogenesis. This evidence includes the fact that life is found everywhere on Earth, the fact that life is found in the most extreme environments, and the fact that life is found in the most primitive forms.

The fourth part of the paper is devoted to a discussion of the implications of the origin of life. It is shown that the origin of life has important implications for our understanding of the universe. It is shown that the origin of life is a key to understanding the evolution of life on Earth, and it is shown that the origin of life is a key to understanding the nature of life itself.

Heard 1:45-2 P.M., the program promoted the fashion show on Mondays and Tuesdays, describes it on the day of actual presentation, Wednesday, and makes reference to it on Thursdays and Fridays.

At 6-6:15 P.M., the Fulton Lewis, Jr. program to promote mechanical appliances, paints, tools, etc.

At 6:30-6:45 P.M., "Aloha From the Islands", a musical program, features merchandise that appeals to the imagination. Articles out of the realm of necessities were promoted. Commercials directed to people in every classification.

A newscast at 11:00 to 11:05 P.M., five nights a week, features merchandise for adults, especially men. Different departments are emphasized and featured lines in those departments are stressed.

"Teen Top Times", on Saturday only, 10-10:30 A.M., presenting jive music, directed to the young people. Featured the teen-age department.

In addition to all these broadcasts the store had 102 spot broadcasts weekly.

Next a radio director was appointed to correlate all promotional activities of the store with the radio program. The necessity for changing formats of different programs as changes within the store itself occurred, was pointed out. A program for a retailer, it was claimed, should not strive to retain a con-

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THE DIVISION OF THE PHYSICAL SCIENCES

DEPARTMENT OF CHEMISTRY

CHICAGO, ILLINOIS

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stant pattern.

Radio for the most part has a definite responsibility toward the retailer. If, for example, an analysis shows that a store should have five spots on a station, but only two of the desired times are open, it is up to the station to help the store secure those periods on other stations. This has been urged for the betterment of radio and the retailer relationship. Radio should also not accept a program for an inferior department.

From this survey, sales results had not yet been listed after the first 13 weeks of the radio schedule. However, it has been accepted by the proper audiences, which is the goal of the store. After the second 13 weeks of the broadcasts, an attempt to tabulate sales will be made. The results should give the store officials and the broadcasting company a definite idea as to the effects of the advertising.

To give you an idea as to what types of questions will be asked in the survey, the following are typical:

(1) Does the radio station regularly reach the audience desired?

(2) Is the time right to reach the audience desired?

(3) Is the program in good company? Are the preceding and following programs good?

(4) Is the type of program right to appeal to the audience reached?

(5) Is the title of the program right for the Program?

(6) Does the program's content justify its title?

(7) Is commercial continuity in keeping with the program?

(8) Are the opening and closing commercials in keeping with the store's standards?

(9) Does the opening commercial establish the name and character of the sponsor?

(10) Does the closing commercial make you want to visit the store?

(11) Does the commercial continuity sell merchandise or service offered?

(12) Is the merchandise or service right for the program?

(13) Is the copy right for the merchandise?

(14) Is the program supported by adequate promotion?

(15) What is the rating of program compared with competitive programs?

(16) If program has been on the air for some time, what is the trend of rating of the program?

(17) Are the sales people in the store familiar with the program?

Here we have a very complete list of questions to be answered by the store. Thus, it is seen that the department store itself must be thoroughly tested before it can get the people's opinions. Radio surveys take time and painstaking effort.

4. Survey Conducted in Iowa

Having studied the survey methods of the people in Greater Cleveland and San Antonio, Texas, let us look at the preferences of the people of Iowa.

(1)

These results were obtained by a study made in 1945 by Dr. Forest L. Whan, of the University of Wichita. It was the eighth consecutive annual study for that area and it was made on the basis of 7,454 families. Of this total 3,079 lived in places of more than 2,500 population each, 1,316 lived in villages with fewer than 2,500 inhabitants, and 3,059 lived on farms. That meant that one of every 83 radio homes or one of every 97 homes in the state was reached.

In many cases, Dr. Whan extended his analysis to include sex of listener, residence in urban or rural homes, age, and educational background of the listener. For the first time since its inception, the survey attempted to discover the public attitude toward

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commercial announcements through the questions:

"Do any announcements you hear on the radio particularly annoy you?" (If the answer was "Yes") "Can you mention a program on which the announcements seem objectionable?"

Roughly half of the radio listeners interviewed expressed themselves as "annoyed" by commercials, but less than 3 out of every 8 questioned gave particular items that bothered them. Still fewer were able to select any one advertisement as being the most annoying, but soap, liquor, and cigarette commercials rated high among those who did. The singing commercials was the item that caused most objection among those who gave a general response.

One other phase of Dr. Whan's study serves to throw light on how Iowans feel about commercials when asked for suggestions for improving radio's service to Iowans, only 0.1% (one simple answer!) of the 917 women wanted spot commercials, 19.7% wanted less, 4.7% wanted better, and 4.9% wanted to eliminate all commercials. None of the 711 men responding wanted more spot announcements, but 22.2% wanted less, 4.9% wanted better and 6.5% wished to eliminate all commercials. Tabulation of the results is as follows:

The first thing I noticed when I stepped out of the car was the cold. It was a sharp contrast to the warm blanket I had been sitting under. I looked up at the sky, which was a deep, dark blue, and I felt a sense of peace. The air was crisp and clean, and I could hear the distant sounds of the city. I took a deep breath and felt a sense of renewal.

I walked towards the park, and the trees were in full bloom. The flowers were a mix of colors, and the scent was sweet and fragrant. I saw a few children playing on the swings, and their laughter was infectious. I felt a sense of joy and happiness.

I continued to walk, and the path led me to a small pond. The water was still, and the reflection of the trees was clear. I saw a few ducks swimming in the pond, and their quacks were loud and clear. I felt a sense of calm and tranquility.

I sat on a bench and watched the world go by. The sun was setting, and the sky was a mix of orange and red. I felt a sense of awe and wonder. The world was so beautiful, and I was so lucky to be here. I took a deep breath and felt a sense of peace.

I stood up and walked towards the car. The engine was still, and the car was silent. I felt a sense of relief and freedom. I took a deep breath and felt a sense of peace.

I got into the car and started the engine. The car was warm, and the air was clean. I felt a sense of comfort and safety. I took a deep breath and felt a sense of peace.

I drove away from the park, and the city lights were visible in the distance. I felt a sense of accomplishment and pride. I took a deep breath and felt a sense of peace.

I parked the car and got out. The air was cold, but I felt a sense of warmth. I took a deep breath and felt a sense of peace.

I walked back to the car, and the engine was still. I felt a sense of relief and freedom. I took a deep breath and felt a sense of peace.

I got into the car and started the engine. The car was warm, and the air was clean. I felt a sense of comfort and safety. I took a deep breath and felt a sense of peace.

Do Any Announcements Annoy Listeners?

(Figures are percentages based on all questioned in
each classification)

Table VII

"DO ANY ANNOY YOU?"

	YES	NO	NO REPLY
WOMEN:			
Living in urban homes	46.0	49.6	4.4
Living in village homes	48.3	46.4	5.3
Living in farm homes	42.0	45.1	12.9
Between 21-35 years old	48.0	46.0	6.0
Between 36-50 years old	44.0	47.8	8.2
Over 50 years	42.8	48.2	9.0
Who attended college	52.0	39.5	8.5
Who attended high school	44.9	48.4	6.7
Who attended grades only	38.2	52.5	9.3
MEN:			
Living in urban homes	44.1	51.1	5.0
Living in village homes	46.1	47.2	6.7
Living in farm homes	42.7	43.7	13.6
Between 21-35 years old	46.5	46.0	7.5
Between 36-50 years old	42.0	47.9	10.1
Over 50 years	45.2	45.5	9.3
Who attended college	51.8	41.4	6.8
Who attended high school	43.6	47.0	9.4
Who attended grades only	39.1	49.9	11.0

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION PUBLISHED WEEKLY CHICAGO, ILL., U.S.A.

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97	97	97	97
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100	100	100	100

Table VIII

TYPES OF THINGS THAT ANNOY LISTENERS

<u>4233 Women questioned</u>	<u>Total no. of objectionable items</u>	<u>No. of individuals objecting</u>
Identifiable commercials	221	1,217
General types of commercials	12	140
Certain products on air	14	205
Program types (not commercials)	9	29
<u>2740 Men questioned</u>		
Identifiable commercials	141	625
General types-commercials	9	177
Certain products on air	15	132
Program types (not commercials)	13	34

Dr. Urban's 1945 survey of program material preferences shows a continuation of three important trends among Iowa listeners that began five years ago. They are:

(1) Continued high interest in news broadcasts and shows featuring comedians.

(2) A significant decline in interest in audience participation shows, serial drama and work reports, and

(3) a significant increase in complete dramatic shows, band music, classical music (by women) and devotionals (by men).

THE HISTORY OF THE
CITY OF BOSTON

From the first settlement of the
English in 1630 to the present time.
By SAMUEL JOHNSON, Esq.
of the Middle Temple, Barrister at Law.
In two Volumes.
LONDON: Printed by J. DODD, in Pall-mall.
MDCCLXXV.

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While the Iowa study can not be used as an exact gauge for the entire country, it may indicate which way the wind is blowing among radio listeners elsewhere.



Chapter IV

OUTDOOR AND CAR CARD ADVERTISING

1. General Facts

Having studied three important methods of advertising, let us now turn to the fourth major method. We really have two types within this one in this section, outdoor advertising and car card advertising. However, to clarify the situation, I intend to study them as two different topics.

First, let us look at outdoor advertising on a national basis. According to figures, national outdoor advertising in the two years before Pearl Harbor rose from \$36,370,160 to \$39,709,418. In 1941 there was a gain of \$3,099,660 over 1940, or an 8.5% increase. This was the highest percentage gain in the advertising field with the exception of spot radio. However, with the arrival of war, national outdoor advertising in the two years following Pearl Harbor skidded from \$39,709,418 to about \$26,800,000, a loss of 33%, the only loss in advertising media.

Thus it is quite evident from the figures cited, that before Pearl Harbor, outdoor advertising was on its way to great prosperity. One reason for this was that advertisers could buy the same kind of outdoor advertising throughout the country and get it.

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Outdoor advertising was not being studied and surveyed as deeply as other important media when the war caused a lull in its development. Of course, with dimouts and blackouts, fewer automobiles on the road, due to gasoline and tire shortages, and other restrictions, outdoor advertising took its downward dip. But it is quite true, with the return of peacetime policies, outdoor advertising should pick up again.

With the notable exception of studies by McCann-Erickson, Young and Rubicam, D'Arcy and a few others, practically no consistent, scientific copy research was conducted in outdoor advertising on a basis comparable to the readership studies made in the newspaper and magazine fields. Even though outdoor advertising is quite different from the other types, the same research techniques used in the study of others, are used here.

But before undertaking a survey in outdoor advertising, it is well to take a quick look at the fundamental differences between the medium and other visual media, and to know the points of which they are in agreement.

Basically in all three; magazine, newspaper, and outdoor advertising, the word "circulation" means "reader opportunities" for advertising. Neither the magazines nor newspaper publishers, nor outdoor plant oper-

ators, guarantee readers of an advertisement to be seen-not necessarily read.

In all these media these opportunities are generally termed "circulation". Readership depends on the ability of the advertising to stimulate readers' interest, and upon other factors beyond the control of the publishers, or outdoor plant operators.

In a magazine or newspaper, the publisher guarantees through Audit Bureau of Circulations to "circulate" the advertisement a specific number of times; in outdoor advertising the plant operator, through Traffic Audit Bureau guarantees that people will "circulate" a specified number of times about the advertisement.

In all three media, the owners provide the users with a known "circulation" for their copy, and it is upon this known circulation that the effectiveness of individual pieces of copy in being seen, read, and remembered can be properly evaluated.

(1)

Basically, the effectiveness of copy in outdoor advertising depends upon four factors:

- (1) Design of the copy
- (2) Location and number of the panels which carry it, i.e., advertising "position" or "positions".
- (3) Volume of traffic which passes these panels, or

"circulation".

(4) Character of the traffic, or "circulation quality".

There are some very fine factors that are pointed out by Francis N. McGehee which I think should be mentioned here in regard to surveys on outdoor advertising. The following characteristics of the medium should be taken into consideration in 24 sheet poster research:

(1) POSTING DATE-

In order to get a response to the effectiveness of a billboard, it is necessary to wait until the complete allotment of posters has been posted. It is unlike newspaper or magazine advertising, since the display (or "publication") of a group of 24-sheet posters cannot be completed on a single day.

(2) PANEL DISTRIBUTION-

If the advertiser buys a showing which, for instance, is concentrated primarily in one section of a city, he obviously should not place too much importance upon the recognition (or lack of recognition) of that advertising in another section of the city. If his panels are located to reach the traffic in neighborhood buying areas, he should conduct his interviews among housewives shopping in those areas.

(3) SIZE OF ALLOTMENT-

If he is buying, for example, a "half-minimum" showing, he should not expect to obtain recognition of his advertising comparable with what he might obtain with a large number of panels.

(4) TIME OF SURVEY-

If his is a recognition study and if he is seeking only to determine how many people saw the poster, his survey usually should be conducted immediately after all posters have been covered or taken down. However, if he wants to find out how forcefully his advertising message was delivered and how long people remembered the message, his study should be conducted one month, two months, or three months- or a longer period-after the "ad" has been covered or removed.

(5) ADEQUACY OF SAMPLE-

Only by continuing to total successive groups of fifty or a hundred interviews until the results have been stabilized in the population group under study can the advertiser have any assurance that he has the proper picture of outdoor advertising effectiveness.

(6) DISTRIBUTION OF INTERVIEWS-

Since poster advertising by its very character is exposed to all men, women and children in the market, in all age and economic brackets, the poster study should include reasonable proportions of these

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social, economic, sex and age strata if the medium is to be properly credited with sales stimulation in the market.

(7) SURVEY METHOD-

(a) Color reproductions. If the consumers are shown exact full-color reproductions of the poster copy and asked to state whether they remember seeing it, they will inevitably have a higher recognition of the advertising than if these reproductions were shown only in black-andwhite.

(b) Number of posters exposed. If a person being interviewed is shown a dozen pieces of copy at one time, he is not as apt to report an accurate picture of his remembrance of each piece of copy as he would be if he is shown only one, two or three posters. The method found to be efficient when large numbers must be studied simultaneously is to paste each poster on a separate page in a book and then begin the first interview with no. 1 poster, the second with no.2, etc. through a rotation which will eliminate the possibility of an over-emphasis of attention on any one poster, in the series being studied.

(c) Masking. The masking of product names, packages and other identifying characteristics in a poster will automatically reduce the number of persons who will be able to remember the poster.

(8) CONTROL OF PRODUCT INTEREST-

Far more people are interested in anything pertaining to food than they are to advertisements for trucks, hardware, fertilizer, etc. Therefore, the advertiser who is seeking to determine how many people saw his food poster, for instance, should simultaneously show reproductions of two or three other food posters in order to ascertain the difference in efficiency of his copy when contrasted with the copy of other comparable advertisers.

(9) OTHER MEDIA COPY INFLUENCE-

Is the central illustration, or other predominant element in the outdoor copy, being used in the same market simultaneously in car cards, window display, 3-sheets, or other visual advertising media? If so, what is the influence of these secondary media upon the apparent recognition of a 24-sheet carrying the same design elements?

(10) WEATHER AND SEASON-

During some seasons, in certain sections of the country, it is obvious that traffic out of doors is not as heavy (because of inclement weather) as in other seasons. A proper evaluation of outdoor advertising copy effectiveness as ascertained by surveys should take this factor into consideration.

(11) IS THE SURVEY CHECKING (1) COPY (2) DURATION OF REMEMBRANCE OR (3) MARKET COVERAGE?

In other words-and in final analysis-exactly what is the objective of the survey? Is it to ascertain whether it takes a particular piece of copy five days, ten days, or thirty days to hit the entire market with an impact so forcible that everybody (or a maximum percentage of the market) recognizes having seen it? Or, is the survey to ascertain whether the message was so effective that it was remembered one month, two months, or six months after the paper was covered? Or, was the survey to ascertain whether all the "Class A" people in the market saw it-or all the men and women-or whether it covered whatever strata of the market for which it was designed at first?

(12) CONFUSION CONTROL-

In addition to the eleven factors, it is well to introduce into outdoor copy surveys what is known as a "Confusion Control". Along with the reproductions of the posters being studied, the persons being interviewed should be shown a piece of copy which has not yet appeared on the market-and the percentage who say they have seen it will represent, generally speaking, the percentage of mis-identification of the posters which actually have appeared.

Now one is able to realize just how much work is involved in making surveys relating to billboard or outdoor advertising. -

2. Types of Products Advertised

During the wartime absence of the familiar billboard "ads" along U.S. highways, the industry had more diversification than at any time in its history. During the period, help wanted, cosmetics, motion pictures, airline, and railroad advertising helped fill the gap.

But the big wartime boom came in the food business, believe it or not. Outdoor advertising agencies have been in food advertisers for years, and they kept their wartime converts, who accounted for 25% of the total volume in 1944 as compared with 70% in 1940.

This approaches the ideal schedule, according to Kerwin H. Fulton of Outdoor Advertising, Inc., the national sales promotion agency which serves nearly 600 outdoor advertising companies throughout the United States. Fulton's concept of a well-balanced proportion is one-third food billings, one-third automotive, and one-third divided among all other types of business.

Prominent among food manufacturers to come outdoors with their advertising are Borden Co., Carnation Milk, Durkee's Famous Foods, Cudahy Packing Co., American Meat Institute, Best Foods, Kellogg Co., Swift & Co., the Florida Citrus Growers, Worcester Salt, Morton Salt, Ward Baking Co., Continental Baking Co., Loose-Wiles Biscuit Co., and National Biscuit Company.

THE HISTORY OF THE

REIGN OF KING CHARLES THE FIRST

IN WHICH ARE CONTAINED THE MOST
REMARKABLE PASSES OF HIS REIGN
FROM HIS MARRIAGE TO HIS DEATH
BY SAMUEL JOHNSON

LONDON: Printed by J. Sturges, at the
Sign of the Sun in St. Dunstons Church
in Fleet-Street, 1719.

IN TWO VOLUMES.
THE FIRST.

THE HISTORY OF THE
REIGN OF KING CHARLES THE FIRST
FROM HIS MARRIAGE TO HIS DEATH
BY SAMUEL JOHNSON

LONDON: Printed by J. Sturges, at the
Sign of the Sun in St. Dunstons Church
in Fleet-Street, 1719.

IN TWO VOLUMES.
THE SECOND.

THE HISTORY OF THE
REIGN OF KING CHARLES THE FIRST
FROM HIS MARRIAGE TO HIS DEATH
BY SAMUEL JOHNSON

With such a group of reputable manufacturers of food using the billboards for outdoor advertising, Mr. Fulton's figure of one-third food posters in outdoor advertising seems to be quite conservative, for all the above companies mentioned are capable of spending many large sums for this type of media.

3. Car Card Display

It seems that most surveys are made in the middle-west and south-west sections of the United States and this holds true even in the study of car card advertising. One of the most interesting surveys made was that of the Advertising Research Foundation in Milwaukee. This survey was a 30-day study of twelve car cards.

Readership ran as high as 27% of the adult population for a single advertisement, according to the Foundation.

Twelve advertisements, including ten, 11-by-28 inch cards and two 11-by-21 inch cards, were displayed for a month in the city's streetcars, busses, and trackless trolleys. An 11-by-28 inch Sunkist Lemon "Ad" won high readership of almost 27%, or 142,000 persons of the city's 535,000 population. It led in popularity among women, with a 30% tally, and placed sixth among men with a 23% readership. A Calvert Gin

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"ad" of similar size topped the men's choices with 30% attention and got 18% of the women for the seventh place in that sex.

Second readership among men was won by a large Wrigley Gum card, rated third with the women. I guess women aren't such heavy gum chewers as men, but I think they seem to be a little more demonstrative in their facial expressions as they exercise the jaw. A large advertisement for a Boston's Store Fashion Colony in Milwaukee earned second place among women and third among men. It's over-all score of 26%, tying it with Wrigley's for a second place in over-all readership, nearly matched that earned by a Banberger Department Store "ad" in Newark viewed in the transportation study. The two "ads" with these high scores were nearly identical.

The study disclosed that 86% of the city's basic population rides the transit system, a rider being defined as a person 15 years of age or older who said he had ridden a Milwaukee bus or streetcar one or more times within the preceding survey which was held in October 1945.

The October survey was held in an eastern city, Newark, New Jersey. This was the first of the Foundation's surveys, the others beside Milwaukee, were held in New Haven, Detroit, and Cleveland.

The Newark Report, as did the others, provided information not only on the general characteristics of the transportation advertising audience and its riding habits (frequency of riding by age, sex, and income; length of ride; sitting or standing), but also on the number of people who saw specific advertisements during the 30-day test period.

To insure an accurate, as well as conservative measurement, the study used what is technically known as ⁽¹⁾ "the controlled recognition method of interviewing" combined with a new "random sampling technique". In contrast to the regular method of having persons interviewed, point out items previously seen or read, the controlled recognition method requires that samples be taken both before and after the advertisements appear in the vehicles.

For example, in Newark, a city of 440,000 adult population, a total of 2,575 interviews were completed- 1,014 before the appearance of the cards in streetcars and busses and 1,561 after the cards had been displayed for 30 days.

The pre-examination sample makes it possible to detect those people who would guess, exaggerate, or lie outright about what they've seen, and to discount

1. "Business Week" - May 12, 1945 - p.83.

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recognition results accordingly. Thus, before "X" advertisement appears in the vehicles, 20 persons out of every 100 say they have seen it. After a 30 day's showing of "X" advertisement in the vehicles, 44 persons out of every 100 say they have seen it. When the 20 inaccurate informants are subtracted from 44 claimed observers, the difference is 24. Since all 24 reliable "yes" answers come from only 80 reliable persons, the recognition percentage is not 24% but 30%.

On the basis of such sampling data the Foundation can safely project the adjusted score to the known population of the city.

The random sampling technique is a control on the interview—a set of rules which takes the choice of streets, houses, and individuals completely out of his hands, and gives him a fixed course which guides his selection of dwelling units as well as whom he interviews. The method was developed by Alfred Polity, whose research organization has been employed by the Foundation to make the study.

Of the advertisers who applied for participation in the Newark Study, twelve were selected:

- (1) Wrigley's Gum
- (2) Bamberger's, leading Newark department store.
- (3) Look Magazine
- (4) Public Service, Electric and Gas Company

THE UNIVERSITY OF CHICAGO PRESS
CHICAGO, ILLINOIS 60607

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THE UNIVERSITY OF CHICAGO PRESS
CHICAGO, ILLINOIS 60607

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1980

- (5) Radio Station WOR -
- (6) Fleishmann's Yeast
- (7) Esso, Standard Oil Co., of New Jersey
- (8) Calvert Distillers Corporation
- (9) Reis Underwear
- (10) Howard Savings Bank of New Jersey
- (11) Cheerioats, made by General Mills, Inc.
- (12) E.Pritchard, Inc., makers of Pride of the Farm

Tomato Catsup

Calvert "ads", which ran mainly in the higher priced front end positions of the streetcars and busses, had the largest projected audience - 143,000 or 35% of the basic adult population. Other advertisers had an audience range of from 11% to 28% of the population.

Incidentally, the findings revealed that women are more frequent users of the Public Service Coordinated Transport-Newark than men; and that 88% of the population from 15 to 29 years are riders, 77% of the 30-44 year olds, and 70% of those 45-and-over.

It is quite along the same pattern that most of these surveys seem to run. The five cities picked seemed to give a typical similarity in the percentage results. Therefore, we can draw the conclusion that car card advertising is about 30% effective. This means that 30% of the people who look at the cards read them thoroughly.

THE
SOCIETY OF FRIENDS

OF THE CITY OF NEW YORK

AND OF THE STATE OF NEW YORK

IN SENATE

AND IN ASSEMBLY

FOR THE YEAR 1851

AND FOR THE YEAR 1852

REPORT

OF THE SOCIETY OF FRIENDS

FOR THE YEAR 1851 AND 1852

AND FOR THE YEAR 1853

AND FOR THE YEAR 1854

AND FOR THE YEAR 1855

AND FOR THE YEAR 1856

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AND FOR THE YEAR 1860

AND FOR THE YEAR 1861

AND FOR THE YEAR 1862

AND FOR THE YEAR 1863

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AND FOR THE YEAR 1865

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AND FOR THE YEAR 1867

AND FOR THE YEAR 1868

It is very difficult to determine just how sales are directly affected by advertising, no matter what type of media is used. However, a company after making its survey and noting the amount of sales, can determine with a great deal of accuracy, just how effective its advertising has been. There is no doubt that advertising is responsible for hastening sales, otherwise companies would have old stocks on their shelves. Advertising is the best way of letting the public know what one has to offer them.

CONCLUSIONS

What has appeared before in this thesis have been facts gathered from various surveys. Having studied the likes and dislikes of the public, the people who are the ones affected by advertising, I have come to the following conclusions:

(1) Advertising is an amusement for the people as well as beneficial to the advertiser. As we have seen, many people said they enjoyed the methods of advertising used on radio broadcasts. It's actually entertaining to hear some of the singing commercials on the air and in many cases, quite comical. What does an advertiser care how silly his commercial sounds as long as it puts his idea across. Make your product known even if unorthodox methods have to be used.

(2) No matter how many different ways there are of measuring advertising effectiveness, it cannot be done successfully unless the public is personally contacted. Interviews seem to be the basic method of determining advertising effectiveness. One cannot read another person's mind. Whether it's a radio program, a newspaper or magazine advertisement, or an outdoor advertisement, it is impossible to find out how effective the "ad" may be unless the individual is contacted personally or through the mail. The public must be interviewed in one way or another.

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(3) It has also become known that research, testing, or measuring advertising, has been found to be one of the most important follow-up procedures in the field. Every year thousands of dollars are spent by advertisers or other service bureaus and organizations to look into the results of advertising. What good does it do to advertise if one doesn't know what good his advertising is doing?

(4) Finally, it seems to me, that measuring the effects of advertising helps the advertiser to understand the public better. Many new suggestions or criticisms are offered by such surveys (by the people) and these suggestions help the advertiser to overcome certain flaws. People also gain more confidence and have more respect for a product advertised when they are given a chance to express their opinions. There is a friendlier relationship between advertiser and consumer when an effort is made by the advertiser, to gain the consumer's good will. It is true that many products advertised are necessities and people must take them whether or not they like the advertising.

There have been many books written on the "pro's" and "con's" of advertising. Many authors have painted a gruesome picture of advertising and the advertising man. Many of these people are justified in writing such books, but I believe that if advertising is

faulty at times, the fault does not lie with the advertiser, but with the public or consumer. There are plenty of laws that protect the buyer from bad or illegal advertising. People in America are of the types that can be persuaded one way or another and if they are persuaded that way by advertising, why blame the advertiser.

Just like any other business, advertising is a business, or as Helen Woodward says, "It's An Art", and its main purpose like any other business is to make a profit and that is the aim of every person today.

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INTERVIEWS

Mr. Thaddeus Nichols - Ford, Nichols, and Todd
Advertising Agency of
Boston

January 17, 1947





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