

AD No. 21427
ASTIA FILE COPY

THE ROLE OF LANGUAGE IN BEHAVIOR

Technical Report Number 9

EFFECT OF THE USE OF AUTHORITY IN AN ARGUMENTATIVE SPEECH¹

Howard Gilkinson and Donald Sikkink

University of Minnesota

Purpose of the Study

This study deals with the relative effectiveness of authority and non-authority presentation on audience attitude shift, retention, and convincingness ratings. Authority presentation (as used in this study) refers to the use of quotations made by persons of prestige or expertness to support arguments used in a speech. The use of such authority quotations is based on the assumption that audiences will be more likely to believe, retain, and rate a speech higher if the speaker demonstrates that experts and persons of prestige agree with his arguments.

Method of the Study

A twenty minute speech favoring the proposition, "The North Atlantic Treaty Nations should form a Federal Union" was prepared. To insure that the proposition selected was one on which opinion was divided, a group of fifty-nine subjects similar in background to the experimental group were asked to indicate their attitudes on the proposition. Results given in Table I, indicated a fairly even division of opinion.

Table I

Pre-Experimental Test of Attitude on the Proposition Selected for the Speech

Attitude	No. Expressing this Attitude
Strongly Agree	3
Agree	14
Neutral	22
Disagree	17
Strongly Disagree	3

The speech prepared contained three main arguments, (1) Soviet Russia is a threat to world peace, (2) present organizations cannot meet that threat, (3) a Federal Union would be able to meet that threat. Factual material, example,

¹ This study is part of a larger program of investigation carried out at the University of Minnesota under sponsorship of the Office of Naval Research (Contract Number N8 onr-66216).

analogy, and statistical evidence were included to support these arguments. In addition, actual quotations from six authorities were included as support for the arguments. (Table II) These quotations made up twenty per cent of the material included in the speech. The authorities used were selected because it was felt

Table II

Authorities Used, Introductory Remarks, and the Argument Supported by the Quotation

Authority	Identifications	Argument Supported
Owen Roberts	"Former Justice of the Supreme Court"	No. 2
Estes Kefauver	"Senator"	No. 2
Guy M. Gillette	"Senator"	No. 2
Beardsly Rumel	"Financial Expert"	No. 3
Percival Brundage	"Director of the Natl. Bureau of Economic Research"	No. 3
John Foster Dulles	"Secretary of State"	Main proposition

they represented different political affiliations and differing amounts of prestige and expertness.

An adult male who was not known by the experimental subjects recorded the speech. Two identical and simultaneous tape recordings were made. This was accomplished by leading the microphone signal to the amplifier and through a wall circuit into an adjoining room. From this circuit, a divided connection lead the signal to two similar tape recorders so that simultaneous recording could be done. After recording, one tape was cut and spliced to remove the names of the authorities and the introductory remarks which served to identify them. Care had been taken in writing the transitions of the speech, so that names and identifying remarks could be removed in such a way that the quoted material would remain an integral part of the speech. This became the non-authority speech. The speech in which names and identifying remarks remained and where the quoted material was identified as being the words of the authority, was called the authority speech.

Subjects used in this study were students enrolled in the Fundamentals of Speech sequence at the University of Minnesota during the spring quarter of 1953. One week prior to hearing the speeches all subjects filled out a "Preliminary Questionnaire for a Listening Project". They were asked to give their names, ages, sex, college grade average, college classification, political affiliation, and to indicate their attitude on the proposition, "The member nations that belong to the North Atlantic Treaty Organization (Belgium, Great Britain, France, Netherlands, Luxemburg, Iceland, United States, Portugal, Canada, Greece, Turkey, Norway, Denmark, Italy) should form a Federal Union." A definition of Federal Union was read to all subjects prior to filling out the form to insure uniformity of response to that term. Attitude was indicated by a numerical rating using the following values: Strongly agree (5), Agree (4), Neutral (3), Disagree (2), Strongly disagree (1).

Subjects heard the speech in groups ranging from twenty-five to one-hundred. A uniform set of directions were used. Subjects were told that they were to take

part in a listening project, that they should not take notes, that scores on the exercise would not affect their course grade and that their listening scores would be returned to them the following week. The speech was then played.

The tape recorder used for playback was located in the front of the auditorium. Uniform settings for tone and volume were maintained throughout the playback. After hearing the speech, subjects filled out a sixty item true-false test based on the material in the speech and again indicated their attitude on the proposition using the five point rating scale. In addition, subjects rated the speech for "convincingness" on a nine point scale.

Subjects were paired on initial attitude and college grade average. Thus, a male, initial attitude 2, college grade average C, hearing the authority speech was paired with a male, initial attitude 2, college grade average C, who heard the non-authority speech. In addition to pairing the subjects, the average age, average college classification (Freshman 1, Sophomore 2, etc.), and the number of subjects of each political affiliation were computed for the two audiences. Results, given in Table III below, indicate the similarity of the two groups on a number of characteristics.

Table III
Characteristics of the Two Audiences

Variable	Non-Authority Audience	Authority Audience
Initial Attitude	Paired	Paired
College Grade Average	Paired	Paired
Men	88	88
Women	42	42
Average age	20.98	19.86
Average College Classification	2.05	1.91
Political Affiliation		
Republicans	55	64
Democrats	48	42
Independents	25	22
Other	2	2

Results of the Study

Table IV gives the results of the pre-test to post-test attitude shift for the two experimental groups and the control group which heard no speech. Both the authority and non-authority speech resulted in a significant shift of attitude. The control group did not shift significantly.

Table V gives the comparative effectiveness of the two forms of presentation on attitude shift. The differences between authority and non-authority presentation are not significant for the total group, men or women.

Table IV
Attitude Shift

	N	Mean on Pre-test	Mean on Post-test	Difference	t
Control Group (no speech)	38	2.76	2.71	-.05	.43
Total Group (authority)	130	2.80	3.25	.45	4.78**
Total Group (non-authority)	130	2.80	3.20	.40	4.91**
Men (authority)	88	2.76	3.16	.40	3.45**
Men (non-authority)	88	2.76	3.12	.36	3.60**
Women (authority)	42	2.88	3.43	.55	3.31**
Women (non-authority)	42	2.88	3.38	.50	3.65**

** Significant at the 1% level.

Table V
Comparative Effectiveness of the Two Forms of Presentation: Attitude Shift

	N	Mean Attitude Shift	Difference	t
Total Group (authority)	130	.45	.05	.43
Total Group (non-authority)	130	.40		
Men (authority)	88	.40	.04	.19
Men (non-authority)	88	.36		
Women (authority)	42	.55	.05	.29
Women (non-authority)	42	.50		

Table VI gives the comparative effectiveness of the two forms of presentation on retention. The differences between authority and non-authority presentation are not significant for the total group, men or women.

Table VII gives the comparative effectiveness of the two forms of presentation on convincingness ratings. The differences between authority and non-authority presentation are not significant for the total group, men or women.

Table VI

Comparative Effectiveness of the Two Forms of Presentation: Retention

	N	Mean score Retention	Difference	t
Total Group (authority)	130	41.63	.30	.60
Total Group (non-authority)	130	41.33		
Men (authority)	88	31.93	.04	.17
Men (non-authority)	88	31.89		
Women (authority)	42	40.97	.78	1.00
Women (non-authority)	42	40.19		

Table VII

Comparative Effectiveness of the Two Forms of Presentation: Convincingness Ratings

	N	Mean Rating	Difference	t
Total Group (authority)	130	5.10	.34	1.60
Total Group (non-authority)	130	4.76		
Men (authority)	88	4.81	.26	.94
Men (non-authority)	88	4.55		
Women (authority)	42	5.71	.50	1.62
Women (non-authority)	42	5.21		

Conclusions and Interpretations

1. Both authority and non-authority presentation affected significant shift of attitude in the audiences which heard them. This shift occurred in the total group, men and women.
2. The control group did not make a significant shift in attitude.
3. The results of this study did not reveal any significant differences between authority and non-authority presentation on attitude shift, retention, or convincingness ratings.
4. In comparing the relative effectiveness of the two forms of presentation on three criteria (attitude shift, retention, convincingness) between three groups

(men, women, total group) all nine numerical differences favor authority presentation.

This consistency of outcomes suggested the possibility that the inclusion of additional subjects might yield t's which would justify rejection of the null hypothesis. But, a fairly large number of subjects were employed (one hundred and thirty) and the question arises, why in view of the supposed rhetorical value of authority didn't a larger difference emerge?

Examination of the experiment suggested three conditions which might account for the smallness of the differences between the two forms of presentation (if there is a difference).

1. The speech as a whole was a clear statement in which the major proposition was supported by reasoning and evidence. The inclusion or exclusion of the names and identification of the authorities might have been a small factor in relation to the total impact of the speech.
2. The listening task was easy; the speech being only about twenty minutes in length, with the retention test and ratings taken immediately.
3. The listeners probably were strongly motivated. Even though a considerable number indicated that they found the speech "dull", their behavior during the playback suggested active listening.