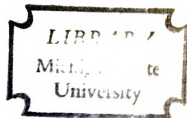


THE EFFECTS OF OBSERVABLE AUDIENCE RESPONSE
ON ATTITUDE CHANGE AND SOURCE CREDIBILITY

THESIS FOR THE DEGREE OF PH.D.
MICHIGAN STATE UNIVERSITY

C. G. HYLTON

1968



This is to certify that the

thesis entitled

THE EFFECTS OF
OBSERVABLE AUDIENCE RESPONSE
ON ATTITUDE CHANGE AND SOURCE CREDIBILITY

presented by

Carroll G. Hylton

has been accepted towards fulfillment
of the requirements for

Ph. D. degree in Department of Speech

William B. Foshburn

Major professor

Date November 22, 1968



ABSTRACT

THE EFFECTS OF OBSERVABLE AUDIENCE RESPONSE ON ATTITUDE CHANGE AND SOURCE CREDIBILITY

by Carroll G. Hylton

This study sought to identify, manipulate, and measure the effects of a new variable in the one-to-many communication event. It was postulated that the perception by audience members of the feedback of others could influence audience attitude.

Feedback has usually been viewed as a receiver-source loop or interaction. A process view of communication, when applied to the one-to-many communication event, would call for a consideration of intra-audience interaction. Such a consideration resulted in the conceptualization of a receiver-receiver loop that was designated observable audience response. The study presented a heuristic model demonstrating how observable audience response could be incorporated into the one-to-many communication event. The literature on feedback, research in other areas such as social facilitation, conformity, and imitation, from which support for the concept can be extrapolated were discussed.

Considerations of the concept and the literature resulted in the formation of a set of experimental



hypotheses and the design for their test. It was hypothesized that observable audience response would change attitude toward a message topic and toward a speaker. Three treatments were employed. Two consisted of conditions in which coached confederates supplied either positive or negative feedback during the presentation of a speech advocating federal control of education. The third treatment was one in which no effort was made to manipulate audience response. A control group received pre and post-tests of attitude toward message. Ss attitudes toward both message and speaker were measured.

Data were analyzed by means of analysis of variance and t-tests for both within-group and between-group differences. Although some individual hypotheses were not supported at the .05 criterion set, the overall results supplied evidence supporting the major predictions of the study.

In addition to attitude measures bearing on the a priori hypotheses of the study, two secondary analyses were performed, supporting the assumptions that (1) the control for the experiment was adequate, and (2) the independent variable was operating in the experiment.

The study was discussed in terms of the implications of its design, the major findings, and the possible future research growing out of both the secondary and major analyses. The failure to support some of the



hypotheses was interpreted as (1) an indication, in some instances, that control was adequate, and (2) that positive feedback may be a stronger intra-audience stimulus than negative feedback.

The study was concluded by discussing the reservations that should be observed in generalizing from the results; and consideration of the implications of observable audience response for the communication process.



THE EFFECTS OF
OBSERVABLE AUDIENCE RESPONSE
ON ATTITUDE CHANGE AND SOURCE CREDIBILITY

by

Carroll G. Hylton

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Speech

1968

TO THE HONORABLE
MEMBERS OF THE HOUSE OF REPRESENTATIVES
OF THE STATE OF NEW YORK

AND

OF THE SENATE

REPORT

OF THE
COMMISSIONERS OF THE LAND OFFICE
IN ANSWER TO A RESOLUTION
PASSED BY THE SENATE
MARCH 18, 1884

ALBANY: J. B. LEECH, 1884.

Printed by J. B. LEECH, 1884.

1884

ACKNOWLEDGEMENTS

Many people have contributed to the completion of this study. My sincere thanks go to Dr. William B. Lashbrook and Dr. James C. McCroskey, the co-directors of this thesis. Their advise and encouragement have gone far above and beyond the call of duty.

My gratitude goes, as well, to Dr. Kenneth G. Hance, Dr. Gordon Thomas, and Dr. Hal Walsh who first contributed to my education in the classroom and later provided valuable help as members of my guidance committee.

I am indebted to colleagues and students at San Jose State College for generous contributions of time and effort at various stages in the preparation of this paper. Thanks are due to the staff of the Department of Speech-Communication for their assistance in securing experimental subjects. My appreciation goes to colleagues in other departments, especially Bob Clarke and Joan Bailey; and to the many students who have helped, especially Linda Squires, Jennifer Benedict, Enid Layes, and Ken Yules.

To my good friend and colleague, Ted Benedict, I owe much more than I can say. His efforts on my behalf have made a major contribution to this study.

To Ruby, Mike, and Laura I am grateful for their faith and patience.



TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
LIST OF TABLES	iv
LIST OF APPENDICES	v
I. INTRODUCTION	
General Statement of the Problem	1
The Feedback Concept	2
The Feedback Literature	4
Observable Audience Response Model	11
OAR and Other Variables	13
Hypotheses Tested	20
II. METHOD	
Procedure	24
Experimental Design	41
III. RESULTS	
Elimination of Ss and Data	44
Secondary Analysis: The Independent Variable	45
Secondary Analysis: Control	54
Major Analysis	56
Summary of Results	65
IV. DISCUSSION AND CONCLUSIONS	
Design Implications	68
The Hypotheses	70
Future Research on the Effects of OAR	81
Some Necessary Reservations	88
Significance of the Research	92
REFERENCES	95



LIST OF TABLES

Table	Page
1 Three Treatment Experimental Design	42
2 Factor Scores for Sp and ARs Rating the Concept "This Audience" for 3 Experi- mental Conditions	48
3 Analysis of Variance Summary of Pre-test Scores for Experimental and Control Ss . .	55
4 Analysis of Variance Summary of Post-test of Attitude Toward Message for PR, FR, NR, and CG	56
5 Pre and Post-test Mean Scores for Attitude Toward Message Topic and Speaker for 3 Experimental Groups and Control Group. .	64



LIST OF APPENDICES

Appendix		Page
A	Instructions to Ss Preceding Pre-test . . .	100
B	Pre-test Questionnaire	101
C	Speaker's Introduction	104
D	Post-test Questionnaire	105
E	Experimental Speech	112
F	Comparison of Speaker's and ARs' Audience Ratings	127



CHAPTER I

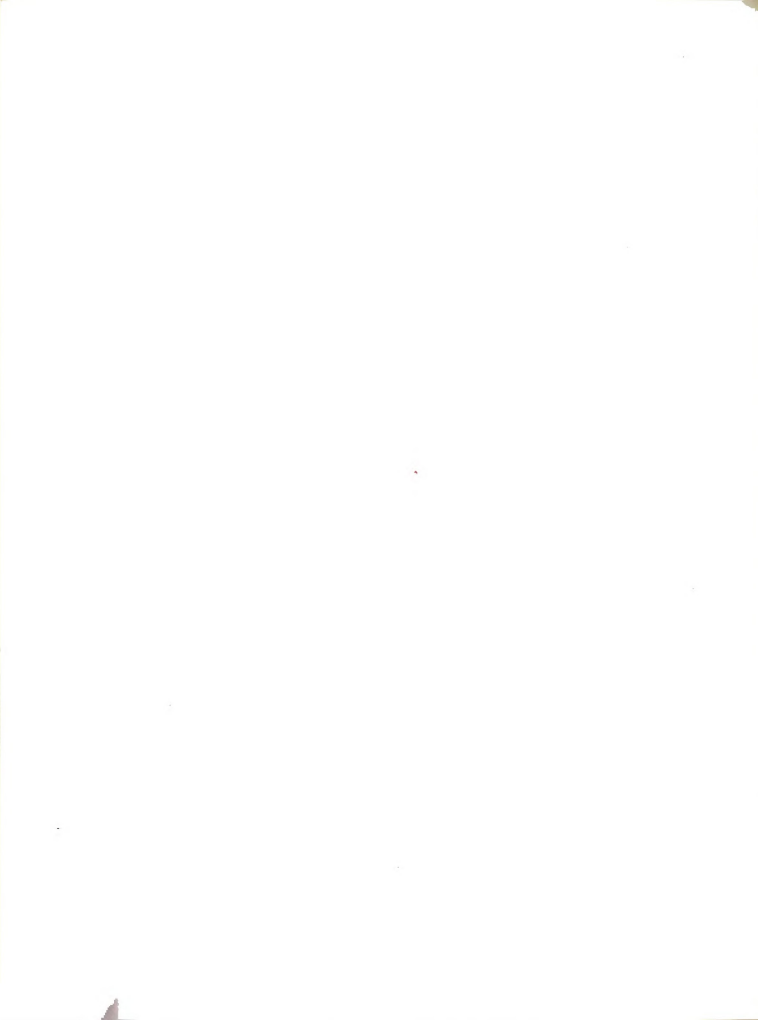
INTRODUCTION

General Statement of the Problem

During the past two decades an increasing number of communication scholars have come to adopt the "process" view of communication. This view holds that all elements of the phenomenon are interdependent and interacting; that to view various elements in isolation is to falsify the event.

Among others, Berlo (1960) argues for the necessity and desirability of taking this process view. One of the crucial elements in the adoption of this position is the recognition that communication is not a one-way process; i.e., messages do not move just from sources through channels to receivers in a one-way flow. Messages move from receivers to sources as well, and this two-way process goes on simultaneously in the face-to-face communication event. Such a receiver-to-source flow has been labeled "feedback."

Communication scholars have recognized the usefulness of the concept of feedback in explaining and predicting communication behavior. In the past few years an increasing number of "feedback studies" have been conducted. Investigators, for the most part, have been interested in observing the effects on sources of varied



receiver or audience response. Such observable response, or feedback, also needs to be examined with a view toward determining its effect on members of the audience providing the feedback.

We need to designate this phenomenon by a name other than "feedback" because we are no longer talking about a receiver-source loop, but rather a receiver-receiver loop. Let us call this receiver-receiver loop observable audience response. We will discuss it in detail later in this chapter when we present a model for one-to-many communication.

The purpose of this study is to test hypotheses which predict the effects of observable audience response on attitude change and source credibility.

The following sections of this chapter will (1) examine in more detail the feedback concept, (2) discuss some of the pertinent research in the area, (3) present a model illustrating the interaction of observable audience response with other elements in the communication process, (4) consider various classes of variables with which observable audience response might interact, and (5) present the hypotheses tested in this study.

The Feedback Concept

There has been considerable speculation, examination and experimentation dealing with the notion of feedback. Some writers credit Wiener (1948), others Ashby (1952),



with the development of the concept in terms of human communication. Certainly either or both of them were familiar with the work of such electrical engineers as Nyquist (1924), who began to use the concept in theoretical formulations involving mechanical communication.

Cherry (1957) writes:

. . . the first mechanical treatment of the stabilization of a dynamic system by feeding information signals back from the output or "receiver" end to the input or "transmitter" end was made by H. S. Black in a study of electrical feedback amplifiers in 1934, and later developed largely by the efforts of Nyquist and of Bode, into an exact mathematical method and system of design. (p. 56-57)

Johnson and Klare (1962) use the term "feedback analogy" in describing the uses to which the term has been put and some of the "contradictions" between disciplines and writers in their different references to feedback. For those interested in interpersonal communication the concept is indeed used analogically. Engineers become disturbed when they hear some sociologists, social-psychologists, et al talking about feedback and reinforcement synonymously, and using the terms positive and negative in ways quite different from the engineers' usual use.

Therefore, we will talk about feedback as a receiver-source loop which is operating simultaneously with the "normal" source-receiver message. In a face-to-face communication event, the source presents a message to a receiver (or receivers), the receivers may react to that



message both overtly and covertly, i.e., in addition to non-observable responses they may smile, frown, nod, laugh, groan, sit quietly, stare intently - at the source, each other, or out the window - etc. Such responses, observed by the source, are feedback. When a source responds to these receiver behaviors, we have an interaction that affects the message.

Behavioral scientists (like Berlo, |1960|) talk about positive and negative feedback in a way that is synonymous with reward and punishment. We will use this latter meaning. In a face-to-face communication event, when receivers engage in behaviors which the source interprets as punishing (e.g., frowns, head shaking, lack of attention, etc.) we have negative feedback. When receivers engage in behaviors which the source finds rewarding (e.g., smiles, head nodding, enthusiastic applause, etc.) we have positive feedback.

The Feedback Literature

Earlier we talked about feedback as a receiver-source loop. We also pointed out that it is sometimes talked about as reinforcement. The behavioral science literature is abundant with studies which examine the effects of manipulating various kinds of feedback and/or reinforcement, under varying conditions, as well as various characteristics of those generating such



feedback.¹

Before examining some of these studies we should understand that feedback has been treated almost exclusively as an independent variable. Investigators have manipulated feedback and measured changes in communicators. Such changes are then attributed to the type of feedback, the amount of feedback, or the source of the feedback. Feedback type might be positive or negative; amount could be varied from no feedback to much feedback. The source of feedback could vary in terms of prestige, i.e., it might come from a liked person or a disliked person, etc.

What are the possible effects of feedback in terms of these three categories (type, amount, and source)? We might, for instance, measure (take as our dependent variable) oral delivery. As we manipulate type, amount, or source of feedback we are interested in such things as fluency. Miller, et al (1961), manipulated type of feedback, specifically reward and non-reward, during the presentation of a speech. They measured fluency and speaking rate. Their manipulation of feedback resulted in significant differences in speakers' fluency but not

¹See for example such studies as: Leavitt and Mueller (1951) who varied amount of feedback and measured such dependent variables as accuracy and time; Miller, et al (1961) who were interested in varying feedback and measuring the effects of such variance on speech patterns; Stoltz and Tannenbaum (1963) who varied feedback in order to measure effects on oral encoding; Amato and Ostermier (1967) who varied feedback in order to note effect on eye contact, nervousness, bodily movement and fluency.



in speaking rate. Later, Miller (1964) manipulated type of feedback using three types: approving, disapproving, and neutral. Once again, fluency and rate were the dependent variables. There were nine treatment conditions, and the data indicated that speakers' fluency and rate were not significantly influenced by the responses to his speech.

Vlandis (1964) conducted a similar experiment. Whereas Miller, et al (1961) and Miller (1964) had utilized confederates in order to measure the effects on their Ss of feedback which differed or agreed with that which the Ss received, Vlandis, on the other hand, simply varied type of feedback between Ss during their presentation of speeches. The two conditions (reward and punishment) consisted of Ss receiving the word "yes" or the word "no" throughout the presentation of the speech. Again, the dependent variables were fluency and rate. The findings indicated significant differences for both variables between the two treatments.

Amato and Ostermier (1967) provided Ss with two types of feedback, neutral and unfavorable, in order to analyze effects on delivery of both oral and visual kinds. Specifically, the dependent variables were: eye contact, nervousness, bodily movement, and fluency. Their data supported the hypothesis that unfavorable feedback prompts a deterioration in speaker delivery. Their study differed from the previously mentioned ones in several



ways; however, for our purposes, an important difference is that the speakers received feedback from more than one person, i.e., Ss presented speeches to an audience. In addition, Ss were receiving what was probably perceived as "peer feedback" as opposed to "authority-figure feedback." The latter label is used to describe the Miller et al, Miller, and Vlandis studies.

Numerous studies have been conducted in "verbal conditioning." In the majority of them reinforced behavior has been changed significantly in the hypothesized direction. Experimenters have used verbal reinforcers such as "mmm hmmm," "good," "right," "fine;" non-verbal reinforcers such as lights, buzzers, head nods, smiles. Ss have been conditioned to increase (or decrease) the use of selected terms, engage in selected movement responses, and vary rate.²

The studies we have considered to this point have varied type of feedback. We have suggested that amount of feedback could be manipulated as well. Considerable work has been done in small group research, specifically in ascertaining the effects of various communication networks. In these studies restricted networks have been created and such dependent variables as accuracy, hostility-friendliness, time, etc. have been affected by the withholding or limiting of feedback. Early work in restricted

²For a summary of results of "verbal conditioning" studies see Krasner (1958); Berelson and Steiner, (1964).



networks was done by Leavitt and Meuller (1951) and Thibaut and Coules (1952).

The familiar circle, chain, Y, and wheel communication networks have been explored by many, perhaps the best known work being that of Bavelas (1948) (1950) (1952). Here feedback has been restricted or directly manipulated in order to determine effects on task speed, role perception, etc.

Before many questions concerned with amount of feedback can be answered we will have to quantify feedback in some more rigorous manner. Information theory may suggest some possibilities, as may extrapolations from Asch's work in conformity (especially those studies in which number of confederates was varied in attempts to arrive at an optimum number which would ensure maximum conformity).³

Source of feedback, as a variable, has been investigated in various communication situations. The majority of studies which bear on this manipulation have likewise been conducted in small-group research.

Collins and Guetzkow (1964), summarizing the results of studies examining communication content, where status has been manipulated, conclude:

³These studies followed the more well-known ones popularizing conformity. See S. E. Asch, "Effects of Group Pressure Upon the Modification and Distortion of Judgments," in E. Maccoby, T. Newcomb and E. Hartley, Readings in Social Psychology 3rd ed. (New York: Holt, 1958), 181.

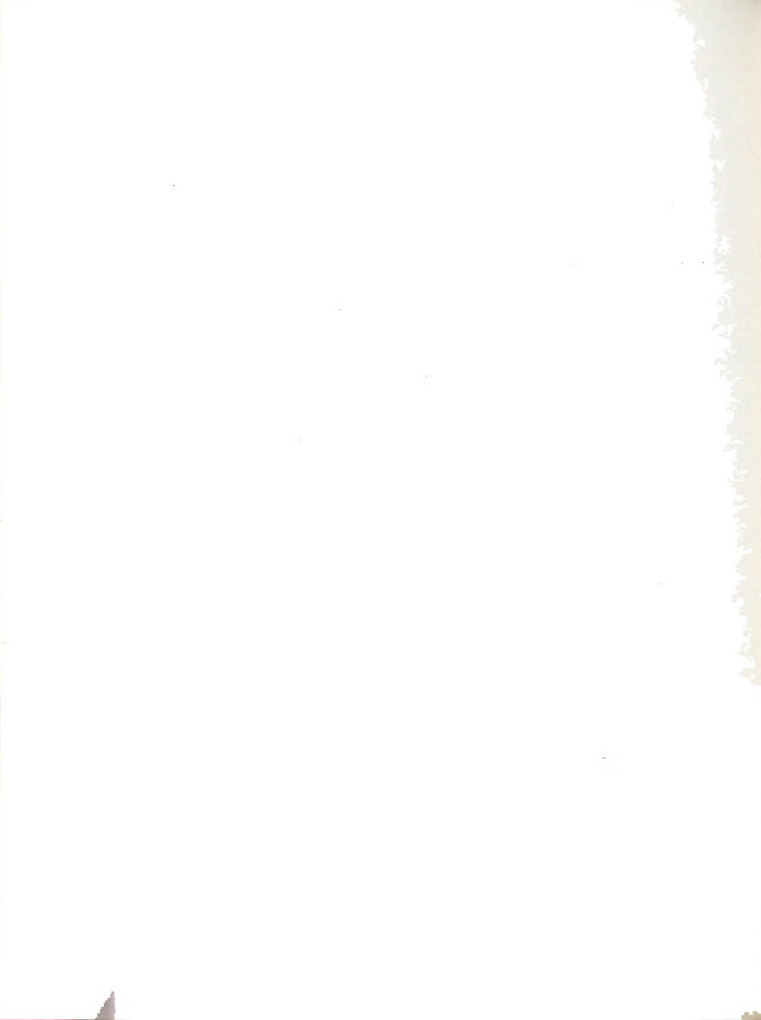


The content of communication from low to high power-status persons will depend on what the low status person has learned is more likely to obtain reinforcement. (p. 176)

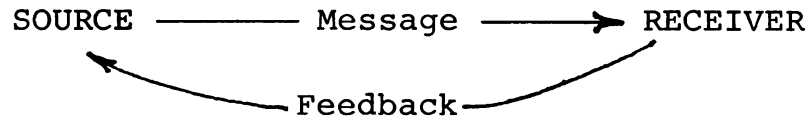
Such investigators as Kelley (1951), Campbell (1958), and Cohen (1958) lend support to the above proposition.

Returning to experiments in verbal conditioning, we find additional data that have implications for source variation in feedback. Sopolsky (1960) manipulated experimenter variables such as age, sex, social status, and prestige in order to observe their effect on Ss' receptivity to conditioning and found significant differences between Ss who perceived their experimenter as compatible and those who did not. Maccoby, et al (1961), presented Ss with information regarding child training and then measured Ss preferences for interaction. Ss chose to interact with those who reinforced their (Ss') opinions.

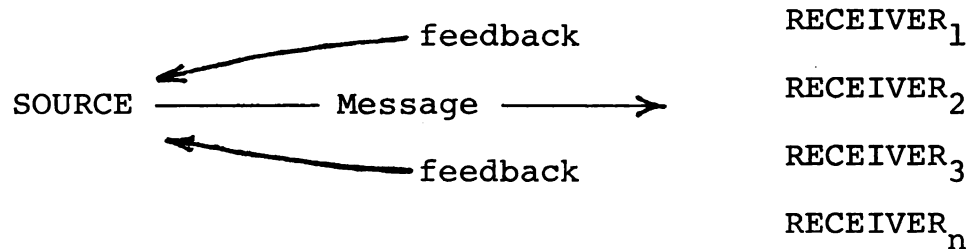
Recalling our original question: "What are the possible effects of feedback in terms of type, amount, and source?" we have seen that these effects have been examined as they change a S's delivery, his speed in completing a given task, his perception of role, his message content, his attitude toward another, and his desire to communicate. The investigations noted, as well as the areas exemplified by them, have (1) been concerned with feedback as cause and a variety of other phenomena as effects, and (2) rest on the single-source



single-receiver model.



Now let us consider the public speaking situation. Here we have a "one-to-many" communication event. One source presents a message to many receivers. The Amato and Ostermier study, mentioned previously, consisted of this kind of communication situation, which could be pictorialized as follows:



Their concern was the manipulation of feedback (neutral and unfavorable) in order to observe its effect on source's eye contact, body movement, etc.

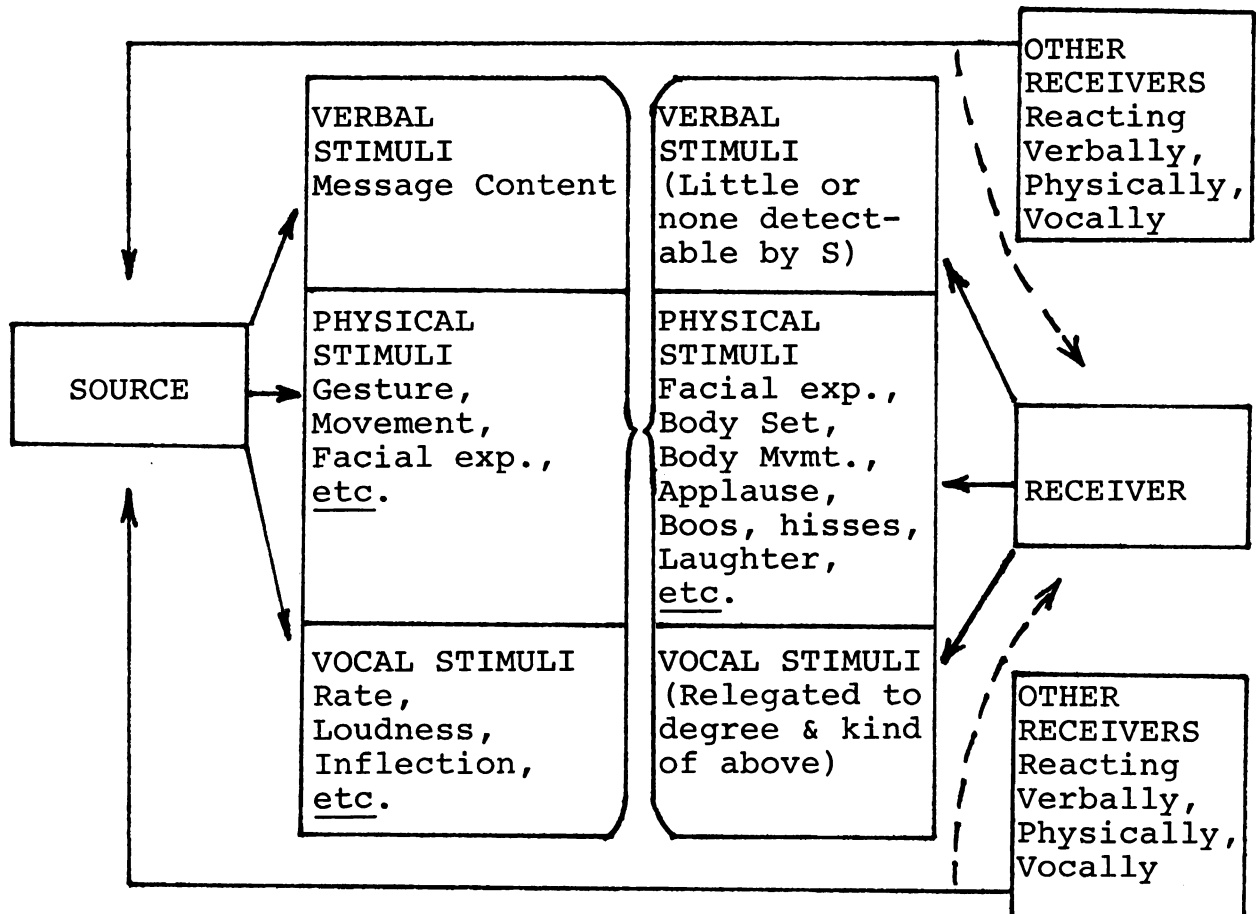
Observable Audience Response Model

Let us now consider the effects of feedback not on the source but rather on the receivers only. The question is this: Are receivers as they observe the responses of other receivers affected by them? We can now construct a model which attempts to pictorialize such a concern:



A MODEL ILLUSTRATING OBSERVABLE AUDIENCE RESPONSE
IN THE ONE-TO-MANY COMMUNICATION SITUATION⁴

The Source presents his Receivers with at least three kinds of stimuli (1) Verbal (his message content), (2) Physical ("the speaker they see") and (3) Vocal ("The speaker they hear"). Each Receiver presents not only the Source, but other Receivers with similar stimuli. Each Receiver reacts to not only the stimuli presented by the Source, but stimuli presented by other Receivers as they react to the Source. The broken arrows running from "Other Receivers" to "Receiver" represent these stimuli (observable audience response) acting on the Receiver along with the stimuli presented by the Source.



⁴Elements of this model (verbal, physical and vocal stimuli) are found in Miller's (1966) model for nonverbal communication. Miller credits Randall P. Harrison for providing the basis for his model.



Here we have a model which includes not only a feedback loop running from receiver(s) to source but an intra-receiver loop which takes into account the perception of the responses of the receiver by others who are likewise receivers. For example, if we are listening to a third person's message and if I am attending to your reaction to that message (i.e., I am perceiving, in addition to the third person's message, your responses to that message), then we have the phenomenon suggested in the model. We will call this phenomenon observable audience response (OAR). Such OAR can take various forms: it can be positive (approving), negative (disapproving), or mixed.

We have already seen that both positive and negative responses act as reinforcers on the source. But what are the effects of OAR on members of an audience? Are their attitudes affected? Does their behavior change as the response they perceive varies? Could members of an audience with neutral attitudes toward source and/or message be persuaded to become partisans after having perceived other audience members reacting favorably to source and message? None of the feedback studies to date has treated these questions nor their various implications.

What we have just been discussing is the effect of a group on a member(s). Although we have no current or past work in the literature which examine such effects

in conjunction with feedback, there are numerous studies in the general area of social influence.

OAR and Other Variables

Festinger (1955), writing more than ten years ago, pointed out that social influence might exist as a "wild variable" in some of the studies then being conducted. He was concerned with the "lag" between immediate and delayed testing, speculating that experimental subjects might be receiving additional treatment as they interacted in the time period between tests. Cohen (1964) has suggested that this lack of control might account for the so-called "sleeper effect." This concept evolved out of the work done at Yale investigating persistence of retention and acceptance of opinion change. If experimental subjects engage in the interaction mentioned by Festinger then it might result in (1) a decrease in retention of factual material coupled with an increase in opinion change and/or (2) a disappearance of source credibility effects on message (both findings being instances of "sleeper effects").

Allport (1924), in his pioneer studies in intra-group effects, noted that Ss performing various tasks in the presence of others were seemingly stimulated by such a condition. He called this phenomenon "social facilitation," and defined it as the enhancement of a response by contributing social stimuli, such as the



sight and sound of other people engaged in the same activity.

Callaghan (1940), writing in the Quarterly Journal of Speech, presented the essence of Allport's investigations and suggested some implications for persuasion. Arguing that students of Speech need to recognize social facilitation, Callaghan made a variety of extrapolations from Allport's work to that of other investigators on audience effects. It would seem that such a beginning would have produced considerable speculation, if not research, in order to integrate the notion into Speech principles; however, the literature reveals little subsequent consideration of this concept by writers in Speech.

Oliver (1950), discussing individual-audience relationships, mentions social facilitation as "the tendency for the group to increase its like-mindedness." Minnick (1957), describing crowd behavior, cites Allport's work and offers social facilitation as an explanation of individual responses which are more vigorous than would be apparent in "non-audience" contexts. Eisenson, et al (1963), considering interaction within the audience, mentions "social facilitation," along with "polarization" and "circular response," as three significant concepts developed by social psychologists.

The above writers, while drawing attention to the phenomenon of social facilitation, seem to take its

existence in the public speaking context for granted, and are content to make this extrapolation from the non-speech work of Allport.

Most modern investigators have come to refer to the original Allport concept as "social influence" and have been primarily concerned with three major constructs: conformity, identification, and imitation. Let us now examine each of these to see if they offer some insight into the possible effects of OAR.

The studies of Sherif (1935) and Asch (1956), demonstrating conformity, established in a variety of contexts, with numerous replications, that individuals can be pressured into altering original judgments when faced with a group judgment that has been manipulated by the experimenter.

Reitan and Shaw (1964) point out that the many studies of conformity behavior have shown conformity to be influenced by at least four classes of variables: (a) the personality characteristics of the individual, (b) the kind of stimuli evoking the response which reflects the conformity behavior, (c) situational factors, and (d) intra-group relations.

Studies of the effects of OAR could take into account the personality characteristics of the persons involved. Houston and Mednick (19) have demonstrated that high creative personalities have a strong need for associative novelty. What would be the effect on such persons



(compared with low creative personalities) of a communication situation in which the OAR they perceived was positive? Type of OAR perceived, as well as various personality characteristics, could be manipulated in order to examine such combinations in the communication context.

Consideration of the kind of stimuli evoking conformity behavior is perhaps the most limited of the classes of variables out of which we might generate studies of the effects of OAR. We have previously talked about the various types of feedback which have been used as reinforcement (head nodding, lights, buzzers, etc.). In most public speaking situations the range of behaviors which might be viewed as OAR is relatively narrow. Audiences are "allowed" to indicate approval with more than hand-clapping and disapproval with more than booing; nevertheless, most of us expect little variance from a narrow range of norms. Within that range we might explore the differences between auditory approval/disapproval, visual approval/disapproval, and mixed forms. Or we might vary degree of approval/disapproval, and here we might find some "boomerang effects." Thus, the kind of audience response perceived could be examined as to its effects.

Situational factors provide a rich area in which OAR can be investigated. Is OAR more effective in the large lecture hall or in the crowd on the street corner?



Is OAR more effective when directed to the after dinner speaker than to the professor in the departmental seminar room? Needless to say, explorations of OAR in varying situations (as well as all other classes of variables) requires rigorous control in order to assure that differences can be attributed to the variable being manipulated and not to some other variable.

Intra-group relations is perhaps the most exciting area for studies of OAR. Common sense and research literature tell us that individuals who perceive the approval/disapproval of their reference group are affected by it. Numerous studies could be devised in which group affiliation and observable response were manipulated in order to examine their interaction. Most individuals "belong" to various groups with varying degrees of affiliation. What would be the effect on the individual who perceived positive responses from members of one such group and negative responses from members of another? We might think it would depend on the message and/or the speaker, or on the strength of the individual's affiliation. It might; but we need to design experiments in order to find out.

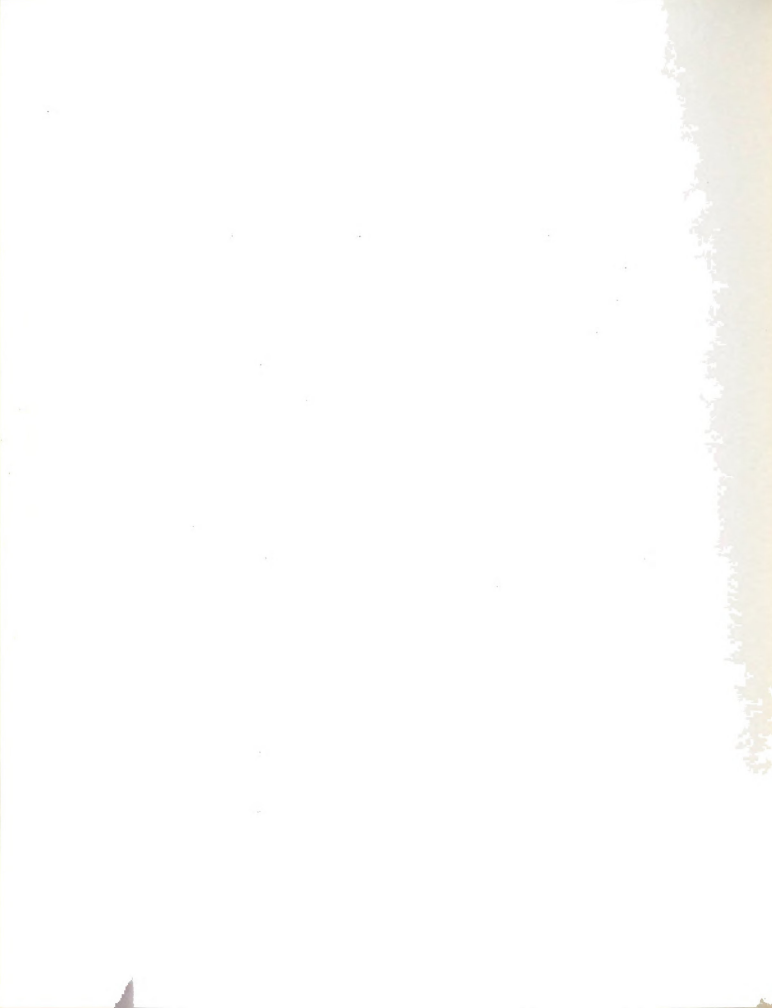
The preceding discussion of just four classes of variables which influence conformity and the possibilities they hold for an examination of OAR is indicative of the many areas into which investigation might lead.

Recalling that we suggested three major constructs (conformity, identification, and imitation), let us now turn to identification and imitation to see whether these two constructs might provide some insight into the effects of OAR.

The notion of "identification" is one which has received extensive treatment by psychologists and social psychologists in their examination of learning and socialization.⁵ Many, if not most of these investigators, have been concerned with reinforcement, both secondary and vicarious. The notion of identification as it applies to OAR is most closely linked to the view taken by Stotland (1961).

Stotland's investigations have led him to view identification as a perceptual-cognitive process in which an individual observing a trait in another then goes on to identify with that individual in terms of another trait or traits. If Stotland's similarity theory of identification is a tenable one, then members of an audience who perceive other members as similar to themselves should, when presented with the additional perception of approval/disapproval for a given message,

⁵See such works as: O. H. Mowrer, Learning Theory and Personality Dynamics (New York: Ronald Press, 1950), 531-561; A. Bandura, "Social Learning Through Imitation," Nebraska Symposium on Motivation (Lincoln: University of Nebraska Press, 1962), 211-269; R. R. Sears, "Identification as a Form of Behavioral Development," in D. B. Harris (ed.) The Concept of Development (Minneapolis: University of Minnesota Press, 1957), 147-161.



be impelled to follow suit.

Some writers use the term "identification" as a synonym for the term "imitation," while others tend to separate the two, reserving identification for the process by which an individual assumes the meaning of another.⁶ Lambert and Lambert (1964) suggest a third category, viz. "vicarious socialization." They cite the work of Berger (1961) and exemplify the notion by pointing to the child who, while watching another being taught, learns along with him. They hypothesize that the imitative habits of the watcher may be covert and that later, when the model is no longer present, the watcher then acts overtly in line with these covertly learned responses. Lambert and Lambert go on to assert: "When such possibilities (imitation and vicarious learning) have been studied we shall have forced into the open two important psychological processes . . ." (p. 20). The examination of the effects of OAR may well contribute to the understanding of processes such as these.

To this point, we have been concerned with an exploration of OAR, we have suggested an OAR effect - not on the source of a message - but rather on receivers who perceive the responses of others in the one-to-many communication situation.

⁶For example, see Lazowick (1955).



It remains to explore the various ramifications of cognitive and behavioral effects of OAR in the communication process. The purpose of the following hypotheses is to explore one such possibility.

Hypotheses Tested

If OAR is a significant variable in those communication events where it can operate, then a study is called for which would "establish" it as an affector and examine some of its effects.

To explore the problem discussed above, an experiment consisting of three treatments was conducted. All treatments were concerned with testing the hypotheses presented below. Treatment I consisted of a positive response condition (PR). Treatment II was a "free" response condition (FR). Treatment III was a negative response condition (NR).

The questions raised by the line of thinking just discussed, and by a review of the literature, led to the following hypotheses:

- I. Ss in Treatments I and II will shift attitude in the direction advocated by the message.
 1. Ss stimulated by positive OAR will express a more favorable postcommunication than precommunication attitude.
 2. Ss where the OAR stimulus is "free" will express a more favorable postcommunication

than precommunication attitude.

II. Ss stimulated by positive OAR will express more favorable attitudes than Ss where the OAR stimulus is "free."

1. Ss stimulated by positive OAR will express more favorable attitudes toward message topic than Ss where the OAR stimulus is "free."

2. Ss stimulated by positive OAR will express more favorable attitudes toward a speaker than Ss where the OAR stimulus is "free."

a. Ss stimulated by positive OAR will express more favorable attitudes toward speaker's authoritativeness than Ss where the OAR stimulus is "free."

b. Ss stimulated by positive OAR will express more favorable attitudes toward speaker's character than Ss where the OAR stimulus is "free."

c. Ss stimulated by positive OAR will express more favorable attitudes toward speaker's dynamism than Ss where the OAR stimulus is "free."

III. Ss stimulated by positive OAR will express more favorable attitudes than Ss stimulated by negative OAR.

1. Ss stimulated by positive OAR will express



more favorable attitudes toward message than Ss stimulated by negative OAR.

2. Ss stimulated by positive OAR will express more favorable attitudes toward speaker than Ss stimulated by OAR feedback.

a. Ss stimulated by positive OAR will express more favorable attitudes toward speaker's authoritativeness than Ss stimulated by negative OAR.

b. Ss stimulated by positive OAR will express more favorable attitudes toward speaker's character than Ss stimulated by negative OAR.

c. Ss stimulated by positive OAR will express more favorable attitudes toward speaker's dynamism than Ss stimulated by negative OAR.

IV. Ss when the OAR stimulus is "free" will express more favorable attitudes than Ss stimulated by negative OAR.

1. Ss where the OAR stimulus is "free" will express more favorable attitudes toward message than Ss stimulated by negative OAR.

2. Ss where the OAR stimulus is "free"

will express more favorable attitudes toward speaker's authoritativeness than Ss stimulated by negative OAR.

- b. Ss where the OAR stimulus is "free" will express more favorable attitudes toward speaker's character than Ss stimulated by negative OAR.
- c. Ss where the OAR stimulus is "free" will express more favorable attitudes toward speaker's dynamism than Ss stimulated by negative OAR.



CHAPTER II

METHOD

Procedure

The procedure consisted of five phases: (1) selection of stimulus, (2) selection of Ss and confederates (Cs), (3) pre-test, (4) experimental treatments, (5) post-test.

Selection of Stimulus

Since the object of the study was to examine the effects of OAR in the public speaking situation it was necessary to obtain a speech that was capable of modifying attitudes, and an instrument capable of measuring attitude change. McCroskey (1966a), in his initial research on ethos and evidence, developed sets of experimental speeches as well as scales for the measurement of speech topics and ethos. One of the experimental speeches has subsequently been used by McCroskey and others (Frates, 1968) in studies involving various experimental problems.

Selecting this speech as the message stimulus had several advantages, (1) the topic was such that experimental intent was not difficult to hide, (2) the message content was "established" as appropriate for college student Ss, (3) it had successfully changed opinion in previous experiments.

Although the ostensible stimulus in the treatments was the presentation of a speech, the real stimulus was the manipulation of type of feedback present. The preparations for generating the positive and negative responses will be discussed below under the section on selection of Ss and Cs.

Methods of Measurement

The hypotheses tested in this study required the measurement of Ss' attitudes regarding both message and source. As mentioned above, previous research by McCroskey included research on ethos and resulted in the development of both semantic differential (SD) and Likert type (LT) scales for the measurement of (1) attitude regarding Federal Control of Education and (2) ethos or source credibility. Since their publication in 1966, McCroskey's scales have received continuing validation in over a dozen experimental studies employing them.

Because of their established validity, the SD and LT scales for attitude toward message were employed. However, additional SD scales, designed to measure source credibility, also were used in this study. The explanation for this decision follows.

Students of rhetoric have been long concerned with the Aristotelian concept of ethos. One of the early experimental studies in Speech was undertaken by Haiman (1948), in which he systematically varied ethos

or source credibility in an attempt to measure its effect on attitude change. In the past few years such investigators as Walter (1948), Berlo and Lemert (1961), and McCroskey (1966b) have designed instruments to measure this variable.

The McCroskey Ethos Scales, developed in a series of experiments designed to test their validity, consist of two dimensions (authoritativeness and character) that can be measured using the bi-polar construct of the SD, or LT scales. The scales were developed using factor and item analysis techniques.

McCroskey's research began with a survey designed to derive terms which would describe ethos or source credibility. Having located thirty such terms "most frequently used" he submitted them to factor analysis in order to derive his scales.

McCroskey's factor analyses, unlike that of Berlo and Lemert, did not produce a "dynamism" dimension. He is quick to point out that he did not include scales appropriate for this dimension, and that ". . . this should not be interpreted as an indication that it does not exist." (McCroskey, 1966b, p. 66) He goes on to raise an interesting question regarding the dynamism factor. Pursuing research in the area of congruity, Berlo and Gulley (1957) used SD scales from the evaluative dimension as an attitude measure. Their study should have been confounded had dynamism been a

factor accounting for significant amounts of variance. Since this was not the case, is dynamism a significant factor in persuasive communication?

The answer to this question has been partially answered in subsequent research conducted by McCroskey (1968) and by Berlo, Lemert and Mertz (1966). McCroskey's investigations indicated that dynamism could not be manipulated without affecting other dimensions at the same time. Berlo, Lemert, and Mertz found that dynamism was unstable and did not account for a large proportion of variance in source credibility. McCroskey, in his discussion of his ethos construct, concludes that the research indicates that the dynamism of a source is important but it is questionable whether it is a dimension of source credibility "or merely one of the many elements that affect the other dimensions." (p. 61)

This study presented an opportunity, at very little additional effort, to utilize both McCroskey's scales and Berlo and Lemert's dynamism scales in this study. (See Appendix D) Both scale sets were used with the hope that analysis would provide additional evidence as to the nature of the dimensions of source credibility.

In summary, methods of measurement employed were: (1) LT and SD type scales measuring Ss attitudes toward the message, administered as both pre-tests and post-tests; (2) LT and SD type scales measuring Ss' attitudes

toward the source, administered as a post-test only.

Selection of Ss and Cs

Subjects. Ss for the three experimental conditions and the control group were randomly selected from among Speech 2A, Public Speaking, classes at San Jose State College. Speech 2A is a general education requirement at San Jose State College, which means that all students must take the course sometime during their undergraduate years at the institution. Surveys of the composition of the course, undertaken by the Department of Speech-Communication, indicate that the typical section is fairly representative of the college population. Although the course is a lower division one, freshmen, sophomores, juniors, and seniors are approximately equally distributed in any given section, as are the various fields of study and proportion of men to women. With the exception of early morning (7:30 A.M.) and late afternoon and evening sections (3:30 P.M. to 8:15 P.M.), the age range of the typical section is what would be expected by the classes represented within each section.

In order to maximize homogeneity in Ss' age, and to control for time of day, Ss were selected from among classes offered between 8:30 A.M. and 11:20 A.M. These are the most "popular" hours for the course, and selecting from this time bloc carried the further advantage of providing a sufficient number of students

per section.

During the Spring 1967 term, 49 sections of Speech 2A were offered at San Jose State College. Each section contained 20 to 25 students. Sixteen sections were offered during the time bloc 8:30 to 11:20 and represented a S pool of approximately 400 students. In order to meet limitations of space, and to create a public speaking situation where no voice amplification would be necessary, audience size was limited to approximately 100 for each treatment.

Ss were assigned randomly, by class, to each of the three experimental treatments and to the control group. Number of Ss per section and treatment will be discussed below.

Confederates. Cs were obtained from Speech 2A sections and from other Speech-Communication classes meeting at the same hours as were Ss' sections. Cs made up approximately one half of the audience for each of the three experimental treatments.

The decision to use a S to C ratio of one-to-one was made after the following considerations. First, a review of the literature indicated no studies in a public speaking situation in which Cs (in any proportion) were used in order to influence Ss. Asch's (1958) work in conformity included varying the ratio of Cs to Ss in order to see whether any ideal ratio existed for conformity behavior. His findings indicated that a

three-to-one ratio (three Cs to one S) resulted in maximum conformity behavior; the addition of more Cs did not significantly increase conformity.

Although Asch's work might be taken as analogous, the problem of C to S ratio in the public speaking situation remains unknown. There is some tentative evidence suggesting that in the public speaking situation a one-to-one ratio is as effective as a three-to-one ratio. Layes (1967) undertook a research project which incorporated some of the design features of this study. Using the same speech and measures for attitudes toward message and source, Layes manipulated responses (positive and "free" conditions) as well as proportion of Cs to Ss. Although her results indicated no differences between a ratio of one C to one S and a ratio of three Cs to one S, the number of Ss per group was so small² that the evidence is tentative at best.

Even though the evidence from the study discussed above suggests a weak basis for the ratio selected for this study, it is the only study available and at least did not deny the suspicion that the public speaking situation differed enough from the situation in Asch's experiments to call for a different ratio.

With the number of Cs determined, the next step was to coach them in providing the experimental stimulus.

²Layes' four groups contained N's of 11, 12, 13 and 13.

One class meeting prior to that on which the experiment would be conducted Cs were told by the experimenter (E) that he would like their help in an experiment; that they were to attend a speech and that they were to present positive/negative feedback to the speaker. ("Cs," students who had received no pre-test, for the FR treatment received no orientation whatsoever.) Cs were then asked what they thought positive/negative feedback consisted of. Cs responded by suggesting various means of showing approval/disapproval, both oral and visual. E did not offer specific directions for feedback but rather encouraged Cs to verbalize their own forms, to E and to each other. E then congratulated the Cs on their creativity and pointed out that the important thing was that the responses should appear to be "natural" and that they knew, better than E, what would seem "phoney" to their peers.

Cs were not told the nature of the experiment, who the speaker was, nor any information regarding the message. Spot checks of various Cs following the experiments revealed that none questioned was aware that measurements of audience members was the purpose of the experiment. Most believed E was interested in effects on the speaker, the remainder had no idea what the purpose of the experiment was.

Pre-test

Three weeks prior to the experiments, during their

regular class periods, all Ss in experimental and control groups completed attitude measures on the speech topic. Ss were told that the Speech Activities class at San Jose State College was interested in gathering opinions on various topics and asked to cooperate in this project. (See Appendix A for complete instructions presented to Ss immediately preceding pre-test.)

As has been noted, the general education classes at San Jose State College are fairly representative of the general college population. Therefore, they are frequently used by investigators sampling opinion in order to make inferences about the college population. It is not unusual for students in Speech 2A (those making up the S pool) to be questioned in class regarding a variety of topics by a variety of individuals and organizations.

Normally, Speech 2A sections are told about the Speech Activities Class, both by their instructor and by a student representative of that class, sometime during the first half of their term. Because the students "know" that the class is real, and because they come to expect various surveys and opinion measures, it was assumed that they were not overly sensitized by the pre-test measure.

Experimental Treatments

The three experimental treatments consisted of presenting the same speech by the same speaker to three groups of Ss paired with three groups of Cs. Time and

treatment conditions were determined by chance, with one exception. Ss drawn for each treatment had to be paired with Cs meeting at the same hour. It would obviously not have been possible to have Ss drawn for the positive condition at one hour and Cs providing that condition at another. The first treatment (PR) was the one in which positive response was generated; the second (FR) consisted of the "free" response condition, i.e., "Cs" received no instruction from E, and no attempt was made to manipulate audience response; the third treatment was the negative response condition (NR).

Treatment I. Three days prior to the experiments, E contacted a student in one of his classes and asked him to present a speech before three live audiences on the day scheduled for the experimental treatments.

The student selected was, in E's judgment, a typical one. He was not a Speech-Communication major; and although he had completed a course in basic public speaking and was then enrolled in the Theory of Oral Communication course, he was not in any sense a "trained speaker."

McCroskey's (1966a) and McCroskey and Dunham's (1966) research, as well as that of Holtzman (1966), has raised the question that source credibility may have been a masking factor in some of the studies in which "weaker" variables have been manipulated with seemingly

no effect. Therefore, the speaker was selected with a view toward holding ethos down to prevent it from acting as a confounding factor in the experiment.

The speaker was given a copy of the Federal Control of Education speech (See Appendix E) so that he might familiarize himself with it prior to presentation. The speaker was told only that his audiences were composed of students.

At this point it might be well to consider the rationale for deciding to sacrifice the obvious control advantages of a taped message for the "looser" live speaker stimulus. Most of the experimental studies in Speech, attempting to measure various speaker and message effects, have sought to control variations in delivery by putting the message on tape, thus insuring that E and C groups will have messages "identical" in all aspects with the exception of the stimulus variable (See such studies as Haiman (1948), Benedict (1958), and Moretti (1965) for such use). Good methodology dictates the control of all relevant variables in order to justify the inference that any differences in the dependent variable(s) can be attributed to the presence of the independent variable(s). However, the gain in specificity attained by rigid controls has its compensatory loss in terms of the concept of process.

If we are interested in what happens in the public speaking situation and must forever infer our statements

from studies using tape-recorded messages, perhaps the price is too high. (How many audiences do we have sitting in front of tape recorders as compared to those sitting in front of live speakers?)

Hovland (1959) and Bormann (1965) are among those who have seriously questioned the disparities between the findings in the laboratory and field studies. Our studies in Speech need to implement as much of the rigor of the laboratory as is feasible while still retaining the "real life" context of actual communication situations. Therefore, this study utilized a live speaker in an effort to bring both visual and auditory stimuli together as they act and interact in affecting an audience.

Since the message content was established prior to treatment, and read from manuscript by the speaker, adequate message control was assumed. The problem of delivery control is both difficult and intriguing. That the message content was held constant, and that the speaker was the same, resulted in some delivery control. However, the question, "was there delivery variation?" must be answered "yes." This raises another question: Might not differences observed in the dependent variables be the result of delivery variance? That is, how do we know that OAR, and not some delivery factor, caused the response?

Common sense, intuition, observation by Speech teachers, and considerable experimental evidence (much

of it cited in Chapter I of this study) support the contention that speakers who receive reinforcement, i.e., who perceive positive or negative feedback during the presentation of a message, produce responses significantly different from speakers who do not. One extrapolation from this data might be the following: The speaker, in the PR treatment (during which time he received positive reinforcement) responded to this reinforcement by increasing the vigor of his delivery, by visually stimulating the audience, etc. or, while he was in the NR treatment, he responded to the negative feedback by increasing his rate (a let-me-out-of-here syndrome). Undoubtedly some of this type of behavior did take place. This introduces a different kind of consideration, a more crucial consideration. It is this: OAR may consist not just of those responses perceived by some receivers as being made by other receivers, but the perception of the source's responses to them as well. In short, what may be necessary is the perception of the entire feedback loop, taking into consideration source responses to audience response. If this is so, then a taped message would, in addition to eliminating visual aspects of delivery, fail to provide an accurate "environment" for OAR. Neither visual nor oral responses of speakers to audience response are possible when delivery is controlled by using the taped message.

Finally, we can note that this study sought to manipulate OAR while source responses were allowed to operate "free;" the study was designed to allow source responses to vary in order to simulate better the process concept of communication.

The Ss and Cs were allowed to select their own seats in the treatment room. No attempt was made to alternate S, C, S, C. . . etc., either by seats or by rows. Observation by E indicated Ss and Cs were seemingly randomly distributed in the room. Thomas and Ralph (1959) found no evidence that overall seating arrangement, size of the audience, nor an individual's position in a room, affect, to a significant degree, response to persuasive appeals. Therefore, in order to disguise experimental intent and to minimize contaminating variables, no set groupings were used.

The speaker was introduced by name as a sophomore associated with speech activities (See Appendix C for speaker introduction). The title of the speech was stated and E left the room. The only persons present during treatment were the speaker, Ss, Cs, and two additional students from one of E's advanced classes who were asked to attend and rate the audience (hereafter referred to as audience raters |ARs|). Since the experiment was one interested in determining the effects of OAR from peers, no "authority figures," neither E nor any of the Ss's professors, were present.

Immediately following the conclusion of the speech the speaker left the room, E entered, distributed post-test questionnaires, and collected them upon their completion. Both the speaker and ARs filled out SD scales rating the concept "This Audience." This measure was taken in order to allow inferences regarding the presence and perception of the independent variable in the experimental conditions (See Appendix F for a comparison of speaker's and ARs' ratings).

Treatment II

Approximately 15 minutes following the conclusion of Treatment I, Treatment II was conducted. All procedures were the same with the following exceptions: (1) Cs for this treatment had received no instructions. Audience response was allowed to operate "free." (2) The speaker had now presented the speech once before a live audience, approximately one half of which had been instructed to provide positive response. (3) ARs were two different individuals drawn from the same class as ARs for Treatment I. Again both speaker and ARs were asked to respond to the scales rating "This Audience."

Treatment III

Approximately 15 minutes following the conclusion of Treatment II, Treatment III was conducted. All procedures and conditions were the same as those for Treatments I and II with the following exceptions: (1) Cs for this treatment had been instructed to provide negative

response during the message presentation. (2) The speaker had now presented the speech twice before live audiences of the types described in Treatments I and II. (3) ARs were different individuals drawn from the same class as ARs used in Treatments I and II. Once more speaker and ARs rated the audience at the conclusion of the message presentation.

Post-test

Attitude. The same measures of attitude toward topic (both LT and SD scales) as Ss received for the pre-test, were administered as the post-test immediately following each experimental treatment. The control group received identical post-test measures, in their classes, on the same day as experimental groups.

Using the same instrument for pre-test and post-test can have a "sensitizing" effect on Ss. This presents a control problem in that we do not know whether Ss are responding to the stimulus of the independent variable or to an interaction between their increased sensitivity and the experimental treatment.

A design feature which attempted to control for any such sensitization was the inclusion of a control group who received both the pre-test and post-test "stimulus." If there is a significant difference between experimental groups and the control group and both have been sensitized by the pre-test, then we should be able to attribute such a difference to the independent

variable. Various investigators, such as Simpson (1960), have conducted studies based on this line of reasoning.

Further, as Kerlinger (1964) points out, "testing is an accepted and normal part of most school and college situations, and as such should have no great sensitizing effect." (p. 311) In this sense, additional control was utilized in giving the pre-test its "cover" explanation. Finally, it should be noted, Ss completed source credibility ratings prior to attitude measures in their post-tests. The questionnaires for pre-test and post-test "looked different" in that post-test forms were bulkier and carried a cover sheet for personal information not carried by the pre-tests. These differences could have provided some "cover." We are thus left with two alternatives: We can assume that no significant sensitization took place because of adequate control procedures; or, if sensitization took place despite control procedures, it would be detected in the analysis of control group data.

Source Credibility. Both LT and SD scales designed to obtain measures of Ss' attitudes toward the speaker were administered immediately following each experimental treatment. These measures preceded the attitude measures discussed above in the questionnaire form making up the post-test. Each questionnaire contained (1) a data sheet requesting personal information,

which Ss detached from the questionnaire and submitted separately, in order to maintain subjective anonymity; (2) LT scales for Authoritativeness; (3) LT scales for Character; (4) SD scales for dimensions of Authoritativeness, Character, and Dynamism measuring the concept "This Speaker;" (5) LT scales for the speech topic; (6) SD scales designed to measure the concept "Federal Control of Education." The questionnaire packet completed by Ss consisted of the above measures in the order indicated. (See Appendices B and D for pre-test and post-test questionnaires.)

Experimental Design

In summary, three experimental treatments were devised: (1) positive, (2) "free," and (3) negative. The design included a control group who received neither the experimental stimulus (OAR) nor the message presented by the speaker.

Ss' and CG's attitudes toward topic were obtained in a pre-test administered in classes on the same date. Ss' attitudes toward topic and source were obtained in a post-test immediately following experimental treatments. CG's attitude toward topic was measured, for the second time, on the same day as Ss received their post-tests. The design is diagrammed in Table 1.

TABLE 1
Experimental Design

	Pre- Attitude	Post- Attitude	Source Ath.	Credibility Ch.	Dy.
Treatment I (PR)	A	E	I	L	O
Treatment II (FR)	B	F	J	M	P
Treatment III (NR)	C	G	K	N	Q
Control Group	D	H			

References to Table 1 now enable us to relate the hypotheses to the design for their test. Hypotheses were presented at the conclusion of Chapter I which predicted both between and within-group differences. Before observing the various cell relationships representative of the a priori hypotheses it should be noted that two other cell relationships need to be present in order to support an assumption of adequate control: (1) There should have been no significant differences in pre-test scores among the four groups, (i.e., $A = B = C = D$) and (2) there should have been no significant differences in pre-test and post-test

scores for the control group (i.e., $D = H$).

The within-group predictions take the following expressions:

$$A < E; B < F.$$

The between-group predictions can be expressed as follows:

$$E < F < G; I < J < K; L < M < N; O < P < Q.$$

CHAPTER III

RESULTS

Elimination of Subjects and Data

Ss names were obtained on separate sheets for both pre and post-test measures. Ss separated name sheets and questionnaires and submitted them separately, having been told that names were necessary in order to know who had responded to tests and who had not. Questionnaires, however, were coded to name sheets with "invisible ink" (lemon juice) so that Ss' pre-tests and post-tests could be matched for purposes of analysis.

Although both LT and SD scales were employed in all measures taken, initial inspection of the data indicated that some Ss misunderstood directions for LT questions and presented responses appropriate for SD scales to LT forms. (LT measures of source credibility followed SD scales for attitude in the questionnaire packet.) Additional LT forms were omitted by some Ss who did, however, respond to SD scales.

McCroskey's (1966) work with the scales employed in this study indicated very high correlations between the LT and SD scales for attitude toward topic (.897) authoritativeness (.981), and character (.980) (p. 130).

On the basis of these findings, and to facilitate scoring, analysis of data was limited to that provided

by SD scales for both attitude toward topic and source credibility.

Before reporting the results of the various analyses, it should be pointed out that of the 163 Ss who received pre-tests and the 151 who received post-tests, 129 usable questionnaires were obtained. In order to facilitate analysis, Ss were randomly eliminated until all cells contained equal Ns. Analysis was performed on 120 Ss, each cell with an N of 30.

Secondary Analysis: The Independent Variable

Before proceeding farther, let us discuss the analysis of the measures mentioned in Chapter II which were obtained from the speaker (Sp) and the audience raters (ARs) after each experimental treatment.

If the independent variable (OAR) was present and operating there should have been discernable differences between those audiences where response was being manipulated (Treatments I and III) and the audience where it was not (Treatment II). Recalling that Sp and AR measures consisted of SD scales by means of which they responded to the concept "This Audience," it might now be appropriate to discuss in some detail the scales selected and the method employed for their analysis.

The writer used scales designed for measuring

source credibility. This decision was made on an intuitive and arbitrary basis. Twenty-five scales were selected, representing five dimensions of source credibility. McCroskey's scales (six for each dimension) for authoritativeness and character made up twelve of those used. The Berlo and Lemert scales (consisting of four scales for each dimension) for dynamism, competence, and trustworthiness made up an additional sixteen. Two extra scales (active-passive, decisive-indecisive) were added to the dynamism dimension. (Scales representing the five dimensions total 26; however, since character and trustworthiness share one scale set only 25 were used.)

The line of thinking that prompted the scale selection ran something like this: An audience, half of which has been instructed to provide positive responses, will be perceived by its speaker and "outside observers" as being more authoritative, more dynamic, more competent, more trustworthy, and having greater character than an audience where positive, negative, and "no" response have equal chances of being present. The same comparison can be made, at least for authoritativeness and dynamism, between the "free" and negative conditions. (A provocative question is: Will the positive audience be rated as more authoritative, more dynamic, than the negative one?)

These differences should show up if the independent

variable has created conditions that are discernibly different and if the condition in which response was not manipulated was comparatively "neutral."

Analysis

Osgood, Suci, and Tannenbaum (1957, p. 99-102) point out that, in analyzing differences between the meanings of the same concept for two different individuals or two different groups, we are faced with a multivariate problem and that the usual univariate tests of significance (t-tests, for example) are not applicable. Further, that in examining the differences between the meanings of two concepts for the same individual we are comparing only two points in the multidimensional semantic space. They say (p. 101):

Although each of the two concepts (for the same individual or for different individuals) is associated with a series of scores on k scales or k' factors, these are not mere replicates and cannot be treated as a sample over which the usual univariate tests of significance can be taken.

What the gentlemen seem to have done with these two statements is to have closed the door on all of the statistics available for examining differences between scores. Neither multivariate nor univariate tests are applicable to the data we are working with.

However, Osgood and his associates have found that test-retest deviations by the individual subject judging the same concept yield the following changes in factor

scores (A factor score is obtained by averaging over the scales representing each factor.): "We find that a change of more than 1.00 for the evaluative factor, more than 1.50 for the potency factor, and more than 1.33 for the activity factor is significant at about the 5 per cent level." (p. 139)

Table 2 displays factor scores for the experimental treatments.

TABLE 2
Factor Scores for Sp and ARs
Rating the Concept "This Audience" For
3 Experimental Treatments

Dimension/ Factor	Treatment I (PR)		Treatment II (FR)		Treatment III (NR)	
	AR	Sp	AR	Sp	AR	Sp
Authorita- tiveness	5.83	5.66	3.83	4.83	4.17	5.00
Character	5.66	5.50	4.50	3.00	2.67	2.83
Dynamism	5.33	5.00	3.67	2.50	6.00	5.66
Competence	5.75	5.00	4.00	5.00	4.50	5.25
Trustwor- thiness	5.33	7.00	5.00	5.00	2.00	2.00

The authoritativeness dimension is made up of six scales, all of which fall within the evaluative factor. Character, represented by six scales, likewise falls

within the evaluative factor; so do competence and trustworthiness. However, these latter two dimensions are represented by four scales and three scales respectively. The dynamism dimension is a special case. As has been pointed out earlier, research evidence raises some serious questions as to the independence of this dimension. McCroskey (1968) has equated it with the activity factor. In examining the data represented by the Sp's and ARs' audience ratings we will bear in mind both McCroskey's research and that of Berlo and Lemert and treat each dimension as independent, even though four of the five are within the evaluative factor. Further, we will take changes of 1.00 or greater in any of the dimensions in the evaluative factor and changes of 1.33 or greater in the dynamism dimension as significant at about the five per cent level. Reference to Table 2 reveals the following:

Authoritativeness. There was no significant difference between Sp's and ARs' ratings of either the PR or the NR audiences. A significant difference exists between the Sp's and the ARs' ratings of the FR audience. In other words, the speaker's perception of the two audiences in which the independent variable was being manipulated coincided with that of the observers, but their perceptions differed when evaluating the audience where no manipulation was attempted.

Turning now to any differences among Sp's ratings of the three audiences, we find that there were no significant differences. However, ARs rated the PR audience significantly above both the FR and the NR audiences (their lowest rating being reserved for the FR audience, as was that of the speaker).

Character. There was no significant difference between Sp's and ARs' ratings for any of the three audiences. ARs and Sp were closest in their ratings for the two audiences where the independent variable was being manipulated (PR and NR audiences) and farthest apart where it was not (FR audience).

Examining Sp's factor scores between the audiences we find a significant difference between the PR and the FR audiences, a significant difference between the PR and the NR audiences, and no significant difference between the FR and the NR audiences. In other words, the speaker rated the character of the positive audience significantly higher than either the "free" audience or the negative audience, but found no difference between the "free" audience's character and that of the negative one.

The ARs, on the other hand, evaluated the PR audience significantly higher than the FR audience, and the FR audience significantly higher than the NR audience.

Dynamism. There were no significant differences

between Sp's and ARs' ratings of dynamism for any of the three audiences. (Ratings of PR and NR audiences differed less than 1.00 and differences between FR ratings differed 1.17; we remember that the dynamism dimension is being viewed as the activity factor and thus requires a difference of 1.33 for significance.)

There was no significant difference between Sp's ratings of the dynamism of the PR and the NR audiences. There was a significant difference between his ratings of the PR and the FR audiences, and between his ratings of the NR and FR audiences. The speaker, then, found the audiences where the independent variable was being manipulated more dynamic than the audience where it was not.

The ARs likewise did not find the PR audience more or less dynamic than the NR audience, but found both of them significantly more dynamic than the FR audience.

Competence. There was no significant difference between Sp's and ARs' ratings of the PR and NR audiences. However, as they did on authoritativeness, they differed significantly in their ratings of the FR audience. (This consistency should be expected in light of the similarity of the two dimensions.)

Just as he had for authoritativeness, the speaker found no significant difference between the three audiences in his evaluation of their competence. The ARs followed the same pattern as they had for authoritativeness,

ranking the PR audience significantly higher in competence than either the FR or NR audiences, and finding no significant difference between the FR and NR audiences. Again, just as they had on authoritative-ness, they rated the FR audience lowest, NR second, and PR highest.

Trustworthiness. Although this dimension was represented by only three scales (perhaps because it was) some interesting differences appeared. Because Sp's and ARs' ratings of the PR audience had not differed significantly in any of the other four dimensions (especially since there was no significant difference in their ratings for character) we would not have expected a difference here. Nevertheless, a significant difference between Sp's and ARs' ratings of the PR audience's trustworthiness was obtained.

Sp's ratings on this dimension differed significantly among the three audiences (and differed to a greater degree than on any other dimension). His factor score for the PR audience was significantly greater than for FR or NR audiences, and his evaluation of the FR audience was significantly higher than for the NR audience.

There was no significant difference between ARs' ratings of the PR and FR audiences. There was a significant difference between AR's ratings of the PR

and NR audiences, and the FR and NR audiences. In other words, ARs found the negative audience significantly less trustworthy than either the positive or "free" audiences. We note that this differed from their evaluations in the character dimension. There they found a significant difference between the character of the PR and FR audiences (as did the speaker).

Summary. To summarize the analysis of this particular set of data we must begin by remembering that it was not collected in order to support any of the a priori hypotheses of this study. Rather it was the result of an effort to seek some support for the assumption that the independent variable was present and "functioning."

Caution must be observed in interpreting these data, for at least three reasons: (1) the problem of analysis, which has already been considered; (2) the obvious lack of verifiable scale validity, for this particular use; and (3) the problems of measurement presented by differences in variables affecting the speaker and those affecting the ARs. Further, there are considerations raised by such questions as: What difference does it make that the speaker was necessarily evaluating out of the "base line" established by the first audience when he evaluated the second and the third? Can any reliable statements be made about speaker and AR differences/similarities when ARs were different for each treatment?

With these reservations and various others that might be raised firmly in mind, it is still interesting to note what was found.

In those dimensions where we might expect the presence of the independent variable to be revealed (i.e., dynamism, with such scale sets as: aggressive-meeek, energetic-tired, active-passive; and trustworthiness, with such adjectives as: just-unjust, cruel-kind, admirable-contemptible) we found clear differences among the three treatments, differences that could be termed supportive of the assumption that the independent variable was operating.

The most exciting aspect of these data is the possibilities presented for additional research. We will discuss some of them in Chapter IV.

Secondary Analysis: Control

Prior to reporting analyses performed in order to examine the hypotheses of the study we should look at the findings pertaining to control.

An analysis of variance, conducted on pre-test scores of the Ss making up the three experimental treatments (PR, FR, and NR) and the control group Ss, produced an F-ratio of .20 and thus supported the assumption that there were no significant differences among groups. (See Table 3) This analysis, in supporting the assumption that external controls had been sufficient, also indicates that no

statistical control procedures (such as analysis of covariance) were necessary prior to additional analyses.

TABLE 3

Analysis of Variance Summary of Pre-test
Scores for Experimental and Control Ss

Source	d.f.	Mean Square	F
Between	3	3577.33	.20
Within	116	17376.01	

No significant difference ($t = -.64$, $df = 29$, $.8 < p < .5$) was obtained between pre-test and post-test scores for the control group, thus supporting the assumption that no variable outside the experimental treatments had a significant effect on the experimental Ss between the time of the pre-test and the post-test measures.

Having reported the results of the secondary analyses, and having obtained some support for the assumptions that, (1) the independent variable was probably operating in the experimental treatments, and that, (2) the controls for the experiment were probably adequate, we can now turn to the analysis of the data bearing on the hypotheses of the study.

Major Analysis

The basic statistical test employed was an analysis of variance in which there were four between-Ss factors and two within-Ss factors. One-tailed t-tests were used to analyze within-group and between-group differences where significant F-ratios were obtained.

A confidence level of .05 was established for statistical significance for all tests; however, obtained probability levels are reported for all measures representing tests of a priori hypotheses.

Analysis of variance of post-communication attitude toward message measures revealed a significant between-group difference ($F = 3.02, p < .05$). The obtained F-ratio is presented in Table 4.

TABLE 4

Analysis of Variance Summary of
Post-test of Attitude Toward Message
for PR, FR, NR, and CG

Source	d.f.	Mean Square	F
Between	3	48801.66	3.02*
Within	116	16114.00	

*F significant, $p < .05$

Hypotheses

Now let us look at the results of the analyses bearing on each of the individual hypotheses of the study. They fall into three major groupings. The first group is concerned with within-group differences in attitude toward message (measures between precommunication and postcommunication attitude toward the message). The second group is concerned with between-group differences in postcommunication attitude toward message (Treatment I, PR vs. Treatment II, FR vs. Treatment III, NR). The third group is concerned with between-group differences in attitude toward speaker (PR vs. FR vs. NR).

Hypothesis I-1: Ss stimulated by positive OAR will express a more favorable postcommunication attitude than precommunication attitude. A significant difference ($t = 2.29$, $df = 29$, $p < .025$) between Ss' precommunication and postcommunication attitude was obtained. Thus support was obtained for the prediction that Ss who had received the message while observing positive audience response would shift opinion in the direction of the message.

Hypotheses I-2: Ss where the OAR stimulus is "free" will express a more favorable postcommunication attitude than precommunication attitude. No significant difference ($t = .56$, $df = 29$, $p < .4$) was obtained between Ss postcommunication and precommunication attitude. Thus no support was obtained for the prediction that Ss who had received the message while OAR was allowed to operate

"free" would shift opinion in the direction of the message.

Although not a hypothesis of this study, it is interesting to note that post hoc analysis revealed that Ss who were stimulated by negative feedback did not express a more favorable postcommunication attitude than precommunication attitude. No significant difference ($t = -.64$, $df = 29$, $p < .4$) was obtained between Ss' postcommunication and precommunication attitudes. Thus it was found that Ss who received the message in the presence of negative OAR did not shift opinion in the direction of the message.

To summarize the analyses bearing on Hypotheses I 1, 2: Only the PR treatment produced significant changes in Ss attitude toward the message. PR Ss shifted opinion, as predicted, in the direction of the message. Neither FR nor NR Ss shifted opinion significantly from pre-test to post-test. It is interesting to note that although changes in FR Ss cannot be attributed to other than chance causes, mean score for post-test was higher than pre-test, but for NR Ss post-test mean was lower than was their pre-test.

Hypothesis II-1: Ss stimulated by positive OAR will express more favorable attitudes toward message topic than Ss where the OAR stimulus is "free." A significant difference ($t = 1.74$, $df = 59$, $p < .05$) was obtained between Ss who received the message while being exposed to positive OAR

and those who receive the message while OAR operated "free." Thus Hypothesis II-1 was supported.

Hypothesis II-2: Ss stimulated by positive OAR will express more favorable attitudes toward speaker than Ss where the OAR stimulus is "free." This hypothesis was broken down into three sub-hypotheses (II-2-a, II-2-b, and II-2-c) since no "overall" measure of source credibility could be made (See Chapter II, "Methods of Measurement"). Analysis of data obtained in measures of authoritativeness, character, and dynamism are reported under their respective sub-hypotheses.

Hypothesis II-2-a: Ss stimulated by positive OAR will express more favorable attitudes toward speaker's authoritativeness than Ss where the OAR stimulus is "free." No significant difference ($t = 1.65$, $df = 59$, $p < .06$) was obtained between Ss in the positive treatment and Ss in the "free" treatment as they rated speaker's authoritativeness. Thus Hypothesis II-2-a was not supported at the .05 level.

Hypothesis II-2-b: Ss stimulated by positive OAR will express more favorable attitudes toward speaker's character than Ss where the OAR stimulus is "free." A significant difference ($t = 2.19$, $df = 59$, $p < .025$) was obtained between these Ss' ratings of speaker's character. Thus the hypothesis that Ss exposed to positive response would rate character higher than those in the "free" treatment was supported.

Hypothesis II-2-c: Ss stimulated by positive OAR will express more favorable attitudes toward speaker's dynamism than Ss where the OAR stimulus is "free." A significant difference ($t = 3.70$, $df = 59$, $p < .001$) was obtained between PR and FR Ss' ratings of speaker's dynamism, thus confirming the hypothesis.

To summarize the analyses bearing on Hypotheses II 1, 2a, 2b, 2c: Of the four between-group differences predicted three were supported by the data. Ss exposed to positive response shifted attitude toward topic significantly more than Ss in the "free" treatment. Ss in the positive treatment rated the speaker higher on both character and dynamism than did FR Ss, but there was no significant difference in authoritativeness ratings between PR and FR groups.

Hypothesis III: Ss stimulated by positive OAR will express more favorable attitudes than Ss stimulated by negative OAR. The hypotheses in this category were concerned with differences between Ss exposed to positive OAR during message presentation and those exposed to negative OAR during the presentation.

Hypothesis III-1: Ss stimulated by positive OAR will express more favorable attitudes toward message than Ss stimulated by negative OAR. A significant difference ($t = 2.90$, $df = 59$, $p < .005$) was obtained between Ss who received the message in the presence of positive response and those who received the message while negative response

was being generated. Thus Hypothesis III-1 was supported.

Hypothesis III-2: Ss stimulated by positive OAR will express more favorable attitudes toward speaker than Ss stimulated by negative OAR. This hypothesis, as did Hypothesis II-2, predicted differences in three source credibility measures, authoritativeness, character, and dynamism. These predictions took the form of three sub-hypotheses, III-2-a, III-2-b, and III-2-c.

Hypothesis III-2-a: Ss stimulated by positive OAR will express more favorable attitudes toward speaker's authoritativeness than Ss stimulated by negative OAR. A significant difference was obtained ($t = 4.36$, $df = 59$, $p < .0005$). Thus the prediction that Ss in the positive treatment would rate the speaker's authoritativeness higher than those in the negative treatment was supported.

Hypothesis III-2-b: Ss stimulated by positive OAR will express more favorable attitudes toward speaker's character than Ss stimulated by negative OAR. A significant difference was obtained ($t = 3.26$, $df = 59$, $p < .005$). The prediction that Ss exposed to positive OAR would rate speaker's character higher than Ss exposed to negative OAR was supported.

Hypothesis III-2-c: Ss stimulated by positive OAR will express more favorable attitudes toward speaker's dynamism than Ss stimulated by negative OAR. A significant difference ($t = 2.83$, $df = 59$, $p < .005$) was obtained. Thus the prediction that Ss' ratings of speaker's dynamism

in the positive treatment would be greater than in the negative treatment was supported.

To summarize the findings bearing on Hypotheses III 1, 2a, 2b, and 2c: All predictions regarding between-group differences for Ss who received the positive OAR stimulus and those who received the negative OAR stimulus were supported.

Hypothesis IV: Ss where the OAR stimulus is "free" will express more favorable attitudes than Ss stimulated by negative OAR. Hypotheses IV 1, 2a, b, c make up the predictions between Ss in the "free" OAR treatment and those in the negative treatment.

Hypothesis IV-1: Ss where the OAR stimulus is "free" will express more favorable attitudes toward message than Ss stimulated by negative OAR. No significant difference ($t = .008$, $df = 59$, p below table values) was obtained between attitude toward message for Ss in the "free" OAR treatment and those in the negative one; hence the hypothesis was not supported.

Hypothesis IV-2: Ss where the OAR stimulus is "free" will express more favorable attitudes toward speaker than Ss stimulated by negative OAR. As in Hypotheses II-2 and III-2, this hypothesis represents three separate predictions of between-group differences in source credibility ratings.

Hypothesis IV-2-a: Ss where the OAR stimulus is "free" will express more favorable attitudes toward speaker's

authoritativeness than Ss stimulated by negative OAR. A significant difference ($t = 2.69$, $df = 59$, $p < .005$) was obtained. Thus the prediction regarding the first dimension of source credibility was supported, i.e., Ss in the "free" treatment rated speaker's authoritativeness significantly higher than did Ss in the negative treatment.

Hypothesis IV-2-b: Ss where the OAR stimulus is "free" will express more favorable attitudes toward speaker's character than Ss stimulated by negative OAR. No significant difference ($t = 1.63$, $df = 59$, $p < .06$) was obtained between Ss' ratings of the speaker's character in the "free" and negative treatments. Thus the prediction that the speaker would receive higher ratings on character from Ss where audience response was not manipulated than from those where negative response was displayed was not supported at the .05 level.

Hypothesis IV-2-c: Ss where the OAR stimulus is "free" will express more favorable attitudes toward speaker's dynamism than Ss stimulated by negative OAR. No significant difference ($t = .004$, $df = 59$, p below table values) was obtained between FR and NR ratings of the speaker's dynamism. Thus the prediction that Ss in the "free" treatment would rate the speaker higher on the dynamism scale than Ss in the negative treatment was not supported.

To summarize the analyses bearing on Hypotheses IV 1, 2a, 2b, and 2c: Only one of the four predictions regarding differences between the "free" OAR treatment and the negative feedback treatment was supported by the data.

FR Ss did not differ significantly from NR Ss in their attitudes toward message following the experimental treatments. It can be noted that mean attitude scores for NR Ss had decreased from pre-test to post-test while mean attitude scores for FR Ss had increased. However interesting it may be to take such a look at direction, no support from the data was obtained; i.e., no statistically significant differences in attitude toward message were present.

FR Ss differed significantly from NR Ss on only one of the source credibility dimensions, authoritativeness. A significant difference was "approached" but not achieved on character; and there was clearly no significant difference in dynamism ratings. Table 5 displays the mean scores for Ss attitude toward message topic and speaker.

TABLE 5

Pre and Post-test Mean Scores for Attitude Toward
Message Topic and Speaker for 3 Experimental Groups
and Control Group

Attitude	Trtmt I	Trtmt II	Trtmt III	Control Grp
Message Topic: Pre-test	4.59	4.46	4.47	4.32
Message Topic: Post-test	5.13	4.57	4.31	4.25
Authoritativeness	5.12	4.67	3.86	
Character	5.02	4.60	4.28	
Dynamism	4.69	3.70	3.83	

Summary of Results

Analysis of the data consisted of two secondary analyses and the major analysis bearing on the hypotheses of the study. Preceding these analyses we discussed the elimination of Ss and data.

Data, collected by means of the LT scales, was not used for purposes of analysis. All analysis was performed on data collected from the SD scales. After attrition and equating of cells, data from 120 Ss (30 Ss per cell) was analyzed.

Ratings by the speaker and "audience raters" of the audiences for each treatment were examined and interpreted as supporting the assumption that the independent variable was operating.

Analysis of pre-test scores for the three treatments and the control group reveal no significant difference. Analysis of pre and post-test scores for the control group revealed no significant difference. These two findings were interpreted as supporting the assumptions that: (1) The Ss making up the three treatments and the control group were drawn from the same population, and (2) External control had been adequate.

Analysis of variance and appropriate t-tests within and between the three experimental treatments revealed the following:

1. Predictions that there would be within-group

differences in attitude toward message were partially supported.

- a. The positive group differed from pre to post-test.
 - b. The "free" group did not differ from pre to post-test.
 - c. The negative group did not differ from pre to post-test.*
2. Predictions that there would be between-group differences in attitude toward message were partially supported.
- a. The positive group differed from the "free" group.
 - b. The positive group differed from the negative group.
 - c. The negative group did not differ from the "free" group.
3. Predictions that there would be between-group differences in attitude toward speaker were partially supported.
- a. Between positive group and "free" group (partial support)
 - (1) No difference on authoritativeness.
 - (2) Difference on character.
 - (3) Difference on dynamism.

*A post hoc finding, no directional a priori hypothesis.

- b. Between positive group and negative group
(complete support)
 - (1) Difference on authoritativeness.
 - (2) Difference on character.
 - (3) Difference on dynamism.
- c. Between negative group and "free" group
(partial support)
 - (1) Difference on authoritativeness.
 - (2) No difference on character.
 - (3) No difference on dynamism.

CHAPTER IV

DISCUSSION AND CONCLUSIONS

Design Implications

In discussing this study, we should return once more to the rationale that produced the hypotheses and design. The logical extensions of a process view of communication; the recognition that, for public speaking, the familiar heuristics were limited; and the resulting efforts to analyze more precisely the one-to-many communication event, all led to an examination of the literature bearing on feedback and intra-audience effects.

The growing suspicion that investigators of the past have neglected an important element in this particular kind of communication gave rise to the conceptualization of OAR. Once conceptualized, the notion needed to be tested. If OAR is "out there" operating in the one-to-many communication event, then its effect should be discernable by measurement.

The decision to manipulate response in two different and "opposite" ways was made in order to give its effect every chance to be observed. Original thinking was concerned with positive response only, and a means by which its effects could be ascertained. An early design

planned for two treatments, positive response and no response. Here, the idea was to instruct confederates in the positive treatment just as they were instructed in this study, and to instruct confederates in the no response treatment to withhold feedback from the speaker. The problems of definition, precision, and artificiality soon became apparent. We can assume, with some appeal to commonsense and research, that positive response is rewarding, and that negative response is punishing. But what assumptions do we make about no response, even if it were possible to create it (which is doubtful)? Is it viewed by a speaker as neutral feedback or as negative feedback? How is it viewed by other audience members when they perceive it being produced/ not produced by those around them? Therefore, the decision to create both a positive and a negative condition, with a free condition against which to compare them, was reached.

Although we have discussed, in some detail, the justification for the decision to use a live speaker, this seems the appropriate place to point out that the advisability of doing so should be put to the test. If the speaker's responses to the audience's feedback play an integral part in the influence attributed to OAR, then we need a study designed to demonstrate it. A replication of this study, in which a taped (either audio only or video) message was used, would give us information on this issue.

With this review of the implications of design and a recapitulation of the purpose of the study, let us now turn to a discussion of the results by examining the hypotheses tested.

The Hypotheses

Within-group Differences

We already know that communication is effective. The literature is filled with studies attesting to the efficacy of a persuasive message in creating short-term opinion change. Once more we have an instance of a message presented to audiences with the expectation that they will change opinion on the message topic in the direction advocated. The speech, in this case, was one which had changed opinion in the past for similar audiences (See McCroskey, 1966a). Yet, the findings in the present study indicated that only one of the three audiences hearing the speech shifted opinion significantly. The audience that received the speech in the presence of positive OAR shifted opinion, and in the direction predicted.

The audience in the "free" and negative treatments did not shift opinion significantly. Why? Our first tendency is to look for some confounding variable responsible for the lack of change in the "free" treatment. We are not concerned with the failure of the negative treatment to produce change in the direction

of the message; indeed, we would be concerned if those Ss had done so. This would have meant that either source or message, or both together (or even some other variable) had interfered with the predictable effect of the treatment.

Could the failure of the "free" treatment to shift be attributed either to some sensitizing or "Hawthorne" effect? Neither of these alternatives is reasonable. If Ss in the "free" treatment had been sensitized by the pre-test, they might attempt to reproduce their pre-test responses on their post-tests. If they did do that, then why did not Ss of the positive treatment do likewise? If a "Hawthorne" effect were operating (The S says to himself, "I know I'm in an experiment, and I'm going to give them what they want.") the obvious thing to do, after hearing a message advocating X, is to indicate your approval of X. What these considerations do seem to indicate is that control was adequate in the experiment. Therefore, let us look outside the experiment for some variable that might account for the failure of the "free" treatment to respond as predicted.

Between the time the speech had been previously used with success, and the time it was used in the present study, there were two developments that should be entertained as possibly causative. Remembering that the speech topic was "Federal Control of Education,"

we saw on the national scene, between 1966 and 1967, increasing publicity for federal contributions to education. (For example, it was during this period that the federal government at last gave its support to a large funding program for the humanities.) Some Ss no doubt heard or read of this program, and of other federal efforts in education. More salient, however, were the local conditions, i.e., state-wide education policies in California.

With state-wide cuts in funding of education, cuts which directly affected the state college system, Ss who were members of that system could hardly remain unaffected. As to how they were affected we can only speculate. They may have reacted to this on-going dispute over higher education by viewing federal control as a desirable alternative to the state's program.

The expectation for the speech topic did not take such a variable into account. The expectation was: Most persons are opposed to federal control of education. Such opposition might even be viewed as a cultural truism. Therefore, pre-test scores should be unfavorable; following an effective speech, post-test scores should show significant change. We should note, parenthetically, that this expectation in no way "loaded the dice" in this study, for the independent variable was OAR, not some message variable.

Examination of pre-test mean scores for all groups

(See Table 5) indicated that none fell below 4.32 (4.00 is the theoretical neutral point on the seven point scale). This indicates that prior to hearing the speech Ss were not significantly opposed to "federal control of education." Nor were they significantly in favor of the topic. Given that Ss were affected by information in the environment regarding education, they might require more than the presentation of the message to shift opinion. They might require the additional force of perceiving it as being approved by their peers. In short, for this particular topic and this particular audience, opinion change may have been obtainable only with both an effective speech and positive OAR.

One further consideration needs to be noted. Since the message was presented live, perhaps some delivery variable resulted in the positive treatment shifting as predicted, while the "free" treatment did not. If the speaker were going to improve as a result of practice, for example, he should be better the second time than the first. Further, when the speaker faced the "free" treatment audience, he had just finished a "successful" experience, one in which at least half of the audience had been providing positive feedback. If anything, his delivery should have been better. Yet there were significant differences in both character and dynamism (not in authoritativeness) indicating that his second

audience did not find him a "better speaker" than his first.

Perhaps the practice effect did not result in better delivery. Perhaps instead of being exhilarated by his "success" the speaker was depleted. He was tired, and therefore did not give the "free" audience the same delivery he had presented to the positive audience. This line of thinking would explain a difference in dynamism ratings, but does nothing to explain the difference and direction for character (nor, for that matter, the lack of difference in authoritativeness).

It seems more reasonable to believe that the differences found were accounted for by the independent variable, and that the failure of the "free" audience to shift opinion should be attributed to the necessary presence of positive OAR in order to obtain a significant shift on this topic for this particular population.

Between-group Differences: Message

Although two of the three between-group predictions regarding attitude toward message were supported, we should examine the prediction which failed to receive support.

We remember that the positive treatment resulted in a more favorable postcommunication attitude than the "free" treatment, and likewise more favorable than the negative treatment. However, the "free" treatment did

not differ significantly from the negative treatment. We can return to the line of thinking developed in our discussion of the within-group finding for the "free" treatment. Here too, the most reasonable explanation does not seem to lie with control, but rather in the idea that the presence of the independent variable was necessary in order to shift opinion.

There is, however, a difference between the unsupported hypothesis of the within-group prediction and that of the between-group prediction. Why, if the independent variable was the cause of shifting opinion, did it not shift opinion far enough in the negative treatment to produce a significant difference between the "free" treatment and the negative one?

We cannot offer our previous rationale because the independent variable - OAR - was manipulated in the negative treatment; thus we must turn elsewhere. It is possible that positive response is "stronger" than negative response. What the unsupported hypothesis of this between-group prediction may indicate is that people are moved more by perceptions of rewarding feedback than of punishing feedback. In other words, it may be easier to like when others do so than it is to dislike; to be more influenced by praise than by denigration.

To repeat the previous inference drawn in the discussion of the within-group hypothesis: perhaps a

significant shift in attitude toward topic could have been achieved only when the persuasive force of the message was coupled with the persuasive force of audience approval (which in this case took the form of positive OAR); that without them working together, so to speak, no shift in opinion was obtainable.

Between-group Differences: Speaker

Examining the results of the hypotheses on source credibility, i.e., predictions regarding between-group differences in attitude toward the speaker, we find three sets of predictions representing the three combinations of treatments.

Treatment I vs. Treatment II. Of the three hypotheses pertaining to the positive vs. the "free" treatment, two were supported; i.e., the positive treatment resulted in a more favorable attitude toward the speaker's character and his dynamism than did the "free" treatment. However, there was no significant difference between ratings of the speaker's authoritativeness.

One explanation is to suggest that the authoritativeness dimension is not an adequate discriminator for these Ss, hearing this speaker, on this topic. This is to call into question the validity of the scales, and to require the refutation of considerable evidence (most of it cited in Chapter II) supporting their validity. Further, to question the validity

of the authoritativeness scales and then to rely on that of the character scales would be unexplainable contradiction. We must look elsewhere for the answer.

We remember that the report of results included obtained probability levels, regardless of their failure to meet the criterion set for hypothesis acceptance. The obtained level for this hypothesis was $< .06$ and the obtained t was 1.65. A t of 1.67 would have resulted in a probability level of .05, the criterion set. Some investigators argue that there is "no such animal" as "very significant" or "highly significant" and certainly not "almost significant." Either the data are significant or they are not significant. The results of the analysis of data pertaining to this hypothesis were reported as not significant. We might, however, be allowed the phrase, "approached significance." No other explanation to account for the failure to support this hypothesis is offered.

Treatment I vs. Treatment III. The hypotheses regarding between-group differences in attitude toward speaker, for the positive vs. the negative treatment, were all supported well beyond the probability level set. These findings especially, as well as those of the entire set of predictions pertaining to source credibility, can be interpreted as failure to find (or to generate) a "boomerang effect" with the negative

treatment. One pertinent design consideration was just such a possibility. Had there been favorable ratings by negative treatment Ss viewing the speaker as an "underdog," as someone being given a "hard-time," their response might well have taken the form of high ratings on source credibility. Further, this "boomerang" could have extended to attitude toward topic. They might have decided to repay the speaker for his perceived-as-unjust treatment by indicating their agreement with his message.

Apparently, neither of these effects occurred. It does seem more reasonable to expect that they would show first, or strongest, in measures of source credibility rather than in attitude toward topic or elsewhere.

Treatment II vs. Treatment III. The final set of hypotheses pertaining to source credibility concerned differences between the negative and "free" treatments. Here, only one of the three hypotheses was supported. Although it was predicted that the "free" treatment would produce higher ratings on authoritativeness, character and dynamism, only on authoritativeness did the speaker receive significantly higher ratings from the "free" group. The differences between ratings of character approached significance ($p < .06$) but did not meet the .05 criterion. Once more the necessary t was 1.67, and the t obtained was 1.63.

It is the "dynamism hypothesis" that was clearly not significant. Here there are several possible explanations. We should once more consider control in this live speaker situation. Could the speaker have been tired, having presented the speech twice, so that his delivery suffered in the third treatment? If that were the case, then dynamism, if any dimension, should have showed it, i.e., the speaker should have been rated significantly lower on dynamism in the negative treatment. The data indicated no significant difference on this dimension. We must reject this possibility. On the other hand, could the speaker have stiffened-under-fire, so to speak, and become more dynamic in response to the negative feedback? Again, this should have produced significant differences (but with the direction reversed) between the two treatments. We must once more conclude that there was no reason to suspect inadequate control.

There is an explanation that, although not altogether satisfying, does have the merit of consistency. A previous interpretation which considered the possibility that positive OAR could be "stronger" than negative OAR may find application here also. We might posit that the three conditions (at least in terms of attitude toward the speaker) are hierarchical. This hierarchy could take the following order: positive, "free," negative. We would then expect our greatest difference between the positive and negative treatments, our next greatest

between the positive and the "free" treatments, and our least difference between the "free" and negative treatments. The results, at least, do not deny such a hierarchy. All source credibility dimensions were significantly different in the positive vs. negative comparison. Two of the three differed significantly (with the third approaching significance) in the positive vs. "free" comparison. One differed significantly, one approached significance, and one did not differ in the "free" vs. negative comparison.

Secondary Analysis

Now, having discussed the results pertaining to the hypotheses, with special attention to those that were not supported, we can turn to some of the questions raised in the secondary analysis. We recall that measures of the audiences were obtained from the speaker and observers, designated "audience raters" (ARs); and that while reporting the results of analysis we pointed out that there were areas of research that might be explored.

The possibilities for research designed to identify and classify audiences go beyond the OAR phenomenon. Here we enter an area that seems to call for a massive descriptive research effort.

Perhaps a meaningful way of getting started would be the creation of scales, similar to McCroskey's and/or Berlo and Lemert's, by means of which speakers and other audience members could rate various audiences. By this

means we might begin to develop sets of audience profiles.

Even considering the highly limited nature of the audience rating in this study, we may have been provided with a provocative research lead: the high agreement between speaker's and ARs' ratings. Common sense would tell us that a speaker views an audience much differently from the way the audience views itself, yet the evidence from this study, meager as it is, seems to indicate otherwise. This becomes more interesting when we remember that the audiences being measured were deliberately manipulated to differ significantly. Does this mean that a speaker, scheduled for a particular audience, might "scout it" by means of ARs whose evaluations would reflect, or at least come close to, his own? If such ratings (speaker's vs. ARs) differ, where and how do they do so? These questions and many others in this area, are in need of investigation.

The preceding perhaps serves as an appropriate preface for our next considerations, those regarding future research on the effects of OAR.

Future Research on the Effects of OAR

In discussing the possibilities provided by this concept for future research, let us begin with the most obvious areas in which we might look for variations extrapolated from this study. That is, what variations

are available in speaker, speech, and audience?

Speaker

Remembering that the speaker for this study was one selected with deliberate intent to hold source credibility low, so that it might not "mask" the presence of other variables, we could design a study which would manipulate the speaker's credibility. What would be the results of a high credible source receiving negative feedback? Would the "boomerang" effect, mentioned previously, take place? Would there be differences between a genuine authority figure interacting with OAR and one whose authority was artificially "created" (the latter might be attempted by introducing an unknown speaker with material designed to give him high credibility)? Other speaker variations, as well as these, could be devised.

Speech

The possible message variations are many. This study utilized a message assumed to be strongly attitude discrepant. As mentioned previously in this chapter, examination of pre-test scores indicated that Ss were generally neutral. Studies examining the influence of OAR interacting with attitude discrepant and attitude congruent messages seem called for.

Message salience is another variable to investigate. What would be the effects of OAR when it was varied in

conjunction with high-salient and low-salient topics?

There is yet another kind of message variance to be explored in combination with OAR. What would be the effects of introducing materials in the speech designed to off-set the effects of feedback? For example, such a message might contain such phrases as: "We should think for ourselves. . . ." "As independent thinkers, we" etc. A recent cigarette commercial seems to make this sort of "anti-conformity" appeal.

Audience

The variations in audience could take many forms. This study utilized audiences in which Ss and Cs were drawn from the same population; Ss were being influenced by their peers. A study could be designed in which authority figures provided the manipulated feedback. What would have been the results of the present study had the student Ss received treatment in the presence of their professors? OAR could come from a reference group as opposed to a membership group, or from what Newcomb (1950) has called a negative reference group. (We will explore the possibilities of a negative reference group below, under considerations of "other dependent variables.") Another audience variation might find OAR coming from opinion leaders. (These opinion leaders could be "created" from a series of pre-treatment group discussions in which emergent leaders were identified and then reinforced.)

Closely connected with the preceding types of variations would be studies designed to determine whether some personality types were more or less influenced by the responses of others. If there are some persons who are more susceptible to the influence of OAR, what, if any, are their shared characteristics?

Variations in age groups would be possible with a series of replications using younger, older, or varying combinations of age groups demonstrably different from the "young adult" category that made up the audiences for this study.

Finally, audience attitudes could be manipulated and "played-off" against OAR in a number of ways. For example, various sets toward speaker and/or message could be created prior to treatment. The OAR could then be manipulated either to support or conflict with these predispositions.

Three additional types of variation might well be considered in a continuing examination of OAR: (1) within-treatment variations, (2) situation or context variations, (3) the consideration of other dependent variables.

Within-treatment

Some challenging possibilities for studies present themselves when we consider ways in which OAR could be varied, other than the positive only and negative only forms that were used in this study. Positive and

negative OAR could be presented in varying proportions within the same treatment, and this manipulation could take a variety of forms. For instance, we might have a treatment in which the majority of the OAR was positive, but a small minority of the audience was producing negative OAR. (This is a common occurrence at the typical political address, at which the majority of the audience is partisan but a contingent from the opposition shows up to heckle the speaker.)

Another within-treatment manipulation could take the form of one type of OAR gradually (or suddenly) giving way to another type, i.e., rather than having two conflicting types of OAR operate simultaneously, we could have a treatment which saw positive OAR at the outset gradually turning into negative OAR during the latter portions of the message presentation, or vice versa. The question raised with this particular example is: Would Ss be more inclined to respond favorably to climactic or anti-climactic positive OAR?

Still another consideration would be variations in intensity of OAR. We recall from Chapter II, that Cs were encouraged to create OAR, for both treatments, as they determined. Studies examining strong positive OAR vs. weak positive OAR, strong negative vs. weak negative, and various other combinations could be undertaken.

Finally, within-treatment variation could take the form of using OAR intermittently to reinforce a selected

point or points within the message.

These are only some of the studies that could be undertaken by varying OAR within treatments, rather than between, as this study did.

Situation or Context

In generalizing from this study, we cannot exclude the possible limitations of context or situation. Student Ss heard the speech and received the experimental stimulus in a college environment. We do not know how important they considered the experience, whether they took a positive or a negative view toward the situation, etc. We can assume that their attitude toward situation or context could have been manipulated. Studies containing such manipulations would provide additional insight into OAR. Putting it another way, a major concern of this study was to hold situation or context constant so that any changes between treatments could be attributed to the study's independent variable. However, situation or context could be manipulated (treated as an independent variable) in order to observe its interaction with OAR. For example, the situation for one treatment might be made more important in order to compare it with another treatment where situation was not so manipulated. As Doob (1948, p. 531) has pointed out, when people believe a speech is being broadcast they consider it important and, "what is important tends to make them more submissive."

Other Dependent Variables

This study was designed to measure the effects of OAR on attitude toward a message and on source credibility. There are numerous other variables that might be measured in order to determine its effects. One of the most obvious is comprehension or retention. Do Ss retain more of a message after the stimulation of OAR? Does positive or negative OAR cause a speech's theme to be retained more accurately or for a longer time? These and other similar questions await answers to be provided by studies in which OAR is manipulated and different dependent variables are measured.

Newcomb's (1950) notion of negative reference groups, mentioned earlier, provides an intriguing application for an OAR study. A negative reference group, as its name implies, is one which an individual regards as "the opposition" or "the enemy." Just as his own membership group (or one to which he aspires) serves as a check on how he should behave, the negative reference group provides a model for how he should not behave.

If Ss were members of an audience composed primarily of a negative reference group, then the perception of positive OAR ought to shift their attitudes either toward the group, or toward the message, or both, depending on message content. Similarly, the perception of negative OAR should strengthen their attitude toward the message or decrease their attitude toward the negative reference group.

In concluding this portion of the discussion, relating to possibilities for future research, we must call attention to at least one more concern. It is the question of whether the effects of attitude change induced by OAR are temporary or lasting. The answer to this question lies in delayed measures to determine if Ss "return" to their original pre-treatment attitudes.

Some Necessary Reservations

At this point, we should muster all available scepticism, and once more review this study with the specific goal in mind of focusing on necessary reservations as to its worth.

It should not be necessary to review again the control questions raised by the use of a live speaker. The problems inherent in such use have been recognized and discussed at some length. Therefore, let us go on to consider the limitations of OAR intensity that were touched on previously.

No "base line" existed in the study by which intensity (or "degree") of perceived OAR could be measured. We can talk only about kind of OAR generated in the treatments. As to how much positive OAR was being produced in Treatment I, there is no satisfactory answer, nor can we say how much negative OAR was being produced in Treatment III. We can say that approximately one-half of the audience was probably generating the appropriate

kind of OAR for the particular treatment. Whether this was contagious, spreading from Cs to Ss within a treatment, is another unknown. Such "unknowns" present problems for accurate replication.

Even though we may, for this study, argue that some crude quantification is possible (on the basis of ratio of Cs to Ss), how do we know whether we had weak (whatever "weak" may mean) positive OAR vs. strong (whatever "strong" may mean) negative OAR, or vice versa? We do not. Our ability to specify becomes even more questionable when we consider the "free" treatment. Did we have equal portions of positive and negative OAR operating? Did one or the other predominate? Did we have a treatment that produced mixed OAR simultaneously, or did OAR take some linear pattern?

We do know that in both the positive and negative treatments half the audience probably maintained the same general kind of OAR throughout the treatment. No matter what the speaker said or did, the Cs were there to produce the kind of OAR appropriate for their treatment, and we assume they did so. This meant that only half the audience (the Ss) were free to produce any kind (or no kind) of OAR, whereas the entire audience in the "free" treatment could produce whatever kind of OAR, and at whatever points in the event, they wished. What contribution did this make to our results?

All of the above questions can rightly be raised in any consideration of the findings. Are there any answers to them? There seem to be two responses (if not answers). First, although it is true that the "free" treatment could have varied as to kind or degree of OAR, we have some tentative evidence to consider. Both the speaker and independent observers (ARs) viewed this audience as different from those of the positive and negative treatments; and, in most cases, supported the assumption that a "neutral" classification (as compared with the other two) was a reasonable one.

Further, we can assume that the "free" audience's responses were made out of the same context, with the same speaker, presenting the same message, to a group drawn from the same population, and holding the same precommunication attitudes, as those of the positive and negative treatments. We can, in short, assume that all variables operating in the manipulated treatments were operating in the "free" treatment, with the exception of the independent variable.

Second, and perhaps more important than any "defense" of the experiment, is the observation that out of such considerations as these grow additional research hypotheses and experiments and, hence, additional knowledge. We must begin somewhere, and we need to begin by establishing that a variable can have some effect before we can analyze its effect(s) with any precision.

We did recognize, in this study, a significant variable in the communication process; future research will enable us to analyze that variable further. One of the first steps in such an analysis would be to determine a method of specifying "strength" or intensity of OAR. A promising beginning would be the development of the audience rating forms we have discussed previously.

Another reservation refers to the limitations imposed by the experimental context or situation. We have already implied this problem in our preceding discussion. There, we pointed out that context was at least limited by the time, the place, and the immediate environment of the experiment. Perhaps the most significant element operating in this particular situation was the cultural norms of audience behavior in a school environment. We cannot discount the possible effects of the experimental stimulus interacting with such norms (whatever they may be).

Further, we could speculate that the amount of OAR perceived (not the amount generated) is probably the result of an interaction between the amount generated and the situational variables, or expectations, of a particular audience. Since we do not know what these expectations may be, let alone what the effects of violating or complying with them might be, we can only call attention to the necessity of recognizing their

obvious role in this and other communication events.

One further limitation needs to be mentioned. The Cs providing the stimulus in the experiment were "acting," that is, we assume that despite their held attitudes they generated the OAR appropriate for their particular treatment. What effect does this produce? Would results be different if their OAR was congruent with their attitudes? Again, we do not know. Once more, future description and experimentation in this entire area is called for.

With these reservations firmly in mind, let us now consider some wider applications that may be made.

Significance of the Research

Now let us discuss, in a broader fashion than that of the preceding sections, what the results of this study may mean. First, we can recall that the impetus for the study came from a consideration, or the "logical extension," of a process view of communication. This view led to speculation in relatively "unknown territory," that of intra-audience effects. Perhaps this study, and others of a similar nature, will reawaken interest in such concepts as social facilitation, and will indicate the applicability of the research (past and current) in imitation, conformity, and vicarious socialization to public speaking. Such interest, once aroused, could lead to further extensions of the "boundaries" of the

speaking event. Beginning with such a premise, we may be led to examine pre-event and post-event variables. "Response" of some sort must take place before a speaking event. What do people say to each other (both verbally and non-verbally) as they begin to assemble in a lecture hall? We have talked previously about creating precommunication sets, and there is ample concern shown in the literature for precommunication attitudes, but how much does pre-event interaction among audiences account for these things?

Closer to the OAR concept is interaction that takes place following a speaking event. As an audience leaves an auditorium, members may react in ways as "simple" as one man turning to another and asking, "What did you think of the speech?" and receiving the reply, "I thought it was very good," or, "Damn boring!" One the other hand, we may have reactions as "complex" as a group spending an entire evening in heated discussion of the speech attended to earlier.

The preceding is an example of something that might be labeled "delayed OAR." It could well be an important element in explanations of results on delayed post-communication measures. It is certainly an area for study itself.

Whenever we discover, define, or invent a new concept, or look at an old one in a new way, the applications and insights provided seem to be virtually

limitless. We have touched on them throughout this study. In Chapter I, we speculated on the relationships that may exist between OAR and other concepts such as conformity, imitation, and vicarious learning. Here, in the concluding portion, we have attempted to indicate some of the "doors" that the concept and its implications may begin to open.

References

- Allport, F. H. Social Psychology. Boston: Houghton Mifflin, 1924.
- Amato, P. and T. Ostermier. "The Effects of Audience Feedback on the Beginning Public Speaker," Speech Teacher. 16: 56-60, 1967.
- Asch, S. E. "Studies of Independence and Conformity: A Minority of One Against a Unanimous Majority," Psychological Monographs. 70: 1956.
- _____. "Effects of Group Pressure Upon the Modification and Distortion of Judgments," in E. E. Maccoby, T. M. Newcomb, and E. L. Hartley, Readings in Social Psychology. 3rd ed. 174-182. New York: Holt, Rinehart, and Winston, 1958.
- Ashby, W. R. Design For a Brain. New York: John Wiley, 1952.
- Bavelas, A. "A Mathematical Model for Group Structures," Applied Anthropology. 7: 16-30, 1948.
- _____. "Communication Patterns in Task Oriented Groups," Journal of the Acoustical Society of America. 22: 725-730, 1950.
- _____. "Communication Patterns in Problem-Solving Groups," in H. von Foerster, et al. (eds.) Cybernetics: Circular Causal and Feedback Mechanisms in Biological and Social Systems. New York: Macy Foundation, 1952.
- Benedict, T. W. "An Experimental Study of Social Status as a Dimension of Ethos." Unpubl. doctoral dissertation, University of Southern California, 1958.
- Berelson, B. and G. Steiner. Human Behavior. New York: Harcourt, 1964.
- Berger, S. M. "Incidental Learning Through Vicarious Reinforcement," Psychological Reports. 9: 477-491, 1961.
- Berlo, D. K. The Process of Communication. New York: Holt, 1960.

- _____ and H. Gulley. "Some Determinants of the Effects of Oral Communication in Producing Attitude Change and Learning." Speech Monographs. 24: 10-20, 1957.
- _____ and J. B. Lemert. "A Factor Analytic Study of the Dimensions of Source Credibility." A paper presented at the convention of the Speech Association of America, 1961.
- _____ and R. J. Mertz. Dimensions for Evaluating the Acceptability of Message Sources. Research Monograph, Department of Communication, Michigan State University, 1966.
- Bormann, E. G. Theory and Research in the Communicative Arts. New York: Holt, Rinehart, and Winston, 1965.
- Callaghan, J. C. "Social Facilitation in Persuasion," Quarterly Journal of Speech. 25: 643-656, 1940.
- Campbell, D. T. "Systematic Error on the Part of Human Links in Communications Systems," Information and Control. 1: 334-369, 1958.
- Cherry, C. On Human Communication. Cambridge: M.I.T. Press, 1957.
- Cohen, A. R. "Upward Communication in Experimentally Created Hierarchies," Human Relations. 11: 41-53, 1958.
- _____. Attitude Change and Social Influence. New York: Basic Books, 1964.
- Collins, B. E. and H. Guetzkow. A Social Psychology of Group Processes for Decision-Making. New York: John Wiley, 1964.
- Doob, L. W. Public Opinion and Propaganda. New York: Henry Holt, 1948.
- Eisenson, J. et al. The Psychology of Communication. New York: Appleton-Century-Crofts, 1963.
- Festinger, L. "Social Psychology and Group Process," in C. P. Stone and Q. McNemar (eds.) Annual Review of Psychology. 6: 187-216, 1955.

- Frates, R. "An Experimental Study of Attitude Change as a Function of Dogmatism and Experimental Environment." Unpubl. M.A. thesis. San Jose State College, 1968.
- Haiman, F. S. "An Experiment in Informative Speaking." Quarterly Journal of Speech 34: 355-360, 1948.
- Holtzman, P. D. "Confirmation of Ethos as a Confounding Element in Communication Research." Speech Monographs 30: 464-466, 1966.
- Houston, J. P. and S. A. Mednick. "Creativity and the Need for Novelty," Journal of Abnormal and Social Psychology. 66: 137-141, 1963.
- Hovland, C. I. "Reconciling Conflicting Results Derived from Experimental and Survey Studies of Attitude Change." American Psychologist 14: 8-17, 1959.
- Johnson, F. C. and G. R. Klare. "Feedback: Principles and Analogies," Journal of Communication. 12: 150-159, 1962.
- Kelley, H. H. "Communication in Experimentally Created Hierarchies," Human Relations. 4: 39-56, 1951.
- Kerlinger, F. N. Foundations of Behavioral Research. New York: Holt, Rinehart, and Winston, 1964.
- Krasner, L. "Studies of the Conditioning of Verbal Behavior," Psychological Bulletin. 35: 148-170, 1958.
- Lambert, W. W. and W. E. Lambert. Social Psychology. Englewood Cliffs: Prentice-Hall, 1964.
- Layes, E. "An Experimental Investigation of Attitude Change Under Varying Audience Conditions." Unpubl. research project. San Jose State College, 1967.
- Lazowick, L. M. "On the Nature of Identification." Journal of Abnormal and Social Psychology. 51: 175-183, 1955.
- Leavitt, H. J. and R. A. Mueller. "Some Effects of Feedback on Communication." Human Relations. 4: 401-410, 1951.
- Maccoby, E. N. et al. "Social Reinforcement in Attitude Change." Journal of Abnormal and Social Psychology. 63: 109-115, 1961.

McCroskey, J. C. "Experimental Studies of the Effects of Ethos and Evidence in Persuasive Communication." Unpubl. doctoral dissertation, Pennsylvania State University, 1966a.

_____. "Scales for the Measurement of Ethos." Speech Monographs. 33: 65-72, 1966b.

_____. An Introduction to Rhetorical Communication. Englewood Cliffs: Prentice-Hall, 1968.

_____ and R. E. Dunham. "Ethos: A Confounding Element in Communication Research." Speech Monographs. 30: 456-463, 1966.

Miller, G. R. "Variations in the Verbal Behavior of A Second Speaker as a Function of Varying Audience Responses." Speech Monographs. 31: 109-115, 1964.

_____. Speech Communication a Behavioral Approach. Indianapolis: Bobbs-Merrill, 1966.

_____. et al. "The Effects of Differential Reward on Speech Patterns." Speech Monographs. 28: 9-15, 1961.

Minnick, W. The Art of Persuasion. Boston: Houghton-Mifflin, 1957.

Moretti, Michael. "An Experimental Study to Measure the Effect that Two Methods of Suggesting Speaker Intelligence and Competence Have on Audience Ratings of Speaker Character and on Message Persuasiveness." Unpubl. M. A. Thesis, San Jose State College, 1965.

Newcomb, T. M. Social Psychology. New York: Dryden Press, 1950.

Nyquist, H. "Certain Factors Effecting Telegraph Speed." Bell System Technical Journal. 3: 324, 1924.

Oliver, R. Persuasive Speaking. New York: Longmans Green, 1950.

Osgood, C. E., G. J. Suci, and P. H. Tannenbaum. The Measurement of Meaning. Urbana: University of Illinois Press, 1957.

Reitan, H. T. and M. E. Shaw. "Group Membership, Sex-Composition of the Group, and Conformity Behavior." Journal of Social Psychology. 64: 41-51, 1964.

- Sherif, M. "A Study of Some Social Factors in Perception." Archives of Psychology. 187, 1935.
- Simpson, R. H. "Attitudinal Effects of Small Group Discussion." Quarterly Journal of Speech. 46: 413-418, 1960.
- Sopolsky, A. "Effects of Interpersonal Relationships Upon Verbal Conditioning." Journal of Abnormal and Social Psychology. 60: 241-246, 1960.
- Stoltz, W. and P. Tannenbaum. "Effects of Feedback on Oral Encoding Behavior." Language and Speech. 6: 218-228, 1963.
- Stotland, E. "Identification with Persons and Groups." Final report on Grant M-2423 to N.I.M.H., U.S. Public Health Service, October, 1961, cited in Secord, P. and C. Backman. Social Psychology. New York: McGraw-Hill, 1964.
- Thibaut, J. W. and J. Coules. "The Role of Communication in the Reduction of Interpersonal Hostility." Journal of Abnormal and Social Psychology. 47: 770-777, 1952.
- Thomas, G. L. and D. C. Ralph. "A Study of the Effects of Audience Proximity on Persuasion." Speech Monographs. 26: 300-307, 1959.
- Vlandis, J. "Variations in the Verbal Behavior of a Speaker as a Function of Varied Reinforcing Conditions." Speech Monographs. 31: 116-119, 1964.
- Walter, O. "The Measurement of Ethos." Unpubl. doctoral dissertation. Northwestern University, 1948.
- Wiener, N. Cybernetics. Cambridge: M.I.T. Press, 1948.

APPENDIX A

INSTRUCTIONS TO Ss PRECEDING PRE-TEST

PLEASE READ TO CLASS BEFORE DISTRIBUTING QUESTIONNAIRES:

The Speech Activities Class at SJSC is interested in gathering opinions on a variety of topics. Your response to this questionnaire would be much appreciated.

There are two important points:

(1) The questionnaire has two parts. In the first part you are asked to respond to statements using a number system. In the second part you are asked to respond to a concept by checking a set of scales. Please read the directions for both parts carefully.

(2) Please ignore the blank on the questionnaire for name. We want your honest opinion and do not want you to feel intimidated by signing the questionnaire. However, we would like to know who did and who did not participate. Therefore, will you please print your name on the attached piece of scratch paper; remove it from the questionnaire and hand them in separately.

APPENDIX B

PRE-TEST QUESTIONNAIRE

Name: _____

DIRECTIONS: Read each of the following statements carefully. If you strongly approve of the statement as it stands, enter the number 5 in the space provided at the left of the sentence. If you strongly disapprove of the statement then enter the number 1 at the left of the sentence, and so on, with regard to the other attitudes (approve, undecided, disapprove).

- | STRONGLY
APPROVE
(5) | APPROVE
(4) | UNDECIDED
(3) | DISAPPROVE
(2) | STRONGLY
DISAPPROVE
(1) |
|----------------------------|----------------|---|-------------------|-------------------------------|
| ___ | 1. | Quality in education can best be guaranteed by local school boards. | | |
| ___ | 2. | Public schools should be financed primarily by federal taxes. | | |
| ___ | 3. | Equality of opportunity in education for all citizens can be best guaranteed by federal control of education. | | |
| ___ | 4. | The curriculum of public schools should be determined by local school boards. | | |
| ___ | 5. | The federal government should have no control of the curriculum of public schools. | | |
| ___ | 6. | Public schools can be better administered by the federal government than by local school boards. | | |
| ___ | 7. | Quality in education can best be guaranteed by the federal government. | | |
| ___ | 8. | The curriculum of public schools should be determined by the federal government. | | |
| ___ | 9. | Equality of opportunity in education for all citizens can be best guaranteed by local control of education. | | |
| ___ | 10. | Public schools should be financed primarily by local taxes. | | |
| ___ | 11. | The federal government should assume complete financial responsibility for education. | | |
| ___ | 12. | Public schools can be better administered by local school boards than by the federal government. | | |
| ___ | 13. | The amount of teachers' salaries should be determined by the federal government. | | |
| ___ | 14. | Teacher employment standards should be controlled by local school boards. | | |

APPENDIX B, continued

- ___ 15. Public schools should not be primarily financed by local taxes.
- ___ 16. The amount of teachers' salaries should be determined by local school boards.
- ___ 17. The federal government should have no control of teacher employment standards.
- ___ 18. The federal government should substantially increase its financial support of public education.
- ___ 19. The federal government should not determine the amount of teachers' salaries.
- ___ 20. Teacher employment standards should be controlled by the federal government.
- ___ 21. Public schools should not be primarily financed by federal taxes.
- ___ 22. Local school boards should not determine the amount of teachers' salaries.

APPENDIX B, continued

DIRECTIONS: In using the following scales please make your judgments on the basis of what these measures mean to you.

Here is how to use the scales:

(Concept)

Good $\frac{\quad}{3} : \frac{\quad}{2} : \frac{\quad}{1} : \frac{\quad}{0} : \frac{\quad}{-1} : \frac{\quad}{-2} : \frac{\quad}{-3}$ Bad

If you felt that the concept was in general extremely good, you would place a check mark in space number 3. If quite good (but not extremely good), in 2; if slightly good in 1; if neither good nor bad, in 0; if slightly bad, in -1; if quite bad, in -2, and if extremely bad, in -3.

The "0" or neutral space on the scale may also be used for "I don't know" or "I don't think this scale applies" answers.

Be sure to put a check mark somewhere along each scale. Put your check within the spaces, not on the lines separating the spaces. Put one, and only one, check on each scale. Please do not omit scales.

FEDERAL CONTROL OF EDUCATION

Harmful	___:___:___:___:___:___:___	Beneficial
Good	___:___:___:___:___:___:___	Bad
Wrong	___:___:___:___:___:___:___	Right
Fair	___:___:___:___:___:___:___	Unfair
Negative	___:___:___:___:___:___:___	Positive
Wise	___:___:___:___:___:___:___	Foolish

APPENDIX C

SPEAKER'S INTRODUCTION

Good morning,

The speaker that we will hear this morning is Ken Yules, who will discuss the role of the Federal government in public education.

Mr. Yules is a sophomore who is associated with speech activities. The title of his speech is, "The Altar of Responsibility."

APPENDIX D
POST-TEST QUESTIONNAIRE

DETACH THIS SHEET FROM YOUR QUESTIONNAIRE AND SUBMIT IT
SEPARATELY

Name:

Age:

Year in School:

Major Field of Study:

Minor Field of Study:

DETACH THIS SHEET FROM YOUR QUESTIONNAIRE AND SUBMIT IT
SEPARATELY

STRONGLY APPROVE (5)	APPROVE (4)	UNDECIDED (3)	DISAPPROVE (2)	STRONGLY DISAPPROVE (1)
----------------------------	----------------	------------------	-------------------	-------------------------------

- ☐ 1. I respect this speaker's opinion on the topic.
- ☐ 2. This speaker is not of very high intelligence.
- ☐ 3. This speaker is a reliable source of information on the topic.
- ☐ 4. I have confidence in this speaker.
- ☐ 5. This speaker lacks information on the subject.
- ☐ 6. This speaker has high status in our society.
- ☐ 7. I would consider this speaker to be an expert on the topic.
- ☐ 8. This speaker's opinion on the topic is of little value.
- ☐ 9. I believe that this speaker is quite intelligent.
- ☐ 10. The speaker is an unreliable source of information on the topic.
- ☐ 11. I have little confidence in this speaker.
- ☐ 12. The speaker is well-informed on the subject.
- ☐ 13. The speaker has low status in our society.
- ☐ 14. I would not consider this speaker to be an expert on this topic.
- ☐ 15. This speaker is an authority on the topic.
- ☐ 16. This speaker has had very little experience with this subject.
- ☐ 17. This speaker has considerable knowledge of the factors involved with this subject.
- ☐ 18. Few people are as qualified to speak on this topic as this speaker.
- ☐ 19. This speaker is not an authority on the topic.
- ☐ 20. This speaker has very little knowledge of the factors involved with the subject.
- ☐ 21. This speaker has had substantial experience with this subject.
- ☐ 22. Many people are much more qualified to speak on this topic than this speaker.

APPENDIX D, continued

DIRECTIONS: Read each of the following statements carefully. If you strongly approve of the statement as it stands, enter the number 5 in the space provided at the left of the sentence. If you strongly disapprove of the statement then enter the number 1 at the left of the sentence, and so on, with regard to the other attitudes (approve, undecided, disapprove).

STRONGLY

APPROVE

(5)

APPROVE

(4)

UNDECIDED

(3)

DISAPPROVE

(2)

STRONGLY

DISAPPROVE

(1)

1. I deplore this speaker's background.
2. This speaker is basically honest.
3. I would consider it desirable to be like this speaker.
4. This speaker is not an honorable person.
5. This speaker is a reputable person.
6. This speaker is not concerned with my well-being.
7. I trust this speaker to tell the truth about the topic.
8. This speaker is a scoundrel.
9. I would prefer to have nothing at all to do with this speaker.
10. Under most circumstances I would be likely to believe what this speaker says about the topic.
11. I admire the speaker's background.
12. This speaker is basically dishonest.
13. The reputation of this speaker is low.
14. I believe that this speaker is concerned with my well-being.
15. This speaker is an honorable person.
16. I would not prefer to be like this speaker.
17. I do not trust the speaker to tell the truth on this topic.
18. Under most circumstances I would not be likely to believe what this speaker says about the topic.
19. I would like to have this speaker as a personal friend.
20. The character of this speaker is good.

APPENDIX D, continued

DIRECTIONS: In using the following scales please make your judgments on the basis of what these measures mean to you. Here is how to use the scales:

(Speaker)

Good : : : : : : Bad
 3 2 1 0 -1 -2 -3

If you felt that the speaker was in general an extremely good one, you would place a check mark in space number 3. If quite good (but not extremely good), in 2; if slightly good in 1; if neither good nor bad, in 0; if slightly bad, in -1; if quite bad, in -2, and if extremely bad, in -3.

The "0" or neutral space on the scale may also be used for "I don't know" or "I don't think this scale applies" answers.

Be sure to put a check mark somewhere along each scale. Put your check within the spaces, not on the lines separating the spaces. Put one, and only one, check on each scale. Please do not omit scales.

THIS SPEAKER

Reliable	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Unreliable
Uninformed	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Informed
Qualified	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Unqualified
Unintelligent	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Intelligent
Valuable	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Worthless
Inexpert	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Expert
Honest	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Dishonest
Unfriendly	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Friendly
Pleasant	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Unpleasant
Selfish	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Unselfish
Nice	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Awful
Sinful	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Virtuous
Aggressive	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Meek
Timid	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Bold
Energetic	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Tired
Introverted	<u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u> : <u> </u>	Extroverted

APPENDIX D, continued

DIRECTIONS: Read each of the following statements carefully. If you strongly approve of the statement as it stands, enter the number 5 in the space provided at the left of the sentence. If you strongly disapprove of the statement then enter the number 1 at the left of the sentence, and so on, with regard to the other attitudes (approve, undecided, disapprove).

- | STRONGLY
APPROVE | APPROVE | UNDECIDED | DISAPPROVE | STRONGLY
DISAPPROVE |
|---|---------|-----------|------------|------------------------|
| (5) | (4) | (3) | (2) | (1) |
| <u> </u> 1. | | | | |
| Quality in education can best be guaranteed by local school boards. | | | | |
| <u> </u> 2. | | | | |
| Public schools should be financed primarily by federal taxes. | | | | |
| <u> </u> 3. | | | | |
| Equality of opportunity in education for all citizens can be best guaranteed by federal control of education. | | | | |
| <u> </u> 4. | | | | |
| The curriculum of public schools should be determined by local school boards. | | | | |
| <u> </u> 5. | | | | |
| The federal government should have no control of the curriculum of public schools. | | | | |
| <u> </u> 6. | | | | |
| Public schools can be better administered by the federal government. | | | | |
| <u> </u> 7. | | | | |
| Quality in education can best be guaranteed by the federal government. | | | | |
| <u> </u> 8. | | | | |
| The curriculum of public schools should be determined by the federal government. | | | | |
| <u> </u> 9. | | | | |
| Equality of opportunity in education for all citizens can be best guaranteed by local control of education. | | | | |
| <u> </u> 10. | | | | |
| Public schools should be financed primarily by local taxes. | | | | |
| <u> </u> 11. | | | | |
| The federal government should assume complete financial responsibility for education. | | | | |
| <u> </u> 12. | | | | |
| Public schools can be better administered by local school boards than by the federal government. | | | | |
| <u> </u> 13. | | | | |
| The amount of teachers' salaries should be determined by the federal government. | | | | |
| <u> </u> 14. | | | | |
| Teacher employment standards should be controlled by local school boards. | | | | |

APPENDIX D, continued

- ___ 15. Public schools should not be primarily financed by local taxes.
- ___ 16. The amount of teachers' salaries should be determined by local school boards.
- ___ 17. The federal government should have no control of teacher employment standards.
- ___ 18. The federal government should substantially increase its financial support of public education.
- ___ 19. The federal government should not determine the amount of teachers' salaries.
- ___ 20. Teacher employment standards should be controlled by the federal government.
- ___ 21. Public schools should not be primarily financed by federal taxes.
- ___ 22. Local school boards should not determine the amount of teachers' salaries.

APPENDIX D, continued

DIRECTIONS: In using the following scales please make your judgments on the basis of what these measures mean to you.

Here is how to use the scales:

(Concept)

Good ₃ : ₂ : ₁ : ₀ : ₋₁ : ₋₂ : ₋₃ Bad

If you felt that the concept was in general extremely good, you would place a check mark in space number 3. If quite good (but not extremely good), in 2; if slightly good in 1; if neither good nor bad, in 0; if slightly bad, in -1; if quite bad, in -2, and if extremely bad, in -3.

The "0" or neutral space on the scale may also be used for "I don't know" or "I don't think this scale applies" answers.

Be sure to put a check mark somewhere along each scale. Put your check within the spaces, not on the lines separating the spaces. Put one, and only one, check on each scale. Please do not omit scales.

FEDERAL CONTROL OF EDUCATION

Harmful : : : : : : Beneficial

Good : : : : : : Bad

Wrong : : : : : : Right

Fair : : : : : : Unfair

Negative : : : : : : Positive

Wise : : : : : : Foolish

APPENDIX E
EXPERIMENTAL SPEECH

Almost two hundred years ago Thomas Jefferson told the American people that if we expected to remain both ignorant and free we were expecting what never was and never will be. If it was true that man could not remain ignorant and free in the 18th century, it is even truer today. Thus it is not surprising that almost every American will tell you that he is "all for the best educational system possible." With this historical support and apparently favorable modern attitude we could be led to the assumption that the United States has the best possible public educational system already in operation. Before we accept this assumption as fact we should determine just what are the criteria for the best possible educational system for the 20th century and how well our present system measures up to this ideal. It will be my purpose this evening to do just that.

While there may be some disagreement on the order of importance, most people concerned with our educational system would suggest four criteria for the first class program. First, the quality of the instruction must be high. Second, there must be adequate finances available to provide for all legitimate educational needs. Third, the school system must provide equal opportunity for all children in the nation. Finally, qualified people must

APPENDIX E, continued

control the operation of the system. Let's look at these criteria of the ideal school system to see what they really mean and how our present school system in the United States meets or fails to meet them.

Probably the most difficult thing to define in relation to education is quality. But I think we can assume that whatever quality is, it will be present if students take the right courses from well trained teachers. Of course, who is to say what are the "right" abilities and interests. Thus, different courses are needed by different students in every school. The right courses for some students are rigorous college preparatory subjects, while for others vocational training courses are what are most appropriate. The important thing in assessing the quality of an educational system is whether or not individual students, whatever school they must attend, are able to study the courses that are right for them. Unfortunately in many of our nation's schools, students are not able to take the right courses--simply because they aren't even offered. According to figures released by the Department of Health, Education, and Welfare of the Federal Government, over one-third of the nation's high schools do not offer such essential college preparatory subjects as chemistry or physics, and about the same number don't offer even one foreign language. Only a small fraction of our public schools offer a broad program of vocational education. From this we must conclude that many of our students are not obtaining the

APPENDIX E, continued

quality education we desire.

But, for a moment, let us assume that every student in the United States has the opportunity to take the right courses. We still will be forced to conclude that the quality of American education is not acceptable because of that second characteristic of a quality educational system that I mentioned a few moments ago--well trained teachers. I'm sure I don't have to tell anyone about the tremendous shortage of adequately trained teachers. Almost every state is presently forced to accept substandard teachers. In their report entitled The Financial Status of Public Schools the Committee on Educational Finance of the National Education Association reports that last year the nation was short 118,000 qualified teachers just to meet minimum standards. We can only guess what that figure would be if we tried to eliminate all of the incompetent teachers in the classrooms today and replace them with thoroughly trained and qualified individuals. I would suggest 500,000 as a very conservative starting figure. But, whatever the figure is, since many needed courses are not even offered students in many of our schools and we face a serious shortage of competent teachers, we must conclude that our present educational system falls far short of our ideal of a quality educational system.

Now let us turn our attention to the criterion of finance. We can't set down an exact figure and say this

APPENDIX E, continued

or that amount of money is adequate for a first class educational system. No one is in a position to be that exact. However, we can say that if our schools have enough money to provide educationally acceptable physical plants, to pay professional salaries to our teachers, and to cover costs of operating expenses and equipment, that could be called adequate finance. Unfortunately, many of our school districts do not have that kind of money.

Let us look first at physical plants. According to figures released by the United States Office of Education in January of this year, 25.4% of the nation's classrooms are, in their words, "obsolete and unacceptable" for public schools because of such things as extreme fire hazards. Translating that percentage into numbers of classrooms, we find that over 375,000 classrooms are presently unacceptable. In terms of students, this means that over nine million American children are presently attending substandard schools, some of which the U.S. Office of Education calls "fire hazards." But one may ask, "Isn't this problem being overcome?" Unfortunately it isn't in many areas. I needn't point out that most schools are built by finances derived by selling municipal bonds. These bond issues must be voted on by the people in the communities involved. If the bonds are voted down, the new school facilities are not built. The U.S. Office of Education reports that

APPENDIX E, continued

28% of the bond issues for such facilities were defeated between 1957 and 1963. The figure rose to 31% last year. It is apparent from these figures that not only are there numerous school buildings in completely unacceptable condition, but even in those communities where an attempt is made to remedy the problem, over a fourth of the attempts are unsuccessful.

And how about adequate financing to provide for professional salaries for our teachers? Well, let's look at the facts and then decide for ourselves. The most recent national study of teachers' salaries was released January 3, 1965, by the National Education Association. This material was included in the NEA Research Report 1964 R17. We find that the average elementary school teacher in the United States earns just over \$6,000. The average in California is over \$7,500. However, in Mississippi and South Dakota it is only \$4,000. Figures for secondary school teachers are similar. The national average is \$6,500 with California leading the country with an average of \$8,400 and Mississippi bringing up the rear with an average of under \$4,300. Probably many of us have enough information already to draw a conclusion about the adequacy of financing in some of our states like Mississippi and South Dakota. But let's get away from state and national "averages" and look at teachers salaries from another perspective. Most of us know that the generally

APPENDIX E, continued

accepted income level under which people are considered to be living in abject poverty is \$3,000. Certainly a professional educator should be expected to earn far more than that. However, according to figures from that same NEA Research Report, 1964 R17, 23% of the teachers in South Dakota earn less than \$3,500. Thirty-one percent of the teachers in Arkansas earn less than that figure. Then, of course, there is Mississippi. Only 14% of Mississippi's teachers earn less than \$3,500. This wouldn't seem too bad if it weren't for the fact that 80% of Mississippi's teachers earn less than \$4,500. This compares with New York, Pennsylvania, Arizona, California, Nevada, and Alaska which have no teachers making less than \$4,500.

Now, don't misunderstand me. Some teachers make a fairly good income, but their salaries just don't compare with other occupations requiring a college degree. The average college graduate, according to a survey conducted by Elmer Roper and Associates, can expect to earn an annual salary of about \$7,500 after three years on the job. According to figures reported in the NEA research report I mentioned before, in three states, New York, California, and Alaska, over 20% of the teachers earn more than that figure. But on the other side of the ledger, in 13 states less than 1% of the teachers receive such a salary, seven of these states have no teacher making that amount.

Thus, while some schools in some areas have excellent financing, other schools in other areas are fire hazards staffed by teachers receiving salaries which force them to live in what our government calls "abject poverty." I don't know what conclusion you will draw from these facts, but I can only conclude that the present financing of our public schools is very inadequate.

But, we can not complete our evaluation of the present school system in the United States without considering the criterion of equality of opportunity for all of our children. There are several things that we must consider in determining whether equality of opportunity is present, some of which I have already mentioned. For a national educational system that offers equal opportunity to all of its children, course offerings must be somewhat similar across the country. We have already seen that this isn't the case in American education. Also for equality of opportunity to exist, the teachers should be reasonably comparable from one area to another. But it would be stretching the imagination pretty far to suggest that Mississippi can get as high a quality of teachers for \$3,000 as California can for \$8,000. Finally, we must mention that many of our children are still prohibited from achieving equality of opportunity in education because of race. Governor Johnson of Mississippi during the last election bragged

APPENDIX E, continued

that no school in the state of Mississippi was integrated. There has been some improvement since then. Now only a little over 99% are segregated.

Truly, equality of opportunity in American education is nothing but a dream, a dream that will never come true as long as the Johnsons, the Wallaces, and their kind control education.

This brings us to the last criterion for an ideal public educational system that I posited early in this talk, that qualified people must be in control of the system. Well, what is a qualified person? I would suggest that three characteristics are essential. Such a person should, among other things, be well educated, he should understand the process of curriculum building, and he should have a thorough understanding of modern teaching procedures. Let's look at who is actually in control of our schools. As we all know, the local school board is in charge of our schools so we need to determine whether these people are capable of properly running an educational system.

First, we can consider what the requirements are for a person to become a school board member. According to Bulletin 1957-13 of the U.S. Office of Education, entitled "Provisions Governing Membership on Local Boards of Education," the picture is not encouraging. Not one single state requires that a school board member know

APPENDIX E, continued

anything at all about education! In 26 states the only requirement is that the person be a qualified voter. Ten others have additional residence requirements. Eleven require an eighth grade education. Four require that the board member be a taxpayer or parent. And, one state, Rhode Island, has no requirements at all.

From this we might suspect that our boards are made up of people totally unqualified to run an educational system. Such a suspicion is born out in fact. From that same U.S. Office of Education report that I mentioned a moment ago we find that the U.S.O.E. national survey of school boards determined that 23.8% of the nation's school boards include people who are not even high school graduates. In the South the figure is 41%. People who haven't even finished high school are telling our teachers not only what to teach but how to teach it. Some people are concerned about the future of high school dropouts. It seems that we have little cause for concern. They will just grow up to be tomorrow's school board members!

Of course, some school board members have finished high school, so let's look at the occupations of school board members in general. Again citing official U.S. Office of Education figures, we find that 35% of the school board members are business owners, officials, and managers. Twenty-seven percent are in the professional and technical services--doctors, lawyers, and engineers.



APPENDIX E, continued

Twelve percent are farmers, 9% are laborers and craftsmen, 7% are housewives, and 7% are clerks. Did you notice one group missing from that list? I did, Educators! There were so few qualified educators that were members of local school boards that the U.S. Office of Education did not even report them as a separate category.

I think it says something significant about our nation's attitude toward education that we let just anyone serve on our school boards. It is even state law in most states that a man must be a licensed veterinarian to take care of our sick dogs. But our children's schools? Anyone is capable of taking care of them. Well, I, for one, refuse to buy that attitude. I think it is time that we make some drastic revisions in our American educational system. The place to begin is right at the heart of the present system, with the people who are controlling the schools, the ones who are responsible for the present deplorable state of American education. These problems can not be overcome by merely increasing federal aid to education as some people suggest. Turning money over to states like Mississippi and Alabama won't solve anything. Neither will it be of any help to turn over federal money to local school districts run by school boards composed of school drop outs. The only answer is to do for our children's schools what we have done for our dogs--turn

APPENDIX E, continued

them over to trained, qualified, experts and provide the money needed to properly educate American youth to take its place in the space age.

More specifically, I suggest that it is time for the Federal Government to assume ultimate control of the educational system of the United States. This is not to suggest that we turn the schools over to the federal politicians, rather it is to take them away from the local politicians and turn them over to the educators. The specific proposal that I recommend is very similar to the one first suggested by Carl J. Megel, President of the American Federation of Teachers, in testimony before the Committee on Education and Labor of the U.S. House of Representatives when that committee was considering the late President Kennedy's program for public education in 1962. This program has three points:

First, it should be established by law that 10% of all future Federal budgets be devoted to American public school education. Along with this law, provision should be made for establishing an absolute priority for education before all other expenditures of the government. California now has such a provision and leads the nation in almost every area of education.

Second, the Federal Government should assume all present debts of public schools. This would equalize the program so that communities that have gone into debt to build present schools would not be penalized for

APPENDIX E, continued

that action.

Finally, a national council on education should be formed composed of members of the National Education Association and the Education Associations of the fifty states. This council would serve as advisors to the U.S. Office of Education which would be exclusively empowered to dispense all funds for education in the United States. This would not only guarantee standardization of the educational system across the U.S. but would also guarantee that the special needs of the state and locality would be served by that state's education association representatives. In short, the ultimate control of education would be in the hands of the Federal Government, but the operation of the schools would be left to professional educators hired on the state and local level.

What would be the effect of this program? Well, let's turn to the criteria for an ideal school system that I mentioned a while ago to see how well this program would stand up. First, we said that the quality of education must be high. Since under the program I have recommended our schools would all be part of one standardized system, each student would have the opportunity to take the courses most suited to his needs, wherever he lives. Since there would be no shortage of funds, top flight people would be drawn

APPENDIX E, continued

into the teaching profession by truly adequate professional salaries. As we noted before, if a student takes the right courses from qualified teachers we have what can only be described as quality education. Second, we said that a school system should have adequate finances available to provide for all legitimate educational needs. If the budget and priority for education that I have recommended is adopted, no educational decisions will be dependent on financial considerations. The only important thing will be "Is it needed?" If salaries are too low, they will be increased. If a classroom building is a fire hazard, it will be replaced. If a teacher needs a slide projector or a tape recorder for her class, it will be provided.

It is important to note one more thing in this regard. Today, in most communities when the school budget is increased the property owners are forced to pay most of the bill through property taxes. These taxes are excessively high already in most areas and can't be expected to be increased much more. People on stable incomes just can't pay these exorbitant taxes. The people hurt most are the retired people and widows who own their homes but have little or no income. Under the program I have suggested this oppressive form of taxation would not be needed and so could be abolished. All funds for education would come from Federal taxes which are based on a person's ability to pay, not on where he

APPENDIX E, continued

lives or what he owns.

Thus, under this system, the financial needs of education would be met and at the same time an oppressive tax would be removed and replaced by the most democratic type of tax system. Certainly under such a program, we can say that the criterion of "adequate" financing will be met.

Our third criterion was that the school system must provide equal opportunity for all children in the nation. Under the program I have suggested the facilities would be equal, the teachers would be relatively equal, and the course offerings would be equal. But most significantly, only under a program such as I offer can we ever hope to have racial equality in education in many parts of the nation. It should be abundantly clear to anyone who is concerned enough to look at the situation in the South that under state and local control of education, Negro children will never be truly equal.

Finally, we said that our school system should be controlled by qualified individuals. Such people should be well educated, have a thorough knowledge of curriculum building, and an understanding of modern teaching procedures. The only people who have these characteristics are professional educators, precisely those people who would be administering our public school system under my program.

APPENDIX E, continued

But what are the possible objections to this new program for American education that I have suggested? The most obvious objection is that it costs a lot of money. It certainly does. To make up for the neglect of our schools over the past fifty years is bound to be expensive. But any country that can afford \$40 billion to put a man on the moon can certainly afford to educate its children.

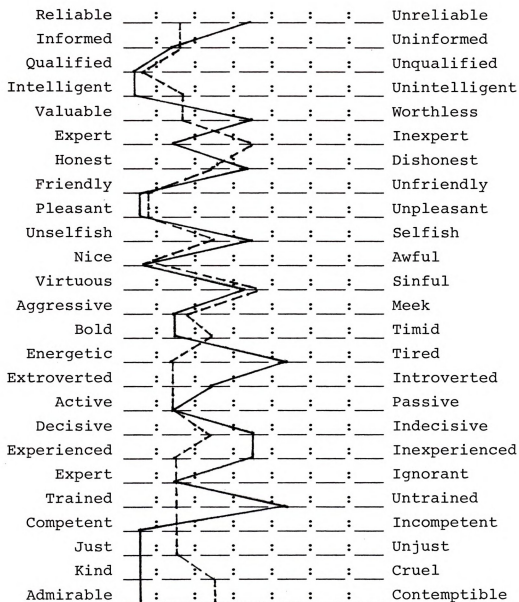
Of course, the other objection is that this program is socialistic. It certainly is. Public schools by definition are socialistic institutions. The only question is whether we want this socialistic institution controlled at the local level by high school dropouts, the state level by men like Governors Wallace of Alabama and Johnson of Mississippi, or at the national level by professional educators. To me that choice is simple. I think it is to most thinking Americans, no matter what their political persuasion.

In the final determination we have to decide whether we, the richest nation on the face of the Earth, wish to have an educational system capable of meeting the needs of our youth, or whether we are going to continue to sacrifice our children's future on the Altar of irresponsibility.

APPENDIX F

COMPARISON OF SPEAKER'S AND ARs' AUDIENCE RATINGS (POSITIVE TREATMENT)

This Audience



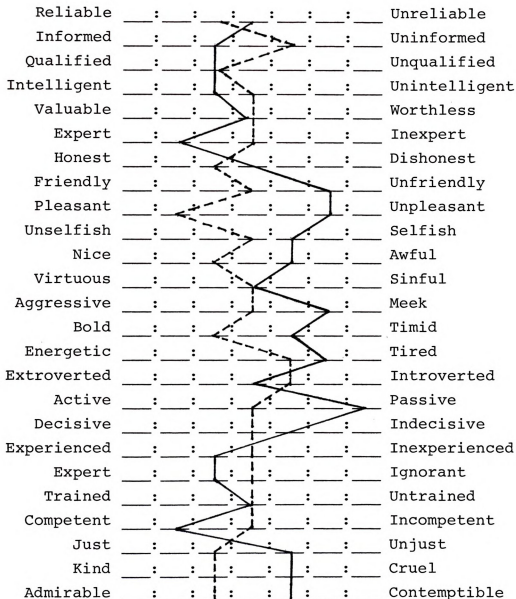
Note: Speaker's ratings: solid line
ARs' ratings: broken line



APPENDIX F

COMPARISON OF SPEAKER'S AND ARs'
AUDIENCE RATINGS ("FREE" TREATMENT)

This Audience

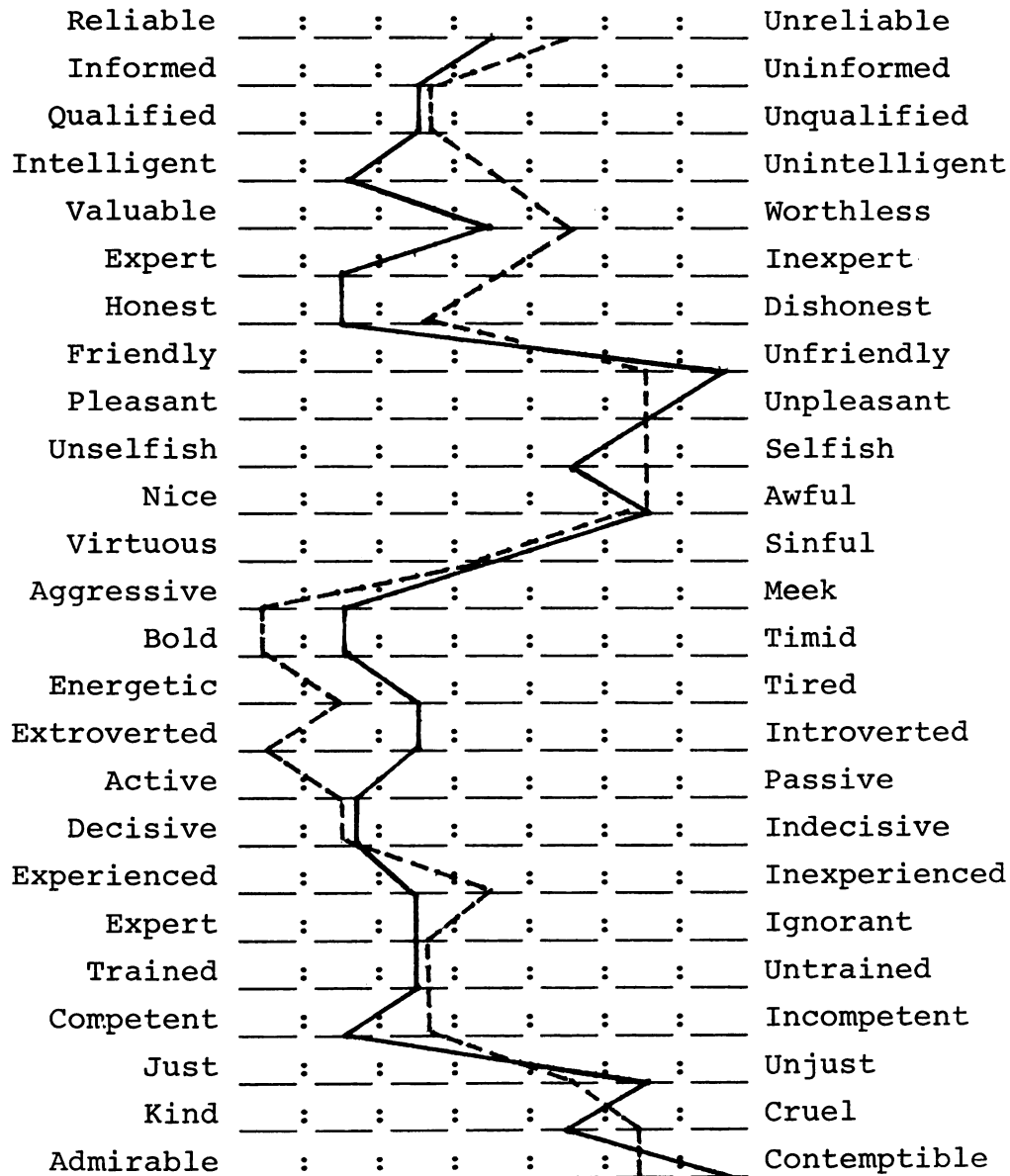


Note: Speaker's ratings: solid line
ARs' ratings: broken line

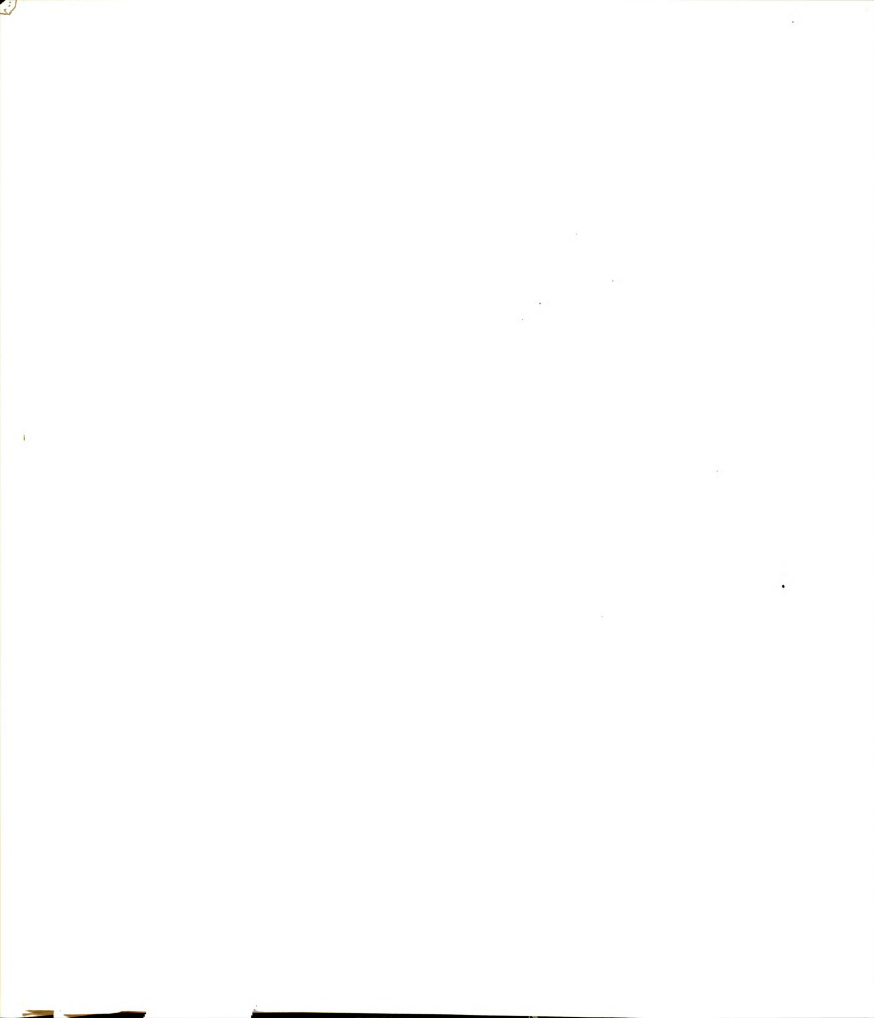
APPENDIX F

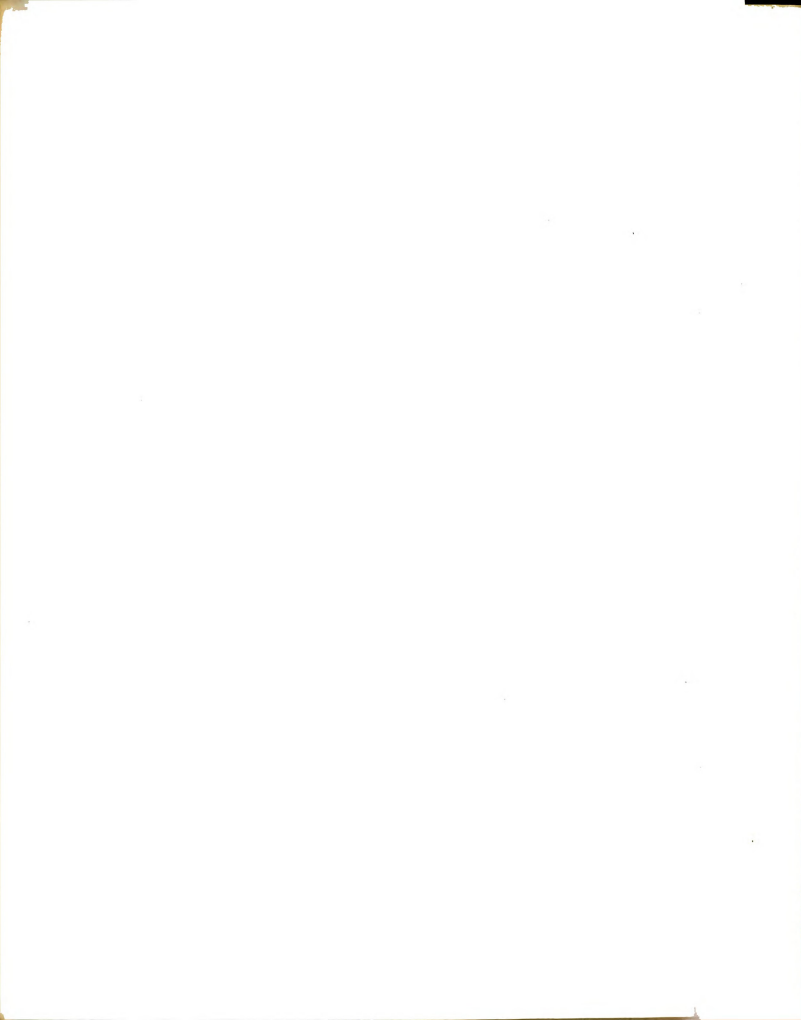
COMPARISON OF SPEAKER'S AND ARs'
AUDIENCE RATINGS (NEGATIVE TREATMENT)

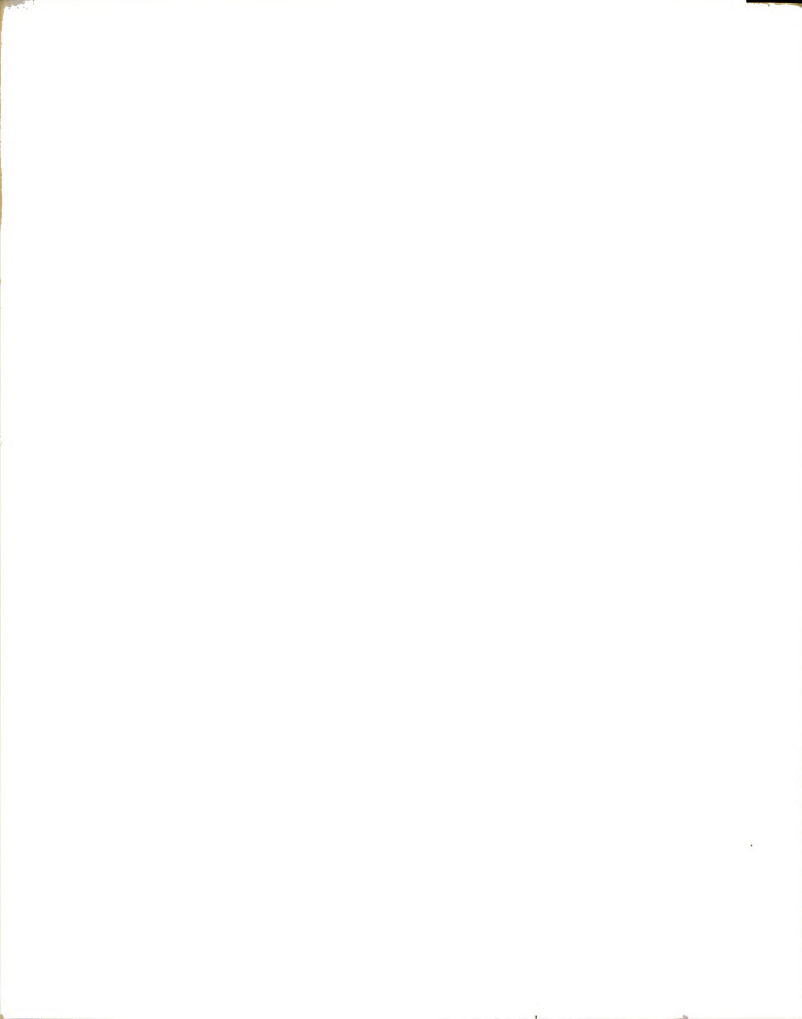
This Audience

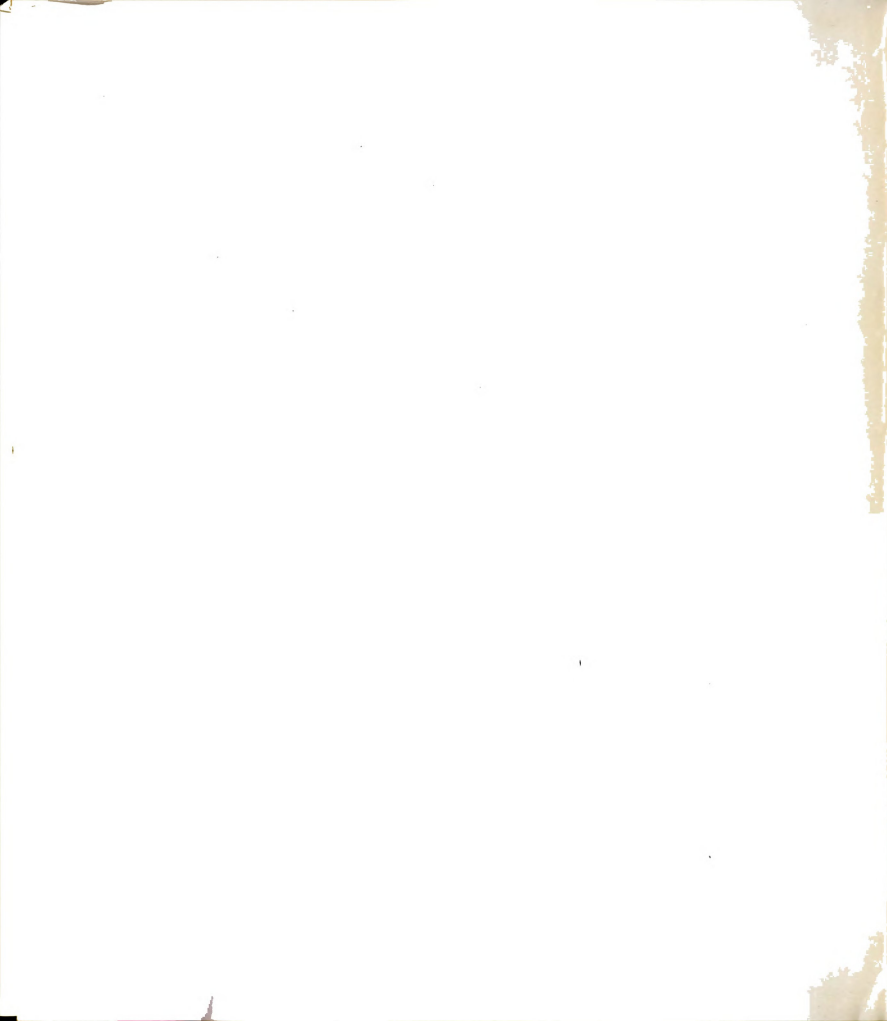


Note: Speaker's ratings: solid line
ARs' ratings: broken line









MICHIGAN STATE UNIVERSITY LIBRARIES



3 1293 03083 0636