

THE ROLE OF LANGUAGE IN BEHAVIOR

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CONDITIONS AFFECTING THE COMMUNICATION OF CONTROVERSIAL STATEMENTS IN CONNECTED
DISCOURSE: FORMS OF PRESENTATION AND THE POLITICAL FRAME OF REFERENCE
OF THE LISTENER¹

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In 1941 Edwards reported a study in which a short speech containing statements which were favorable to the New Deal and statements which were unfavorable to the New Deal was presented to college students, who were then given a recognition test to determine how many of the statements they could correctly identify. The listeners were also asked to indicate their attitude toward the New Deal on a seven-point scale, on the basis of which three small - forty-eight in each - but distinctively different groups of subjects were chosen: (1) favorable to the New Deal, (2) neutral, (3) unfavorable. It was found that pro-New Deal listeners achieved higher recognition scores on pro-New Deal statements than did anti-New Deal listeners, and anti-New Deal listeners achieved higher recognition scores on anti-New Deal statements than did pro-New Deal listeners. The trends were consistent and statistically significant. Edwards thought these outcomes to be consistent with the general rule "that experiences which are in harmony with an existing frame of reference (organization of desires, attitudes, wishes, values, etc., within an individual as a result of learning) will tend to be learned and remembered better than experiences which are in conflict with the same frame of reference."²

² Edwards, A. L. "Political Frames of Reference as a Factor Influencing Recognition," The Journal of Abnormal and Social Psychology, Vol. 36, No. 1, January, 1941, 34-50.

The purpose of the present article is to report the outcomes of a series of three experiments incorporating the same general features of design found in Edwards' study. Our objectives were to test the consistency of his outcomes, to study the effects of various forms of presentation, and to make sub-group comparisons.

Study #1 was carried out in the fall of 1951, at a time when charges of corruption against the national administration were prominently featured in the press. Thirty statements favorable to the Fair Deal (Truman administration) and thirty statements unfavorable to the Fair Deal were presented orally via recording to 476 students at the University of Minnesota in groups ranging in

¹ The studies reported here are 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).

size from 20 to 50. The subjects were enrolled in Fundamentals of Speech. They were told that the speech was being presented as a listening exercise, that they would be tested on their ability to remember what they had heard, that their scores would not affect their course grades, that the scores would be posted with identification numbers (not with names).

One half of the subjects heard a "mixed" form of presentation in which the pro and anti statements were mingled in random fashion. The remaining subjects heard a "separated" form in which the pro and anti statements were not mingled. Among the latter, one half heard the pro statements first, and the other half heard the anti statements first. It was our expectation that the "mixed" form would produce a more marked difference between the pro-Fair Deal subjects and the anti-Fair Deal subjects than the "separated" form. This expectation was based on the assumption that the "mixed" form would be more confusing than the "separated" form and thus aggravate the projective tendencies of the biased listeners. The two speeches were recorded by a skillful speaker who was instructed to maintain the same style of delivery in both forms of presentation.

Immediately after hearing the speech the listeners were asked to indicate their attitude toward the Truman administration on a seven point scale, and were then given a sixty-item multiple choice test in which they were asked to identify the statements made by the speaker.

A summary of outcomes for the total group is presented in Table I. It will be noted that a majority of the subjects indicated an unfavorable attitude toward the Fair Deal. Only two subjects indicated a "very favorable" attitude; they were included in the "favorable" group for purposes of tabulation. The table also shows how successful the various attitude groups were in correctly identifying the pro and anti Fair Deal statements presented in the speech. For example, 54 subjects - 30 men and 24 women - indicated that they were very unfavorable to the Fair Deal. This group scored a total of 1235 correct identifications of pro-Fair Deal statements, as against a total of 1331 for anti-Fair Deal statements, or 76% of the total possible score as against 82%, with a difference of 6%. In the table as a whole, the differences, though small percentage-wise, take the expected direction, and are larger at the ends of the attitude scale than they are in the middle.

The theoretical expectation in this study was that the individual listener would identify more of the speech material which conformed to his political attitude than he would of the material which ran contrary to it. This suggested a convenient and for our purposes an adequate basis of examining the trends in the data and testing their statistical significance. First it was necessary to find out if the thirty anti-Fair Deal statements and the thirty pro-Fair Deal statements had approximately equal rhetorical strength. This was done by making up through random selection a composite group of subjects in which favorable and unfavorable attitudes were balanced, and comparing the frequency with which the pro and anti statements were correctly identified. The composition of the group is shown in Table II, and the outcomes indicate that both classes of items were correctly identified about 79% of the time. With this assurance that the pro and anti statements were of about equal rhetorical strength, we then classified each listener according to whether or not he showed a preponderance of correct identifications of items conforming to his bias. For example, if a pro-Fair deal

Correct Recognition of Pro and Anti Administration Statements in Relation to Attitudes Toward the Administration.

Table I

Attitudes	Correct Recognition of				Differences
	Pro Statements	Anti Statements			
	N	f	%	f	%
2 Favorable	57	1353	80	1278	75
3 Slightly favorable	67	1597	79	1563	78
4 Neutral	54	1242	77	1276	79
5 Slightly unfavorable	94	2130	77	2200	78
6 Unfavorable	150	3450	77	3614	80
7 Very unfavorable	54	1235	76	1331	82
	476				6

Table II
Comparative Valence of Pro-Administration and
Anti-Administration Statements

<u>Attitudes</u>	<u>Correct Recognition of</u>	
	<u>Pro Statements</u>	<u>Anti Statements</u>
	<u>N</u> <u>Men</u> <u>N</u> <u>Women</u>	
Very favorable	1	1
Favorable	32	23
Slightly favorable	$\frac{37}{70}$	$\frac{27}{51}$ (121)
Slightly unfavorable	37	27
Unfavorable	32	23
Very unfavorable	$\frac{1}{70}$	$\frac{1}{51}$ (121)
	$\frac{2814}{5703}$ (79%)	$\frac{2916}{5757}$ (79%)

listener identified more pro-Fair Deal than anti-Fair Deal statements he was tabulated in the "plus" column, if the reverse was true he was put in the "minus" column, if he identified an equal number of pro and anti statements he was placed in the zero column. The skewness of the distribution in the "plus" direction then becomes the critical test of the conformity of the outcomes to theoretical expectations.

Three obtained distributions (o) are given in Table III, along with the expected chance distributions (e). Chi-square analysis shows significant skewness for the group which heard the mixed form of presentation and for the total group. The distribution for the group which heard the separated form of presentation is skewed in the expected direction but not significantly. Direct comparison of these two sub-groups yielded a chi-square value with probability falling between 2% and 1%.

The significant skewness of the total distribution adds confirmation to Edwards' results. Expectations as regards the mixed and separated forms of presentation were only partially realized. A significant difference in skewness of distribution appeared, as was expected, but the mixing of statements did not increase the difficulty of identifying statements. Both forms of presentation yielded a total score of 78% correct identifications.

Study #2. Another experiment was run in the fall of 1952, one week before the election, chiefly for the purpose of confirming the difference found in the first experiment between the "mixed" and "separated" forms of presentation. Procedures in Study #2 conformed in all essential respects to those of Study #1. Sixty new statements were formulated. Thirty of the statements were favorable to the Republicans: fifteen were pro Eisenhower, and fifteen were anti-Stevenson. Thirty of the statements were favorable to the Democrats: fifteen were pro Stevenson, and fifteen were anti Eisenhower. A new group of listeners were used; as in Study #1 they were students enrolled in Fundamentals of Speech at the University of Minnesota. One half of the subjects heard a "mixed" form of presentation in which the pro and anti statements were randomly mingled, and the other half heard the "separated" form in which the pro and anti statements were not mingled. After hearing the speech the listeners were asked to indicate which presidential candidate they would vote for, if they were eligible to vote, and were given a sixty-item multiple choice recognition test.

Analysis of the relative rhetorical strength of the pro Republican and pro Democrat items showed a 4% advantage for latter which ran consistently through the sub-groups in the test population. A blanket correction was employed to eliminate this discrepancy; two points being subtracted from each listener's score on pro Democrat items.

Plus, zero, and minus values were tabulated, as in Study #1, and are presented in Table IV. All three of the distributions are skewed in the expected direction, but the chi-square value for the mixed form of presentation is not significant. Direct comparison of the distributions for the mixed and separated forms did not yield a significant chi-square value. Combined data from Studies #1 and #2 for the two forms of presentation are given in Table V. The two distributions are markedly similar, and both show significant skewness in the expected direction. Thus, Study #2 again showed the same sort of relationship between

Table III

Study #1. Preponderance: Distribution and Analysis.

Form of Presentation	Listeners	N		Plus	Zero	Minus	Chi-square
mixed	Democrats & Republicans	218	(o) (e)	123 95	28 28	67 95	16.5052
separated	Democrats & Republicans	204	(o) (e)	102 94	17 17	85 93	1.5454
mixed and separated	Democrats & Republicans	422	(o) (e)	225 188.5	45 45	152 188.5	14.1352
n = 2	p 5% = 5.991	p 1% = 9.210					

Table IV

Study #2. Preponderance: Distribution and Analysis

Form of Presentation	Listeners	N	Plus	Zero	Minus	Chi-square
mixed	Democrats & Republicans	174 (c) (e)	91 78.5	17 17	66 78.5	3.9808
separated	Democrats & Republicans	192 (c) (e)	109 82	28 28	55 82	17.7304
mixed and separated	Democrats & Republicans	366 (o) (e)	200 160.5	45 45	121 160.5	19.4424

N = 2

P 5% = 5.991

P 1% = 9.210

Table V

Studies #1 and 2. Preponderance: Distribution and Analysis

Form of Presentation	Listeners	N	Plus	Zero	Minus	Chi-square
mixed	Democrats & Republicans	392 (o) (e)	214 173.5	45 45	133 173.5	18.9078
separated	Democrats & Republicans	396 (o) (e)	211 175.5	45 45	140 175.5	14.3618

n = 2

F 5% = 5.991

F 1% = 9.210

recognition scores and listeners' attitudes as was found in Study #1 and by Edwards, but did not confirm the difference between mixed and separated forms of presentation which was found in Study #1.

Study #3. The statements presented to the listeners in Studies #1 and 2 referred to contemporary and recent events and conditions, and no doubt similar statements had reached some of the subjects via newspapers, magazines, television, radio, and other sources. If we assume that the partisan listener is exposed more frequently to political commentary which conforms to his bias than to criticism which conflicts with it, it seems evident that familiarity could have a positive influence on the outcomes of such studies. The assumption receives some support in a study of the press and radio in a presidential campaign in which it was noted "that the people tend to seek out political views similar to their own."³ Furthermore, selected exposure to political opinions may have been

³ Lazarsfeld, Paul F., Berelson, Bernard, and Gaudet, Hazel. The People's Choice, (New York, 1948), p. 122.

relatively strong in the case at hand, for the subjects in Studies #1 and 2 were attending a university located in a metropolitan area, and many of them were living at home with their parents. A positive relationship between the political views of college students and their parents has been found.⁴

⁴ Bird, Charles. Social Psychology. (New York, 1940), p. 177.

Study #3 was carried out in a manner intended to reduce the effect of familiarity as much as possible. Sixty statements were formulated about the Republican administrations for the years 1920 to 1932; thirty being favorable and thirty being unfavorable to those administrations. The statements were historically factual and specific. There were two forms of presentation; a "proactive" form in which the section of the speech favorable to the administration was introduced with a laudatory paragraph, and the section which was unfavorable was introduced with a condemnatory paragraph; and a "retroactive" form in which the same paragraphs were used as concluding statements. Our expectation was that the proactive form to a greater extent than the retroactive form would excite bias, thus aggravating the tendency of the listener to recognize more readily statements conforming to his frame of reference than statements conflicting with it. The study was carried out in the spring of 1952, about six months before the November election. After hearing the speech the listeners were asked to indicate which party they hoped would win the fall election, and were given a sixty-item multiple-choice recognition test. The subjects were students in the Fundamentals of Speech course at the University of Minnesota, few if any of them had been either in Study #1 or 2. Forty-six subjects drawn from the same student population but not included in the main experimental group were given the recognition test without having heard the speech. These yielded an average score of 17.8. Since each item in the test gave four options and since the subjects checked all items, this result is only 2.8 points above the average to be expected by chance, suggesting very little familiarity with the statements in the speech.

A test of the relative rhetorical strength of the pro-Republican and pro-Democrat items was made, as in the other two studies, and a consistent difference

was found in favor of the latter. A blanket correction was used to correct this discrepancy; four points being subtracted from each listener's score on pro-Democrat items. The distributions for Study #3 are given in Table VI. All are skewed significantly in the expected direction. The trend appears a little stronger for the retroactive form than for the proactive form, but direct comparison of the two distributions did not yield a significant chi-square value. Thus, the expected difference between the two forms did not appear. Here, again, as in Studies #1 and 2 and in Edwards' study, the subjects on the whole tend to identify statements which conform to their frame of reference more frequently than statements which conflict with it.

Sub-Group Analysis. The three studies give a total of 1245 subjects who were identified as being pro-Democrat or pro-Republican at the time they were given the recognition test. This accumulation of data permitted some comparisons of sub-groups with sizable N's, which are presented in Table VII. There appears to be no difference between men and women, but a striking difference will be noted as between Republicans and Democrats. The former show strong and consistent skewness in the expected direction. The latter show little skewness in Studies #1 and 2, and in Study #3 the distribution is skewed significantly in the minus direction. Possibly this unexpected reversal of outcomes was due in some way to the rather crude correction of pro-Democrat items which was employed. In any event, it was thought desirable to make a direct comparison of the Republicans and Democrats in Study #3, the results of which are given in Table VIII. It will be noted that while both groups show a similar tendency, the trend is stronger among the Republicans than among the Democrats. This, plus the fact that the Democrats showed only a weak trend in Study #1, in which no correction was used, indicate that the two party groups did in fact react differently to the speeches.

Study #3. Preponderance: Distribution and Analysis

Table VI

Forms of Presentation	Listeners	N	Plus	Zero	Minus	Chi-square
proactive	Democrats & Republicans	214 (c) (e)	120 95	24 24	70 95	13.1578
retroactive	Democrats & Republicans	213 (o) (e)	143 109.5	24 24	76 109.5	20.4992
proactive & retroactive	Democrats & Republicans	457 (o) (e)	263 204.5	48	48 204.5	146 33.4694

n = 2 P 5% = 5.991 P 1% = 9.210

Table VII

Sub-Group Analysis. Combined Data from Studies #1, 2, & 3.

<u>Study</u>	<u>N</u>	<u>Plus</u>	<u>Zero</u>	<u>Minus</u>	<u>Chi-Square</u>
<u>Republican Women</u>					
#1	159	87	13	59	
#2	123	82	14	27	
#3	<u>119</u>	<u>85</u>	<u>14</u>	<u>20</u>	
	401 (o)	254	41	106	
	(e)	180	41	180	60.8444
<u>Republican Men</u>					
#1	139	76	20	43	
#2	86	50	13	23	
#3	<u>204</u>	<u>136</u>	<u>18</u>	<u>50</u>	
	429 (o)	262	51	116	
	(e)	189	51	189	56.3916
<u>Democrat Women</u>					
#1	51	28	2	21	
#2	74	31	9	34	
#3	<u>46</u>	<u>14</u>	<u>3</u>	<u>29</u>	
	171 (o)	73	14	84	
	(e)	78.5	14	78.5	.7708
<u>Democrat Men</u>					
#1	73	34	10	29	
#2	83	37	9	37	
#3	<u>88</u>	<u>28</u>	<u>13</u>	<u>47</u>	
	244 (o)	99	32	113	
	(e)	106	32	106	.9246
<u>All Subjects</u>					
	1245 (o)	688	138	419	
	(e)	553.5	138	553.5	65.3668

N = 2

P 5% = 5.991

P 1% = 9.210

Table VIII

Study #3. Comparison of Democrats and Republicans.

	N	Recognized More Pro-Republican Items	Equal Number	Recognized More Pro-Democrat Items
Republicans	323	221	32	70
Democrats	134	76	16	42

N = 2

$\chi^2 = 5.991$

$p = 9.210$

chi-square 6.3383

Conclusions

1. Generally, the subjects in these experiments show the same tendency which was indicated in Edwards' study; they show greater facility in the recognition of statements which conform to their bias than statements running counter to their bias.
2. In one experiment in which relatively unfamiliar material was presented to the listeners both the Democrats and Republicans recognized more pro-Republican than pro-Democrat statements, but the trend was significantly stronger among the Republicans.
3. The trend toward "biased" listening was equally strong among men and women.
4. The trend toward "biased" listening was not affected by the forms of presentation employed: mixed statements versus separated statements, pro-active form versus retroactive form.
5. The trend toward "biased" listening was strong and consistent among the Republican subjects; it was neither strong nor consistent among the Democrats. No ready explanation for this unexpected outcome occurs to these writers. The data gathered in the fall of 1951 (Table I) indicated a strong anti-Democrat tendency in the test population, not only in numerical division but also in strength of attitude. If the latter persisted throughout the following year the difference in listening behavior shown by the Republicans and Democrats may have been due to difference in strength of motivation or partisan feeling.