Experimental Studies of the Effects of Ethos and Evidence in Persuasive Communication

James C. McCroskey

The Pennsylvania State University

The Graduate School

The Department of Speech

Experimental Studies of the Effects of Ethos and Evidence in Persuasive Communication

A thesis in

Speech

by

James C. McCroskey

Submitted in partial fulfillment
of the requirements
for the degree of

Doctor of Education

September 1966

Approved:

June 17, 1966 — Head of the Department of Speech
Thesis Adviser

June 17, 1966 — Professor of Speech

ACKNOWLEDGEMENTS

The writer would like to express his appreciation and indebtedness to all those who offered both their time and advice during the period in which this thesis was being prepared. Special credit and appreciation are due to several people:

To his thesis advisor, Dr. Robert E. Dunahm, for his advice and encouragement during the planning, execution, and writing of this project;

To Dr. Carroll C. Arnold, Dr. Richard B. Gregg, Dr. Robert T. Oliver, and Professor Harold P. Zelko, members of the thesis committee from the Department of Speech, whose guidance and advice were invaluable;

To Dr. Kenneth H. Wodtke, member of the thesis committee from the Department of Educational Psychology, for his assistance in the development of the research designs and procedures for statistical analysis employed in the series of experimental studies;

To Dr. Robert L. Lathrop of the Department of Educational Psychology for his guidance in developing attitude measuring instruments;

To Dr. Walter Dick, formerly with the Division of Examination Services, for his assistance in developing computer programs for scoring attitude measures;

And to the staff of the Speech Department for their assistance in securing experimental subjects.

To all these persons and many others who offered advice and encouragement, the writer expresses sincere thanks.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

General Statement of the Problem

For centuries one of the elements considered necessary for effective persuasive communication has been good use of evidence to support assertions made by a speaker. This generally accepted theoretical importance of evidence is well expressed by Mills (1964, p. 98):

> In rhetorical theory there are three main reasons given for the use of evidence in argumentative discourse: It adds probative force; it tends to increase the credibility of the communicator; it may add emotional impact.

More recently, as a result of several experimental studies involving evidence usage, this theory has come into serious question. After reviewing the experimental research, Gregg (1964) concluded that

> . . .the audience reaction to an argument may have little or nothing to do with whether the argument includes fully documented or completely undocumented evidence, relevant or irrelevant evidence, weak or strong evidence or any evidence at all.

Although the number and extent of the experimental research studies has been limited, Gregg's observation seems justified. Thus far experimental studies have provided very little support for the

generally held view of the importance of evidence. However, these studies fall far short of providing adequate support for a position recently stated by Kruger (1965, p. 111):

> Now we know, from many studies that have been made, that most audiences are as much persuaded by assertions, delivered forcefully or confidently, as they are by arguments, that is, assertions supported by evidence.

There have been fewer than ten experimental studies involving evidence reported in the literature. Most of these have been very limited in scope. As we will note later, some of these studies had design flaws which severely limit the generalizability of their findings. In short, we have not yet accumulated enough experimental evidence to draw any general conclusions concerning the importance of evidence in persuasive communication. Therefore, the major question involved in the studies to be reported in later chapters was "What is the effect of good use of evidence in persuasive communication"?

A second element which has been considered of primary importance in persuasive communication for centuries is ethos. Although modern writers are not in unanimous agreement on the meaning of this concept, for the most part they tend to agree with Aristotle's opinion of its importance--that it is probably the most potent of all the means of persuasion (Cooper, 1932).

Unlike the experimental research involving evidence, the experimental research involving ethos has generally tended to confirm Aristotle's view. However, as Andersen and Clevenger (1963) point out,

> . . .despite the great number of experimental studies relevant to ethos, the scope of this concept is such that the findings are not yet sufficiently numerous and sophisticated to permit definitive conclusions about the operation of [it].

Therefore, a second question involved in the studies to be reported in later chapters was "What are the effects of differential ethos levels in persuasive communication"?

Before we discuss the specific hypotheses which were tested in the studies to be reported, let us examine previous stuides that are closely related to the current investigation.

Review of Evidence Studies

Several experimental studies have been concerned with the importance and use of evidence. Six have investigated the probative force of evidence in persuasive communication. Two of these found that the inclusion of evidence increased the persuasive impact of the experimental speeches; four found no significant effect attributable to evidence usage.

The first reported experiment involving evidence usage was conducted by Cathcart (1955). He presented speeches advocating abolition of capital punishment to four audiences. The speeches were identical except for variations in evidence usage. He found that including evidence to support 90% of the assertions in the communication but not documenting the source and including the same evidence, citing the source, and adding statements designed to give weight to the source or authority were significantly more effective in changing

attitude than omitting the evidence and using generalized statements and assertions in its place. He also found that including evidence, citing the source, and documenting the source was more effective than omitting the evidence, but that the difference between the two treatments was not statistically significant ($p > .05$).

The other experiment which found that the inclusion of evidence increased the persuasive impact of experimental speeches was conducted by Bettinghaus (1953). Prior to any experimental treatment, Bettinghaus obtained reactions from experimental subjects on a questionnaire designed to reveal persons whom they believed were most expert on the topic of the experimental speeches. Then two forms of an experimental speech were developed. One form contained six pieces of evidence clearly identified with the name of the individual quoted. The authorities cited were those most often named as experts by the experimental subjects. The other form of the speech included the quotations used in the first form; however, the citation of sources was omitted and the quotations appeared as statements originated by the speaker. The first form was found to be significantly more effective in changing the attitudes of the experimental subjects.

More recent studies have all failed to indicate any significant superiority for speeches including good use of evidence. Anderson (1958) presented three forms of a persuasive communication to three experimental audiences. In the first form no authoritative evidence was included. In the second form seven authoritative quotations were included and the name of the source was cited for each quotation. In the third form the sources were located in a

publication and comments about their qualifications were included as were citations of the sources. No significant difference in attitude shift was found among the three forms.

In three forms of a persuasive speech Costley (1958) varied the use of statistical evidence. In the first form statistics were compared to "quantities familiar to the audience" or "standard measures." In the second form statistics were included but no comparisons were made. In the third form all evidence was removed and assertion inserted in its place. No significant difference in attitude shift was produced by the various forms.

Wagner (1958) varied the amount of evidence in four forms of a persuasive communication. In the first form he included three tape-recorded statements, three authoritative quotations, and three pictures. In the second form two units of each type of evidence were included. One unit of each type was included in form three. All evidence was removed and assertion inserted in its place in form four. No significant differences in attitude shift were found among the various forms.

In the most recent experiment involving evidence Dresser (1962b) varied the quality of evidence in four forms of a persuasive speech. In the first form he included satisfactory evidence (as judged by a panel of experts) for all assertions. In the second form he attributed the evidence to questionable sources such as Jimmy Hoffa, The Worker, and Male. Irrelevant materials were inserted in place of evidence in the third form. In the fourth form the evidence was made internally inconsistent and self-contradictory. In two

separate experiments, one using a live speaker, one using a taped communication, he found no significant differences in attitude shift as a result of alternating the various forms. All forms were effective in changing attitudes.

The traditional theory that evidence has probative force has been significantly challenged by the inconsistent findings of these experimental studies. The theory is also challenged by two descriptive studies. In a study of four speeches on foreign policy by Dean Acheson and Robert A. Taft, Goetzinger (1952) could locate a total of only five pieces of "authority" and "statistics." In a study comparing "high-ranking" and "low-ranking" United States Senators, Brandes (1953) found no appreciable difference in their use of evidence. Evidence was not widely used by either group.

Thus the findings of both experimental and descriptive research raise a question concerning the general utility of evidence in persuasive communication. While it is apparently useful in some persuasive circumstances, it seems to have no significant effect in others. Unfortunately, the studies summarized above do not enable us to predict the circumstances in which evidence would exert a significant probative force.

Review of Ethos Studies

Studies concerning "source credibility" and the initial ethos of the communicator have indicated that ethos is a very important variable in persuasive communication. Haiman (1948) presented an identical tape recorded speech to three groups but variously attributed

it to Thomas Parran, Surgeon General of the United States; to Eugene Dennis, Secretary of the Communist Party in America; and to a "Northwestern University Sophomore." The experimental subjects voted "Parran" significantly more competent than the other two; and, as measured by the Woodward Shift-of-Opinion Ballot, his speech was significantly more effective in changing attitude than either of the other two. There was no significant difference found between the "Dennis" and "Sophomore" versions. In a similar study Strother (1951) also found a significant difference in attitude shift between the "Parran" and "Dennis" speeches, the "Parran" speech being more effective.

Paulson (1952) attributed a taped speech to a political science professor and to a student. For female members of the audience there was no significant difference in opinion change produced by the "two" speakers. For male members, however, there was a significant shift in favor of the political science professor's speech.

Hovland and Weiss (1951) presented an identical communication to two groups indicating in one case that it came from a high-credibility source and in the other that it came from a low-credibility source. They repeated this procedure for four separate topics and four pairs of audiences. A questionnaire administered before the communication obtained judgments from the subjects as to the trustworthiness of a long list of sources, including the specific ones used. In an immediate postcommunication sampling it was determined that the shift of opinion was significantly greater when the communication was attributed to a highly credible source. However, data

obtained four weeks later indicated that the differential effectiveness of sources with high and low credibility had disappeared; there was no significant differences between them. It is important to note that this change did not occur as a result of regression effect; rather, it occurred as a result of decreased acceptance of the point of view advocated by the highly credible sources and increased acceptance of the position of the less credible sources. The significance of this phenomenon will be considered later.

Kelman and Hovland (1953) presented an identical taped communication to three audiences. The speech favored extreme leniency in the treatment of juvenile delinquents and was variously attributed to a juvenile court judge, a "member" of the studio audience "chosen at random," and a former juvenile delinquent now out on bail after arrest on a charge of dope peddling. The three initial ethos levels were brought out by means of introductory interviews immediately preceding the communication. In an immediate postcommunication sampling it was determined that there was significantly greater shift of opinion when the communication was attributed to the judge and the member of the studio audience than when it was attributed to the former juvenile delinquent. However, data obtained three weeks later indicated that the differences among the groups were no longer present. As in the case of the experiment by Hovland and Weiss, there had been a decrease in the acceptance of the high-ethos communicator's position and an increase in the acceptance of the position of the low-ethos communicator.

A study by Hovland and Mandell (1952) based on the "trustworthiness" of the communicator indicated no greater net change in opinions when a communication emanated from a nonsuspect communicator than when it is attributed to a suspect one. However, the design of this study may not have been appropriate for conclusions about "trustworthiness." The experimenters introduced the two communicators in ways which "elicited either 1) suspicion of the communicator's motives or 2) belief in his impartiality." The subjects were asked their opinions of the speaker's "fairness" and whether he did a "good or a poor job of giving the facts." It was demonstrated statistically that the introductions had succeeded in getting the subjects to accept an image of "fairness" or "unfairness" and "good" or "bad" job of fact presentation. However, no measure was taken to determine whether there was a significant difference in the audience's specific attitude toward "trustworthiness," the variable the experimenters were attempting to manipulate. It does not seem reasonable to conclude that fairness and ability in presentation of facts are the only or even the most important constituents of "trustworthiness."

From these studies and numerous others (Andersen & Clevenger, 1963) we can be reasonably confident in accepting the theory that initial ethos is an important factor in influencing audience attitude. At least when other factors are held constant, audiences tend to accept propositions expressed by a communicator with high initial ethos more readily than they will accept the same propositions when expressed by a communicator with low initial ethos.

Generation of the Experimental Hypotheses

As was noted above, the experimental research involving evidence has failed to support consistently the traditional theory that evidence is important in persuasive communication. There are at least two conclusions that can be drawn from this information: 1) The traditional theory on the importance of evidence in persuasive communication is questionable, or 2) some unknown factor confounded the experimental studies which involved evidence. The writer believes that the latter conclusion is more tenable.

It should be noted that all of the studies discussed above attempted to examine only one variable, either evidence or ethos. The experimenters studying evidence were careful to hold ethos constant--initial ethos, that is. The experimenters studying ethos were careful to hold evidence and other content factors constant. In no case was a possible interaction of ethos with evidence studied. However, several experimental studies have demonstrated that ethos interacts with other variables (Andersen & Clevenger, 1963; Hewgill & Miller, 1965). This writer submits that such an interaction may have produced the results in the evidence studies.

In order to explain how this interaction may occur we must define what we mean by evidence and ethos. We may define evidence as factual statements originating from a source other than the speaker, objects not created by the speaker, and opinions of persons other than the speaker which are offered in support of the speaker's claims. We may define ethos as the image of the communicator in the minds of the audience. This image is composed of at least two factors,

perceived authoritativeness and perceived character of the speaker.[1] It is also important that we distinguish among types of ethos at various points in time in the total communicative process. Initial ethos is the image the audience has of the communicator before the inception of communication. This is the type of ethos varied in the ethos studies discussed above. Derived ethos is the image of the communicator produced in the minds of respondents as a result of the communication. It is the product of all elements of communication, including content, presentation, and the circumstances in which the communication occurs. Terminal ethos is the image the audience has of the communicator at the completion of the communication and is produced by the interaction of initial and derived ethos.

To determine a communicator's initial ethos may be very difficult or impossible in most communication situations. Without the use of an attitude measurement device the only means of interpreting it is by use of the "reasoned guess." Such a procedure is certainly not acceptable in rigorous experimental research, yet none of the researchers who have studied evidence reported any measurement of the audiences' initial image of the communicator. Neither was any pretest measurement of the sources' ethos reported. Their unreported "guestimates" were probably that ethos was unimportant because it was "controlled" or that the ethos of their communicators was "neutral." We must reject both of these possible assumptions.

---

[1]The factoral structure of the ethos construct is considered further in the following chapter.

The first assumption has already been demonstrated faulty by the ethos studies discussed above and those that have examined the interaction of ethos with other variables. The assumption that neutral ethos existed is not tenable because of the surroundings in which the communications took place. It is unlikely that in an academic laboratory situation subjects would perceive the experimental source as "neutral." The entire orientation of academia would lead a college or high school student to expect a high source. Students are not ordinarily subjected to any other kind; and, when they are, they are usually explicitly informed that this is the case. Particularly if an experiment is conducted in a classroom with the subjects' teacher present, as was the case in most of the evidence studies summarized above, it seems unreasonable to assume that the experimental source was considered neutral by those who received the messages. This "sponsorship effect" has been advanced by Hovland (1959) as an explanation of the conflicting results derived from experimental and survey studies of attitude change.

Hovland's conjecture is supported by a finding reported by Cathcart. As determined by a speech rating scale

> . . .each audience tended to rate the "unknown" and "unseen" speaker very highly in terms of "competence" and being "qualified to speak" on the topic. This might indicate that the mere fact that a person is giving a speech tends to give him a certain amount of "competence" in the eyes of his auditors, and if he apparently "knows what he is talking about" his competence is rated even higher (1953, p. 84).

That the absence of significant effects attributable to evidence

usage may have been caused by this factor has also been suggested by Dresser.

> It could be argued that college students might tend to take a submissive attitude toward ideas expressed in an experimental setting by college faculty members and could have sensed a tenuous "sponsorship" of the experimental speech by their instructor or the experimenter, in which case it is possible that they would be more likely to accept unsuspectingly the materials in the speeches than they would have been in other circumstances (1962b, p. 161).

With this confounding factor present, we certainly cannot conclude that the studies so far reported have demonstrated that using evidence has no value in persuasive communication.

The writer ventures the following hypothesis: The importance of evidence as a probative force varies with the level of ethos of the communicator. Communicators with high ethos should find comparatively less value in the use of evidence than communicators with low ethos. If this is true, it would tend to explain the results of previous research on evidence.

Some support for this hypothesis is provided by the experimental research on ethos. These studies demonstrate that statements by high-ethos communicators are accepted more readily than those by low-ethos communicators. If those same high-ethos sources were quoted by another communicator, we would refer to this quotation as "authoritative" evidence. In reality, then, high-ethos communicators are providing more "evidence" than low-ethos communicators. Thus, in evidence experiments what has been called "assertion" may have had the effect of authoritative evidence if the audience attributed high

ethos to the communicator. There is reason to believe that this was the case in the evidence studies cited above.

The results of the descriptive studies discussed above also lend support to the hypothesis being offered here. The speakers considered in both of these studies would have to be classified as high-ethos communicators. If our hypothesis is true, we should not expect such speakers to depend very heavily on evidence other than their own ethos-based, "authoritative" evidence.

The breadth of application of our hypothesis is challenged, however, by the fact that tests of audience opinion three and four weeks after the communication in the ethos studies by Kelman and Hovland and Hovland and Weiss indicated that the high-ethos communicators had lost some of their support and the low-ethos communicators had gained some. Apparently, ethos tends to have no long range effect. The question arises as to why the low ethos communicators actually gained support after time had elapsed. This phenomenon has been referred to as the "sleeper effect" (Hovland, Lumsadine, & Sheffield, 1949). Hovland, Janis, and Kelley explain the "sleeper effect" in terms of dissociation of source and content. They suggest that "with the passage of time the content of a statement is less likely to be spontaneously associated with the source; i.e., people often remember what was said without thinking about who said it" (1953, 259). With this theory in mind the writer suggests an alternate hypothesis: For communications seeking "long-range" audience response, the probative force of evidence is equally important for communicators of all ethos levels.

This second hypothesis would seem reasonable if the reason that a low-ethos communicator gains support over time is that the audience dissociates him from his communication. In such case what they would be remembering would be his points and what he used to support them, his evidence. Conversely we could assume that the reason that the high-ethos communicator loses support is that his "halo" has worn off and his sustained impact is dependent upon the content of his speech, the points and their support.

Combining the two hypotheses stated above, the writer suggests that for short-term effect evidence is of much greater importance to the low-ethos communicator than to the high-ethos communicator, but for long-range effect evidence is of major importance to communicators of all ethos levels.

In the above discussion the writer has suggested the possibility of an interaction of evidence and ethos in their effect on the speaker's ability to modify audience attitude or behavior successfully. There is another possible effect of the interaction of these elements. As we noted above, terminal ethos of a communicator is the image of the communicator in the minds of the audience members after the communicative stimulus has been completed. This image is produced by an interaction of initial and derived ethos. Since derived ethos is that which is produced by the communicative act itself, it would seem probable that evidence would have substantial effect upon it. Therefore, the writer suggests a third hypothesis: Use of evidence in persuasive communication increases terminal ethos of the communicator.

This hypothesis is in accordance with present rhetorical theory (Mills, 1964, p. 98). It suggests that when a speaker includes evidence in his speech audience members will perceive him as being a source with higher ethos than they would otherwise. This does not necessarily mean that his terminal ethos will be higher than his initial ethos. It may well be lower if he speaks in favor of a proposition to which his audience is opposed. However, if ethos is reduced by supporting an unpopular proposition, the use of evidence should decrease the loss. A survey of the literature indicates that there have been no previous studies investigating this hypothesis.

Hypotheses To Be Investigated

Primary Hypotheses:

1. The probative force of evidence varies with the level of ethos of the communicator; it adds probative force for a low-ethos communicator but has no effect for a high-ethos communicator.
2. When seeking "long-range" audience response, the probative force of evidence is equally important for communicators of all ethos levels.
3. Use of evidence in persuasive communication increases the terminal ethos of the communicator.

Secondary Hypotheses:

1. High-ethos communicators are more successful in modifying immediate postcommunication attitudes of audiences than are low-ethos communicators.

2. High- and low-ethos communicators are equally effective in modifying long-term postcommunication attitudes of audiences.
3. There are no differences between males and females in their response to evidence usage.
4. There are no differences between males and females in their response to varying ethos levels of communicators.

CHAPTER II

CONSTRUCTION AND PRETESTING OF EXPERIMENTAL INSTRUMENTS

Research Design

A pilot study and two major studies were conducted to test the hypotheses generated in Chapter I. The specific design and results of each of these studies will be reported in subsequent chapters. At this point a general statement of research design is appropriate.

In the two major studies two experimental factors were included in the research design. The primary experimental stimuli were "evidence" and "no-evidence" versions of persuasive speeches on two topics. Each evidence stimulus was presented to three audiences by means of tape recording. The speakers were variously introduced in such a manner as to establish them initially as sources having high, middle, or low ethos. Experimental subjects in all three studies were students enrolled in Speech 200 at The Pennsylvania State University.[2]

Primary dependent variables were immediate postcommunication attitude, delayed postcommunication attitude, and terminal ethos of

---

[2]Speech 200 is a required course in oral communication. Students from all colleges in the university are enrolled and the classes include students at all undergraduate levels. Subjects in all of the studies reported in this paper were students enrolled in Speech 200.

the communicator. Secondary dependent variables were the audience members' evaluation of evidence usage in the speeches and audience members' evaluation of which of the two speeches heard was the "better speech."

In order to facilitate this research design it was necessary to develop several experimental instruments. The remainder of this chapter will be devoted to reporting the development of those instruments. Chapter III will report the pilot study. Chapters IV and V will report the two major studies. Chapter VI will be devoted to a summary of this series of investigations and conclusions based on these studies. The final chapter, Chapter VII, will present a theoretical basis for future research on the role of evidence in persuasive communication.

Construction of the Speech Stimuli

In order to increase the generalizability of the results of this series of investigations the design of the studies called for construction of speeches on two separate topics. It was believed that if the results obtained were comparable across two dissimilar topics, a better basis would be provided for conclusions concerning the role of evidence in persuasive communication.

The first topic, capital punishment, was selected because Cathcart's (1953) experimental speeches on this topic were available in which use of evidence was manipulated. Cathcart developed four versions of a speech on this topic varying evidence usage from none to complete documentation with qualification of sources. After

observing that the audiences in his study had perceived the source as highly competent Cathcart called for the use of these speeches in a further study in which the "authority" of the source was controlled (1953, p. 89). Since this control was built into the designs of the major studies, it was felt that a partial replication of Cathcart's study would be highly desirable. Therefore, Cathcart's "no-evidence" speech and his speech with the best use of evidence were selected for this study.

It was not possible, however, to use the Cathcart speeches in their original form. Much of the evidence had to be updated. In addition, it was felt by some members of the doctoral committee that the two versions of the speech should be strengthened in order to provide greater assurance that audience attitudes would be modified by being exposed to them. Therefore, some additional argument and considerable additional evidence were added.

The second topic, federal control of education, was selected on the basis of a survey of student opinion on thirty topics (Arnold, 1964). Federal control of education was a topic on which very few students indicated strong opinions, either favorable or unfavorable, and it was believed that the question of who should control education was more salient to college students than the question of capital punishment.

The experimental speech on federal control of education was designed to support such control because most of the students in the above mentioned survey indicated moderately unfavorable attitudes toward this policy. It was thought desirable to design the speech in

opposition to prevailing attitudes because this would tend to reduce such ceiling problems in measurement as could occur if the subjects were already generally favorable to the position advocated by the experimental speech.

The speech on federal control of education was written by this researcher. Evidence used in the "evidence" version of the speech was secured from the United States Office of Education, the National Education Association, and the American Federation of Teachers. The "evidence" version of the speech was prepared first. All major points in the speech were supported with evidence, the sources of the evidence were cited, and the qualifications of the sources were noted where appropriate. After this speech was developed the "no evidence" version was developed by removing all of the evidence of a statistical nature and all factual examples. Authoritative quotations were retained, but all references to sources were omitted and the quotations were worked into the text so as to appear to be assertions of the speaker.

Members of the doctoral committee concurred with the writer that the speeches met two major criteria, namely 1) the evidence included in the "evidence" versions of the speeches conformed to high standards of evidence usage, and 2) there were no significant differences between versions of the speeches except for evidence usage. (For transcripts of the experimental speeches see Appendix A.)

Selection of Speakers

In order to reduce the potentially confounding elements of a speaker's appearance and physical manner in delivery and to provide greater consistency in experimental treatments, all speeches were presented to the experimental subjects by means of tape-recording. Because the initial ethos stimuli for the purported speakers would lead the subjects to diverse perceptions of age and credibility of the speaker, it was important that the voices of the speakers' give no reliable clues as to age and credibility. Thus, pretesting of possible speakers' voices was undertaken.

Tape recordings of the voices of five graduate students in the Department of Speech were presented to forty-eight students enrolled in three sections of Speech 200. Each graduate student recorded approximately two minutes of text from an issue of Consumers' Digest. These recordings were presented to the subjects in random order, the same order in all three sections. After each recording the subjects were asked to estimate the age of the speaker. They were to indicate whether the speaker was "under 25," "between 25 and 50," or "over 50." After hearing all five recordings the subjects were asked to indicate which speaker they would "be most likely to believe" and which speaker they would "be least likely to believe." Table 1 indicates the results of this procedure. Speaker 1 was chosen to record the speeches on capital punishment and speaker 4 was chosen to record the speeches on federal control of education. The subjects' reactions to these two individuals indicated the greatest ambiguity as to age and credibility.

TABLE 1

Pretest of Speakers' Voices

Speaker Number	Under 25	25 to 50	Over 50	Most Believable	Least Believable
1	14	21	13	2	4
2	38	9	1	2	28
3	9	39	0	16	7
4	12	22	14	4	4
5	7	20	21	24	5

Ethos Measures

The methods of measuring ethos levels in previous studies have included rankings, sociograms, "prestige indexes," linear rating scales, Thurstone-type attitude scales, and devices similar to Likert scaling techniques, including the semantic differential (Anderson & Clevenger, 1963, p. 74). Likert-type summated rating scales and semantic differentials were developed to measure ethos and attitude toward the topics used in the experimental speeches.

The first step in the development of the ethos measures was to determine the dimensionality of the ethos construct. The literature of speech and psychology was surveyed to locate terms used in reference to ethos, credibility, and prestige. The terms most frequently used to describe these concepts were used to form the 30 items for the original Likert-type scale.

Introductions for two hypothetical speakers were developed, one for a presumably high-ethos source, the other for a presumably low-ethos source. Each introduction was read to fifty subjects. A tape recorder was present, and the subjects were led to believe that they were to hear a tape-recorded speech by the person introduced. Immediately after the introduction the subjects completed the scale. The responses were scored, correlated, and subjected to factor analysis and varimax rotation.[3]

Factor analysis produced two significant factors. The first which can be described as an "authoritativeness" factor, accounted for 47% of the response variance. The second factor, which can be described as a "character" factor, accounted for 29% of the variance. The theoretical "factor" of ethos characterized as "good will" by Aristotle (Cooper, 1932) and as "intention" toward the listener by Hovland, Janis and Kelley (1953) did not appear. At least two of the items on the scale (see items 6 and 14 on the Character Scale, Appendix C) would appear to measure a part of this theoretical factor. Since these items were loaded heavily on the character factor, one might speculate that the theoretical "good will" or "intention" factor is not separate from authoritativeness and character.

A factor analytic study reported by Berlo and Lemert (1961) using semantic differential scales identified three factors for the

---

[3]Statistical procedures used in this series of research studies were based upon procedures described by Winer (1962) and Edwards (1954). All computations were made with the assistance of the Pennsylvania State University Computation Center. Standard Computation Center Library programs were used for all computations except scoring of attitude and ethos measures. Specialized programs were developed for scoring.

ethos construct. These factors were "competence," "trustworthiness," and "dynamism." The first two correspond with the factors designated above as "authoritativeness" and "character." Although the "dynamism" factor did not appear in the study reported above, this should not be interpreted as an indication that it does not exist. An examination of the scale items used by this writer indicates that there were no items which appear to be directed toward this factor.

The significance of the "dynamism" factor in persuasive communication is yet to be established. Although three studies (Baker, 1965; Miller & Hewgill, 1964; Hewgill & Miller, 1965) have been reported which used the Berlo and Lemert scales, none investigated the effect of the various ethos factors on other variables in communication. There is some reason to believe that the dynamism factor is not a significant element in ethos for persuasive communication. If we agree that ethos is the "attitude toward a speaker held by a listener," we would expect the factors of that attitude to be consistent with the factors of other attitudes. In the extensive research reported by Osgood, Suci, and Tannenbaum (1957), the "evaluative" dimension was found to be representative of attitude. This led to a definition of attitude in terms of this evaluative dimension. The principle of congruity, based on this definition, has since been demonstrated as a reliable means of predicting attitude change toward speakers and concepts in persuasive communication (Berlo & Gulley, 1957). If "dynamism" were a significant factor in ethos for persuasive communication it would seem reasonable to expect that it would confound congruity studies which apparently it has not. Therefore,

until research is reported indicating the significance of the "dynamism" factor in persuasive communication, there is some justification for assuming that the significance of ethos in persuasive communication lies in the "evaluative" dimension.

The question arises as to why two factors were found to exist in the above study conducted by this writer. On the basis of the results reported by Berlo and Lemert (1961) and further studies conducted by this writer (to be reported below) it is apparent that this two factoredness also appears for semantic differential measures. Thus, the two factoredness cannot be attributed to an artifact of measurement unique to Likert-type scaling procedures. From these investigations we may conclude that the Osgood "evaluative" factor when applied to speakers breaks into two factors which we may label "authoritativeness" and "character." Summing across these two factors to arrive at a total "ethos" score, as would be possible if the evaluative factor held together, should be avoided until such time as further research indicates the feasibility of this procedure.

Operating on the assumption that "authoritativeness" and "character" are the constituent parts of the ethos construct, the writer developed separate Likert-type scales to measure each of these factors.[4] Fourteen new items were added to the original thirty items. Therefore, each scale included twenty-two items. To obtain estimates of item discrimination, reliability, and validity the scales were

---

[4]Procedures for construction and evaluation of the Likert-type measures used in this research were based upon procedures described by Edwards (1957).

used in seven experiments.

Experiment 1. Introductions of three speakers has been developed prior to the construction of the scales. These presumably represented sources having high, middle, and low ethos. The introductions were presented to 143 subjects (51 hearing the high-ethos introduction, 43 the middle, and 49 the low) who listened to the introductions and immediately completed both scales. In addition the subjects completed a revised version of the Anderson (1958) Authoritativeness Scale.

Results. The three speakers were rated high, middle, and low on all three scales, as expected. The obtained t-ratios for the differences between mean scores for the speakers were significant at the .001 level for all three scales. Item discrimination was checked by two methods, item-total correlations and t-tests. It was decided that item-total correlations should be a minimum of .5. All items on the authoritativeness scale met this criterion. All but two of the items on the character scale met it. The t-tests were run for all items between the high and low sources. The .001 level was set for acceptance of an item. A t of 3.646 was needed for significance at this level. All items on the authoritativeness scale met the criterion. All but two of the items on the character scale met it, the same two that failed to meet the item-total correlation criterion. The accepted items composing the two scales are reported in Appendix C.

Factor analysis indicated only one significant interpretable factor on each scale. A second factor accounting for 5% of the variance on the character scale was uninterpretable. This factor correlated highly with factor one (r=.833). The split-halves (odd-even)

corrected reliability estimate[5] for the 22-item authoritativeness scale was .978. The Hoyt Internal Consistency Reliability estimate[6] was .975. The correlation with the Anderson Authoritativeness Scale was .917.

The split-halves (odd-even) corrected reliability estimate for the 20-item character scale was .966. The Hoyt estimate was .961. The correlation with the Anderson scale was .365. The correlation between the authoritativeness and character scales was .521.

Experiment 2: Forty-three subjects were instructed to "identify in your mind the speaker whom you would be most likely to believe, other things being equal." Forty-three other subjects were instructed similarly, except that they were to imagine the speaker they would be "least likely" to believe. All subjects completed the same scales as in Experiment 1.

Results. The hypothetically high source was found to be significantly higher ($p < .0005$) than the hypothetically low source on all three scales. All items discriminated well beyond the .001 level except for the two items which were found not to discriminate in Experiment 1. Item-total correlations were similarly high.

Experiment 3. Three new introductions were developed. As in Experiment 1, these presumably represented sources with high, middle, and low ethos. One hundred eleven subjects listened to one of the

---

[5]All split-half reliability estimates reported in this chapter were corrected by means of the Spearman-Brown formula (Guilford, 1954).

[6]For a discussion of this type of reliability estimate see Guilford (1954).

introductions (41 hearing the high-ethos introduction, 32 the middle, and 38 the low) and immediately completed the two scales. The Anderson scale was not included in this experiment.

Results. The three speakers were rated high, middle, and low as expected. The differences between speakers were significant at the .001 level for both forms. The two items on the character scale which were found not to discriminate in Experiments 1 and 2 were omitted in this experiment. All remaining items met the criteria set in Experiment 1. The corrected split-halves reliability estimate for the authoritativeness scale was .962. The Hoyt estimate was .968. The corrected split-halves reliability estimate for the character scale was .945. The Hoyt estimate was .939. The correlation between the two scales was .534.

Experiment 4. This experiment was the major pilot study. It is reported in detail in Chapter III. Briefly, it involved two hundred forty-three subjects, each hearing one of the experimental speeches. An additional fifty subjects heard one speech on each topic. Each subject completed both scales immediately after hearing an experimental speech.

Results. The responses were scored, correlated, factor analyzed, and subjected to varimax rotation. Factor analysis again indicated only one significant interpretable factor on each scale. A second factor appeared on the character scale which accounted for 7% of the variance. This factor was uninterpretable because the content of the items with high loadings after rotation was essentially the same as that of items on factor one. The two factors correlated

highly (.886). With n=343 the split-halves corrected reliability estimate for the authoritativeness scale was .951. The Hoyt estimate was .943. The split-halves estimate for the character scale was .940. The Hoyt estimate was .928. The correlation between the scales was .323. The mean intraitem correlation across the two scales was .369. Item-total correlations and t-tests between the 27% high- and 27% low-total score subjects were comparable to those in Experiment 1.

Experiment 5.[7] Introductions for three sources were developed, one a labor leader, one a management leader, and one an economics professor. Two opinion statements were developed, one pro-labor, one anti-labor. One hundred thirty-three subjects read various combinations of the introductions and opinion statements and immediately completed both scales.

Results. All hypotheses in this study were confirmed on the basis of the differences measured by these two scales. The split-halves reliability estimate for the authoritativeness scale was .957. The Hoyt estimate was .953. The split-halves estimate for the character scale was .940. The Hoyt estimate was .936. The correlation between the scales was .690. The mean intraitem correlation across the two scales was .391.

Experiment 6. The experimental speeches on capital punishment were presented to one hundred twenty-five high school students participating in the Summer High School Speech Institute at the Pennsylvania State University, each student hearing one speech.

---

[7]This experiment was conducted by William E. Arnold, Instructor in Speech, Pennsylvania State University.

Immediately after hearing the speech the subjects completed the two scales.

Results. Factor analytic and item discrimination results were comparable to those in the previous experiments. The split-halves reliability estimate for the authoritativeness scale was .944. The Hoyt estimate was .946. The split-halves estimate for the character scale was .930. The Hoyt estimate was .932. The correlation between the scales was .708. The mean intraitem correlation was .213.

Experiment 7. Introductions of eight speakers, which presumably represented widely varying ethos levels, were presented to two hundred eighteen subjects, each subject hearing two introductions. After each introduction each subject completed the two Likert-type scales and two semantic differential measures.

Results. The eight speakers were rated as expected on all scales. The split-halves reliability estimate for the Likert-type authoritativeness scale was .969. The Hoyt estimate was .964. The split-halves estimate for the Likert-type character scale was .979. The Hoyt estimate was .968. Factor-analytic and item-discrimination results were comparable to those previously reported.

The First Major Study. The procedures and results of Major Study I will be reported in Chapter IV. At this point we shall consider only data pertaining to the Likert-type ethos measures. A total of seven hundred forty-one subjects heard one speech on each topic. After each speech the subjects completed both scales. Their responses were scored, correlated, and factor analyzed. Factor analysis was based on the two scales combined. Two factors were obtained. The

first, the authoritativeness factor, accounted for 44% of the variance. The second factor, the character factor, accounted for 32% of the variance. Factor-analytic results when the scales were considered separately indicated only one significant factor on each scale.

With N = 1482, the split-halves reliability estimate for the authoritativeness scale was .969. The Hoyt estimate was .950. The split-halves estimate for the character scale was .959. The Hoyt estimate was .963.

On the basis of the above experiments it can be concluded that the scales used to measure ethos are capable of reliably measuring either initial or terminal ethos on the two dimensions of authoritativeness and character. Whether they can be used to measure change between initial and terminal ethos remains to be tested; however, this was not a matter of concern in the major study for which these instruments were developed.

The results of Experiments 4 and 5 are of particular importance. Because the scales were originally developed as measures of initial ethos created by introductions, there was present the possibility of accidentally biasing the results by constructing the introductions so as to manipulate the precise factors the scales were designed to measure was present. In Experiment 4, however, this bias could not have influenced the results because the speaker was not introduced at all. Experiment 5 is important because it was conducted by another researcher who was not familiar with the scales or their development. Experiment 5 was designed to test other hypotheses and validation of the ethos scales was of secondary importance. Thus,

it is most unlikely that accidental bias was present in these experiments.

There are several relevant indications of validity for the scales. First, the content of the items and the procedures used in their selection tend to indicate that the scales are representative samplings of the universe of items pertaining to the construct of ethos. Second, the authoritativeness scale correlates highly with the Anderson authoritativeness scale (r=.917). The correlation between the character scale and the Anderson scale was relatively low (r=.365). It appears that the character and authoritativeness scales measure primarily different things and that the authoritativeness scale measures primarily the same thing as the Anderson scale. Third, both scales measured the hypothetical ethos levels projected in Experiment 2. Fourth, the intuitively identified ethos levels in Experiments 1, 3, and 7 were confirmed by the scales.

On the basis of these studies the writer concluded that the two Likert-type scales were adequate measures of ethos as here defined.

Attitude Measures

It was necessary to develop some method of assessing attitude toward the concepts, capital punishment and federal control of education. As indicated above, the primary methods of measurement selected for this study were Likert-type summated rating scales. Development of these scales followed the usual procedure for summated rating scales (Edwards, 1957). Following is a report of that procedure and the obtained results.

Several articles in recent periodicals concerning both topics were surveyed. Ten items representing widely divergent views on capital punishment were selected from a forced-choice measure (Grove, 1965) to compose the original capital punishment scale. Thirty-eight items representing a variety of views concerning who should finance and control education were prepared. These items made up the original scale for federal control of education.

The capital punishment scale was administered to fifty-seven subjects. The federal control of education scale was administered to eighty-four subjects. The responses were scored, correlated, factor analyzed, and subjected to varimax rotation. Item discrimination was checked by two methods, item-total correlations and *t*-tests between the 27% of the subjects with the highest total scores and the 27% with the lowest total scores. The same criteria for item discrimination used for the ethos measures were used in developing these measures.

Factor analysis of the results from the scale for capital punishment indicated only one significant factor, which accounted for 60% of the variance. Two of the ten items had relatively low loadings on this factor both before and after rotation. Item discrimination checks on these two items indicated that they failed to meet either of the two criteria established for acceptability of items. The other eight items met the criteria. Therefore, the final scale was composed of these eight items. The split-halves corrected reliability estimate for these eight items was .934.

Factor analysis of the results from the scale for federal control of education indicated five significant factors. Only two of

these were interpretable after rotation. These were a "federal-local" factor and a "state" factor. Of the five significant factors the "federal-local" accounted for the most variance--16%. The other factors ranged down to 7%. Item discrimination checks indicated that no item met either criterion established for acceptability of items. An inspection of the data suggested that the various factors represented by the scale probably cancelled one another out in the total score. The split-halves corrected reliability estimate was only .314. Therefore, it was decided that the scale needed some major revisions.

Since the "federal-local" factor appeared to be very close to the attitude for which a measure was desired, the seven items with high loadings on this factor were retained and all others discarded. Twenty-one new items, which appeared to be similar to the seven original items retained, were generated. These twenty-eight items composed the revised scale.

The major pretest of these instruments involved two hundred twenty-nine subjects. Each subject completed the eight-item capital punishment scale and the twenty-eight item federal control of education scale. Their responses were scored, correlated, and factor analyzed.

Factor analysis of the capital punishment scale indicated only one significant factor which accounted for 78% of the variance. Item discrimination checks indicated that all eight items met both the _t_ and the item-total correlation criteria. The split-halves corrected reliability estimate was .952. The Hoyt estimate was .940.

Factor analysis of the federal control of education scale results indicated two significant factors. The first factor, which was composed of items relating to control of education, accounted for 38% of the variance. The second factor was composed of items relating to finance of education and accounted for 12% of the variance. Less than half of the items met either of the item discrimination criteria. Inspection of the data again indicated that poor items were probably confounding the total score. Therefore, the six items with the lowest item-total correlations were omitted and the remainder were re-scored. After re-scoring, all of the remaining twenty-two items met both of the item discrimination criteria. The split-halves corrected reliability estimate was .953. The Hoyt estimate was .957.

Because of the continuing difficulty with the federal control of education scale, the two scales were pretested once more. The capital punishment scale and the revised twenty-two-item scale for federal control of education were administered to one hundred twenty-five subjects.

Factor analysis again indicated that the capital punishment scale had only one significant factor which accounted for 82% of the variance. Two factors again appeared on the federal control of education scale. The first, the control factor, accounted for 53% of the variance. The second, the finance factor, accounted for 6% of the variance. Varimax rotation indicated that this factor was composed mainly of secondary loadings of items concerning who should finance education.

Reliability estimates were comparable to the previous pretest. The split-halves estimate for the capital punishment scale was .954. The Hoyt estimate was .948. The split-halves estimate for the federal control of education scale was .941. The Hoyt estimate was .930.

Pilot Study. The final scales were used in the pilot study which is reported in Chapter III. Three hundred forty-seven subjects completed the two scales as a pretest for the experiment. One hundred ninety-one subjects completed the capital punishment scale as a posttest. One hundred ninety-two subjects completed the education scale as a posttest. A control group of sixty-nine subjects completed the pretest and posttest but received no treatment. There was a four-week period between the pretest and posttest.

The split-halves corrected reliability estimate for the pretest responses on the capital punishment scale was .920. The Hoyt estimate was .903. For the posttest the split-halves corrected reliability estimate was .937. The Hoyt estimate was .948. The test-retest reliability estimate based on the responses of the control group was .926.

The split-halves corrected reliability estimate for the pretest responses on the education scale was .924. The Hoyt estimate was .909. For the posttest the split-halves corrected reliability estimate was .932. The Hoyt estimate was .945. The test-retest reliability estimate based on the responses of the control group was .886.

Factor-analytic and item-discrimination results were comparable to the final pretest discussed above.

The First Major Study. As indicated previously the procedures and results of the first major study will be reported in Chapter IV. At this point we shall consider only data pertaining to the two Likert-type attitude measures. The scales were administered a week before the experiment, at the experiment, and four weeks after the experiment. Nine hundred sixty-nine subjects completed the pretest. Seven hundred forty-one subjects completed the scales during the experiment. Eight hundred fifteen subjects completed the delayed posttest.

The split-halves corrected reliability estimate for the pretest scores on the capital punishment scale was .940. The Hoyt estimate was .981. For the immediate posttest the split-halves estimate was .945. The Hoyt estimate was .938. For the delayed posttest the split-halves estimate was .950. The Hoyt estimate was .941. Based on the control group of one hundred fourteen subjects, the test-retest reliability estimate with a one-week delay between administrations was .922; with a four-week delay between administrations .853; and with a five-week delay between administrations .846.

The split-halves corrected reliability estimate for the pretest scores on the education scale was .921. The Hoyt estimate was .911. For the immediate posttest the split-halves estimate was .960. The Hoyt estimate was .957. For the delayed posttest the split-halves estimate was .963. The Hoyt estimate was .954. The test-retest

reliability estimate with a one-week delay between administrations was .874; with a four-week delay .795; and with a five-week delay .763.

Factor-analytic and item-discrimination results were comparable to those previously discussed with one exception. Factor analysis of the pretest results on the education scale produced only one significant factor. This factor accounted for 68% of the variance. The second factor accounted for only 3% of the variance and had no item with a high loading.

On the basis of these data the writer concluded that these two scales were adequate measures of attitudes toward capital punishment and federal control of education.

Secondary Measures

Because of the writer's interest in the semantic differential as an attitude measure, semantic differential scales were developed for ethos and attitudes toward capital punishment and federal control of education. After development and pretesting, these measures were used in the first major study as secondary measuring instruments. The attitude measures were used in the second major study as the only measuring instruments.

Osgood, Suci and Tannenbaum (1957), the primary developers of the semantic differential concept in measurement, indicate that when an investigator is interested in measuring the meaning of a concept, he is usually involved with multi-dimensional measurement.

These researchers consistently found three dimensions of meaning for concepts when they factor analyzed their semantic differentials. They point out, however, that only one of these dimensions, the evaluative dimension, represents attitude. Therefore, in the development of semantic differentials to measure the concepts in this study, only items which appeared to involve the evaluative dimension were considered.

The first step in the development of the semantic differentials was to determine the dimensionality of the concepts and the items with high factor loadings on this (these) dimension(s). Forty bipolar items were selected to compose the original semantic differential. Twenty-six of these items were taken from Osgood, Suci and Tannenbaum (1957). Fourteen additional items were generated by the writer. Fifty-two subjects completed the scale as an ethos measure after hearing introductions of unknown speakers. These same subjects also completed the scale as an attitude measure for both capital punishment and federal control of education.

Semantic Differential for Ethos. Factor analysis of the subjects' responses indicated two significant factors. The first, the authoritativeness factor, accounted for 52% of the variance. The second, the character factor, accounted for 19% of the variance. The items with high and pure loadings on the two factors were similar in nature to those reported by Berlo and Lemert (1961). The six items with the highest and purest factor loadings after rotation (all over .8) were selected to compose the final scale for each dimension.

However, three items were replaced on the authoritativeness scale because an examination of the data indicated that over 50% of the subjects' responses were at the "neutral" mid-point of the scale. Two of these items, trained-untrained and competent-incompetent, were items included in the Berlo and Lemert competency scale. The items which were substituted also had factor loadings over .8 on the authoritativeness dimension.

It should be noted that the items with high and pure loadings on the character factor include items which appear to measure the theoretical "intention" or "good will" factor. (See items 2 and 4, Appendix C.) This further suggests that, as was inferred earlier, this theoretical factor is not distinct from the other two observed factors of ethos.

Semantic Differential for Attitude. Factor analysis of the subjects' responses was conducted for each attitude concept separately. In both cases two significant factors appeared. For the capital punishment concept the first factor accounted for 53% of the variance. The second factor accounted for 8% of the variance. For the concept, federal control of education, the first factor accounted for 47% of the variance. The second factor accounted for 9% of the variance. An inspection of the data for both concepts indicated that the second factor was composed in each case of items which were nondiscriminating. Therefore, it was concluded that this was an error factor and was not considered further.

Six items appeared among the eight items with the highest and purest factor loadings on both attitude concepts. These six items were selected to compose the semantic differential for both concepts.

Cross-Validation of Measures

Ethos Measures. The Likert-type and semantic differential measures were both administered to the subjects in one of the pretest experiments (number 7) for the Likert-type ethos scales. This experiment has already been described. Relevant here are the correlations between the two types of measuring instruments, the reliability estimates for the semantic differentials, and the results of factor analysis of the semantic differential responses. The correlation between the two authoritativeness measures was .851. The correlation between the two character measures was .817. Hoyt reliability estimates for the semantic differentials dealing with authoritativeness and character were .933 and .922 respectively. Separate factor analyses of the two semantic differentials indicated a single factor on each scale accounting for over 90% of the variance. Factor loadings for all items on both scales was over .91.

In the first major study the correlation between the two authoritativeness measures was .915. The correlation between the two character measures was .903. The Hoyt reliability estimates for the semantic differentials for authoritativeness and character were .916 and .901 respectively. Factor analysis results were comparable to the results of the pretest.

Attitude Measures. The Likert-type and semantic differential measures were administered to fifty-nine subjects. The correlation between the two capital punishment measures was .929. The correlation between the two federal control of education measures was .834. The Hoyt reliability estimates for the Likert-type and semantic differential measures for capital punishment were .969 and .980 respectively. For the Likert-type and semantic differential measures for federal control of education the estimates were .941 and .979 respectively.

Factor analyses of the two semantic differential scales indicated a single factor for each scale which accounted for over 90% of the variance. Factor loadings all exceeded .92.

In the first major study the correlation between the two capital punishment measures was .915 for the pretest and .934 for the posttest. The correlation between the two federal control of education measures was .811 for the pretest and .856 for the posttest. Hoyt reliability estimates for the capital punishment semantic differential were as follows: pretest .962, posttest .978, delayed posttest .978. Hoyt reliability estimates for the federal control of education semantic differential were as follows: pretest .964, posttest .976, delayed posttest .981. Factor analysis results were comparable to those in the pretest.

In the first major study the semantic differential measures were administered to a control group of one hundred fourteen subjects one week before the experiment, on the same day as the experiment, and seven weeks after the experiment. Based on the results of these

administrations, the test-retest reliability estimate of the capital punishment measure with a one-week delay was .955; with a six-week delay it was .896; and with a seven-week delay it was .891. The test-retest reliability estimate of the federal control of education scale with a one-week delay was .844; with a six-week delay it was .772; and with a seven-week delay it was .723.

In the second major study the only measure administered was the semantic differential attitude measure. For the measure of attitude toward capital punishment the Hoyt reliability estimates were: pretest .926, posttest .953, delayed posttest .958. For the measure of attitude toward federal control of education the Hoyt reliability estimates were: pretest .945, posttest .964, delayed posttest .963.

It would appear from the data reported above that both the Likert-type and semantic differential measures were highly reliable instruments. Establishing the validity of any attitude measure is a subjective matter. A researcher can never be absolutely certain that he is measuring the attitude with which he is concerned. In research on attitude change the most important concern is that the measure reliably measure change. The dependent variable in these studies is the "attitude" score. Whether, in fact, this score is an exact measure of the "attitude" is a secondary concern because this "attitude" can be no more than a hypothetical construct. The measures in this study appear to draw responses based on the hypothetical constructs of ethos and attitude toward the two experimental topics. Factor analysis consistently produced one significant factor on each measure. Thus, face and factoral validity arguments are strong.

The two types of measures were highly correlated, an indication of concurrent validity. Finally, construct validity was indicated by the fact that predicted differences between treatments were confirmed by the measures in the series of studies to be reported in the following chapters. In short, it is reasonable to conclude that these instruments are reliable and valid measures of the constructs for which they were designed.

Pretesting of Introductions

A primary variable manipulated in the major studies was the initial ethos of the speaker. The design of the studies called for this manipulation to be accomplished by means of introductions of the speakers. The introductions used are reported in Appendix B. Since it was vital that these introductions should be capable of stimulating the desired ethos of the speaker in the minds of the audience, the introductions were pretested in surroundings nearly identical to those which would later be obtained in the major studies.

Two pretests were conducted. In the first pretest only the Likert-type measures were administered; in the second, both the Likert-type and the semantic differential measures were administered. In both pretests there was a tape recorder present and the subjects were led to believe that they were to hear a speech by the person introduced. The orientation of the pseudo-experiment used in the major studies was also used in these pretests. (This orientation is described in Chapter IV.) After this orientation the speaker was

introduced. Then the subjects were asked to "open your packets and complete the scales concerning the speaker we are about to hear." After all of the subjects had completed the scales they were dismissed.

Table 2 reports the mean authoritativeness and character ratings across the two pretests for the six speakers on both the Likert-type and the semantic differential measures. The results of the pretesting were very much as expected. The three speakers were distributed from "high" through "middle" to "low" on both ethos dimentions for both types of measure, with one exception. This exception was the supposed "low" source on capital punishment. On the authoritativeness dimension as measured by both scales this source was not rated significantly below the hypothetical neutral points on the scales. Since he was introduced as a convicted murderer whose death sentence had been commuted to life imprisonment, it would not be unreasonable to credit him with a certain amount of authority when speaking on this topic. Since his character ratings were significantly below the "middle" source, it was decided not to alter the introduction for the major studies.

TABLE 2

Results of Pretest of Introductions

Topic-Source	Authoritativeness				Character			
	Likert-Type		Semantic Differential		Likert-Type		Semantic Differential	
	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$
Capital Punishment								
High	55	40.18	28	12.17	55	41.78	28	17.72
Middle	74	68.58	50	21.08	74	52.40	50	20.92
Low	62	68.82	29	26.45	62	79.18	29	30.45
Federal Control of Education								
High	80	38.17	27	8.10	80	44.77	27	16.60
Middle	93	67.18	54	21.10	93	58.44	54	21.37
Low	81	82.35	30	31.00	81	80.59	30	28.44
Hypothetical Neutral Point		66.00		24.00		60.00		24.00

CHAPTER III

THE PILOT STUDY

Because of the need to pretest the instruments discussed in Chapter II and the desire to test several hypotheses concerning the role of evidence in persuasive communication when the source of the communication is unknown, a pilot study was conducted. The purpose of this chapter is to report that study.

Hypotheses Tested

The hypotheses tested in the pilot study were:

1. Auditors can perceive qualitative differences in use of evidence in persuasive speeches.
2. Good use of evidence increases perceived authoritativeness of a speaker.
3. Good use of evidence increases perceived character of a speaker.
4. Perceived authoritativeness of an unidentified tape-recorded speaker in an experimental setting is higher than neutral.
5. Perceived character of an unidentified tape-recorded speaker in an experimental setting is higher than neutral.

6. Speeches which include good use of evidence produce greater favorable attitude shift than those which do not.
7. The experimental speeches modify attitude in the direction advocated.
8. Sex has no effect on any of the dependent variables in the study.
9. Other personal factors have no effect on any of the dependent variables in the study.

Procedures

Each experimental speech was presented to an audience composed of sixty male and sixty female subjects randomly assigned from students enrolled in sixteen sections of Speech 200. Each subject heard one speech on each topic at an evening meeting. All subjects completed preliminary attitude scales (Likert-type) four weeks before the experiment. Immediately after each speech one-half of each group completed the Likert-type attitude scale on the topic. The other half of each group completed the Likert-type authoritativeness and character scales. All subjects in both groups also completed the six-item speech evaluation questionnaire for each speech and a personal data form concerning age, term in school, and cumulative grade-point average. A control group (N = 69) completed the attitude scales four weeks before the experiment and again 24 hours before the experiment during regular class sessions.

Statistical Analysis

Hypothesis one was tested by subjecting evidence ratings in the various treatments to two-factor analysis of variance. The two factors analyzed were sex and evidence stimulus. Hypotheses two, three, and six were tested by subjecting posttest measures of ethos and attitude to two-factor analyses of covariance. The covariate in each case was pretest attitude on the topic. The factors analyzed were sex and evidence treatment. Hypotheses four and five were tested by computing *t*-tests for each treatment, comparing the mean ethos scores obtained with the hypothetical neutral scores on the scales. Hypothesis seven was tested by computing correlated *t*-tests of the differences between pre- and posttest mean attitude scale scores for each treatment. Hypothesis eight was tested in conjunction with hypotheses one through seven. Hypothesis nine was tested by computing Pearson product moment correlations between age, term, and grade-point average and the dependent variables in the study: evidence ratings, ethos-scale scores, and attitude-scale scores.

The usual .05 criterion for significance was used except when the F test was used to test a directional hypothesis, in which case the .10 criterion level was used. When the .10 criterion level was met, *t*-tests were computed using the .05 (one-tailed) criterion level.

Results

Hypothesis 1: Auditors can perceive qualitative differences in use of evidence in persuasive speeches. The hypothesis was

confirmed. Analysis of variance of evidence ratings for both topics indicated significant differences attributable to evidence usage. (Capital punishment topic, $F=107.92$, $p < .0001$; education topic, $F=69.73$, $p < .0001$.) Effects attributable to sex were not significant. The evidence ratings for the "evidence" speeches were much higher than those for the "no-evidence" speeches. These auditors clearly perceived the qualitative differences in use of evidence in the speeches.

Hypothesis 2: Good use of evidence increases perceived authoritativeness of a speaker. The hypothesis was confirmed. Analysis of variance of the authoritativeness scale scores for both topics as adjusted by covariance indicated significant differences attributable to evidence usage. (Capital punishment topic, $F=3.70$, $p < .10$; education topic, $F=5.75$, $p < .05$.) Since a directional hypothesis had been made, a one-tailed significance test was appropriate for the difference on the capital punishment topic. Therefore, a t-test was computed for this difference. The resulting t was 1.922, significant at the .05 level (one-tailed). There were no significant differences attributable to sex.

The speakers' use of evidence in the speeches in this experiment apparently caused the auditors to perceive the speaker to be more authoritative than when he did not use evidence.

Hypothesis 3: Good use of evidence increases perceived character of a speaker. The hypothesis was not confirmed. Although use of evidence increases perceived authoritativeness, it does not

appear to have an effect on perceived character. Analysis of variance of character scale scores as adjusted by covariance indicated no significant differences attributable to evidence for either topic. It should be noted, however, that there was a significant difference on capital punishment attributable to sex. ($F=6.97$, $p < .01$) Females in both experimental treatments considered the speaker on this topic to be of higher character than did the males. There was no significant sex effect on education; however, the observed trend was for the males to rate the speaker's character slightly higher than the females.

Hypothesis 4: Perceived authoritativeness of an unidentified tape-recorded speaker in an experimental setting is higher than neutral. The hypothesis was confirmed. The hypothetical neutral point on the authoritativeness scale is 66.0. The mean scores of the various groups are reported in Table 3. (The lower the score, the higher the perceived authoritativeness.)

As indicated in Table 3, tests of the differences between the observed mean authoritativeness scores and the hypothetical neutral point on the scale produced *t*'s significant at the .025 level or higher for all but two of the treatment groups.

Hypothesis 5: Perceived character of an unidentified tape-recorded speaker in an experimental setting is higher than neutral. The hypothesis was confirmed. The hypothetical neutral point on the character scale is 60.0. The mean scores of the various groups are reported in Table 4. Tests of the differences between the observed

TABLE 3

Scores on Authoritativeness Scale

Treatment	$\bar{X}$	$\bar{D}$ from neutral	t
Capital Punishment			
Males--evidence	55.97	10.03	4.36, $p < .0005$
Males--no evidence	58.53	7.47	3.39, $p < .005$
Females--evidence	51.93	14.07	8.75, $p < .0005$
Females--no evidence	57.27	8.73	4.37, $p < .005$
Federal Control of Education			
Males--evidence	56.13	9.87	4.94, $p < .005$
Males--no evidence	62.33	3.67	1.69, $p < .10$
Females--evidence	58.93	7.07	2.24, $p < .025$
Females--no evidence	64.80	1.20	.46, $p > .10$

TABLE 4

Scores on Character Scale

Treatment	$\bar{X}$	$\bar{D}$ from neutral	t
Capital Punishment			
Males--evidence	51.40	5.60	2.69, $p < .01$
Males--no evidence	58.53	7.47	3.39, $p < .0005$
Females--evidence	48.43	11.57	6.09, $p < .0005$
Females--no evidence	48.30	11.70	7.31, $p < .0005$
Federal Control of Education			
Males--evidence	49.90	10.10	8.00, $p < .0005$
Males--no evidence	55.83	4.17	2.61, $p < .01$
Females--evidence	53.73	6.27	2.35, $p < .025$
Females--no evidence	53.30	6.70	3.35, $p < .005$

mean character scores and the hypothetical neutral point on the scale produced t's significant at the .05 level or higher for all of the treatment groups.

Hypothesis 6: Speeches which include good use of evidence produce greater favorable attitude shift than those which do not. The hypothesis was confirmed. Analysis of covariance indicated significant differences in posttreatment attitude scores attributable to evidence usage for both topics. (Capital punishment topic, $F=7.815$, $p < .01$; education topic, $F=3.036$, $p < .10$.) A t-test of the observed differences on the education topic produced a t of 1.743 ($p < .05$ one-tailed). The speeches which included "evidence" were significantly more effective in producing attitude shift than those which included "no evidence", although the subjects hearing the "no-evidence" speeches shifted significantly more on both topics than the control group. The control group was found not to shift significantly on either topic.

Significant effects attributable to sex and interaction of sex and evidence usage were also indicated by the analysis of covariance for the topic, capital punishment. Females were significantly more opposed to capital punishment both before and after the experimental treatment than the males, and they shifted their opinions against capital punishment significantly more than the males. The significant interaction is explained by the fact that the females who heard evidence shifted significantly more than any other group. Because of this one may speculate that evidence is uniquely effective

when speaking to females. However, since no significant interaction effect was observed on the education topic, such speculation has little support from this experiment.

Hypothesis 7: The experimental speeches modify attitude in the direction advocated. The hypothesis was confirmed. Table 5 reports the pre- and posttest mean attitude scores for each treatment group, the difference between the means, and the obtained *t* for each difference.

TABLE 5

Attitude Change in Pilot Study

Division	Pretest	Posttest	Mean Shift	*t*
Capital Punishment				
Evidence	25.95	21.57	4.38	4.01, $p < .001$
No Evidence	24.05	22.57	1.48	1.36, $p < .10$
Education				
Evidence	67.38	56.28	11.10	6.10, $p < .001$
No Evidence	68.78	60.68	8.10	3.93, $p < .001$

As noted in Table 5 all of the speeches produced shifts in the direction advocated significant at the .001 level or higher except for the "no-evidence" speech on the capital punishment topic. This speech produced a shift in the direction advocated, however, it was significant only at the .10 level.

Hypothesis 8: Sex has no effect on any of the dependent variables in the study. The hypothesis was not confirmed. As is noted in the discussion of the above hypotheses, in some cases sex was a significant factor and in some cases it was not. However, there seems to be no predictable effect of sex across topics.

Hypothesis 9: Other personal factors have no effect on any of the dependent variables in the study. The hypothesis was confirmed. Table 6 reports the correlations between age, term in school, and grade-point average and the dependent variables in the study. Only two of these correlations would meet the .05 criterion for significance if tested in isolation. Since the probability of obtaining two significant correlations out of thirty strictly by chance is great, we can not consider the observed correlations to be significant. However, even if they were significant, the two correlations would account for a very small portion of the variance of the dependent variables.

Additional Checks. In order to examine further the data available and to be more certain that evidence produced the differences discussed above, the five items (other than evidence usage) on the speech evaluation scale were submitted to two factor analyses of variance. The two factors analyzed were sex and evidence stimulus. There were no significant differences for the items concerning "organization and clarity of the speech," "voice usage," or "originality of thought" on either topic. A significant difference in "quality of reasoning" on the capital punishment topic attributable to sex was

TABLE 6

Correlations of Personal Factors and Dependent Variables

Dependent Variable	Age	Term in School	Grade Point Average
Capital Punishment			
Evidence Rating	-.10	-.09	.04
Attitude-Evidence	.00	.09	-.17
Attitude-No Evidence	.06	-.04	-.09
Authoritativeness	-.09	-.11	-.07
Character	.21*	.10	-.13
Education			
Evidence Rating	.04	-.09	.03
Attitude-Evidence	-.01	.00	.02
Attitude-No Evidence	.28*	-.06	-.07
Authoritativeness	.18	.15	-.09
Character	-.14	-.03	-.08

*$p < .05$

found. This is explained by the fact that the females were significantly more opposed to capital punishment both before and after hearing the speeches. It would be expected that "reasoning" with which one initially agrees would be rated higher than that with which one is not in initial agreement.

Significant differences in "quality of reasoning" and "general quality of the speech" were observed on the education topic. Since a significant difference in evidence usage, which is usually considered to be related to the quality of reasoning and the quality of speech, was perceived, significant differences on these two items could be expected. The only surprising thing is that similar differences were not found on the capital punishment topic.

Conclusions of Pilot Study

1. The college students who were subjects in this study were able to perceive the qualitative differences in use of evidence in the persuasive speeches presented to them. This finding seems to conflict with the findings reported by Dresser (1962b). In his study the college-student subjects were not able to perceive weaknesses in use of evidence. While this difference in results may be attributable to differences between subjects used in the two investigations, a more likely explanation is that in the Dresser study the qualitative difference in evidence usage between treatments was relatively small. In the present study the qualitative differences were large. We can tentatively conclude that college students can perceive major

qualitative differences in evidence usage but that when differences are small college students can not perceive them. Further study is needed to determine whether this finding is generalizable to the population as a whole and to determine more precisely how large a qualitative difference in evidence usage must be for it to be perceivable by auditors.

For the purposes of the present studies, however, we can conclude that the differences in evidence usage were large enough to constitute meaningfully different persuasive treatments.

The results of the analysis of the three items on the speech evaluation scale which were unrelated to evidence are important here. Since no significant differences were found on these items for either topic, it appears that the other elements in the experimental speeches were sufficiently controlled to justify the conclusion that the results attributable to the differences between speeches were produced by the variations in evidence usage. The only reservation which must be appended to this conclusion concerns the length of the experimental speeches. As it was not feasible to maintain the speeches at the same length when evidence was removed, the possibly confounding factor of length could not be removed. The two "evidence" speeches were approximately twenty minutes in length. The "no-evidence" speech on capital punishment was approximately sixteen minutes long, the "no-evidence" speech on education approximately seventeen minutes. Since the discrepancies in length were not great, there is some justification for believing that this possibly confounding factor had little if any influence on the results.

2. One of the major concerns of this series of investigations is the effect of use of evidence on perceived ethos of a communicator. It was suggested in Chapter I that good evidence usage should increase perceived ethos. The results reported here support this theory. However, it is important to note that in this study only one dimension was affected by evidence usage. Perceived authoritativeness was increased by good evidence usage, but perceived character was not affected significantly. This finding supports the caution recommended in Chapter II concerning treating the two dimensions of ethos as additive components. There is good reason to believe that other factors may significantly affect one dimension and not the other. Which of these dimensions is the more important in a given persuasive situation may vary. For the present investigation, it would appear that the authoritativeness dimension is the more important; however, investigations involving differential manipulation of the two ethos dimensions are needed to determine the generalizability of this finding.

3. The confirmation of hypotheses 4 and 5 in this study provides support for one of the basic assumptions underlying our earlier explanation of the confused findings by previous researchers. In this experimental setting the subjects perceived the communicators as of comparatively high ethos. This was true even though there was no attempt to infer credibility of the communicator and even though the experimenter was completely unknown to the subjects. A partial replication of this pilot study was conducted in order to investigate this experimental artifact further. In the replication there were

two experimenters, both known and respected by the students. The experiment was conducted in the classroom rather than at a special meeting outside of class. Procedures for the experiment were similar to those described above, except that only the capital punishment speeches were used. The results were strikingly different. The perceived authoritativeness and character scores for each treatment were significantly higher ($p < .05$ or higher) than the corresponding treatment scores in the study reported above. In addition, the ethos scores for the "no-evidence" treatment in the replication were significantly higher ($p < .05$) than the scores for the "evidence" treatment in the first study. Most significantly, no significant difference in attitude change attributable to evidence usage was found in the replication.[8]

4. While these findings offer substantial support for the assumption that perceived ethos of the communicator in previous studies of evidence has confounded the results, they also call into question one of the primary hypotheses posed for the major study. Since in the pilot study relatively high ethos was concurrent with significant differences in attitude change between evidence and "no-evidence" treatments, the possibility of an interaction of ethos and evidence usage is somewhat reduced. It may be that good evidence usage is beneficial to all speakers except those with extremely high ethos, as was the case in the replication and was likely the case in

---

[8]For an extended discussion of these discrepent results and the implications for experimental design, see McCroskey & Dunham (in press).

evidence studies by other researchers. This possibility was investigated to a limited degree in the major studies.

5. Since the experimental speeches modified attitude in the intended direction, there was no need to change them for the major studies.

6. Since the effects of sex were neither consistent nor predictable in this study, it was deemed necessary to continue to analyze the results of the various treatments for each sex separately.

7. Since personal factors other than sex were found not to correlate with any of the dependent variables, these factors were not considered in later studies.

CHAPTER IV

MAJOR STUDY I

The first major study was conducted during the Fall Term, 1965. The purpose of this chapter is to report the procedure and results of that study and to discuss the implications of the results.

Hypotheses Tested

The hypotheses tested in this study were:

1. Good use of evidence increases perceived authoritativeness of a speaker.
2. Good use of evidence increases perceived character of a speaker.
3. Speeches which include good use of evidence produce more favorable immediate postcommunication attitudes than those which do not include good use of evidence.
4. Speeches attributed to high-ethos sources produce more favorable immediate postcommunication attitudes than those attributed to middle-ethos sources, which in turn produce more favorable immediate postcommunication attitudes than those attributed to low-ethos sources.
5. Speeches which include good use of evidence maintain more favorable postcommunication attitudes than those which do not include good use of evidence for:

a. Four weeks after exposure to communicative stimulus, and

b. Seven weeks after exposure to communicative stimulus.

6. Speeches attributed to high-ethos sources maintain more favorable postcommunication attitudes than those attributed to middle-ethos sources, which in turn maintain more favorable postcommunication attitudes than those attributed to low-ethos sources for:

   a. Four weeks after exposure to communicative stimulus, and

   b. Seven weeks after exposure to communicative stimulus.

7. Auditors can perceive qualitative differences in use of evidence in persuasive speeches.

8. Speeches which include good use of evidence are preferred over speeches which do not include good use of evidence.

Procedures

Six audiences were generated by randomly assigning forty-two sections of Speech 200 students to various treatments. Six additional sections constituted a control group. Each audience heard an "evidence" speech on one topic and a "no-evidence" speech on the other topic. The high ethos introductions were presented to two audiences immediately preceding the appropriate speech. The same procedure was followed for the middle- and low-ethos introductions.

Subjects in all forty-eight sections completed pretest attitude measures on both topics during regular class periods two weeks prior to the experiment. Both the Likert and the semantic differential measures were administered. These were included with several other attitude measures of the semantic differential type.

The experiment was conducted on three successive evenings. All meetings were held in the same room, a large lecture hall. One meeting was held each evening at 6:30 p.m. and one at 8:30 p.m. Time and treatment combinations were determined randomly except for two restrictions. Evidence treatments on the two topics were paired before random assignment to time, an "evidence" speech on one topic and a "no-evidence" speech on the other topic in each pair. In addition, it was decided that the communicators in each pair should receive similar introductions to avoid ethos-contrast effects.

The subjects in the high- and low-ethos conditions were told that they were to hear two speeches recorded for broadcast on a proposed new network radio program called "The Citizen Speaks." The reason they were selected to hear the speeches was supposedly because the proposed program was to be directed to young adults. The scales they were asked to complete were supposedly designed to indicate the reaction young adults would have to this type of program. The introductions of the speakers were preceded by comments indicating that this would not be the introduction broadcast by the network, but "we feel that you are entitled to know the background of the speaker."

The subjects in the middle ethos condition were told that they were participating in a study designed to improve the Speech Department's proficiency examination. Supposedly, the speeches they were to hear were given by students as a part of the new examination. The scales were described as means of determining the reactions of a normal group so that we could compare them with those of speech teachers. It was suggested that we wanted to be sure that "our standards" were "realistic."

Immediately after each speech the subjects completed both the Likert and semantic differential measures for attitude on the topic and the two dimensions of ethos. They also completed the six-item speech rating scale. After the subjects had completed the scales for the second speech they were asked to respond to two questions: 1) In your opinion, which of the two speeches you have just heard was the better speech? 2) Briefly, why?

After the subjects had completed their answers to these questions, the questionnaires were collected and the subjects were thanked for their cooperation and excused.

The control group completed the attitude measures during regular class periods on the days of the experiment.

Four weeks after the experiment, all subjects, experimental and control, again completed the Likert scales. Three weeks later (seven weeks after the experiment) the subjects again completed the semantic differential measures. In both cases the measures were completed during regular class sessions. In the latter case the measures were included with several other semantic differential measures.

Approximately twelve per cent of the subjects who completed pretest measures were lost from the experiment. Most of these were lost as a result of dropping the course or transferring to a section that was not included in the study. After all of the data had been collected the cells of the study were balanced by random exclusion of subjects. Thus, in each of the six cells and the control group there were sixty-eight males and thirty-nine females who completed the entire experiment. This represented approximately eighty-five per cent of the subjects originally sampled. There was no reason to suspect that the subjects lost from the experiment differed from those retained in any systematic way that would confound the observed results of the study.

Statistical Analysis

Immediate postcommunication Likert and semantic differential authoritativeness, character, and attitude scale scores and delayed postcommunication Likert and semantic differential attitude scale scores were subjected to two-factor analysis of covariance. The two factors analyzed were initial-ethos stimulus and evidence stimulus. The covariate in each case was the pretest attitude scale score for the appropriate topic.

One-tailed *t*-tests were computed for the adjusted mean postcommunication scale score differences between the various treatment combinations for which *a priori* hypotheses had been made. Similar tests were computed for the adjusted mean delayed postcommunication

scale score differences. These t-tests provided a statistical indication of the tests of hypotheses one through six.

An additional analysis of covariance was conducted on the delayed postcommunication attitude scale scores. The two factors analyzed were ethos stimulus and evidence stimulus. The covariate was the immediate postcommunication attitude scale score for the appropriate topic. This analysis provided a check on homogeniety of regression across treatments.

Two-tailed t-tests were computed for the mean attitude-scale score differences of the control group between the pretest and immediate postcommunication test and between the pretest and the delayed postcommunication test.

The statistical significance of the differences between evidence ratings obtained from the speech rating scale for the "evidence" and "no-evidence" treatments on each topic was determined by computing one-tailed t-tests. The statistical significance of the differences in subjects' indicated speech preferences between treatments was determined by chi-square analyses. These t-tests and chi-square analyses provided a statistical indication of the tests of hypotheses seven and eight.

Although the .05 criterion was established for statistical significance for all tests in this study, the obtained probability level will be reported for all tests.

As noted in the previous chapter, it was suspected that sex might interact with the experimental treatments in this study. Preliminary analyses, however, indicated no significant interaction

of sex with any factor other than speech preference. Therefore, since sex was balanced across treatments, sex was not considered in the tests of hypotheses one through seven. Sex was considered in the analysis of speech preference. The results of that analysis are discussed under hypothesis eight below.

Results

Hypothesis 1: Good use of evidence increases perceived authoritativeness of a speaker. The results of this study will permit neither confirmation nor rejection of this hypothesis as stated. No significant differences in authoritativeness scores were observed between the "evidence" and "no-evidence" treatments on the capital punishment topic, on either the Likert or the semantic differential measure. However, significant differences ($p < .0005$) on both measures were obtained on the education topic. The evidence speech produced considerably higher authoritativeness scores. (See Tables 7 through 10.)

As noted in Table 8, a significant interaction of ethos and evidence treatments was also obtained on the education topic. This interaction can be attributed to the fact that a much greater difference in perceived authoritativeness between the "evidence" and "no-evidence" stimuli occurred in the low-ethos condition than in the high-ethos condition. The degree of difference for the middle-ethos condition was appropriately between the two extremes represented by the high- and low-ethos conditions.

TABLE 7

Likert Authoritativeness Scale Results
Capital Punishment Speeches

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	15234.022	129.76
Evidence	1	11.683	.10
Interaction	2	21.856	.19
Error	635	117.399	

Adjusted Mean Scale Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	41.46	42.36	41.91
Middle Ethos (B)	55.49	55.79	55.64
Low Ethos (C)	57.47	57.09	57.28
Across Ethos Levels	51.47	51.74	51.61

Hypothesis Tests

H: $A1 < A2$; $\overline{D} = .89$, $\underline{t} = .60$, $p > .10$

H: $B1 < B2$; $\overline{D} = .30$, $\underline{t} = .20$, $p > .10$

H: $C1 < C2$; $\overline{D} = -.38$

H: $\overline{X}A < \overline{X}B$; $\overline{D} = 13.73$, $\underline{t} = 13.08$, $p < .0005$

H: $\overline{X}A < \overline{X}C$; $\overline{D} = 15.37$, $\underline{t} = 14.65$, $p < .0005$

H: $\overline{X}B < \overline{X}C$; $\overline{D} = 1.64$, $\underline{t} = 1.57$, $p < .10$

H: $\overline{X}1 < \overline{X}2$; $\overline{D} = .27$, $\underline{t} = .31$, $p > .10$

Note--The lower the score, the higher the perceived authoritativeness. The hypothetical neutral point on the scale is 66.0.

TABLE 8

Likert Authoritativeness Scale Results
Education Speeches

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	23510.430	164.40
Evidence	1	18357.050	128.37
Interaction	2	3019.453	21.11
Error	635	143.007	

Adjusted Mean Scale Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	43.34	46.46	44.90
Middle Ethos (B)	52.69	63.58	58.13
Low Ethos (C)	56.54	74.68	65.61
Across Ethos Levels	50.86	61.57	56.21

Hypothesis Tests

H: $A1 < A2$; $\overline{D} = 3.12$, $\underline{t} = 1.91$, $p < .05$

H: $B1 < B2$; $\overline{D} = 10.89$, $\underline{t} = 6.66$, $p < .0005$

H: $C1 < C2$; $\overline{D} = 18.14$, $\underline{t} = 11.10$, $p < .0005$

H: $\overline{X}A < \overline{X}B$; $\overline{D} = 13.23$, $\underline{t} = 11.44$, $p < .0005$

H: $\overline{X}A < \overline{X}C$; $\overline{D} = 20.71$, $\underline{t} = 17.89$, $p < .0005$

H: $\overline{X}B < \overline{X}C$; $\overline{D} = 7.47$, $\underline{t} = 6.45$, $p < .0005$

H: $\overline{X}1 < \overline{X}2$; $\overline{D} = 10.71$, $\underline{t} = 11.32$, $p < .0005$

Note--The lower the score, the higher the perceived authoritativeness. The hypothetical neutral point on the scale is 66.0.

TABLE 9

Authoritativeness Semantic Differential Results
Capital Punishment Speeches

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	4347.826	158.91
Evidence	1	99.437	3.63
Interaction	2	14.350	.52
Error	635	27.360	

Adjusted Mean Semantic Differential Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	16.10	15.66	15.88
Middle Ethos (B)	17.60	16.22	16.91
Low Ethos (C)	24.42	23.88	24.15
Across Ethos Levels	19.37	18.59	18.98

Hypothesis Tests

H: A1 $<$ A2; $\overline{D} = -.44$

H: B1 $<$ B2; $\overline{D} = -1.38$

H: C1 $<$ C2; $\overline{D} = -.54$

H: $\overline{X}_A < \overline{X}_B$; $\overline{D} = 1.03$, $\underline{t} = 2.02$, $p < .025$

H: $\overline{X}_A < \overline{X}_C$; $\overline{D} = 8.26$, $\underline{t} = 16.22$, $p < .0005$

H: $\overline{X}_B < \overline{X}_C$; $\overline{D} = 7.24$, $\underline{t} = 14.20$, $p < .0005$

H: $\overline{X}_1 < \overline{X}_2$; $\overline{D} = -.79$

Note--The lower the score, the higher the perceived authoritativeness. The hypothetical neutral point on the measure is 24.0.

TABLE 10

Authoritativeness Semantic Differential Results
Education Speeches

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	2458.889	82.47
Evidence	1	901.006	30.22
Interaction	2	231.478	7.76
Error	635	29.816	

Adjusted Mean Semantic Differential Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	16.98	17.15	17.06
Middle Ethos (B)	16.59	19.22	17.90
Low Ethos (C)	21.15	25.46	23.31
Across Ethos Levels	18.24	20.61	19.42

Hypothesis Tests

H: $A1 < A2$; $\overline{D} = .17$, $\underline{t} = .22$, $p > .10$

H: $B1 < B2$; $\overline{D} = 2.63$, $\underline{t} = 3.51$, $p < .0005$

H: $C1 < C2$; $\overline{D} = 4.31$, $\underline{t} = 5.76$, $p < .0005$

H: $\overline{X}A < \overline{X}B$; $\overline{D} = .84$, $\underline{t} = 1.59$, $p < .10$

H: $\overline{X}A < \overline{X}C$; $\overline{D} = 6.25$, $\underline{t} = 11.80$, $p < .0005$

H: $\overline{X}B < \overline{X}C$; $\overline{D} = 5.41$, $\underline{t} = 10.22$, $p < .0005$

H: $\overline{X}1 < \overline{X}2$; $\overline{D} = 2.37$, $\underline{t} = 5.50$, $p < .0005$

Note--The lower the score, the higher the perceived authoritativeness. The hypothetical neutral point on the measure is 24.0.

From these results it appears that the effect of good evidence usage on the authoritativeness dimension of a speaker's ethos is dependent on the topic of the speech. We will consider the differences between the two topics later. At this point it would seem appropriate to conclude tentatively that good evidence usage can improve a speaker's ethos on the authoritativeness dimension if his initial ethos is moderate or low on certain topics. We can not ascertain from this study on precisely which topics we should expect this to occur. It seems important to note, further, significant decreases in perceived authoritativeness were observed in this study. We may, therefore, tentatively conclude that good use of evidence will have a favorable effect on perceived authoritativeness of a speaker if it has any effect at all.

Hypothesis 2: Good use of evidence increases the perceived character of a speaker. The results of this portion of the study were almost identical to those relative to Hypothesis 1. No significant differences in character scores were observed between the "evidence" and "no-evidence" treatments on the capital punishment topic, on either the Likert or the semantic differential measure. However, significant differences ($p < .0005$) on both measures were obtained on the education topic. The "evidence" speech produced considerably higher character scores than the "no-evidence" speech. (See Tables 11 through 14.)

A significant interaction of ethos and evidence treatments was also obtained on the education topic. As was the case with the

TABLE 11

Likert Character Scale Results
Capital Punishment Speeches

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	34508.811	316.53
Evidence	1	7.397	.07
Interaction	2	3.504	.03
Error	635	109.022	

Adjusted Mean Scale Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	41.79	41.42	41.60
Middle Ethos (B)	47.76	47.41	47.59
Low Ethos (C)	65.93	66.01	65.97
Across Ethos Levels	51.83	51.61	51.72

Hypothesis Tests

H: $A1 < A2$; $\overline{D} = -.37$

H: $B1 < B2$; $\overline{D} = -.35$

H: $C1 < C2$; $\overline{D} = .08$, $\underline{t} = .17$, $p > .10$

H: $\overline{X}A < \overline{X}B$; $\overline{D} = 5.98$, $\underline{t} = 5.92$, $p < .0005$

H: $\overline{X}A < \overline{X}C$; $\overline{D} = 24.37$, $\underline{t} = 24.12$, $p < .0005$

H: $\overline{X}B < \overline{X}C$; $\overline{D} = 18.39$, $\underline{t} = 18.22$, $p < .0005$

H: $\overline{X}1 < \overline{X}2$; $\overline{D} = -.21$

Note--The lower the score, the higher the perceived character. The hypothetical neutral point on the scale is 60.0.

TABLE 12

Likert Character Scale Results
Education Speeches

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	24673.153	196.74
Evidence	1	6036.344	48.13
Interaction	2	1914.240	15.26
Error	635	125.408	

Adjusted Mean Scale Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	43.23	43.38	43.30
Middle Ethos (B)	46.09	52.25	49.17
Low Ethos (C)	58.07	70.19	64.13
Across Ethos Levels	49.13	55.27	52.20

Hypothesis Tests

H: $A1 < A2$; $\overline{D} = .16$, $\underline{t} = .10$, $p > .10$

H: $B1 < B2$; $\overline{D} = 6.15$, $\underline{t} = 4.02$, $p < .0005$

H: $C1 < C2$; $\overline{D} = 12.12$, $\underline{t} = 7.92$, $p < .0005$

H: $\overline{X}_A < \overline{X}_B$; $\overline{D} = 5.87$, $\underline{t} = 5.43$, $p < .0005$

H: $\overline{X}_A < \overline{X}_C$; $\overline{D} = 20.83$, $\underline{t} = 19.26$, $p < .0005$

H: $\overline{X}_B < \overline{X}_C$; $\overline{D} = 14.96$, $\underline{t} = 13.83$, $p < .0005$

H: $\overline{X}_1 < \overline{X}_2$; $\overline{D} = 6.14$, $\underline{t} = 6.94$, $p < .0005$

Note--The lower the score, the higher the perceived character. The hypothetical neutral point on the scale is 60.0.

TABLE 13

Character Semantic Differential Results
Capital Punishment Speeches

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	2599.670	103.78
Evidence	1	22.201	.89
Interaction	2	36.565	1.46
Error	635	25.051	

Adjusted Mean Semantic Differential Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	10.77	12.09	11.43
Middle Ethos (B)	15.70	15.53	15.62
Low Ethos (C)	18.37	18.33	18.35
Across Ethos Levels	14.95	15.32	15.13

Hypothesis Tests

H: $A1 < A2$; $\overline{D} = 1.32$, $\underline{t} = 1.93$, $p < .05$

H: $B1 < B2$; $\overline{D} = -.47$

H: $C1 < C2$: $\overline{D} = .04$, $\underline{t} = 0.00$

H: $\overline{X}A < \overline{X}B$; $\overline{D} = 4.19$, $\underline{t} = 8.55$, $p < .0005$

H: $\overline{X}A < \overline{X}C$; $\overline{D} = 6.92$, $\underline{t} = 14.12$, $p < .0005$

H: $\overline{X}B < \overline{X}C$; $\overline{D} = 2.74$, $\underline{t} = 5.59$, $p < .0005$

H: $\overline{X}1 < \overline{X}2$; $\overline{D} = .37$, $\underline{t} = .94$, $p < .10$

Note--The lower the score, the higher the perceived character. The hypothetical neutral point on the scale is 24.0.

TABLE 14

Character Semantic Differential Results
Education Speeches

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	4453.630	125.30
Evidence	1	3810.174	107.19
Interaction	2	837.803	23.57
Error	635	35.545	

Adjusted Mean Semantic Differential Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	11.76	12.66	12.21
Middle Ethos (B)	14.18	19.09	16.64
Low Ethos (C)	16.93	25.74	21.34
Across Ethos Levels	14.29	19.17	16.73

Hypothesis Tests

H: $A1 < A2$; $\overline{D} = .90$, $\underline{t} = 1.11$, $p < .10$

H: $B1 < B2$; $\overline{D} = 4.91$, $\underline{t} = 6.04$, $p < .0005$

H: $C1 < C2$; $\overline{D} = 8.81$, $\underline{t} = 10.84$, $p < .0005$

H: $\overline{X}A < \overline{X}B$; $\overline{D} = 4.43$, $\underline{t} = 7.69$, $p < .0005$

H: $\overline{X}A < \overline{X}C$; $\overline{D} = 9.13$, $\underline{t} = 15.89$, $p < .0005$

H: $\overline{X}B < \overline{X}C$; $\overline{D} = 4.70$, $\underline{t} = 8.18$, $p < .0005$

H: $\overline{X}1 < \overline{X}2$; $\overline{D} = 4.88$, $\underline{t} = 10.34$, $p < .0005$

Note--The lower the score, the higher the perceived character. The hypothetical neutral point on the scale is 24.0.

interaction affecting perceived authoritativeness, this interaction can be attributed to the fact that a much greater difference in perceived character between the "evidence" and "no-evidence" stimuli occurred in the low ethos condition than in the high ethos condition. The degree of difference in adjusted mean character scale scores between the "evidence" and the "no-evidence" treatments increased as the initial ethos of the speaker decreased.

As with the authoritativeness dimension, it appears that the character dimension of ethos may be affected by good evidence usage on some topics but not on others. Again it is important to note that no significant decreases in either dimension of ethos were observed in this study. We may, therefore, tentatively conclude that good use of evidence will have a favorable effect on perceived character of a speaker if it has any effect at all.

Hypothesis 3: Speeches which include good use of evidence produce more favorable immediate postcommunication attitudes than those which do not include good use of evidence. Conflicting results prevent either acceptance or rejection of this hypothesis. No significant differences were observed between the "evidence" and "no-evidence" treatments on the capital punishment topic on either measure. However, significant differences ($p < .0005$, Likert; $p < .005$, S.D.) on both measures were obtained on the education topic. The "evidence" speech produced considerably more favorable attitude scores. (See Tables 15 through 18.)

TABLE 15

Likert Capital Punishment Scale Results
Immediate Postcommunication Measure

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	104.883	3.15
Evidence	1	6.398	.19
Interaction	2	4.193	.13
Error	635	33.305	

Adjusted Mean Scale Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	21.29	21.65	21.47
Middle Ethos (B)	22.18	22.06	22.12
Low Ethos (C)	22.69	23.05	22.87
Across Ethos Levels	22.05	22.25	22.15

Hypothesis Tests

H: A1 $<$ A2; $\overline{D}$ = .37, $\underline{t}$ = .47, $p > .10$

H: B1 $<$ B2; $\overline{D}$ = .12, $\underline{t}$ = .14, $p > .10$

H: C1 $<$ C2; $\overline{D}$ = .36, $\underline{t}$ = .46, $p > .10$

H: $\overline{X}A < \overline{X}B$; $\overline{D}$ = .65, $\underline{t}$ = 1.17, $p < .10$

H: $\overline{X}A < \overline{X}C$; $\overline{D}$ = 1.40, $\underline{t}$ = 2.51, $p < .01$

H: $\overline{X}B < \overline{X}C$; $\overline{D}$ = .75, $\underline{t}$ = 1.35, $p < .10$

H: $\overline{X}1 < \overline{X}2$; $\overline{D}$ = .20, $\underline{t}$ = .36, $p > .10$

Note--The lower the score, the more favorable the attitude. The hypothetical neutral point on the scale is 24.0.

TABLE 16

Likert Education Scale Results
Immediate Postcommunication Measure

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	319.615	1.84
Evidence	1	3063.520	17.65
Interaction	2	236.380	1.36
Error	635	173.598	

Adjusted Mean Scale Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	54.53	56.72	55.63
Middle Ethos (B)	53.71	58.28	56.00
Low Ethos (C)	54.72	61.09	57.90
Across Ethos Levels	54.32	58.70	56.51

Hypothesis Tests

H: $A1 < A2$; $\overline{D} = 2.19$, $\underline{t} = 1.22$, $p < .10$

H: $B1 < B2$; $\overline{D} = 4.57$, $\underline{t} = 2.54$, $p < .01$

H: $C1 < C2$; $\overline{D} = 6.38$, $\underline{t} = 3.54$, $p < .0005$

H: $\overline{X}_A < \overline{X}_B$; $\overline{D} = .37$, $\underline{t} = .28$, $p > .10$

H: $\overline{X}_A < \overline{X}_C$; $\overline{D} = 2.28$, $\underline{t} = 1.79$, $p < .05$

H: $\overline{X}_B < \overline{X}_C$; $\overline{D} = 1.91$, $\underline{t} = 1.50$, $p < .10$

H: $\overline{X}_1 < \overline{X}_2$; $\overline{D} = 4.38$, $\underline{t} = 4.20$, $p < .0005$

Note--The lower the score, the more favorable the attitude. The hypothetical neutral point on the scale is 66.0.

TABLE 17

Capital Punishment Semantic Differential Results
Immediate Postcommunication Measure

Corvariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	287.941	5.22
Evidence	1	69.915	1.27
Interaction	2	3.732	.07
Error	635	55.175	

Adjusted Mean Semantic Differential Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	18.73	19.18	18.95
Middle Ethos (B)	19.86	20.81	20.33
Low Ethos (C)	20.97	21.54	21.26
Across Ethos Levels	19.85	20.51	20.18

Hypothesis Tests

H: A1 $<$ A2; $\overline{D}$ = .45, $\underline{t}$ = .45, $p > .10$

H: B1 $<$ B2; $\overline{D}$ = .96, $\underline{t}$ = .94, $p < .10$

H: C1 $<$ C2; $\overline{D}$ = .57, $\underline{t}$ = .57, $p > .10$

H: $\overline{X}A < \overline{X}B$; $\overline{D}$ = 1.38, $\underline{t}$ = 1.91, $p < .05$

H: $\overline{X}A < \overline{X}C$; $\overline{D}$ = 2.30, $\underline{t}$ = 3.19, $p < .005$

H: $\overline{X}B < \overline{X}C$; $\overline{D}$ = .92, $\underline{t}$ = 1.28, $p < .10$

H: $\overline{X}1 < \overline{X}2$; $\overline{D}$ = .66, $\underline{t}$ = 1.12, $p < .10$

Note--The lower the score, the more favorable the attitude. The hypothetical neutral point on the scale is 24.0.

TABLE 18

Education Semantic Differential Results
Immediate Postcommunication Measure

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	107.860	2.07
Evidence	1	502.268	9.65
Interaction	2	219.992	4.23
Error	635	52.063	

Adjusted Mean Semantic Differential Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	18.06	17.53	17.80
Middle Ethos (B)	15.74	18.25	17.00
Low Ethos (C)	16.75	20.07	18.41
Across Ethos Levels	16.85	18.62	17.74

Hypothesis Tests

H: A1 $<$ A2; $\overline{D} = -.52$

H: B1 $<$ B2; $\overline{D} = 2.51$, $\underline{t} = 2.55$, $p < .01$

H: C1 $<$ C2; $\overline{D} = 3.32$, $\underline{t} = 3.37$, $p < .0005$

H: $\overline{X}A < \overline{X}B$; $\overline{D} = -.80$

H: $\overline{X}A < \overline{X}C$; $\overline{D} = .61$, $\underline{t} = .87$, $p < .10$

H: $\overline{X}B < \overline{X}C$; $\overline{D} = 1.41$, $\underline{t} = 2.01$, $p < .025$

H: $\overline{X}1 < \overline{X}2$; $\overline{D} = 1.77$, $\underline{t} = 3.11$, $p < .005$

Note--The lower the score, the more favorable the attitude. The hypothetical neutral point on the scale is 24.0.

Of particular importance is the fact that a significant interaction between ethos and evidence was observed on the education topic. There was no significant difference between "evidence" and "no-evidence" treatments in the high-ethos condition, but differences between the two evidence treatments were significant in both the middle- and low-ethos conditions.

From these results it appears that the effect of good evidence usage on immediate postcommunication attitude is dependent on the topic of the speech. We will consider the differences between the two topics later. At this point we may tentatively conclude that good evidence usage will produce more favorable immediate postcommunication attitudes if the speaker has moderate to low ethos on some topics.

It should be stressed that all treatment conditions on both topics produced significant ($p < .05$ to .0005) immediate postcommunication attitude shifts while the control group did not shift significantly on either topic. Thus, even when the "evidence" treatment was found to be significantly more effective than the "no-evidence" treatment in producing favorable attitudes, the "no-evidence" treatment produced significant attitude change.

Hypothesis 4: Speeches attributed to high-ethos sources produce more favorable immediate postcommunication attitudes than those attributed to middle-ethos sources, which in turn produce more favorable immediate postcommunication attitudes than those attributed to low-ethos sources. Although the observed results were generally in line with what would be predicted from this hypothesis, differences

between the ethos levels did not consistently reach the established criterion for significance. The results of the analysis of covariance of the immediate postcommunication attitude scores on education indicated nonsignificant F-ratios for the ethos factor. The F-ratios for the analysis of attitude scores on capital punishment were significant, however ($p < .05$). (See Tables 15 through 18.)

A possible conclusion from these results is that initial ethos of a speaker will be a significant factor in attitude change on some topics but not on others. However, since other researchers have consistently demonstrated the significance of initial ethos on a variety of topics (Andersen & Clevenger, 1963), this conclusion is suspect. The apparent conflict with the results of research conducted by other experimenters raises the question of whether some as yet unidentified factor confounded the results of this study. We will concern ourselves with this possibility later in this chapter. At this point, it would seem unwise to draw any conclusion concerning the effect of the speaker's initial ethos on the attitudes held by his audience.

Hypotheses 5 and 6: Speeches which include good use of evidence maintain more favorable postcommunication attitudes than those which do not include good use of evidence for a) four weeks after exposure to communicative stimulus, and b) seven weeks after exposure to communicative stimulus. Speeches attributed to high-ethos sources maintain more favorable postcommunication attitudes than those attributed to middle-ethos sources, which in turn maintain

more favorable postcommunication attitudes than those attributed to low-ethos sources for a) four weeks after exposure to communicative stimulus, and b) seven weeks after exposure to communicative stimulus. The results of this study will permit neither confirmation nor rejection of these hypotheses as stated. The presumption underlying the hypotheses was that consistently significant effects of evidence and ethos would be observed across topics on the immediate postcommunication measures. The concern of these hypotheses, then, was whether these effects would hold up over time. Since the presumption was erroneous, the stated hypotheses were not adequately tested.

The data were analyzed, and the results of that analysis provide some insight into the effects of ethos and evidence over time. Subjects in all cells were found to hold significantly more favorable attitudes toward the topics four and seven weeks after the experiment than prior to the experimental stimuli. The control group did not shift significantly on either topic. Treatment effects which were significant in the immediate postcommunication analysis were significant in the four-week and seven-week postcommunication analyses also. (See Tables 19 through 22.)

In a further analysis of the data the immediate postcommunication attitude measure was used as the covariate and the delayed postcommunication attitude measure was the dependent variable. Using this procedure, if there were a difference in regression under the various treatments, a significant treatment or interaction effect would be observed. The analyses indicated no significant difference for either treatment or interaction.

TABLE 19

Likert Capital Punishment Scale Results
Four-Week Postcommunication Measure

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	104.552	4.45
Evidence	1	42.226	1.80
Interaction	2	55.914	2.38
Error	635	23.482	

Adjusted Mean Scale Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	23.29	22.77	23.03
Middle Ethos (B)	22.60	24.13	23.36
Low Ethos (C)	24.11	24.64	24.37
Across Ethos Levels	23.33	23.85	23.59

Hypothesis Tests

H: $A1 < A2$; $\overline{D} = -.52$

H: $B1 < B2$; $\overline{D} = 1.53$, $\underline{t} = 2.31$, $p < .025$

H: $C1 < C2$; $\overline{D} = .53$, $\underline{t} = .79$, $p < .10$

H: $\overline{X}A < \overline{X}B$; $\overline{D} = .33$, $\underline{t} = .71$, $p < .10$

H: $\overline{X}A < \overline{X}C$; $\overline{D} = 1.34$, $\underline{t} = 2.86$, $p < .005$

H: $\overline{X}B < \overline{X}C$; $\overline{D} = 1.01$, $\underline{t} = 2.15$, $p < .025$

H: $\overline{X}1 < \overline{X}2$; $\overline{D} = .52$, $\underline{t} = 1.34$, $p < .10$

Note--The lower the score, the more favorable the attitude. The hypothetical neutral point on the scale is 24.0.

TABLE 20

Likert Education Scale Results
Four-Week Postcommunication Measure

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	88.713	.64
Evidence	1	1657.466	12.02
Interaction	2	313.281	2.27
Error	635	137.938	

Adjusted Mean Scale Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	59.57	60.83	60.20
Middle Ethos (B)	57.86	60.33	59.10
Low Ethos (C)	57.26	63.19	60.22
Across Ethos Levels	58.23	61.45	59.84

Hypothesis Tests

H: A1 $\lessdot$ A2; $\overline{D}$ = 1.26, $\underline{t}$ = .79, p $\lessdot$ .10

H: B1 $\lessdot$ B2; $\overline{D}$ = 2.47, $\underline{t}$ = 1.54, p $\lessdot$ .10

H: C1 $\lessdot$ C2; $\overline{D}$ = 5.93, $\underline{t}$ = 3.69, p $\lessdot$ .0005

H: $\overline{X}$A $\lessdot$ $\overline{X}$B; $\overline{D}$ = -1.10

H: $\overline{X}$A $\lessdot$ $\overline{X}$C; $\overline{D}$ = .02, $\underline{t}$ = 0.00

H: $\overline{X}$B $\lessdot$ $\overline{X}$C; $\overline{D}$ = 1.13, $\underline{t}$ = .99, p $\lessdot$ .10

H: $\overline{X}$1 $\lessdot$ $\overline{X}$2; $\overline{D}$ = 3.22, $\underline{t}$ = 3.46, p $\lessdot$ .0005

Note--The lower the score, the more favorable the attitude. The hypothetical neutral point on the scale is 66.0.

TABLE 21

Capital Punishment Semantic Differential Results
Seven-Week Postcommunication Measure

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	216.525	4.64
Evidence	1	4.720	.10
Interaction	2	94.617	2.03
Error	635	46.673	

Adjusted Mean Semantic Differential Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	21.90	20.53	21.21
Middle Ethos (B)	21.98	22.94	22.46
Low Ethos (C)	22.75	23.66	23.20
Across Ethos Levels	22.21	22.38	22.29

Hypothesis Tests

H: $A1 < A2$; $\overline{D} = -1.37$

H: $B1 < B2$; $\overline{D} = .96$, $\underline{t} = 1.03$, $p < .10$

H: $C1 < C2$; $\overline{D} = .91$, $\underline{t} = .97$, $p < .10$

H: $\overline{X}A < \overline{X}B$; $\overline{D} = 1.25$, $\underline{t} = 1.88$, $p < .05$

H: $\overline{X}A < \overline{X}C$; $\overline{D} = 1.99$, $\underline{t} = 3.00$, $p < .005$

H: $\overline{X}B < \overline{X}C$; $\overline{D} = .74$, $\underline{t} = 1.12$, $p < .10$

H: $\overline{X}1 < \overline{X}2$; $\overline{D} = .17$, $\underline{t} = .32$, $p > .10$

Note--The lower the score, the more favorable the attitude. The hypothetical neutral point on the scale is 24.0.

TABLE 22

Education Semantic Differential Results
Seven-Week Postcommunication Measure

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	134.350	2.57
Evidence	1	251.708	4.82
Interaction	2	64.919	1.24
Error	635	52.193	

Adjusted Mean Semantic Differential Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	20.05	20.12	20.08
Middle Ethos (B)	18.44	19.87	19.15
Low Ethos (C)	19.60	21.86	20.73
Across Ethos Levels	19.36	20.62	19.99

Hypothesis Tests

H: $A1 < A2$; $\overline{D} = .07$, $\underline{t} = .10$, $p > .10$

H: $B1 < B2$; $\overline{D} = 1.43$, $\underline{t} = 1.45$, $p < .10$

H: $C1 < C2$; $\overline{D} = 2.26$, $\underline{t} = 2.28$, $p < .025$

H: $\overline{X}A < \overline{X}B$; $\overline{D} = -.93$

H: $\overline{X}A < \overline{X}C$; $\overline{D} = .65$, $\underline{t} = .93$, $p < .10$

H: $\overline{X}B < \overline{X}C$; $\overline{D} = 1.58$, $\underline{t} = 2.26$, $p < .025$

H: $\overline{X}1 < \overline{X}2$; $\overline{D} = 1.26$, $\underline{t} = 2.20$, $p < .025$

Note--The lower the score, the more favorable the attitude. The hypothetical neutral point on the scale is 24.0.

These results appear to rule out the theoretical explanation of the "sleeper effect" developed in Chapter I. That explanation suggested that if over time an audience member dissociates the source of a message from the content of the message, the evidence included in the message would have a unique effect in a low-ethos condition. Since no "sleeper effect" was observed in this study for either a four- or seven-week period, we were unable to test hypotheses based on the theoretical effects of evidence on "sleeper effect." Whether the absence of the "sleeper effect" here was produced by some confounding element in the present research design, or whether the presence of the "sleeper effect" in previous studies was produced by some confounding element in the designs of those studies is a subject for speculation. It was suspected that the method of measurement in this study confounded the delayed postcommunication results. We shall address ourselves to this question later in this chapter.

Hypothesis 7: Auditors can perceive qualitative differences in use of evidence in persuasive speeches. Hypothesis confirmed. The t-tests of the subjects' mean evidence ratings indicated that the "evidence" speeches on both topics were rated significantly higher on evidence usage than were the "no-evidence" speeches ($p < .001$ for both topics). Table 23 reports the mean evidence ratings on each treatment for each topic. It is important to note that although there were large and statistically significant differences between the evidence ratings for the two treatments on both topics, the evidence ratings for the "no-evidence" treatments were relatively high.

We may conclude from this that the experimental subjects did indeed perceive qualitative differences in evidence usage between the evidence treatments, but they definitely did not perceive the speeches as having "no evidence." It is even doubtful that they perceived the evidence usage as "poor." We shall consider the implications of this finding in Chapter 6.

TABLE 23

Mean Evidence Ratings

Treatment	Capital Punishment Topic	Education Topic
Evidence	6.28	6.12
No Evidence	4.81	4.45
Mean Difference	1.47	1.67
t	16.12 ($p < .0005$)	13.82 ($p < .0005$)

Note--The maximum score on this scale is 7.0. The higher the score the better the perceived evidence usage.

Hypothesis 8: Speeches which include good use of evidence are preferred over speeches which do not include good use of evidence. The hypothesis was confirmed. Of the 733 subjects participating in the experiment (before exclusion of subjects lost because of a lack of delayed posttest measures) 495 indicated preference for the "evidence" speech they heard ($X^2=90.1$, $p < .001$). While this general hypothesis was clearly sustained, two supplementary findings appear to be more meaningful. Chi-square analyses of preferences by males, females, and the total group in terms of ethos stimuli indicated a

preference-ethos interaction in all three cases. Tables 24 through 26 report the observed preferences by treatment and sex. Included are obtained overall chi-squares and chi-squares for each ethos level.

TABLE 24

Speech Preferences of Females

Ethos Level	Preference for Evidence Speech	Preference for No Evidence Speech	Chi-Square
High Ethos	49	41	.72, $p < .5$
Middle Ethos	49	34	2.72, $p < .1$
Low Ethos	66	22	22.00, $p < .001$
Across Ethos Levels	164	97	17.20, $p < .001$

Note--Chi-square (ethos x evidence) = 8.85, $p < .02$.

TABLE 25

Speech Preferences of Males

Ethos Levels	Preference for Evidence Speech	Preference for No Evidence Speech	Chi-Square
High Ethos	88	57	6.62, $p < .01$
Middle Ethos	107	56	15.96, $p < .001$
Low Ethos	136	28	67.68, $p < .001$
Across Ethos Levels	331	141	76.48, $p < .001$

Note--Chi-square (ethos x evidence) = 20.57, $p < .001$.

TABLE 26

Speech Preferences of All Subjects

Ethos Level	Preference for Evidence Speech	Preference for No Evidence Speech	Chi-Square
High Ethos	137	98	6.48, $p < .01$
Middle Ethos	156	90	17.70, $p < .001$
Low Ethos	202	50	91.68, $p < .001$
Across Ethos Levels	495	238	90.10, $p < .001$

Note--Chi-square (ethos x evidence) = 29.33, $p < .001$.

The above analyses indicate that the preference for a speech including evidence increases as the ethos of the communicator decreases. In the high- and middle-ethos conditions the females demonstrated no statistically significant preference for the evidence speech. However, the males indicated a significant preference for the evidence speech in all three ethos conditions. This difference in preference between the sexes was the only significant interaction of sex and another variable observed in this study. Like the sex effects observed in the pilot study, this result was not predicted and is difficult to explain in the context of this study. If we assume this is not a chance finding and that it would be replicated on other topics, we may theorize that either males have a stronger expectency for evidence than females or that the halo effect is more potent for females than for males. Were this the case, males would be more likely than females to indicate a preference for a speech

including evidence. These explanations are speculative at best. Further research in reference to speech preferences between evidence and no-evidence speeches is needed.

Supplementary analyses indicated a strong preference by both males and females for the speeches on capital punishment over those on education. As we noted above, this preference was not so strong as to overshadow the effects of evidence usage on preference; however, the capital punishment speeches were preferred over the education speeches in all ethos treatments. A chi-square analysis (speech preference by ethos stimulus) indicated that there was no interaction of speech preference and ethos. The implications of this preference for the capital punishment speeches will be discussed below.

Implications of the Results

The results of the study just reported indicate major differences in treatment effects between the two topics that were unexpected. These are difficult to explain in the context of the research design employed here. Two possible explanations may account for these findings. Either there are some, as yet unspecified, differences between the two topics that interacted with the experimental treatments or there were one or more factors in the experimental design that confounded the results. Since it seems likely that both of these alternatives are correct to some degree, it is appropriate at this point to consider both in more detail.

When the two topics were originally selected it was believed that they were different in nature. If effects of the experimental treatments were found to be significant across these topics the generalizability of the findings would be substantially increased because of the presumed differences in the speech topics.

The topics were thought to be different in two important respects. First, capital punishment was believed to be much less salient to the student subjects than education. Subjects might be interested in or even hold strong opinions toward capital punishment, but it did not seem likely that they would perceive the topic as being personally important. Secondly, nearly everyone is familiar with the capital punishment question. Students in particular are likely to be familiar with the subject through their course work in the social sciences. On the other hand, it was believed unlikely that most of the subjects had heard a speaker advocate federal control of education, for this is not a position commonly expressed on the public platform or in the classroom. However, the general subject of education was believed to be highly salient to the student subjects. Thus, it seemed reasonable to believe that observed differences in the effects of the experimental treatments would result from the differences between the topics in consequence of saliency and degree of prior exposure.

These topic differences may explain three of the unexpected findings in this study. The first finding was that good use of evidence significantly improved the speaker's ethos on the education topic but not on the capital punishment topic. We may speculate that

if an audience member is already aware of evidence introduced by a speaker, introduction of that evidence will not have significant impact. Since there is reason to believe that the experimental subjects were aware of the arguments and of at least similar evidence on capital punishment but were not aware of the arguments or evidence on the particular educational issue discussed, this difference becomes a possible explanation for the observed results on the ethos measures. The same differences in experience would also explain why the effects of evidence usage on attitude change were markedly different between the two topics.

The finding that the experimental subjects preferred the capital punishment speeches over the education speeches may also be explained in terms of the differences between topics. We might speculate that audience members prefer speeches on topics with which they are familiar. Further research, would, of course, be necessary before we could accept this explanation with substantial confidence.

At least three possibly confounding factors could have produced some of the unexpected findings in this study. We may suspect that the initial-ethos stimuli for the education speeches did not "take." However, the pretesting of these stimuli gave no indication that this would be the case (see Chapter II). In addition, analysis of covariance of the terminal-ethos scores indicated significant ($p < .001$) differences in perceived authoritativeness and character between the ethos stimuli on both topics. We may conclude with reasonable confidence that this possibly confounding factor was not present.

A second confounding factor appears to be a likely explanation of why the initial-ethos treatments produced no significant differences in terminal attitudes on the education topic. The extent of measurement involved in the experiment presented such a possibility. Previous studies have consistently demonstrated the effect of initial ethos on attitude change (Andersen & Clevenger, 1963). Frequently, however, the design of those studies did not include a measure of terminal ethos. The writer has been unable to locate any previous study using two types of measures of terminal ethos. In the present study, of course, both Likert and semantic differential measures were taken of terminal authoritativeness and character.

The theory of cognitive dissonance suggests that when two attitudes (e.g., attitude toward source and attitude toward concept) are in conflict, people are likely to modify either or both attitudes to bring them into harmony (Festinger, 1957). This process reduces dissonance and allows the person to restore a mental balance between his attitudes. But, if he can reduce the dissonance between conflicting attitudes in another way, he may avoid shifting his attitudes toward source or concept.

We may speculate that completing ethos measures for a period of ten to fifteen minutes before completing an attitude scale could provide for a reduction of dissonance produced by the source to the extent that there is no longer a need to modify attitude toward the concept in order to achieve balance among attitudes.

This would be an adequate explanation of why no difference in the effects of varying ethos stimuli appeared on the education

topic if it were not for the fact that such differences were observed on the capital punishment topic. To account for this discrepancy we must extend our analysis a bit farther. In all cases the education speech was the second speech heard by the experimental subjects. Thus, before the subjects heard the second ethos stimulus they had completed the ethos measures for the first speaker. We may, therefore, hypothesize an intensified "scale consciousness" on the part of the subjects. As they heard the introduction of the second speaker they may have listened to it with thoughts of having to complete a scale later for which the introductory information would be relevant. Conceivably, they dissociated the source and the message while listening to the speech because they had previously perceived that the measures of ethos applied to the source but the measures of attitude applied to the message.

This explanation is admittedly speculative, but it appears the only alternative to concluding that initial ethos may have no effect on attitude change on some topics. As this latter alternative is highly suspect in light of previous research, we may conclude that replication of the above study is needed without the possibly confounding factor of excessive measurement.

It should be noted that the confounding element discussed above may also explain why no "sleeper effect" was observed in this study. If the subjects dissociated the source and message as suggested above a "sleeper effect" would be precluded. As was indicated in Chapter I, the explanation of a "sleeper effect" occurring over time is in terms of dissociation of source and message over time.

Again it would appear that replication without excessive measurement is called for.

A third possibly confounding factor, the nature of the experimental speeches, may provide an explanation for the remainder of our unexpected results. Analysis of the subjects' responses indicating why they preferred a particular speech indicated that many of the subjects perceived the capital punishment speeches as highly emotional. Examination of the speeches (See Appendix A) indicates that such a perception is justified. We may suspect that highly emotional speeches produce considerable attitude change whether they include good evidence usage or not. Indeed, the presence or absence of good evidence in highly emotional speeches may be irrelevant. If this is true, it would explain why evidence had no effect on either attitude or ethos in the capital punishment speech but affected both on the less emotional topic of education. We may even suggest that this is why the subjects tended to prefer the capital punishment speeches over the education speeches. It would not be altogether new to suggest that people "feel" more than they "think" and that the former, being easier for most people, is preferred.

This explanation, too, is highly speculative, but it would seem worthwhile to replicate this study with capital punishment speeches using the evidence included in the speeches of this study but without the heavy emotional overtones. Such a replication with the two possible confounding factors removed was performed and is reported in the following chapter.

CHAPTER V

MAJOR STUDY II

The second major study was conducted to test certain hypotheses without high emotionality in the capital punishment speeches and without excessive measurement of dependent variables, the elements that were suspected of confounding the results of the first major study. The purpose of this chapter is to report the procedure and results of that study.

Procedures

Six audiences were generated by randomly assigning forty-eight sections of Speech 200 students to various treatments. Two hundred forty students in these sections had been previously selected at random for another experiment. These students were excluded from the present study. Each audience heard an "evidence" speech on one topic and a "no-evidence" speech on the other topic. The ethos stimuli were administered in the same manner as in major study one.

Subjects completed pretest semantic differential attitude measures on both topics five weeks prior to the experiment. The semantic differentials were included with several other attitude measures administered to all students enrolled in Speech 200 at an out-of-class session during the first week of the term.

The experiment was conducted on three evenings of the same week, Monday, Wednesday, and Thursday. Time and treatment combinations were exactly the same as in major study one. Ethos stimuli were also exactly the same as in major study one.

Immediately after each speech the subjects completed the semantic differential attitude measure for the topic. After the subjects had completed the semantic differential for the second speech they were asked to respond to the same two questions which were asked in major study one; namely, 1) "In your opinion, which of the two speeches you have just heard was the better speech?" and 2) "Briefly, why?"

Four weeks after the experiment (the final week of the term) all subjects again completed the semantic differential attitude measures for the two topics. The measures were administered during regular class sessions.

There was an attrition of approximately ten per cent of the subjects eligible for inclusion due to the failure of some to attend the experimental session as assigned, and others dropped the course or transferred to a section that was not included in the study. After all of the data had been collected, the cells of the study were balanced by random exclusion of subjects. Thus, in each of the six cells there were forty males and forty females who completed the entire experiment. This represented approximately eighty-six per cent of the subjects originally sampled. There was no reason to suspect that the subjects lost from the experiment differed from those retained in any systematic way that would confound the results of the study.

As opposed to the first major study there were two major modifications in procedure in this study. Here, the only measures taken at the experiment were the two six-item semantic differential attitude measures. The Likert attitude measures and all ethos measures were omitted. If, as suggested in the previous chapter, excessive measurement confounded the ethos-treatment effects on the education topic in the first major study, the removal of these extra measures would be expected to correct the situation.

The second major difference between the two experiments was the nature of the capital punishment speeches. The original capital punishment speeches were highly emotional in character. Since it was suspected that this high emotionality may have confounded the evidence treatments on this topic, the capital punishment speeches were revised in such a manner as to eliminate the emotive passages and replace them with nonemotive text. (See Appendix A for copies of the revised speeches.) All of the factual and statistical evidence included in the original "evidence" speech was retained in the revised version. Most of the authoritative testimony, however, was omitted because of its emotive nature. In revision an attempt was made to produce more dispassionate and unemotional speeches. That this was accomplished was attested to by the fact that not a single subject commented on the emotionality of the capital punishment speeches in this study.

The procedure for this study was the same as that for the first major study except for modification in measurement and revision of the capital punishment speeches.

Hypotheses Tested

Based on the results of the first major study and theoretical considerations previously discussed, the following hypotheses were selected for testing in this study:

1. Speeches containing good use of evidence and speeches not including good use of evidence on the topic of capital punishment are equally effective in producing favorable immediate postcommunication attitudes; however, speeches including good use of evidence produce more favorable postcommunication attitudes four weeks after communicative stimuli than do speeches not including good use of evidence.

2. Speeches including good use of evidence on the topic of federal control of education produce more favorable immediate postcommunication attitudes than do speeches not including good use of evidence; and this differential effectiveness is maintained four weeks after communicative stimuli.

3. Speeches attributed to high-ethos sources produce more favorable immediate postcommunication attitudes than those attributed to middle-ethos sources, which in turn produce more favorable immediate postcommunication attitudes than those attributed to low-ethos sources; and this differential effectiveness is maintained four weeks after communicative stimuli.

4. Speeches which include good use of evidence are preferred by audience members over speeches which do not include good use of evidence.

As in the first major study, the effects of sex were analyzed in all cases. In no case was sex found to interact with any other factor. Therefore, sex effects will not be considered in this report.

Statistical Analysis

Immediate postcommunication attitude scale scores for each topic were subjected to two-factor analysis of covariance. The two factors analyzed were initial-ethos stimulus and evidence stimulus. The covariate in each case was the pretest attitude scale score for the appropriate topic.

The significance of the differences between mean postcommunication attitudes (as adjusted by covariance) of subjects exposed to the three ethos conditions were determined by *t*-tests. Similarly, *t*-tests were computed for the difference between adjusted mean postcommunication attitudes for the subjects exposed to the "evidence" and the "no-evidence" speeches for each ethos condition. The same procedure was followed in analyzing the delayed postcommunication attitude scale scores.

These statistical procedures provided tests for hypotheses one through three. Hypothesis four was tested by chi-square analyses of the subjects' indicated speech preferences. The .05 criterion for significance was set for all of the above tests.

Results

Hypothesis 1: Speeches including good use of evidence and speeches not including good use of evidence on the topic of capital punishment are equally effective in producing favorable immediate postcommunication attitudes; however, speeches including good use of evidence produce more favorable postcommunication attitudes four weeks after communicative stimuli than do speeches not including good use of evidence. The hypothesis was confirmed. The "evidence" treatment was somewhat more effective in producing favorable immediate post-communication attitude than the "no-evidence" treatment ($p < .10$); however, the difference did not achieve the established significance level. After four weeks, however, the differential effectiveness had increased and reached statistical significance ($p < .05$). (See Tables 27 and 28.)

It is important to note that no significant interaction effect was observed. From this result we have no reason to believe that evidence is uniquely helpful to the moderate- to low-ethos communicator. Evidence would appear to be equally useful to communicators of all ethos levels.

Hypothesis 2: Speeches including good use of evidence on the topic of federal control of education produce more favorable immediate postcommunication attitudes than do speeches not including good use of evidence; and this differential effectiveness is maintained four weeks after communicative stimuli. The hypothesis was confirmed. The "evidence" treatment was significantly more effective in producing

TABLE 27

Immediate Postcommunication Attitude Results
Capital Punishment Speeches

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	386.093	7.66
Evidence	1	26.467	.52
Interaction	2	41.343	.82
Error	473	50.417	

Adjusted Mean Semantic Differential Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	14.46	15.97	15.21
Middle Ethos (B)	14.94	14.41	14.68
Low Ethos (C)	17.40	17.83	17.61
Across Ethos Levels	15.60	16.07	15.83

Hypothesis Tests

H: A1 $<$ A2; $\overline{D}$ = 1.41, $\underline{t}$ = 1.26, p $<$ .10

H: B1 $<$ B2; $\overline{D}$ = -.53

H: C1 $<$ C2; $\overline{D}$ = .43, $\underline{t}$ = .39, p $>$ .10

H: $\overline{X}$A $<$ $\overline{X}$B; $\overline{D}$ = -.53

H: $\overline{X}$A $<$ $\overline{X}$C; $\overline{D}$ = 2.40, $\underline{t}$ = 3.02, p $<$ .005

H: $\overline{X}$B $<$ $\overline{X}$C; $\overline{D}$ = 2.93, $\underline{t}$ = 3.69, p $<$ .0005

H: $\overline{X}$1 $<$ $\overline{X}$2; D = .47, $\underline{t}$ = .72, p $<$ .10

Note--The lower the score, the more favorable the attitude. The hypothetical neutral point on the scale is 24.0.

TABLE 28

Delayed Postcommunication Attitude Results
Capital Punishment Speeches

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	127.102	2.61
Evidence	1	183.545	3.76
Interaction	2	17.101	.35
Error	473	48.764	

Adjusted Mean Semantic Differential Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	18.30	20.02	19.16
Middle Ethos (B)	17.75	18.24	17.99
Low Ethos (C)	19.00	20.50	19.75
Across Ethos Levels	18.35	19.59	18.97

Hypothesis Tests

H: A1 $<$ A2; $\overline{D}$ = 1.72, $\underline{t}$ = 1.55, p $<$ .10

H: B1 $<$ B2; $\overline{D}$ = .49, $\underline{t}$ = .45, p $>$ .10

H: C1 $<$ C2; $\overline{D}$ = 1.50, $\underline{t}$ = 1.36, p $<$ .10

H: $\overline{X}_A < \overline{X}_B$; $\overline{D}$ = -1.17

H: $\overline{X}_A < \overline{X}_C$; $\overline{D}$ = .59, $\underline{t}$ = .75, p $<$ .10

H: $\overline{X}_B < \overline{X}_C$; $\overline{D}$ = 1.75, $\underline{t}$ = 2.24, p $<$ .025

H: $\overline{X}_1 < \overline{X}_2$; $\overline{D}$ = 1.24, $\underline{t}$ = 1.94, p $<$ .05

Note--The lower the score, the more favorable the attitude. The hypothetical neutral point on the scale is 24.0.

favorable immediate postcommunication attitude than the "no-evidence" treatment ($p < .01$). This differential effectiveness was maintained for the intervening four-week period between the experiment and the delayed postcommunication measure. (See Tables 29 and 30.)

Although no significant interaction was indicated by the analysis of covariance for either the immediate or the delayed postcommunication measure, an inspection of the data indicates that the impact of evidence usage was not the same for all three ethos levels. On the immediate postcommunication measure the difference between the evidence treatments in the middle-ethos condition was significant ($p < .025$), the difference in the low-ethos condition approached significance ($p < .10$), but the difference in the high-ethos condition was clearly nonsignificant. On the delayed postcommunication measure the difference in the low-ethos condition was significant ($p < .01$), the difference in the middle-ethos condition approached significance ($p < .10$), but the difference in the high-ethos condition was nonsignificant.

It would appear from these observations that evidence is uniquely helpful to the moderate- to low-ethos communicator, but it is of little or no use to the high-ethos communicator. The reader will note that this conclusion is not consistent with the conclusion drawn under Hypothesis 1 above. This apparent inconsistency will be discussed in Chapter VI.

Hypothesis 3: Speeches attributed to high-ethos sources produce more favorable immediate postcommunication attitudes than those

TABLE 29

Immediate Postcommunication Attitude Results
Education Speeches

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	511.127	7.25
Evidence	1	422.087	5.99
Interaction	2	35.575	.50
Error	473	70.476	

Adjusted Mean Semantic Differential Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	15.39	16.26	15.82
Middle Ethos (B)	14.68	17.41	16.04
Low Ethos (C)	18.01	20.04	19.02
Across Ethos Levels	16.03	17.90	16.96

Hypothesis Tests

H: A1 $\angle$ A2; $\overline{D}$ = .86, $\underline{t}$ = .65, p > .10

H: B1 $\angle$ B2; $\overline{D}$ = 2.73, $\underline{t}$ = 2.06, p $\angle$ .025

H: C1 $\angle$ C2; $\overline{D}$ = 2.03, $\underline{t}$ = 1.53, p $\angle$ .10

H: $\overline{X}A \angle \overline{X}B$; $\overline{D}$ = .22, $\underline{t}$ = .24, p > .10

H: $\overline{X}A \angle \overline{X}C$; $\overline{D}$ = 3.20, $\underline{t}$ = 3.41, p $\angle$ .0005

H: $\overline{X}B \angle \overline{X}C$; $\overline{D}$ = 2.98, $\underline{t}$ = 3.18, p $\angle$ .005

H: $\overline{X}1 \angle \overline{X}2$; $\overline{D}$ = 1.87, $\underline{t}$ = 2.45, p $\angle$ .01

Note--The lower the score, the more favorable the attitude. The hypothetical neutral point on the scale is 24.0.

TABLE 30

Delayed Postcommunication Attitude Results
Education Speeches

Covariance Adjusted Analysis of Variance Summary Table

Source	d.f.	Mean Square	F
Ethos	2	254.290	3.96
Evidence	1	285.791	4.45
Interaction	2	105.814	1.65
Error	473	64.274	

Adjusted Mean Semantic Differential Scores

Ethos Level	Evidence (1)	No Evidence (2)	Across Evidence Levels
High Ethos (A)	19.48	19.39	19.43
Middle Ethos (B)	17.88	19.43	18.65
Low Ethos (C)	19.54	22.70	21.12
Across Ethos Levels	18.96	20.51	19.74

Hypothesis Tests

H: A1 $<$ A2; $\overline{D} = -.09$

H: B1 $<$ B2; $\overline{D} = 1.55$, $\underline{t} = 1.22$, $p < .10$

H: C1 $<$ C2; $\overline{D} = 3.17$, $\underline{t} = 2.50$, $p < .01$

H: $\overline{X}_A < \overline{X}_B$; $\overline{D} = -.78$

H: $\overline{X}_A < \overline{X}_C$; $\overline{D} = 1.69$, $\underline{t} = 1.80$, $p < .05$

H: $\overline{X}_B < \overline{X}_C$; $\overline{D} = 2.47$, $\underline{t} = 2.63$, $p < .005$

H: $\overline{X}1 < \overline{X}2$; $\overline{D} = 1.54$, $\underline{t} = 2.11$, $p < .025$

Note--The lower the score, the more favorable the attitude. The hypothetical neutral point on the scale is 24.0.

attributed to middle-ethos sources, which in turn produce more favorable immediate postcommunication attitudes than those attributed to low-ethos sources; and this differential effectiveness is maintained four weeks after communicative stimuli. This hypothesis was partially supported. The speeches attributed to low-ethos sources on both topics were significantly less successful in producing favorable immediate postcommunication attitudes than the speeches attributed to high- and middle-ethos sources. In the delayed postcommunication measure the differences were maintained on the education topic, the difference between the middle and low sources were maintained on the capital punishment topic, but the difference between the high and low sources dropped below the established criterion for significance. The latter observed difference was significant at only the .10 level. In no case were the differences between the high- and the middle-ethos sources significant. In three of the four cases examined, the middle source was slightly more effective in producing favorable attitudes than the high source. These differences were not statistically significant and can probably best be explained as chance variations.

Hypothesis 4: Speeches which include good use of evidence are preferred by audience members over speeches which do not include good use of evidence. This hypothesis was confirmed. Of the 480 subjects participating in the experiment, 292 indicated their preference for the "evidence" speech they heard ($X^2 = 22.53$, $p < .001$). Although the overall chi-square (ethos x evidence) failed to indicate a significant interaction, the data presented in Table 31 indicate a

partial interaction. As was the case with preferences in the first major study, preference for the speech including evidence increased as the ethos of the communicator decreased.

TABLE 31

Speech Preferences in Major Study II

Ethos Level	Preference for Evidence Speech	Preference for No Evidence Speech	Chi-square
High Ethos	88	72	1.60, $p < .30$
Middle Ethos	100	60	6.67, $p < .01$
Low Ethos	104	56	14.40, $p < .001$
Total Group	292	188	22.53, $p < .001$

Note--Chi-square (ethos x evidence) = 3.64, $p < .20$.

A supplementary analysis indicated a strong preference by both males and females for the speeches on capital punishment over those on education. Chi-square analysis (speech topic x ethos stimulus) indicated no significant interaction. The capital punishment speeches were preferred in all three ethos conditions.

An Interaction Problem

Our discussion of the effects of ethos and evidence on the education topic in the two major studies has included reference to an interaction of these two stimuli. An examination of the results of the analyses of covariance indicates that in only one of the six

analyses did the F-ratio for interaction achieve statistical significance. However, an examination of the t-tests of the differences between the evidence and no evidence treatments at the various levels of ethos stimuli indicates that the difference between the two evidence stimuli never achieved significance in the high-ethos condition, but the difference in the low- and middle-ethos conditions was regularly significant. These consistent findings across experiments point to the existence of an interaction between ethos and evidence. A question therefore arises as to why the F-ratios for interaction were usually nonsignificant. The reason is not clear. Supplementary analyses of covariance which omitted the middle ethos conditions produced consistently significant interaction effects. In short, when only the high and low ethos conditions were considered, it was clear that the effect of evidence usage was not consistent across ethos stimuli. There was a significant difference attributable to evidence in the low-ethos condition but not in the high-ethos condition.

Because these results were difficult to interpret, a partial replication of the second major study was conducted. The education speeches were presented to students in eight sections of Speech 200 during regular class sessions. Ethos was manipulated by means of a dialogue between the classroom instructor and the experimenter. The low-ethos source was identified as a present member of the American Communist Party and the high-ethos source was identified as a former communist who had renounced his membership in the party and condemned what it stood for. Each experimental condition was administered to two sections. The education semantic differential was administered

to the subjects two days before the experiment and immediately after exposure to the experimental treatment.

A two-factor analysis of covariance indicated a significant interaction ($F = 5.41$, $p < .05$) between ethos and evidence. Subsequent *t*-tests indicated that the high-ethos source was significantly more successful in modifying audience attitude than the low-ethos source in the "no-evidence" condition ($t = 3.80$, $p < .001$), but the two sources were not significantly different in the "evidence" condition ($t = .49$).

The findings of this partial replication and the previously stated findings point to a significant difference in the impact of evidence between high- and low-ethos conditions on the education topic. The most defensible interpretation of these findings is that ethos and evidence interact in determining the degree of attitude change produced by speeches on this topic.

Implications of the Results

At least four important implications can be drawn from this study. First, excessive measurement was a likely cause for the previous finding that ethos had no significant effect on the education topic. When excessive measurement was removed in this study, the ethos effects on the education topic were significant.

Second, the suspicion that the highly emotional nature of the original capital punishment speeches caused evidence to be ineffective in modifying either attitude change or perceived ethos and

produced the observed preference for the capital punishment speeches should be discounted. In this study the emotionality was removed from the capital punishment speeches, but there still was no significant difference in immediate postcommunication attitudes between the subjects exposed to the "evidence" and the "no-evidence" treatments, and the capital punishment speeches were still preferred to the education speeches.

Third, the tentative explanations for why the males preferred the "evidence" speeches significantly more than the females in the first major study should be discounted. In the second major study there was no significant difference between the sexes in speech preferences. While it is likely that the result of one of these studies represents a chance variation, it is impossible with the data available to determine which result is in error. Speculation as to the cause of the finding in the first study would have no foundation in these experiments taken together.

Fourth, the previously suggested differences between the two experimental speech topics are the most likely explanation of the differences in evidence effects between the two pairs of speeches. The findings in this study very closely parallel those in the first major study, except for the ethos effects discussed above. This difference, as noted, was most likely produced by the confounding element of excessive measurement in the first study.

It would appear that our conclusions concerning the importance of evidence in persuasive communication must take into account differences in speech topics, or, if possible, in topic types. We will consider this problem in the following chapter.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Summary

Rhetorical theory as represented by current books in the field of Speech suggests that inclusion of evidence in support of assertions is a useful means of improving the persuasive potential of a rhetorical message. Previous experimental research has failed to support consistently this generally accepted theory.

Rhetorical theory also suggests that the ethos of a communicator is a potent persuasive force. Experimental research has consistently confirmed this theory.

On the basis of the previous research on ethos it seemed reasonable to believe that the elements of ethos and evidence may interact in persuasive communication. No previous research was found which manipulated both the ethos of the source and the quality of evidence usage. In short, prior to the research reported in this paper, there were no reported empirical data upon which to base acceptance or rejection of the theoretical interaction of ethos and evidence usage. The research reported in the previous chapters was conducted to provide such data.

Three major hypotheses were generated and tested in a series of experimental studies. These hypotheses were:

1. The probative force of evidence varies with the level of ethos of a communicator; it adds probative force for a low-ethos communicator but has no effect for a high-ethos communicator.

2. When seeking "long range" audience response, the probative force of evidence is equally important for communicators of all ethos levels.

3. Use of evidence in persuasive communication increases terminal ethos of the communicator.

Four secondary hypotheses were also generated and tested.

1. High-ethos communicators are more successful in modifying immediate postcommunication attitudes of audiences than are low ethos communicators.

2. High- and low-ethos communicators are equally effective in modifying long term postcommunication attitudes of audiences.

3. There are no differences between males and females in their response to evidence usage.

4. There are no differences between males and females in their response to varying ethos levels of communicators.

Two versions of speeches on capital punishment and federal control of education were developed. One version on each topic included evidence, the source of which was documented and qualified. The other version on each topic included no specific, documented evidence. Introductions of six speakers were developed, three for each topic. Pretesting indicated that these introductions established differential initial-ethos levels; a high level, a middle level, and a low level for each topic.

Semantic differential and Likert-type measures for attitude on the two topics and the authoritativeness and character dimensions of ethos were developed. Pretesting indicated that all of the measures were reliable and apparently valid. The development and pretesting of the experimental instruments was discussed in detail in Chapter II.

A pilot study, reported in Chapter III, produced the following results:

1. Auditors were able to perceive the differences in evidence usage between the two versions of the experimental speeches on both topics.

2. The experimental speeches modified audience attitude in the direction advocated by the speeches.

3. The speeches including evidence produced significantly more favorable postcommunication attitudes than did the "no-evidence" speeches.

4. Unidentified tape-recorded speakers were moderately high-ethos sources in this experimental setting.

5. Speeches including evidence produced higher terminal authoritativeness ratings than "no-evidence" speeches, but differential use of evidence produced no difference in terminal character ratings.

6. Interaction of sex and evidence usage was observed on some of the dependent variables; however, this interaction apparently followed no pattern.

7. Personal factors other than sex were found not to correlate with any of the dependent variables.

Two major studies were conducted. The results of the first major study, reported in Chapter IV, indicated that the effects of evidence on attitude change and on perceived ethos of the communicator were not consistent across the two topics used in the experimental speeches. Neither were the effects of initial ethos on attitude change found to be consistent across the two topics. It was suspected that excessive emotionality in the capital punishment speeches was a cause of the inconsistent evidence effects across topics and that excessive measurement was a cause of the inconsistent initial-ethos effects across topics. It was deemed necessary to conduct an experiment in which these two suspected confounding factors were not present in order to test the effects of evidence and initial ethos on attitude change.

The effect of evidence usage on terminal ethos of the communicator was also examined. The speech on education which included good use of evidence produced significantly higher authoritativeness and character ratings. This was particularly true in the middle and low initial-ethos conditions; however, no significant effects on ethos ratings attributable to evidence were observed on the capital punishment topic.

Analysis of the subjects' speech preferences indicated that speeches including good use of evidence were highly favored over those not including good use of evidence. This was particularly true in the middle and low initial-ethos conditions.

Analysis of the subjects' ratings of evidence usage in the speeches indicated that the speeches including good use of evidence were rated significantly higher than those not including good use of evidence.

An expected "sleeper effect" upon which one of the primary and one of the secondary hypotheses for this series of studies was based, was not present. All effects of evidence usage and ethos which were significant on the immediate postcommunication attitude measures were still significant on the measures taken four and seven weeks after the experiment. In addition, there was no significant difference in the degree of the subjects' regression toward their original attitudes attributable to either evidence usage or ethos. However, a trend toward significance was noted in the differential effectiveness of the capital punishment speeches on the four-week postcommunication measure which was not present on the immediate post-communication measure.

The design for the second major study removed the two factors suspected of confounding the results of the first major study. The effects of evidence usage on immediate postcommunication attitudes were nearly identical with those observed in the first major study. The speech including evidence on the education topic was significatnly more effective in producing favorable immediate postcommunication attitudes than the speech lacking good use of evidence, particularly in the middle- and low-ethos conditions. However, no significant difference in the effects of the capital punishment speeches was ob-served. It appears that the reason good use of evidence on capital

punishment topic did not produce more favorable immediate postcommunication attitudes in the first major study was not that the speech stimuli were emotion laden. When this feature of the speeches was removed, the differential effects of evidence usage still did not achieve statistical significance.

The effects of initial ethos were consistent across the two topics. In both cases the low-ethos communicator was significantly less successful in producing favorable immediate postcommunication attitudes than the middle- and high-ethos communicators. The effects of the middle- and high-ethos communicators were not significantly different on either topic.

As in the first major study, the subjects in this study indicated a significant preference for the speeches including good use of evidence, particularly in the middle- and low-ethos conditions.

Again no ethos "sleeper effect" was observed. The differential effects of evidence usage increased over time on the capital punishment topic, and the significant effect of evidence on immediate postcommunication responses to the education speech persisted on the four-week postcommunication measure.

Conclusions

Tentative conclusions were drawn in each of the studies summarized above. At this point it is appropriate to draw some general conclusions based on the combined results of the pilot study and the two major studies. We shall draw such conclusions in relation to the primary and secondary hypotheses generated in Chapter I.

Primary Hypothesis 1: The probative force of evidence varies with the level of ethos of the communicator; it adds probative force for a low ethos communicator but has no effect for a high-ethos communicator. This hypothesis, as far as it goes, was generally supported in this series of studies. However, in both of the major studies the effect of evidence as a probative force varied with the topic of the speech, a factor not considered in the generation of this hypothesis.

It seems that any conclusion we draw concerning the importance of evidence in modifying immediate postcommunication attitudes should be offered with reference to differences between topics. It will be suggested in the next section of this chapter that topic-related conclusions are probably inappropriate also. However, on the basis of the design and results of the studies reported in this paper, we are limited to topic-bound conclusions.

Based on the data reported above, the most defensible conclusion we can draw is that good use of evidence can be an important asset to a speaker who wishes to produce favorable immediate postcommunication audience attitudes toward his propositions. This will likely be the case for speeches on some topics when the speaker is a moderate-to-low-ethos communicator.

Primary Hypothesis 2: When seeking "long-range" audience response, the probative force of evidence is equally important for communicators of all ethos levels. We cannot confidently reject this hypothesis. No consistent interaction of ethos and evidence

usage was observed in the covariance analyses for either topic on the delayed postcommunication measures. However, significance tests of the differences between the evidence treatments at each ethos level produced *t*'s that were significant or approached significance in most cases for the middle- and low-ethos levels. The *t*'s for the differences between evidence treatments in the high-ethos condition were consistently nonsignificant.

It appears from these results that good evidence usage may have a greater effect on long-term persuasion for middle- and low-ethos communicators than it does for high-ethos communicators, but on the basis of the studies reported in this paper we can not be certain.

Primary Hypothesis 3: Good use of evidence in persuasive communication increases terminal ethos of the communicator. Results of the pilot study and the first major study were inconsistent. In the pilot study good use of evidence increased perceived authoritativeness on both topics but perceived character was not affected by evidence usage on either topic. In the first major study good evidence usage increased perceived authoritativeness and character on the education topic but had no effect on either dimension on the capital punishment topic. It seems unwise to draw any conclusions based on such inconsistent results.

Secondary Hypothesis 1: High ethos communicators are more successful in modifying immediate postcommunication attitudes of audiences than are low ethos communicators. The data reported in

Chapters IV and V provide confirmation for this hypothesis. The low-ethos communicator was consistently less successful in producing favorable immediate postcommunication attitudes than were the high- and middle-ethos communicators when evidence treatment was not considered. However, as noted above, on the education topic evidence appeared to interact with middle and low ethos. Thus, the superiority of high initial ethos over low initial ethos, when the speaker includes good evidence, may be greatly reduced or even eliminated on some topics.

Secondary Hypothesis 2: High- and low-ethos communicators are equally effective in modifying long-term postcommunication attitudes of audiences. Cautious rejection of this hypothesis is appropriate. The results of the two major studies indicated that whenever a significant difference in the effectiveness of the ethos conditions occurred on the immediate postcommunication measure, the difference persisted for from four to seven weeks. This appears to contradict the findings of other researchers reviewed in Chapter I. Previous studies have indicated a "sleeper effect" in which the high-ethos sources lost some of their effectiveness over time and low-ethos sources gained some. Over time the "sleeper effect" has been found to cancel out the differences between the two sources. However, it was also noted by Hovland et al., (1953) that when their audiences were reminded of the source of communications to which they had been subjected, the effects of the two communicators were reinstated, the high-ethos source becoming significantly more effective in producing long-term favorable attitude change.

In the two major studies reported here, delayed postcommunication measures were administered in the classroom. It is possible that the act of completing the instruments reinstated the source in these studies. The measures were the same as those which the subjects had completed prior to and during the out-of-class experiments. The possibility that being handed copies of these instruments could remind the subjects of the experiment can not be ignored. Thus, we must condition our rejection of this hypothesis with the realization that it is probably correctly rejected only under circumstances where the source has been reinstated.

Secondary Hypotheses 3 and 4: There are no differences between males and females in their response to evidence usage or to varying ethos levels of communicators. We may not reject either of these two hypotheses. Although sex was found to interact with evidence usage in the pilot study on the capital punishment topic, it did not interact with evidence on the education topic. There was no observed interaction of sex with either evidence usage or ethos in the two major studies.

Supplementary Observations

Although the studies reported in previous chapters were designed primarily to test the hypotheses generated in Chapter I, additional information of importance was also obtained. While most of this information bears upon attitude change in general rather than evidence in particular, let us first concern ourselves with two

observations concerned only with the role of evidence in persuasive communication.

In both the pilot study and the first major study there were significant differences in the quality of evidence usage perceived by the subjects between the "evidence" and "no-evidence" versions of the speeches on both topics. While the "evidence" version was rated much higher in all cases, the "no-evidence" version was consistently rated moderately high also. We may wonder why a speech with no specific evidence and no citation or qualification of sources would be rated as having moderately good evidence usage. Was it because the measure of perceived evidence usage was imprecise? We certainly cannot discount this possibility. Or do untrained college students have a different meaning for "quality of evidence usage" than professionally trained speech educators? If so, what is that meaning?

On the basis of the data we cannot answer these questions. However, the results observed suggest the possibility that what our textbooks indicate as high quality evidence usage may not be what an untrained audience member perceives as high quality evidence usage.

Although we have reason to wonder what untrained audience members consider good evidence usage, we can at least be reasonably certain that they prefer speeches which include what professional speech educators consider good use of evidence over speeches that do not. In both of the major studies the subjects' indicated preferences were for the "evidence" speeches.

The implications of this last observation are not clear. The preference for speeches including evidence was consistent across all

treatment combinations. Thus, this preference seems unrelated to either attitude change or terminal ethos. It may merely indicate an "evidence expectancy." Irrelevant evidence or evidence from incompetent or undocumented sources might satisfy that expectancy also. Dresser's (1962b) results indicate as much. Dresser found that his subjects could not perceive such flaws in evidence usage. Baskerville (1961) has suggested that an "evidence expectancy" exists in many if not most American audiences and that this makes the audiences especially susceptible to illusory proof. The preference for speeches including evidence in the two major studies reported in this paper is not, therefore, a necessarily encouraging sign. Further study could confirm Baskerville's observation concerning the culpability of American audiences.

Several other supplementary observations deserve statement. One of the more important of these is that the semantic differential and Likert measures of attitude and ethos were highly correlated. The correlations between the two types of measures across experimental subjects were reported in Chapter II. These correlations were based on the scores of all subjects participating in the first major study. In addition, the covariance adjusted immediate postcommunication means for the treatments in major study one were highly correlated on the two measures. Table 32 reports the correlations for the various instruments.

These correlations are an indication of the validity of the semantic differential as a measure of attitudes--if we presume the validity of the Likert measures. This latter presumption seems

justified in light of the very large quantity of previous research which indicates the validity of scales developed by the Likert approach to attitude measurement. The Likert scaling approach was closely followed in the development of the scales used in this study. This observation tends to indicate the validity of the semantic differential approach to unidimensional attitude measurement of the type used in this study, but it should not be interpreted as an indication of the validity of the semantic differential as a multidimensional measure of meaning, the purpose for which it was developed. This was not the concern of the studies reported in this paper.

TABLE 32

Correlations Between Likert and Semantic Differential Adjusted Immediate Postcommunication Means

Scale Concept	Correlation
Capital Punishment Attitude	.984
Federal Control of Education Attitude	.897
Authoritativeness (Across Topics)	.981
Character (Across Topics)	.980

Note--All of the correlations are statistically significant, $p < .001$.

Two problems of measurement were revealed in these studies, both of which we have noted previously. The first was the effect on attitude change attributable to ethos when multiple measures were completed by the experimental subjects. The second was the suspected

reinstatement of the sources of the experimental communications when subjects were asked to complete an attitude scale for delayed post-communication attitude measurement. Future researchers should be cognizant of both of these potential problems when constructing research designs.

Finally, two problems which could confound experimental studies of attitude change were noted. One of these came to light through the conflicting results of the pilot study and its partial replication. The effect of the experimentor's ethos on an unidentified tape-recorded speaker's ethos apparently produced conflicting results. The second problem was also suggested by the results of the pilot study. This concerned the ethos level of the unidentified tape-recorded speaker. The perceived ethos of such a source is likely to be significantly above neutral. Either of these problems or a combination of the two, could limit the generalizability of a research study to the point that it would have very little value. It is likely that previous studies concerning evidence and studies of some other variables have been plagued by these problems. Future research studies should be designed to preclude the possibility of these problems occurring.

CHAPTER VII

A THEORETICAL BASIS FOR FUTURE RESEARCH

A fair conclusion based upon experimental studies of evidence reported prior to those with which this paper deals would be that evidence may not be useful to all speakers on all topics. The studies conducted by this investigator point to the probability that evidence is useful to moderate-to-low-ethos communicators on some topics, but that evidence may make no contribution to the persuasive affect of communications emanating from high-ethos sources in general or from any source, given some topics.

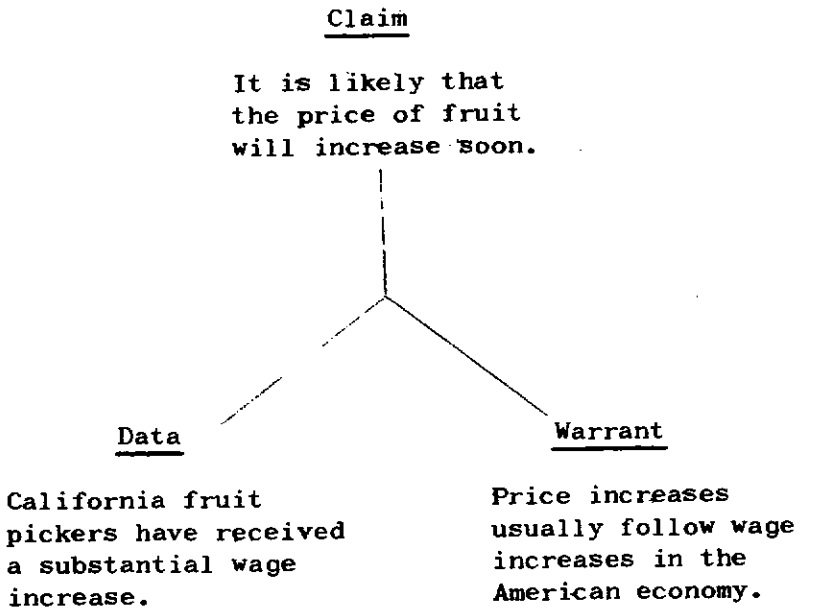
Such a probability is not consistent with the traditional theory concerning the importance of evidence in persuasive communication as that theory is represented by writers of current textbooks in public speaking and argumentation. Additionally, from neither traditional theory nor from the results of experimental studies do we have a basis for predicting for which topics evidence is likely to be a useful rhetorical tool. Thus, if we are to have a firm basis for generating hypotheses for future research, a revised theory of the role of evidence in persuasive communication is needed. The following theoretical formulations are presented in the hope of providing a needed basis for future research.

The Persuasive Unit

To begin with let us set forth a model of a persuasive unit. Persuasion may be described as the process of relating new beliefs to beliefs already held by an audience in such a manner as to gain audience acceptance of the new beliefs. A single persuasive unit, frequently referred to as an "argument," consists of two elements accepted by an audience which, when related to each other, produce audience acceptance of a new element. The new element, of course, is the speaker's claim--the new belief he hopes his audience will accept.

The other two elements are data and warrant. Data consist of one or more specific beliefs accepted by an audience. There are three types of data which will be discussed below. A warrant is a general belief held by an audience which relates the data to the speaker's claim. Such general beliefs may be concerned with relationships of things in the external world, values held by the audience, or the ethos of the source of the argument.

All arguments include data, warrant, and claim--either stated or implied. Their relationship is exemplified diagramatically below:



Data and warrant should be considered coordinate and indispensible parts of the process of gaining acceptance of claims. They are the support upon which the claim rests. If either is not believed or if they appear unrelated to each other, the persuasive process will be disrupted. The acceptance of the claim for which that persuasive unit was created will not occur; and any subsequent claims which are dependent on the completion of this persuasive unit will also be prevented from gaining acceptance.

An understanding of the natures of the elements of a persuasive unit is vital to the scientist investigating the rhetorical process. The natures of claims and warrants have been set forth and discussed at length by Ehninger and Brockriede (1963). For the purposes of generating a theory of the role of evidence in persuasive communication, however, the nature of data is the crucial concern.

In their textbook, Ehninger and Brockriede (1963) substitute the term "evidence" for the term "data" when describing the persuasive unit. While such a substitution may be acceptable if one is concerned with the persuasive unit only as it appears in the setting of academic debating with its established "game rules," the substitution is not acceptable if one is concerned with the process of persuasion as it appears in other contexts. Unfortunately, the narrow conception of data expressed by Ehninger and Brockriede is the same, or very nearly the same, conception within which experimental researchers (including the writer) have investigated the importance of good evidence usage in persuasive communication.

Since data is defined as evidence in this narrow view, evidence becomes one of the three indispensible elements of a persuasive unit as we have described it above. However, the results of experimental investigations have clearly indicated that in some circumstances, at least evidence is <u>not</u> indispensible. In fact, it would appear from these studies that frequently evidence contributes little or nothing to the success of a persuasive effort.

We shall look at data in a broader context to see if we can develop a better explanation of the role of evidence in persuasive communication.

The Types of Data

There are three distinct types of data. The first type is of the highest order, for it is ultimately the only type upon which a

meaningful argument may be developed. One example of this type of data is audience opinion. If the audience believes that Negroes are inferior to whites, this opinion may be used by the persuader as data for an argument. He may not use the opinion that Negroes and whites are equal as data unless he first instills that opinion in his audience's mind. Thus, in any given persuasive circumstance a speaker is restricted in his choice of arguments by the data which he can find or implant in the beliefs of his audience.

A second example of this type of data is audience knowledge. Anything that the audience knows can serve as data for an argument. If they are aware of wage increases for fruit pickers, this knowledge may be used by the persuader to obtain acceptance of the claim that price increases are likely in the near future. If, however, the audience is unaware of such wage increases, the speaker is precluded from this data option until such time as he informs his audience of the wage increases and secures their belief in the fact that they occurred.

There is a narrow line between "knowledge" data and "opinion" data. What is knowledge to one person may be opinion to another. We need not be concerned with this, however, because knowledge and opinion operate in almost exactly the same manner. If the audience "believes" or "knows" something, it can be used as data. If they do not "believe" or "know" something, it can not be used as data.

The next type of data is of a lower order, though essential to a persuader in nearly every circumstance. This type of data consists of speaker opinion and asserted information. This type of data is dependent on a secondary, usually implied, argument in every

case. This secondary argument has as its data the asserted opinion or information. The warrant is based on the credibility of the source. An example of this would be: "I say X's are usually Y" (data), "I am a credible source" (warrant), therefore "X's are usually Y" (claim). The data in this example meet the test of "first order" data, for if the audience hears me say it, their opinion that I said it is immediately assured.[9] The crucial determinant of whether the claim is accepted or not has to do with whether my ethos is high enough for the warrant to be acceptable to the audience. This is the case whenever a speaker makes an assertion in a speech. So long as his credibility is high enough there is a warrant that will permit his assertion to become audience opinion or audience knowledge. Thus, assertions of high credibility sources can serve as data for further arguments while assertions of sources with lower credibility serve no persuasive purpose. When a persuader makes an assertion the audience immediately (though usually not consciously) completes the secondary argument. If the persuader's ethos is high enough the assertion is accepted by the audience and becomes either audience knowledge or audience opinion. At this point data of the first order is present and the persuader can continue to develop further argument.

[9]While this is usually true, it should be recognized that under some circumstances "communication distortion" will occur. An audience member may hold a very strong attitude relevant to the statement and a favorable attitude toward the speaker but find the statement inconsistent with both of these other attitudes. In order to keep his attitude universe in harmony, he may unconsciously misperceive the statement of the speaker. This explanation of the "communication distortion" phenomenon is based on dissonance theory. (Festinger, 1957)

When appropriate audience opinion or knowledge is not available and the persuader's ethos is not sufficient to establish his assertions as audience opinion or knowledge, the persuader must resort to "third-order" data. Third-order data consist of opinions of others and facts attested to by others. This type of data will be recognized as what we have traditionally called "evidence." As in the case of "second-order" data discussed above, the introduction of opinions of others or facts attested to by others immediately causes the audience to complete a secondary argument. This argument has as data the belief that the outside source made the statement attributed to it and the warrant is based on the ethos of the outside source.

Actually a third-order argument is also produced. It goes something like this: The speaker says that so-and-so said X (data), the speaker is a credible source (warrant), therefore probably so-and-so did say X (claim). Obviously the speaker must have a certain minimal amount of credibility for even this argument to be accepted. But if it is, the data for the secondary argument are established. Then the credibility of the outside source (warrant) becomes crucial. If the outside source is credible enough, the secondary argument is established and new audience opinion or knowledge has been created. This can then be used as data by the persuader to develop further argument.

The establishment of first-order data by means of evidence (third-order data), then, is dependent upon the credibility of the speaker. Is he at least honest enough to tell the truth about what others say? Thus, for the very low ethos persuader, evidence would

serve no persuasive purpose. The audience would reject the evidence because of the person presenting it. But if the speaker has the minimal ethos necessary to overcome this obstacle, the credibility of the outside source can become crucial. If the audience is unfamiliar with the outside source, they are unlikely to accept the authoritative warrant. Thus, the advice given in the public speaking and debate textbooks concerning citing and qualifying sources of evidence appears to be theoretically and practically justified, though not for precisely the reasons usually given in the textbooks.

It is important to note here that either second- or third-order data may be rejected by an audience if the acceptance of it would force acceptance of an unacceptable claim. There are those among us, for example, who would refuse to accept the claim that communism is a better form of government than democracy, no matter who asserted it and no matter what evidence he brought forth to support his assertion. We find this an unacceptable claim. No first-order data are available that can persuade us of this claim, and no speaker could establish any by means of second- or third-order data. Some people can not be persuaded to accept some claims.

What we have suggested, then, is that there are three orders of data available to a communicator when persuasion is possible. First-order data consist of existing audience opinion and audience knowledge. If this type of data is available, it is to be preferred on rhetorical grounds over data of a lower order. It is the data most likely to enable the speaker to achieve his intended persuasive goal. Second-order data consist of asserted opinions and information.

This type of data is dependent on the credibility of the persuader. If the speaker is a highly credible source, this type of data is rhetorically preferable to data of a lower order. However, this type of data is available only to a communicator with moderately high to high ethos. Third-order data consist of opinions of others and facts attested to by others. This type of data is what has traditionally been called "evidence." Its persuasiveness is dependent on both the credibility of the persuader and the credibility of the outside source. Since there are two supplementary arguments introduced each time this type of data is used, there are more chances for this type of data to be rejected by the audience than when first- or second-order data are used. Thus, on rhetorical grounds, we should consider opinions and facts attested to by others the least potent of the data options open to the persuader.

This is not to suggest that third-order data (evidence) should not be used. As we have noted previously, on some topics the audience may not have any knowledge or opinion that the speaker can use as data, and the speaker's ethos may be too weak to establish his assertions as audience knowledge or opinion. Whenever this is the case, third-order data should be a useful tool, unless the ethos of the persuader is so low that his audience will not even accept evidence which he presents. Speakers with very low ethos may not have any promising data options available to them; therefore, they will probably be unsuccessful persuaders whether they include evidence in their speeches or not.

Implications for Future Research

If the above analysis of the structure of units of persuasion and the types of data is accepted, there are several implications for future research investigating the role of evidence in persuasive communication. The usual call for replication would not be appropriate. The designs of the studies reported in this paper were based on the traditional theory of the role of evidence in persuasive communication. The results of these studies suggest that this basis is inappropriate.

Future research should systematically investigate the effects of evidence usage 1) when first-order data are readily available to the speaker, 2) when first-order data are not available but second-order data are readily available, 3) when neither first- nor second-order data are readily available but the communicator has moderate to low ethos, and 4) when neither first- nor second-order data are readily available and the communicator has very low ethos. This research should use a variety of speech topics, some of which, at least, should be highly salient to the experimental subjects. Additionally, experimental subjects other than, or in addition to, college and high school students should be involved in this research in order to provide greater generalizability of experimental findings.

Completion of this research will provide the data needed for a much clearer understanding of the role of evidence in persuasive communication than we have at present.

REFERENCES

Andersen, K. and Clevenger, T., Jr. A summary of experimental research in ethos. Sp. Monogr., 1963, 30, 59-78.

Anderson, D. C. The effect of various uses of authoritative testimony in persuasive speaking. Unpubl. thesis, Ohio State University, 1958.

Arnold, W. E. Survey of student attitudes. Unpublished manuscript, 1964.

Baker, E. E. The immediate effects of perceived speaker disorganization on speaker credibility and audience attitude change in persuasive speaking. Western Sp., 1965, 29, 148-161.

Baskerville, B. The illusion of proof. Western Sp., 1961, 25, 236-242.

Berlo, D. K. and Gulley, H. E. Some determinants of the effect of oral communication in producing attitude change and learning. Sp. Monogr., 1957, 24, 10-20.

Berlo, D. K. and Lemert, J. B. An empirical test of a general construct of credibility. Paper read at Sp. Assoc. Amer. Conv., New York, December, 1961.

Bettinghaus, E. P., Jr. The relative effect of the use of testimony in a persuasive speech upon the attitudes of listeners. Unpubl. thesis, Bradley Univer., 1953.

Brandes, P. D. Evidence and its use by selected United States senators. Unpubl. doctoral dissertation, Univer. of Wisconsin, 1953.

Brandes, P. D. Evidence in Aristotle's Rhetoric, Sp. Monogr., 1961, 28, 21-28.

Cathcart, R. S. An experimental study of the relative effectiveness of selected means of handling evidence in speeches of advocacy. Unpubl. doctoral dissertation, Northwestern Univer., 1953.

Cathcart, R. S. An experimental study of the relative effectiveness of four methods of presenting evidence. Sp. Monogr., 1955, 22, 227-233.

Cooper, L. The rhetoric of Aristotle. New York: Appleton-Century-Crofts, 1932.

Costley, D. L. An experimental study of the effectiveness of quantitative evidence in speeches of advocacy. Unpubl. thesis, Univer. of Oklahoma, 1958.

Dresser, W. R. Studies of the effects of evidence: implications for forensics. A. F. A. Register, 1962, 10 (3), 14-19. (a)

Dresser, W. R. Studies of the effects of satisfactory and unsatisfactory evidence in a speech of advocacy. Unpubl. doctoral dissertation, Northwestern Univer., 1962. (b)

Dresser, W. R. Effects of 'satisfactory' and 'unsatisfactory' evidence in a speech of advocacy. Sp. Monogr., 1963, 30, 302-306.

Dresser, W. R. The impact of evidence on decision making. Paper read at Sp. Assoc. Amer. Conv., New York, December, 1965.

Edwards, A. L. Statistical methods for the behavioral sciences. New York: Holt, Rinehart & Winston, 1954.

Edwards, A. L. Techniques of attitude scale construction. New York: Appleton-Century-Crofts, 1957.

Edwards, A. L. Experimental design in psychological research. New York: Holt, Rinehart & Winston, 1960.

Ehninger, D. and Brockriede, W. Decision by debate. New York: Dodd, Mead, 1963.

Festinger, L. A theory of cognitive dissonance. Evanston: Row, Peterson, 1957.

Gilkinson, H., Paulson, S. F., and Sikkink, D. E. Effects of order and authority in an argumentative speech. Quart. J. Sp., 1954, 40, 183-192.

Goetzinger, C. S., Jr. An analysis of the "validity" of reasoning and evidence in four major foreign polich speeches, 1950-51. Unpubl. thesis, Purdue University, 1952.

Gregg, R. E. Some hypotheses for the study of the psychology of evidence. Paper read at Sp. Assoc. Amer. Conv., Chicago, December, 1964.

Grove, T. G. Attitude convergence in small groups. Unpubl. doctoral dissertation, Northwestern Univer., 1965.

Guilford, J. P. Psychometric methods. New York: McGraw Hill, 1954.

Haiman, F. An experimental study of the effects of ethos in public speaking. Unpubl. doctoral dissertation, Northwestern Univer., 1948.

Hewgill, M. A. and Miller, G. R. Source credibility and fear-arousing communications. Sp. Monogr., 1965, 32, 95-101.

Hovland, C. I. Reconciling conflicting results derived from experimental and survey studies of attitude change. Amer. Psychologist, 1959, 14, 8-17.

Hovland, C. I., Janis, I. L., and Kelley, H. H. Communication and persuasion. New Haven, Conn.: Yale Univer. Press, 1953.

Hovland, C. I., Lumsdaine, A. A., and Sheffield, F. D. Experiments on mass communication. Princeton: Princeton Univer. Press, 1949.

Hovland, C. I. and Mandell, W. An experimental comparison of conclusion drawing by the communicator and by the audience. J. abnorm. soc. Psychol., 1952, 47, 581-588.

Hovland, C. I. and Weiss, W. The influence of source credibility on communication effectiveness. Pub. Opin. Quart., 1951, 15, 635-650.

Kelman, H. C. and Hovland, C. I. Reinstatement of the communicator in delayed measurement of opinion change. J. abnorm. soc. Psychol., 1953, 48, 327-335.

Kruger, A. N. The inherent need: further clarification. J. Am. Foren. Assoc., 1965, 2, 109-119.

McCroskey, J. C. Scales for the measurement of ethos. Sp. Monogr., 1966, 33, 65-72.

McCroskey, J. C. The effects of evidence in persuasive communication. Western Sp., in press.

McCroskey, J. C. and Dunham, R. E. Ethos: a confounding element in communication research. Sp. Monogr., in press.

Miller, G. R. and Hewgill, M. A. The effect of variations in nonfluency on audience ratings of source credibility. Quart. J. Sp., 1964, 50, 33-44.

Mills, G. E. Reason in controversy. Boston: Allyn & Bacon, 1964.

Osgood, C. E., Suci, G. J., and Tannenbaum, P. N. The measurement of meaning. Urbana, Ill.: Univer. of Illinois, 1957.

Paulson, S. F. An experimental study of spoken communications: the effects of prestige of the speaker and acknowledgement of opposing arguments on audience retention and shift of opinion. Unpubl. doctoral dissertation, Univer. of Minnesota, 1952.

Strother, E. An experimental study of ethos as related to the introduction in the persuasive speaking situation. Unpubl. doctoral dissertation, Northwestern Univer., 1951.

Wagner, G. A. An experimental study of the relative effectiveness of varying amounts of evidence in a persuasive communication. Unpubl. doctoral dissertation, Northwestern Univer., 1953.

Winer, B. J. Statistical principles in experimental design. New York: McGraw-Hill, 1962.

APPENDIX A

APPENDIX A: EXPERIMENTAL SPEECHES

Capital Punishment--With Evidence

Today, I want to talk to you about murder, a very special kind of murder, the kind that someday you may find is your duty to commit. At some time or another, all of you are going to be called upon for jury duty and when you are, you may find that the life of a fellow citizen rests in your hands. The judge will solemnly tell you to weigh the evidence, and if there is no doubt in your mind, then you should find the defendent guilty, and he will be sentenced to death.

No, you say, that is not murder, that is a just punishment for a crime committed. But how just is it? How just is a death sentence based on shreds of circumstantial evidence, or fed by mass hysteria, or built out of the emotional pleading of an eloquent prosecuting attorney, a sentence which is leveled at the poor bedeviled dregs of our society, a sentence which has even been bestowed on completely innocent men?

This form of legalized murder is practiced in most of our fifty states, and each year this death ritual is carried out with remarkable regularity. For example, statistics reported in the Statistical Abstracts of the United States for 1964, published by the Federal Government, indicate that in the last four years 166 men were put to death by juries made up of people like you. Examining this annual report a bit closer, we can note that in 1947 alone we executed 187 individuals, and since 1930 we have legally murdered 3833 men and women--an average of about one hundred and fifteen people a year for over 34 years.

It is this matter of legalized murder, or capital punishment if you will, that I want to discuss with you. As responsible citizens, and future jury members, you owe it to yourselves to examine the many sides of the controversy over capital punishment. Everyone must be ready to take a stand one way or another when the various proposals concerning this issue are brought before the public. And, certainly everyone will have opportunities to express opinions and beliefs on this problem if past occurrences mean anything. For this problem has come before state legislatures nearly every year since World War I.

To begin with, let us take a very close look at the case for capital punishment. According to Lamar Beman, a Cleveland Attorney, in his book Capital Punishment, "Capital punishment has been practiced

in all times, in all lands, by almost every possible method, and for all kinds of offenses against established law. In years gone by it was sometimes made the penalty for a great many different crimes, the number in England being at one time as high as two hundred and forty. It has been used as the punishment for minor offenses, such as vagrancy, larceny, and pocket picking. It is reported that during the reign of Henry VII, more than 7200 persons were hanged, mostly for vagrancy--the crime of being poor."

Since those days however, the number of offenses punishable by death has been gradually reduced. Of course, there are a few states which have kept five or six crimes on the statutes as worthy of a death sentence. Jerome Johnson in his book Capital Punishment reports that twelve states list only two offenses punishable by death, while seven states list six offenses, and the majority of the others list three or four. Rape, kidnapping, and premeditated murder are the most common. "By and large, however," states Mr. Johnson, "modern society has found the death penalty unnecessarily severe and undoubtedly ineffective in dealing with most crimes."

Despite this progress already made, we, for the most part, tenaciously cling to the death sentence as the only fitting punishment for premeditated murder, kidnapping, and rape. And why do we still cling to this belief? I can tell you why, it is mainly because the average person, without thinking, accepts the age-old tenets that putting certain criminals to death deters potential future criminals and protects society from crime. In a Gallup Poll when people were asked about this, 36% reported that they thought it was necessary to use some form of the death penalty, and 59% thought it helped prevent crimes.

Deterrence, or the prevention of crimes by threat, is a most widely held belief, and is the most frequently advanced reason for keeping the death sentence. The idea behind deterrence goes like this: we are supposed to fear death more than anything else, therefore, if we know that we will be put to death for committing a crime, we shall not commit it. Now, this might seem reasonable if one accepts the idea that men are entirely rational and that they deliberately choose the course of action they wish to take before they actually commit a murder or other capital crime. Needless to say, this is not in accord with modern psychologists who see human behavior as largely unplanned and habitual, rather than carefully calculated and completely voluntary.

Furthermore, this belief is not in accord with the facts as we know them today. Karl Schlessler, Professor of Sociology at Indiana University, who has made a study of the deterrent influence of the death penalty, states in a published essay that, of "six hundred and two convicted murderers questioned, five hundred and eighteen said that they did not think of the consequent penalties before they committed their crimes, and over 90% stated that even if they had

thought of the consequences they would have still committed the crime anyway." In view of Dr. Schlessler's wide experience both as an advisor to the Indiana Prison Board and as a criminologist who has worked with thousands of prisoners during the past sixteen years, it is interesting to note his conclusion concerning this matter of deterrence: "Statistical findings he says and case studies converge to disprove the claim that the death penalty has any special deterrent value. . . The fact that men continue to argue in favor of the death penalty on deterrence grounds may only demonstrate man's ability to confuse tradition with proof, and his related ability to justify his established way of behaving."

Today we no longer need accept this proposition of deterrence on the grounds of tradition and dogma, for we can disprove its effectiveness in the light of cold hard facts. Statistics, taken from the article, "The Status of Capital Punishment in the United States" by Herbert Weschler, former Attorney General of New York, Assistant Attorney General of the U.S., and chariman of the advisory committee to the Supreme Court, published in the Journal of Political and Social Science, show that in the eight states which have abolished the death sentence, there has been no increase in capital crimes, and their homicide rates are lower than that of their neighboring states. For example, Michigan has been without the death penalty for one hundred and six years, and her homicide rates are traditionally lower than those of Indiana and Illinois. This view is also supported by figures from the Statistical Abstracts. In 1962 Michigan had a homicide rate of 3.3 per hundred thousand population, whereas in Indiana it was 3.5 and Illinois 5.3. Wisconsin and Minnesota, two other neighboring states that have abolished capital punishment have even lower homicide rates--only .9 per hundred thousand population.

Similar comparisons can be made for other states that have abolished capital punishment. Maine, a non-capital punishment state has a homicide rate of 1.4 per hundred thousand population while neighboring New Hampshire which continues the death penalty has a rate of 2.4. North Dakota, another state that has abolished capital punishment, has a rate of 1.2. South Dakota, however, with capital punishment, has a rate of 3.3. Rhode Island has abolished capital punishment and has a homicide rate of .8. Connecticut and Massachusetts, the capital punishment states that surround Rhode Island, have rates of 1.3 and 1.8 respectively. In all these cases, states which have abolished capital punishment have lower homicide rates than their neighbors. Two other states which have abolished capital punishment are Alaska and Hawaii, which have no close neighbors with which to make comparisons. West Virginia and Iowa have also abolished capital punishment, but just did so this year.

These statistics compiled by the F.B.I. and published by the federal government are extremely significant, because if the threat of the death penalty is the only deterrent to those who would commit murder, then it would seem logical that murder should have run

rampant in those states which did away with this deterrent. We can see that there is no other conclusion to be reached than that stated by Dr. George Vold, advisor to the Minnesota Crime Commission, member of the American Prison Association, advisor to the Justice Department, and the leading research writer in this field. In his recent article "Modern Trends in Capital Punishment" he says "It seems clear that the presence or absence of the death penalty makes no particular difference in the amount of murder in any given state."

Society obviously recognizes this or it would conduct its executions in public for all to see. It would let every man, woman, and child in the country see a man's neck snapped, his tongue forced out of his mouth, and hear the anguished gurgle in his throat as he is hanged. It would let us all see a man go rigid as he receives the shock of thousands of volts of electricity and smell the sickening stench of his burning flesh. It would bring in the television cameras and let everyone see what a man goes through when cyanide pellets are dropped and he starts trying to avoid the act of breathing, that which once sustained life, but now brings death. No, we don't see these atrocities. They are hidden away in carefully secured parts of our prisons and only the warden, the guards, and carefully selected representatives of the press are present. No prosecuting attorney, no jury member, no average American ever sees this horror. I can only conclude that the argument that capital punishment is a deterrent to crime is absolutely ludicrous.

Of course, there is more to the case for capital punishment than this point of possibly deterring criminals. Many will argue that it is essential to eliminate those who are unfit and who might menace society. And at one time in history this might have been a valid argument, because there were no prisons and no known ways of caring for the criminally insane. Primitive societies, then, had to eliminate murderers for their own protection. But today, we have all the things needed to keep these maladjusted individuals from menacing society, and we also have the knowledge that murderers are not murderers by nature, prone to kill, who will reproduce future murderers, but rather they are individuals with long standing problems, unstable emotions, and mental derangements. We can hardly say that we are preserving and protecting our society when we add another life to the one already destroyed.

Then too, there is that small group of practical and economy minded individuals who would uphold capital punishment because it seems to be much less expensive than keeping capital offenders in prison. They reason that capital offenders, if not executed, will usually be kept in prison for fifty or sixty years and this is a great burden on the taxpayer. Yet, in actuality, just the reverse is true. New York University Professor Wenzell Brown, noted lecturer and writer on problems of crime and juvenile delinquency, points out in his book Women Who Died in the Chair that "Advocates of capital punishment who argue that execution is a cheap way to dispose of criminals are talking

through their hats. Prison officials say that if a prisoner should live for a hundred years after his conviction his expenses would amount to only a small fraction of the cost of his death in the electric chair." As Prof. Brown points out, even conservative estimates of the cost of a single execution are in excess of one million dollars. This figure, of course, includes the expense of appeals to higher courts which are mandatory in most states when capital punishment is decreed. These appeals are not mandatory and are not regularly used in noncapital punishment cases. In any case, it would be difficult to weigh the value of a man's life in terms of a taxpayer's dollars.

Finally, there is the age-old and persistent concept that says a criminal ought to die because he has committed a horrible crime and society must have its retribution. This stems from the old idea of an "eye for an eye" and a "tooth for a tooth," which was a way of giving satisfaction to those who had been offended. Today, this form of retribution is little more than a desire for revenge, a desire to see another person be made to suffer for his mistakes.

No doubt, in all of us there sometimes exists the desire to get even when we have been wronged. But we no longer take matters into our own hands and settle them, we have learned that these things are better settled in the courts and by law enforcement agencies. In the same manner we are learning that punishment simply for the sake of revenge or retribution does little to rid society of crime and does nothing to rehabilitate the criminal. What is happening to this type of punishment is best summarized in the following quotation: "The idea of punishment of any type solely as retribution is gradually disappearing, together with other of the older conceptions and theories of criminology. This idea is yielding to the modern scientific attitude, that retribution is not justification for any system of punishment nor are its results beneficial. It is repressive, not reformative, it ignores social responsibility and disregards all possibility of rehabilitation." This statement comes from Lewis Lawes, for thirty years warden of Sing Sing Prison, a man who has certainly been in a position to judge the effect of this method of punishment. Warden Lawes has long been considered one of America's outstanding prison officials and he clearly states his opposition to this type of punishment in his book, Man's Judgment of Death.

Rather than being beneficial, capital punishment quite often has the opposite effect. The fact that we are inconsistent in applying it tends to undermine our judicial system. One man at one time may be put to death for committing exactly the same crime that another man receives only a few years imprisonment for. Figures for 1954, for example, show that 1758 persons who were convicted of capital crimes were given prison sentences in contrast to the unfortunate eighty-two who were executed. Professor R. T. Bye, an outstanding professor of sociology and economics at the University of Pennsylvania, who spent four years carefully gathering materials for his book Capital

Punishment in the United States, says that "This inconsistent and only occasional use of the death penalty renders it a ridiculous and purposeless outrage. For, as it is now applied, the penalty is nothing but an arbitrary discrimination against an occasional victim."

The death sentence has even become an instrument of racial discrimination in parts of our nation. Figures taken from the North Carolina Board of Charities and Public Welfare's Annual Report on Capital Punishment in North Carolina show that 54% of the Negroes convicted of capital crimes are actually executed, whereas only 25% of the whites convicted of the same crimes are executed. Nor is North Carolina the exception to the rule. According to statistics released on May 29th of this year by the U. S. Bureau of Prisons, North Carolina is typical. This report states, "Although Negroes make up only about 12 per cent of the population, they comprised 53.6% of the prisoners executed by civil authorities in the U. S. from 1930 through 1964."

The report listed 3849 executions. Of these 2064 were Negroes, 1743 were white persons and 42 were of other races. Negroes and whites died in about equal numbers for murder, but 407 Negroes, compared with 48 whites, were executed for rape. Nearly two out of every five prisoners executed were Negroes and put to death by Southern states. The 11 former Confederate states executed 1484 Negroes and 491 white persons. This accounted for more than 51% of the Nation's total executions.

This discriminate use of the death sentence is amply demonstrated in Virginia's celebrated "Martinsville Seven" case. In this case, seven Negroes were convicted of rape on doubtful evidence and were sentenced to die. And that sentence was carried out, despite the appeal made to the Supreme Court where the defense attorney called attention to the fact that in the entire history of the State of Virginia, none of the 809 white men convicted of this crime had ever been executed, proving that these Negro convicts were being discriminated against.

Nor is discrimination in capital punishment restricted to race. Even more flagrant discrimination is based on sex. Figures reported in the Statistical Abstract for 1940, 1950, 1960, and 1962 indicate that 25,712 convicted murderers were men, 8,036 were women. Since about three out of four murderers are men it would be expected that more men would be put to death. But the actual figures for these four years are not in the expected proportion. Three hundred four men were put to death, but only one woman! These four years are not exceptional either. Of the 3849 people executed since 1930, only 30 have been women. That is about .8 of one percent. Thus, a man has more than 100 times greater chance of dying than a woman for the same crime. We can only conclude that the choice of imposing capital punishment is not based on the crime committed, but rather it is based on race and sex, hardly appropriate criteria in a democracy.

With all these executions, any thinking individual must eventually wonder whether any innocent men have been put to death. A special study has been made of cases where innocent persons have been convicted of crimes they did not commit by Edwin Borchard, who is considered one of our foremost legal authorities. He is the former legal advisor to the State Department and law librarian of Congress, as well as professor of Law at Yale. He states: "How many wrongfully convicted people have actually been executed, it is impossible to say. But with the system of criminal justice in all parts of the country as faulty as we know it to be, and with public hysteria in control of the prosecuting authorities. . ., certainly no penalty is irretrievable as death itself would be tolerated. . . There have been cases in every state where the real murderer has confessed the crime on his deathbed years after a totally innocent person has been executed."

One of the most striking examples of this is the case of Isidore Zimmerman. In his gripping book, Punishment Without Crime, Zimmerman tells how his trouser legs had been slit for the electric chair, his head shaved for the electrodes, and he had been given his last dinner of steak and ice cream when the late Governor Herbert Lehman commuted his sentence to life imprisonment. After spending 24 years in New York prisons for a murder he never committed, evidence turned up showing he was not guilty. News reports indicate that since the publication of Zimmerman's book West Virginia and Iowa have abolished capital punishment and crime commissions in New York and Pennsylvania have recommended to their state legislatures that it be abolished in these states also.

When we invoke the death penalty we preclude any possibility of rectifying mistakes that might have been made. Even the faintest possibility of sending an innocent man to his death should make us abolish any penalty so severe and irrevocable which is based on such indeterminable chances of circumstance. We cannot forget that the next innocent person executed may be one of us. We have no way of knowing who is next.

What, then, can we conclude about capital punishment in the United States? First, it is clear that the threat of the death penalty is not a deterrent to crime. Where it has been abolished the homicide rates are lower than in comparable states where people continue to be executed. Second, capital punishment can not be justified for economic reasons. As we have noted, executing criminals is far more expensive than maintaining them in prison. Third, capital punishment is discriminatory on the bases of race and sex. Negroes are killed, whites are imprisoned. Men die, but women live. Finally, and in my opinion, most important, capital punishment results in innocent men being put to death. This has not just occurred in a couple of isolated instances, but has been found to occur in virtually every capital punishment state in the nation.

The big question, the one neither I nor anyone else can answer with certainty, is why? Why has society allowed this barbaric remnant of the Middle Ages to continue? Why do we continue to direct our law enforcement agents to execute men in hidden rooms of our prisons like the Nazis directed their agents to exterminate Jews in hidden camps like Auschwitz? The only answer I can suggest is that this is just another instance in the long history of man's inhumanity to man. But, whatever the reason, this legalized murder must be abolished!

Capital Punishment--Without Evidence

Today, I want to talk to you about murder, a very special kind of murder, the kind that someday you may find is your duty to commit. At some time or another, all of you are going to be called upon for jury duty and when you are, you may find that the life of a fellow citizen rests in your hands. The judge will solemnly tell you to weigh the evidence, and if there is no doubt in your mind, then you should find the defendent guilty, and he will be sentenced to death.

No, you say, that is not murder, that is a just punishment for a crime committed. But how just is it? How just is a death sentence based on shreds of circumstantial evidence, or fed by mass hysteria, or built out of the emotional pleading of an eloquent prosecuting attorney, a sentence which is leveled at the poor bedeviled dregs of our society, a sentence which has even been bestowed on completely innocent men?

This form of legalized murder is practiced in most of our fifty states, and each year this death ritual is carried out with remarkable regularity. There has never been a year that juries made up of people just like you have not legally murdered many unfortunate individuals, and it goes on like this year in and year out.

It is this matter of legalized murder, or capital punishment if you will, that I want to discuss with you. As responsible citizens, and future jury members, you owe it to yourselves to examine the many sides of the controversy over capital punishment. Everyone must be ready to take a stand one way or another when the various proposals concerning this question are brought before the public. And, certainly everyone will have opportunities to express opinions and beliefs on this problem if past occurrences mean anything. For this problem has come before state legislatures nearly every year since World War I.

To begin with, let us take a very close look at the case for capital punishment. Capital punishment has been practiced in all times, in all lands, by almost every possible method, and for all

kinds of offenses against established law. In years gone by it was sometimes made the penalty for a great many different crimes. It has been used as the punishment for minor offenses, such as vagrancy, larceny, and pocket picking. In fact, thousands of people have been hanged for such things as stealing a loaf of bread or begging on the streets. They were legally murdered for committing a crime, the crime of being poor.

Since those days however, the number of offenses punishable by death has been gradually reduced. Of course, there are a few states which have kept five or six crimes on the statutes as worthy of a death sentence. But this is not a wide spread practice; most states uphold the death penalty for premeditated murder, kidnapping, and rape, only. By and large, however, modern society has found the death penalty unnecessarily severe and undoubtedly ineffective in dealing with most crimes.

Despite this progress already made, we, for the most part, tenaciously cling to the death sentence as the only fitting punishment for premeditated murder, kidnapping, and rape. And why do we still cling to this belief? I can tell you why, it is mainly because the average person, without thinking, accepts the age-old tenents that putting certain criminals to death deters potential future criminals and protects society from crime. A great many people believe that it is necessary for us to have some type of death penalty, and even more believe that this actually prevents crimes.

Deterrence, or the prevention of crimes by threat, is a most widely held belief, and is the most frequently advanced reason for keeping the death sentence. The idea behind deterrence goes like this: we are supposed to fear death more than anything else, therefore, if we know that we will be put to death for committing a crime, we shall not commit it. Now, this might seem reasonable if one accepts the idea that men are entirely rational and that they deliberately choose the course of action they wish to take before they actually commit a murder or other capital crime. Needless to say, this is not in accord with modern psychologists who see human behavior as largely unplanned and habitual, rather than carefully calculated and completely voluntary.

Furthermore, this belief is not in accord with the facts as we know them today. Most convicted murderers will tell us that they did not give the slightest thought to the consequent penalties when they committed their crimes. Furthermore, they will tell us that even if they had thought of the consequences, they would have committed the crimes anyway. From this we can see that the death penalty has no special deterrent value, and the only reason we go on arguing in favor of this idea is, that we accept tradition over proof and we like to justify our old ways of doing things.

Today, we no longer need accept this proposition of deterrence on the grounds of tradition and dogma, for we can disprove its

effectiveness in the light of cold, hard facts. Some of our states, as you may know, took the forward step long ago and abolished the death sentence. Nothing happened to their homicide rates. There were no increases in capital crimes, and in most cases the homicide rate of these particular states has been lower than that of neighboring states. So it is with all types of capital crimes in these states which have done away with this outmoded form of punishment. This is significant because, if the threat of the death penalty is the only deterrent to those who would commit murder, then it would seem logical that murder should have run rampant in those states which did away with the deterrent. However, it seems clear that the presence or absence of the death penalty makes no particular difference in the amount of murder in any given state.

Society obviously recognizes this or it would conduct its executions in public for all to see. It would let every man, woman, and child in the country see a man's neck snapped, his tongue forced out of his mouth, and hear the anguished gurgle in his throat as he is hanged. It would let us all see a man go rigid as he receives the shock of thousands of volts of electricity and smell the sickening stench of his burning flesh. It would bring in the television cameras and let everyone see what a man goes through when cyanide pellets are dropped and he starts trying to avoid breathing the deadly gas, but dies choking and screaming. No, we don't see these atrocities. They are hidden away in carefully secured parts of our prisons and only the warden, the guards, and carefully selected representatives of the press are present. No prosecuting attorney, no jury member, no average American ever sees this horror. I can only conclude that the argument that capital punishment is a deterrent to crime is absolutely ludicrous.

Of course, there is more to the case for capital punishment than this point of possibly deterring criminals. Many will argue that it is essential to eliminate those who are unfit and who might menace society. And at one time in history this might have been a valid argument, because there were no prisons and no known ways of caring for the criminally insane. Primitive societies, then, had to eliminate murderers for their own protection. But today, we have all the things needed to keep these maladjusted individuals from menacing society, and we also have the knowledge that murderers are not murderers by nature, prone to kill, who will reproduce future murderers, but rather they are individuals with long standing problems, unstable emotions, and mental derangements. We can hardly say that we are preserving and protecting our society when we add another life to the one already destroyed.

Then too, there is that small group of practical and economy minded individuals who would uphold capital punishment because it seems to be much less expensive than keeping capital offenders in prison. They reason that capital offenders, if not executed, will usually be kept in prison for fifty or sixty years and this is a

great burden on the taxpayer. Yet, in actuality, just the reverse is true. Advocates of capital punishment who argue that execution is a cheap way to dispose of criminals are talking through their hats. If a prisoner should live for a hundred years after his conviction his expenses would amount to only a small fraction of the cost of his death in the electric chair. I'm sure that the costs of a single execution are in excess of a millon dollars. In any case, it would be difficult to weigh the value of a man's life in terms of a taxpayer's dollars.

Finally, there is the age-old and persistent concept that says a criminal ought to die because he has committed a horrible crime and society must have its retribution. This stems from the old idea of an "eye for an eye" and a "tooth for a tooth," which was a way of giving satisfaction to those who had been offended. Today, this form of retribution is little more than a desire for revenge, a desire to see another person be made to suffer for his mistakes.

No doubt, in all of us there sometimes exists the desire to get even when we have been wronged. But we no longer take matters into our own hands and settle them, we have learned that these things are better settled in the courts and by law enforcement agencies. In the same manner we are learning that punishment simply for the sake of revenge or retribution does little to rid society of crime and does nothing to rehabilitate the criminal. The idea of punishment of any type solely as retribution is gradually disappearing, together with other of the older conceptions and theories of criminology. This idea is yielding to the modern scientific attitude, that retribution is not justification for any system of punishment nor are its results beneficial. It is repressive, not reformative, it ignores social responsibility and disregards all possibility of rehabilitation.

Rather than being beneficial, capital punishment quite often has the opposite effect. The fact that we are inconsistent in applying it tends to undermine our judicial system. One man at one time may be put to death for committing exactly the same crime that another man receives only a few years imprisonment for. Each year hundreds of persons commit capital crimes, but there seems to be neither rhyme nor reason in the selection of the few whose lives are to be taken away by the state. This inconsistent and only occasional use of the death penalty renders it a ridiculous and purposeless outrage. For as it is now applied, the penalty is nothing but an arbitrary discrimination against an occasional victim.

The death sentence has even become an instrument of racial discrimination in parts of our nation. In some southern states practically the only persons ever executed are Negroes. Certain laws, such as the one which makes rape punishable by death, are kept on the statute books of these states, mainly so that they may be used against the Negro. In many cases, although the crime might be exactly the same in all respects, the white man is charged with assault or some

other lesser charge, so that he can be given a lighter sentence whereas the Negro must suffer the most extreme penalty the state can administer.

Nor is discrimination in capital punishment restricted to race. Even more flagrant discrimination is based on sex. Women commit many of the same crimes as men, but we all know that it is extremely rare for a woman to be executed. We can only conclude that the choice of imposing capital punishment is not based on the crime committed, but rather on race and sex, hardly an appropriate criterion in a democracy.

With all these executions, any thinking individual must eventually wonder whether any innocent men have been put to death. It is not uncommon to hear of a person being saved from the electric chair at the last possible moment because someone else has confessed to the crime, or because some entirely new evidence has been uncovered. How many wrongfully convicted people have actually been executed, it is impossible to say. But with the system of criminal justice in all parts of the country as faulty as we know it to be; and with public hysteria in control of the prosecuting authorities, certainly no penalty as irretrievable as death itself should be tolerated. There have been cases in every state where the real murderer has confessed the crime on his death bed years after a totally innocent person had been executed. Naturally, when we invoke the death penalty, we preclude any possibility of rectifying mistakes that might have been made. Even the faintest possibility of sending an innocent man to his death should make us abolish any penalty so severe and irrevocable which is based on such indeterminable chances of circumstance. We cannot forget that the next innocent person executed may be one of us. We have no way of knowing who is next.

What, then, can we conclude about capital punishment in the United States? First, it is clear that the threat of the death penalty is not a deterrent to crime. Where it has been abolished the homicide rates are lower than in comparable states where people continue to be executed. Second, capital punishment can not be justified for economic reasons. As we have noted, executing criminals is far more expensive than maintaining them in prison. Third, capital punishment is discriminatory on the bases of race and sex. Negroes are killed, whites are imprisoned. Men die, but women live. Finally, and in my opinion, most important, capital punishment results in innocent men being put to death. This has not just occurred in a couple of isolated instances, but has been found to occur in virtually every capital punishment state in the nation.

The big question, the one neither I nor anyone else can answer with certainty, is <u>why</u>? Why has society allowed this barbaric remnant of the Middle Ages to continue? Why do we continue to direct our law enforcement agents to execute men in hidden rooms of our prisons like the Nazis directed their agents to exterminate Jews in

hidden camps like Auschwitz? The only answer I can suggest is that this is just another instance in the long history of man's inhumanity to man. But, whatever the reason, this legalized murder must be abolished!

Revised Capital Punishment Speech--With Evidence

A controversy over capital punishment has raged in this country for the past century. Nearly every week there is at least one article or editorial in the newspapers concerning this method of punishing criminals. State legislatures are constantly confronted by bills which would either abolish or limit the use of the death penalty.

It is no wonder, then, that nearly everyone has an opinion on the question. What is surprising is that the American public is nearly evenly divided in their opinions. It is difficult to understand how a people who pride themselves on judging the desirability of a policy in light of cold, hard facts can be so divided. It seems to me that only two things could explain this division: Either the American people are irrational, or the important facts on this question have not been made available to them. In my opinion the latter is more likely the case. Thus, it will be my purpose in this talk to discuss the pertinent facts concerning capital punishment in this country.

To begin with, lets answer the question, "How frequently is the death penalty being imposed on criminals?" The trend is clear. And that trend is downward. According to official F.B.I. figures published in the Statistical Abstracts of the United States for 1964, in the last four years we have executed only 166 individuals, an average of 42 per year. The average of all years since 1930, however, is 113 executions per year. Since 1930 we have executed a total of 3833 men and women. In 1947 alone we executed 187 criminals. What do these facts tell us? They clearly indicate that while our population and crime rate are both increasing sharply, our execution rate has dropped to only a fraction of what it was just a few years ago. In short, although society has retained this form of punishment on our law books, we have chosen to enforce it in only a small and steadily decreasing fraction of the cases in which it could be applied.

But this doesn't tell us whether we should enforce the death penalty more frequently or abolish it. There are those who will argue forcefully for either of these positions. Lets look at the arguments for both sides and the pertinent facts which apply to those arguments.

The most frequent argument for capital punishment is that the threat of the death penalty deters potential criminals from committing crimes. It supposedly helps reduce the crime rate for those offenses against society to which it applies. That this is a strong argument for retaining the death penalty is indicated by responses of a cross section of the American public to a Gallup Poll. Fifty-nine per cent of the people surveyed indicated they believed that the death penalty is a deterrent to crime.

Those opposed to capital punishment say that the deterrence argument is absurd. They analyze the deterrence argument something like this. We are supposed to fear death more than anything else, therefore, if we know that we will be put to death for committing a crime, we shall not commit it. However, this assumes a rational choice on the part of the potential criminal. For this theory to work the criminal would have to be consciously aware of the possibility of being executed when he is making his decision whether to commit a crime or not. Needless to say, this is not in accord with modern psychological research which has found human behavior to be largely unplanned and habitual, rather than carefully calculated and completely rational.

Which view of deterrence is right? Well, lets look at the facts. Dr. Karl Schlessler, a Professor of Sociology at Indiana University, has conducted one of the most extensive studies of the deterrent influence of the death penalty. One part of his study involved interviewing several hundred convicted murderers. Professor Schlessler reports that of "six hundred and two convicted murderers questioned, five hundred and eighteen said that they did not think of the consequent penalties before they committed their crimes, and over 90% stated that even if they had thought of the consequences they would have committed the crime anyway."

Now, to some, these findings of Professor Schlessler represent positive proof that the death penalty is not a deterrent. But if we think about it for a moment we will realize that Professor Schlessler's findings tell us nothing that we didn't already know. Since the only people he interviewed were convicted murderers it is obvious that they weren't deterred by the threat of the death penalty. Any person who has been prevented from committing a crime by the threat of the death penalty could not possibly have been contacted by the Professor.

It is obvious that facts of this sort will not provide an answer to the question of the value of the death penalty as a deterrent. Fortunately, there is another body of fact that is reliable. Before we look at these facts lets take just a moment to examine the theory of deterrence a bit more closely. This theory says that by threatening potential criminals with the death penalty we will reduce the crime rate. The converse of this, of course, is that if we remove the threat of the death penalty the crime rate will increase. Clearly the best way to test this theory is to look at the crime rates

where the death penalty is legal and where it is not legal to see if there is a significant difference.

Since murder is the most common crime to which the death penalty applies, the state by state homicide rates that are compiled annually by the F. B. I. are the best source of facts on the deterrent power of capital punishment. These figures are reported annually in the Statistical Abstracts of the United States, a publication of the federal government. Let's look at the figures for last year. The F.B.I. report indicates that ten states have abolished the death penalty. Their homicide rates are lower than those which have retained it. Let's look at some specific examples. Mighigan has abolished the death penalty. Her homicide rate was 3.3 per hundred thousand population. Indiana and Illinois, adjoining states who still enforce capital punishment, had homicide rates of 3.5 and 5.3 respectively. Wisconsin and Minnesota, two neighboring states that have abolished capital punishment have even lower homicide rates--only .9 per hundred thousand population.

Similar comparisons can be made for other non-capital punishment states. Maine, without capital punishment, has a homicide rate of 1.4 while neighboring New Hampshire has a rate of 2.4. North Dakota has a rate of 1.2 while South Dakota has the death penalty and a rate of 3.3. Rhode Island has a rate of only .8. Connecticut and Massachusetts, the capital punishment states that surround Rhode Island, have rates of 1.3 and 1.8 respectively.

Two other states which have abolished capital punishment are Alaska and Hawaii, but they have no close neighbors with which to make comparisons. West Virginia and Iowa have also abolished capital punishment, but just did so this year. Thus there can be no meaningful comparisons made for these states.

In all of the cases where meaningful comparisons can be made, the states which have abolished capital punishment have lower homicide rates than their neighbors. What do these facts indicate? They indicate that homicide rate comparisons are exactly opposite of what they should be if the theory of deterrence were correct. In short, there is absolutely no factual support for the theory of deterrence whatsoever. If we are to justify retaining capital punishment on the law books we must find some other justification.

Supporters of capital punishment, of course, believe there are other reasons for retaining this law. Many will argue that it is essential to eliminate those particularly viscious criminals who have already proven that they are a menace to society so that society will not be threatened by them again. This certainly makes sense. If we run over a nail and get a flat tire, we certainly want to remove that nail so that it won't give us more flat tires in the future. Only a fool would leave the nail where it was.

Opponents of capital punishment readily agree that society must be protected from such criminals, but they suggest that capital punishment is not necessary to accomplish that end. Let's look at the facts to see which side has the better of this dispute.

First, as we all know, there is more than adequate space in our prisons to keep all capital offenders securely restrained from molesting the rest of society. According to official F.B.I. figures there are only about 2000 persons convicted of capital crimes each year in this country. This averages out to about forty persons per state. Certainly this small handful of criminals can be retained in prison without overburdening our prison system.

Secondly, and I think much more importantly, far, far less than 2000 persons are executed each year. Last year the FBI reports indicate that less than thirty were executed. To suggest that executing this small group of criminals significantly protects society is absurd. Obviously, keeping a man in prison is just as effective a method of protecting society as killing him.

Of course many people are legitimately concerned that if a man is not executed he may be parolled and thus be free to commit more capital crimes. This, of course, is true. But the answer to this problem is to toughen the requirements for parole of capital offenders. One excellent suggestion has been made in this regard. That is to give juries the option of life imprisonment without the possibility of parole as an alternative to capital punishment.

On the basis of these facts it is apparent that capital punishment is not necessary to protect society from even the most dangerous of capital offenders. In short, protection of society does not justify retaining capital punishment on the law books.

One more argument is frequently advanced in support of capital punishment. This is the age-old and persistent concept that says a criminal ought to die because he has committed a horrible crime and society must have its retribution. Opponents of capital punishment say that such a philosophy is nothing but the law of the jungle and is beneath the dignity of civilized man. Both sides quote the Bible to support their argument. I will not pose as an authority on morality. However, the facts on this question are known by almost everyone. Every major religion in the world has denounced this position as immoral. As far as I have been able to determine, only the Russian and Chinese Communists and a few primitive tribes in Africa and Asia hold this philosophy as a basic tenant of their lives.

It is apparent then that the three basic arguments of the advocates of capital punishment are not supported by the facts. Crime is not deterred by this penalty, society is not better protected by this penalty, and the ethical basis of this penalty has been renounced by every major religion in the world. But lets not

automatically conclude that capital punishment should be abolished. Lets look at the arguments advanced by the opponents of capital punishment to see if they are supported by the facts any better than those of the people favoring it.

The first major argument advanced by those advocating abolition of capital punishment is that it is inherently discriminatory in its enforcement. They suggest that it is discriminatory on three grounds--on the basis of chance, on the basis of race, and on the basis of sex. Let's look at the facts.

First discrimination by chance. One fact that we have already mentioned is relevant here. Of the nearly 2000 people convicted of capital crimes last year only about 30 were executed. Why were these thirty executed and the others not? That question can be answered by referring to chance. Certainly different juries and judges may have chosen a different thirty to die. This is a most uncomfortable answer to most people. We like to think of our system of justice as being perfect and consistent. Of course we know that no system devised by man is perfect and that mistakes and injustices do occur in our administration of our laws permitting capital punishment. But the opponents of capital punishment suggest that discrimination on the bases of race and sex is much more important than chance in determining who shall be executed and who shall be imprisoned. Again, let's look at the facts.

First, racial discrimination. Official figures reported in the annual report of the North Carolina Board of Charities and Public Welfare indicate that in that state 54% of the Negroes convicted of capital crimes are actually executed, whereas only 25% of the whites convicted of the same crimes are executed. North Carolina is typical. According to official FBI statistics reported in Statistical Abstracts of the United States, since 1940, 1333 Negroes have been executed in the United States while only 978 whites have paid the death penalty. For the crime of rape 280,000 men have been convicted since 1940. Only 322 were executed (about one tenth of one percent). But of those executed, 287 were Negroes and only 35 were whites. This discriminate use of the death penalty in cases involving rape is amply demonstrated in Virginia's celebrated "Martinsville Seven" case. In this case, seven Negroes were convicted of rape on very doubtful evidence and were sentenced to die. And that sentence was carried out, despite the appeal made to the Supreme Court where the defense attorney called attention to the fact that in the entire history of the State of Virginia not one of the 809 white men convicted of rape had ever been executed.

As clearly as the facts support the contention that Negroes are discriminated against in the administration of capital punishment, the facts concerning discrimination based on sex are even more lopsided. The official FBI figures reported in Statistical Abstracts indicate that approximately 33 percent of the persons convicted of

murder since 1930 were women. However, only 30 of the 3833 people executed since 1930 have been women. That is about eight tenths of one percent. Thus a man has more than 100 times greater chance of being executed than a woman for the same crime.

It is readily apparent from these facts that chance, race, and sex are very important factors in determining whether a criminal will be executed for a capital crime. The discrimination argument of those who would abolish capital punishment is strongly supported.

The final argument expounded by opponents of capital punishment suggests that with all of the executions that take place certainly some completely innocent men have been put to death. There are very few facts on this question. However, a special study has been made of cases where innocent persons have been convicted of crimes. Edwin Borchard who is a professor of law at Yale and a former legal advisor to the State Department and law librarian of Congress conducted the study. Although his report indicated that it was impossible to estimate how many completely innocent men have been executed, it stressed that there have been cases in nearly every capital punishment state "where the real murderer has confessed the crime on his deathbed years after a totally innocent person has been executed."

A recent case has come to light where this almost occurred. This was the case of Isidore Zimmerman. In his gripping book, Punishment Without Crime, Zimmerman tells how his trouser legs had been slit for the electric chair, his head shaved for the electrodes, and he had been given his last dinner of steak and ice cream when the late Governor Herbert Lehman of New York commuted his sentence to life imprisonment. After spending 24 years in New York prisons for a murder he never committed, evidence turned up showing he was not guilty. He has since been freed. As terrible as this injustice was, it was only a matter of a few minutes from being incalculably worse. As Dr. Borchard's study indicates, it has been worse for innocent men in nearly every capital punishment state. Although Isidore Zimmerman lost 24 years, these other innocent men lost their lives.

It is interesting to note that since the publication of Zimmerman's book, West Virginia and Iowa have abolished capital punishment and crime commissions in New York and Pennsylvania, and Tennessee have recommended to their state legislatures that it be abolished in these states also.

As these crime commissions have noted, when we invoke the death penalty we preclude any possibility of rectifying mistakes that might have been made. We may think that it could never happen to us. That's what those other innocent men thought. But it did. The only way we can be absolutely certain that innocent men are not executed is to avoid executing anyone at all.

Well, I don't believe I need to belabor the issue any further. We have examined the facts and seen that capital punishment does not deter crime, we have seen that society can be protected from criminals without killing them, we have seen that the alleged moral basis for capital punishment has been renounced by every major religion in the world, we have seen that discrimination based on race and sex flourishes in the administration of the death penalty, and finally we have noted that innocent men have been executed and that the only was to prevent this from happening again is to eliminate the death penalty altogether.

I have decided what I think should be done about the laws that permit capital punishment. I would guess that you have also.

Revised Capital Punishment Speech--Without Evidence

A controversy over capital punishment has raged in this country for the past century. Nearly every week there is at least one article or editorial in the newspapers concerning this method of punishing criminals. State legislatures are constantly confronted by bills which would either abolish or limit the use of the death penalty.

It is no wonder, then that nearly everyone has an opinion on the question. What is surprising is that the American public is nearly evenly divided in their opinions. It is difficult to understand how a people who pride themselves on judging the desirability of a policy in light of cold, hard facts can be so divided. It seems to me that only two things could explain this division: Either the American people are irrational, or the important facts on this question have not been made available to them. In my opinion the latter is more likely the case. Thus, it will be my purpose in this talk to discuss the pertinent facts concerning capital punishment in this country.

To begin with, let's answer the question, "How frequently is the death penalty being imposed on criminals?" The trend is clear and that trend is downward. The past thirty years there have been gradually fewer people executed. While our population and crime rate are both increasing sharply, our execution rate has dropped to only a fraction of what it was just a few years ago. In short, although society has retained this form of punishment on our law books, we have chosen to enforce it in only a small and steadily decreasing fraction of the cases in which it could be applied.

But this doesn't tell us whether we should enforce the death penalty more frequently or abolish it. There are those who will argue

forcefully for either of these positions. Lets look at the arguments for both sides and the pertinent facts which apply to those arguments.

The most frequent argument for capital punishment is that the threat of the death penalty deters potential criminals from committing crimes. It supposedly helps reduce the crime rate for those offenses against society to which it applies. That this is a strong argument for retaining the death penalty is attested to by the fact that a majority of the American public believe that it is true.

Those opposed to capital punishment, however, say that the deterrence argument is absurd. They analyze the deterrence argument something like this. We are supposed to fear death more than anything else, therefore, if we know that we will be put to death for committing a crime, we shall not commit it. However, this assumes a rational choice on the part of the potential criminal. For this theory to work the criminal would have to be consciously aware of the possibility of being executed when he is making his decision whether to commit a crime or not. Needless to say, this is not in accord with modern psychological research which has found human behavior to be largely unplanned and habitual, rather than carefully calculated and completely rational.

Which view of deterrence is right? Well lets look at the facts. Studies of convicted murderers indicate that very few of them thought of the possible consequences before they committed their crime. Many say that even if they had thought of the consequences they would have committed the crime anyway.

Now to some this represents positive proof that the death penalty is not a deterrent. But if we think about it for a moment we will realize that these reactions of convicted murderers tell us nothing that we didn't already know. It is obvious that they weren't deterred by the death penalty or they wouldn't have been convicted murderers.

It is obvious that facts of this sort will not provide an answer to the question of the value of the death penalty as a deterrent. Fortunately, there is another body of fact that is reliable. Before we look at these facts lets take just a moment to examine the theory of deterrence a bit more closely. This theory says that by threatening potential criminals with the death penalty we will reduce the crime rate. The converse of this, of course, is that if we remove the threat of the death penalty the crime rate will increase. Clearly the best way to test this theory is to look at the crime rates where the death penalty is legal and where it is not legal to see if there is a significant difference.

The figures for murder, the most common crime to which the death penalty applies, show that the homicide rates are lower for states which have <u>abolished</u> capital punishment than for those that

still retain it. In fact if we compare individual non-capital punishment states with neighboring capital punishment states, we find that wherever meaningful comparisons can be made the non-capital punishment states have lower homicide rates than their neighbors.

What do these facts indicate? They indicate that homicide rate comparisons are exactly opposite of what they should be if the theory of deterrence were correct. In short, there is absolutely no factual support for the theory of deterrence whatsoever. If we are to justify retaining capital punishment on the law books we must find some other justification.

Supporters of capital punishment, of course, believe there are other reasons for retaining this law. Many will argue that it is essential to eliminate those particularly viscious criminals who have already proven that they are a menace to society so that society will not be threatened by them again. This certainly makes sense. If we run over a nail and get a flat tire, we certainly want to remove that nail so that it won't give us more flat tires in the future. Only a fool would leave the nail where it was.

Opponents of capital punishment readily agree that society must be protected from such criminals, but they suggest that capital punishment is not necessary to accomplish that end. Let's look at the facts to see which side has the better of this dispute.

First, as we all know, there is more than adequate space in our prisons to keep all capital offenders securely restrained from molesting the rest of society. There are only a few hundred persons who are convicted of capital crimes each year in this country. This averages out to only a handful of individuals for each state. Certainly this small group of criminals can be retained in prison without overburdening our prison system.

Secondly, and I think much more importantly, very few persons are actually executed each year. To suggest that executing this small group of criminals significantly protects society is absurd. Obviously, keeping a man in prison is just as effective a method of protecting society as killing him.

Of course many people are legitimately concerned that if a man is not executed he may be parolled and thus be free to commit more capital crimes. This, of course, is true. But the answer to this problem is to toughen the requirements for parole of capital offenders. One excellent suggestion has been made in this regard. That is to give juries the option of life imprisonment without the possibility of parole as an alternative to capital punishment.

On the basis of these facts it is apparent that capital punishment is not necessary to protect society from even the most dangerous of capital offenders. In short, protection of society does

not justify retaining capital punishment on the law books.

One more argument is frequently advanced in support of capital punishment. This is the age-old and persistent concept that says a criminal ought to die because he has committed a horrible crime and society must have its retribution. Opponents of capital punishment say that such a philosophy is nothing but the law of the jungle and is beneath the dignity of civilized man. Both sides quote the Bible to support their argument. I will not pose as an authority on morality. However, the facts on this question are known by almost everyone. Every major religion in the world has denounced this position as immoral. As far as I have been able to determine, only the Russian and Chinese Communists and a few primitive tribes in Africa and Asia hold this philosophy as a basic tenant of their lives.

It is apparent then that the three basic arguments of the advocates of capital punishment are not supported by the facts. Crime is not deterred by this penalty, society is not better protected by this penalty, and the ethical basis of this penalty has been renounced by every major religion in the world. But let's not automatically conclude that capital punishment should be abolished. Let's look at the arguments advanced by the opponents of capital punishment to see if they are supported by the facts any better than those of the people favoring it.

The first major argument advanced by those advocating the abolition of capital punishment is that it is inherently discriminatory in its enforcement. They suggest that it is discriminatory on three grounds--on the basis of chance, on the basis of race, and on the basis of sex. Let's look at the facts.

First, discrimination by chance. One fact that we have already mentioned is relevent here. Only a handful of those people convicted of capital crimes each year are actually executed. Why are these few executed and the others not? That question can be answered by referring to chance. Certainly different juries and judges may have chosen a different group to die. This is a most uncomfortable answer to most people. We like to think of our system of justice as being perfect and consistent. Of course we know that no system devised by man is perfect and that mistakes and injustices do occur in our administration of laws permitting capital punishment. But the opponents of capital punishment suggest that discrimination on the bases of race and sex is much more important than chance in determining who shall be executed and who shall be imprisoned. Again, let's look at the facts.

First, racial discrimination. In some southern states practically the only persons ever executed are Negroes. Certain laws, most notably the law making rape a capital crime, are enforced only against Negroes in some states. Whites who commit the same crime receive a lesser penalty. Over the nation as a whole more Negroes than

whites are executed annually--even though the Negro constitutes only a small minority of our population.

As clearly as the facts support the contention that Negroes are discriminated against in the administration of capital punishment, the facts concerning discrimination based on sex are even more lopsided. Women are almost never executed, no matter what their crime. All but a handful of the hundreds of people executed since World War II have been males. Actually a man has about a hundred times greater chance of being executed than a woman for the same crime.

It is readily apparent from these facts that chance, race, and sex, are very important factors in determining whether a criminal will be executed for a capital crime. The discrimination argument of those who would abolish capital punishment is strongly supported.

The final argument expounded by opponents of capital punishment suggests that with all of the executions that take place certainly some completely innocent men have been put to death. There are very few facts on this question. Although it is impossible to estimate how many completely innocent men have been executed, there have been cases in nearly every capital punishment state where the real murderer has confessed the crime on his deathbed years after a totally innocent person has been executed.

It is interesting to note that after recent publication of a case of this type two states have abolished capital punishment and crime commissions in three others have recommended to their state legislatures that it be abolished in these states also.

We must remember that when we invoke the death penalty we preclude any possibility of rectifying mistakes that might have been made. We may think that it could never happen to us. That's what other innocent men have thought. But it did happen to them. The only way we can be absolutely certain that innocent men are not executed is to avoid executing anyone at all.

Well, I don't believe I need to belabor the issue any further. We have examined the facts and seen that capital punishment does not deter crime, we have seen that society can be protected from criminals without killing them, we have seen that the alleged moral basis for capital punishment has been renounced by every major religion in the world, we have seen that discrimination based on race and sex flourishes in the administration of the death penalty, and finally, we have noted that innocent men have been executed and that the only way to prevent this from happening again is to eliminate the death penalty altogether.

I have decided what I think should be done about the laws that permit capital punishment. I would guess that you have also.

Education Speech--With Evidence

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 a 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 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" courses? In any given school we will find students with differing 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 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 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 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 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 tha 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 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 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. 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 veteranarian 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 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 major 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 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 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 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 abundently 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.

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.

Education Speech--Without Evidence

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 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 a 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 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" courses? In any given school we will find students with differing 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. Many of our schools do not offer such essential college preparatory subjects as chemistry or physics, and others 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 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. Across the nation we are short more than 100,000 teachers just to meet minimum standards. We can only guess what the 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 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. A very large percentage of the classrooms presently in use are obsolete and unacceptable for public schools because of such things as extreme fire hazards. Over three hundred thousand of our present classrooms are unacceptable. This means that upwards of nine million American children are forced to attend substandard schools, some of which are so bad that they can only be classed as 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. Almost one-fourth of these bond issues have been voted down in elections over the past few years, and the number is increasing. It is apparent from these facts 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? Probably many of us have enough information already to draw a conclusion about the adequacy of financing in some of our states. We know that the average teacher's salary in some states is only half of that of teachers in other states. 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 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, in some states many teachers receive salaries below that level.

Now, don't misunderstand me. In some states teachers make a fairly good income. But very few teachers receive salaries comparable to other college graduates. It all depends on what state in which the teacher happens to live whether he receives an adequate salary or is forced to live on a near poverty level.

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 alrady 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 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. The picture is not encouraging. No state requires that a school board member know anything about education. In most states the only requirement is that the person be a qualified voter. Some have additional residence requirements. Others require an eighth grade education. A few require that the board member be a taxpayer or parent. In some areas there are 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. Many of the school boards in the United States include members who are not even high school graduates. 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. Many of them are business owners, officials, and managers. Some are in the professional and technical services--doctors, lawyers, and engineers. Some are farmers. A few are laborers, craftsmen, housewives and clerks. Did you notice one group missing from that list? I did. Educators! There are so few qualified educators that are members of local school boards that they don't even constitute a reportable 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 veteranarian 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 dropouts. The only answer is to do for our children's schools what we have done for our dogs--turn 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 has three major 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 that action.

Finally, a national council on education should be formed composed of members ot 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 return to the criteria for an ideal school system that I mentioned a while age 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 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 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 abundently 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.

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 B

APPENDIX B: INTRODUCTIONS OF SPEAKERS

High Ethos Condition--Capital Punishment Topic

The first speaker we will hear this evening is Warden William T. Anderson who will discuss the question of whether society should continue Capital Punishment. Mr. Anderson has spent his life in the field of criminology and is recognized as one of the outstanding criminologists in the United States. Mr. Anderson received his law degree from the University of Pennsylvania in 1928. After graduating from Penn, he spent two years in graduate study in Criminology at American University in Washington, D. C. After completing his work at American, he joined the F.B.I. He served with the F.B.I. for the next 18 years. At the completion of World War II in Europe, Mr. Anderson was assigned to the allied intelligence agency to aid in gathering evidence for the trials of Nazi war criminals. In 1948, Mr. Anderson accepted a position as assistant warden of the Colorado State Penitentary. In 1950, he moved up to Warden, the position he has held for the past 15 years. During this period, Warden Anderson has supervised over 30 executions. The speech we will hear this evening was recorded from the NBC radio network program, "The Citizen Speaks."

Low Ethos Condition--Capital Punishment Topic

The first speaker we will hear this evening is Anthony L. Capelli who will discuss the question of whether society should continue capital punishment. Mr. Capelli was originally from Chicago. In 1938 at the age of 15 Mr. Capelli was convicted of the murder of an 80-year old candy store operator during a robbery attempt. He was sentenced to life imprisonment but was paroled in 1960 after serving 22 years of his sentence. In 1963, Mr. Capelli was arrested in San Francisco and confessed to the murder of a policeman while escaping from the scene of a robbery. He was convicted of first-degree murder and sentenced to die in the gas chamber on June 15, 1964. However, Governor Brown of California commuted Capelli's sentence to life imprisonment without parole. The speech we will hear this evening was recorded at San Quentin prison for broadcast on the NBC radio network program, "The Citizen Speaks."

Middle Ethos Condition--Capital Punishment Topic

The first speaker we will hear this evening is Don Perman, a first-term Freshman here at Penn State. Mr. Perman will discuss whether society should continue capital punishment. This speech was originally presented in accordance with the examination requirements for exemption from Speech 200.

High Ethos Condition--Education Topic

The next speaker that we will hear is Dr. William A. Johnson who will discuss the role of the Federal Government in public education. Dr. Johnson was graduated with honors from Penn State in 1940. He received his master's degree in political science from Columbia in 1941. After serving four years in the U. S. Marines in the Pacific during World War II, Dr. Johnson resumed his studies at Harvard. Harvard conferred the Ph.D. on Dr. Johnson in 1947. From then until 1951, Dr. Johnson served as an Assistant Professor of Political Science at the University of Southern California. After the outbreak of the Korean War, Dr. Johnson joined the Central Intelligence Agency. In 1956, he left the CIA to serve on President Eisenhower's White House Committee on Education. In this capacity he was responsible for conducting numerous studies of our nation's public educational system. In 1959, Dr. Johnson was appointed head of the research department of the Rockefeller Foundation's Education Division. In this capacity he has directed over four hundred separate studies concerning various problems of public elementary and secondary education. The title of his speech is the same as that of his most recent book, "The Altar of Irresponsibility." This speech was originally presented on the NBC radio network program, "The Citizen Speaks."

Low Ethos Condition--Education Topic

The next speaker we will hear is Mr. John Terakov who will discuss the role of the Federal Government in public education. Mr. Terakov was born and raised in New York City where he attended public schools until he was dropped for academic reasons in the tenth grade. In 1952, Mr. Terakov testified before the House Committee on Un-American Activities that he had been a card-carrying member of the Communist party from 1937 to 1950. When again called before the committee in 1960, he invoked the 5th amendment forty-seven times and refused to answer any questions. Mr. Terakov is

presently appealing to the Supreme Court to reverse a conviction for advocating the violent overthrow of the government of the State of New York as a result of a speech he delivered during the Harlem riots of 1964. The title of his speech is "The Altar of Irresponsibility." This speech was originally presented on the NBC radio network program, "The Citizen Speaks."

Middle Ethos Condition--Education Topic

The next speaker that we will hear is Francis Finelli who will discuss the role of the Federal Government in public education. Mr. Finelli is a first-term Freshman in Liberal Arts at Penn State. The title of his speech is "The Altar of Irresponsibility." This speech was originally presented in accordance with the examination requirements for exemption from Speech 200.

APPENDIX C

APPENDIX C: MEASURING INSTRUMENTS

Likert-Type Capital Punishment Scale

1. Capital punishment is nothing but legalized murder.
2. Capital punishment should be abolished in all states and territories.
3. There is no crime which justifies capital punishment.
4. In most cases when the death penalty is enforced it is justified.
5. Capital punishment is a justifiable means for society to use to protect itself from certain types of criminals.
6. Capital punishment gives a murderer just what he deserves.
7. States which have abolished capital punishment should re-establish it.
8. Vicious criminals deserve capital punishment.

Likert-Type Federal Control of Education Scale

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.

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.

Likert-Type Authoritativeness Scale

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 this 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.

Likert-Type Character Scale

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. The 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.

Federal Control of Education and Capital Punishment Semantic Differential

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

Authoritativeness Semantic Differential

Reliable	:___:___:___:___:___:___:___:	Unreliable
Uninformed	:___:___:___:___:___:___:___:	Informed
Unqualified	:___:___:___:___:___:___:___:	Qualified
Intelligent	:___:___:___:___:___:___:___:	Unintelligent
Worthless	:___:___:___:___:___:___:___:	Valuable
Expert	:___:___:___:___:___:___:___:	Inexpert

Character Semantic Differential

Dishonest	:___:___:___:___:___:___:___:	Honest
Friendly	:___:___:___:___:___:___:___:	Unfriendly
Pleasant	:___:___:___:___:___:___:___:	Unpleasant
Awful	:___:___:___:___:___:___:___:	Nice
Unselfish	:___:___:___:___:___:___:___:	Selfish
Sinful	:___:___:___:___:___:___:___:	Virtuous

Speech Rating Scale

1.	Organization and clarity of the speech	1 2 3 4 5 6 7
2.	Use of evidence to support assertions in the speech	1 2 3 4 5 6 7
3.	Voice usage	1 2 3 4 5 6 7
4.	Originality of thought	1 2 3 4 5 6 7
5.	Quality of reasoning	1 2 3 4 5 6 7
6.	General quality of the speech	1 2 3 4 5 6 7

VITA

James C. McCroskey was born on October 6, 1936, in Platte, South Dakota. He was graduated from Platte High School in 1954. The Bachelor of Science degree with a major in Speech was awarded to him in June, 1957, by Southern State College (S. Dak.). He received the Master of Arts degree in Speech from the State University of South Dakota in 1959.

Mr. McCroskey has served as a teacher of Speech and English and Director of Forensics at Scotland (S. Dak.) High School (1957-58) and at Watertown (S. Dak.) High School (1958-60). He served as an Instructor in Speech and Debate Coach at the University of Hawaii (1960-61) and at the Norfolk College of William and Mary (1961-63). Since 1963, Mr. McCroskey has served as an Instructor in Speech at The Pennsylvania State University.

Mr. McCroskey is a member of the American Forensic Association and a sustaining member of the Speech Association of America. He is a former member of the Legislative Assembly of the latter organization. His memberships in honorary societies include Phi Kappa Phi, Pi Kappa Delta, and Sigma Delta Nu. He has published scholarly articles on a variety of subjects, including speech education, experimental design, attitude measurement, and forensics. His articles have appeared in the following journals: Speech Monographs, Speech Teacher, Central States Speech Journal, Southern Speech Journal, Western Speech, Today's Speech, Journal of the American Forensic Association, The Register, Speaker and Gavel, The Forensic, The Rostrum, Pennsylvania High School Speech League Newsletter, and Bulletin of the South Dakota Speech Teachers Association.