

**Appendix to Chapter 8,
entitled
“Stirring Emotion to Mobilize Engagement,”
from
*Echo Chamber: Rush Limbaugh and the Conservative Media
Establishment***

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Appendix 8.1 (see page 127 of *Echo*)
Trust in Government by PTR Groups, 1996

Trust in government to do what is right: 1996 primaries

To assess trust in government the following standard question was asked of all participants:

How much of the time do you think you can trust the government in Washington to do what is right --- just about always, most of the time, only some of the time, or less often?

- 1 Just about always
- 2 Most of the time
- 3 Some of the time
- 4 Less often
- 5 None of the time (VOL.)
- 9 Don't know/ Refused

The results in Table A8.1.1. are from an ANCOVA for mistrust of government scored from 4 higher mistrust to 1 lowest with four PTR listening groups (including nonlisteners). Limbaugh listeners are the comparison. Exposure to mainstream mass media for news is also controlled using a combined measure of print and television exposure to news.

Table A.8.1.1. ANCOVA for trust in government (Wave 1): PTR groups and controls

Source	df	F	p	B(SE)
Intercept	1	684.92	0	3.35(.14)***
PARTY	1	6.74	0.01	.07(.03)**
WHITE	1	0.48	0.488	-.04(.06)
SEX (Male)	1	0.09	0.76	.01(.04)
IDEOLOGY	1	3.61	0.058	.04(.02)#
AGE	1	7.91	0.005	-.003(.001)**
EDUCATION	1	2.7	0.10	-.04(.02)#
MSMM Exp*Attn	1	15.89	0.001	-.06(.02)***
LISTENING GROUP	3	2.5	0.058	
Nonlisten				-.12(.06)*
Oth Reg Con				-.18(.09)*
Oth Reg Lib/Mod				-.03(.08)
Total	N=1526	R ² (adj) = .034		

*** p<.001; **p<.01; *p<.05; #p<.10

Appendix 8.2 (see page 129 of *Echo*)
Political Indifference by PTR Groups, 1996

Political indifference was measured by two standard items: “There aren't any important differences between Republicans and Democrats in what they stand for these days” and “I really don't care who wins the presidential election this fall” where agree =3, disagree =1 and don't know, unsure, or it depends was coded as a 2. The two items were averaged. The results in Table A8.2.1. are from an ANCOVA for indifference where higher scores indicate more indifference. Predictors include various controls as well as four PTR listening groups (including nonlisteners); Limbaugh listeners are the comparison. Exposure to mainstream mass media for news is also controlled using a combined measure of print and television exposure to news.

Table A.8.2.1. ANCOVA for political indifference (Wave 1): PTR groups and controls

Source	df	F	p	B(SE)
Intercept	1	788.45	0	2.57(.11)***
PARTY	1	0.49	0.484	.02(.02)
WHITE	1	4.83	0.028	-.09(.04)*
SEX (Male)	1	12.21	0	.10(.03)***
IDEOLOGY	1	0.02	0.885	.003(.02)
AGE	1	0.17	0.681	.00(.001)
EDUCATION	1	36.23	0	-.11(.02)***
MSMM (Exp*Attn)	1	7.21	.01	-.03(.01)#
LISTENING GROUP	3	3.69	0.012	
Nonlisten				.12(.05)**
Oth Reg Con				-.01(.07)
Oth Reg Lib/Mod				.11(.06)*
Total	N=1540		R ² (adj) = .047	

*** p<.001; **p<.01; *p<.05; #p<.10

Political inefficacy was measured by agreement with a set of standard items including: (a) People like me don't have any say about what the government does; (b) I don't think public officials care much about what people like me think; (c) Sometimes politics and government are so complicated that a person like me can't really understand what's going on.

The results in Table A8.2.2. are from an ANCOVA for inefficacy scored from high to low with four PTR listening groups (including nonlisteners) and controls as predictors. Limbaugh listeners are the comparison. Exposure to mainstream mass media for news is also controlled using a combined measure of print and television exposure to news.

Table A.8.2.2. ANCOVA for political inefficacy (Wave 1): PTR groups and controls.

Source	df	F	p	B(SE)
Intercept	1	1283.92	.000	5.7(.18)
PARTY	1	.74	.39	-.03(.04)
LISTENING GROUP	3	3.5	.02	
Nonlisten				.14(.08)#
Oth Reg Con				-.11(.11)
Oth Reg Lib/Mod				.01(.10)
AGE	1	12.1	0.001	.002(.002)
IDEOLOGY	1	0.02	0.89	-.01(.03)
WHITE	1	10.28	.001	-.23(.07)**
SEX (Male)	1	3.55	.06	-.1(.05)#
MSMM (Exp*Attn)	1	24.71	.000	-.09(.02)***
EDUCATION	1	149.91	.000	-.38(.03)***
Total N	N=1544		R ² (adj) = .145	

*** p<.001; **p<.01; *p<.05; #p<.10

The only significant difference among listening groups is that between Limbaugh and nonlisteners.

Appendix 8.3 (see page 130 of *Echo*)
Political Participation by PTR Groups, 1996

Political Involvement: Primary period and during fall election period, 1996.

In this section of the appendices, results for an index of political participation are presented for two periods of time in 1996 – the spring primary period (Wave 1 of 1996 PTR Survey) and the fall (Wave 4 of 1996 PTR Survey). The items tapping into political involvement are somewhat different in the two periods, reflecting different kinds of political activity appropriate to the two times. The items for wave 4 are described in *Echo Chamber*, page 130. During the primary the items included: (1) Contacted or written to a public official about an issue that concerned you; (2) Attended a public hearing or town meeting; (3) Contacted a newspaper or television station about an issue that concerned you; (4) Contributed money to a political candidate or organization.

Table A.8.3.1. presents the results for the primary and Table A8.3.2. for the election period (and is the analysis for Figure 8.3 of *Echo*, page 130).

Table A8.3.1. ANCOVA for political involvement (wave 1): PTR groups and controls.

Source	df	F	p	B(SE)
Intercept	1	1677.3	.000	1.1(.29)
PARTY	2	.103	.90	
Dems vs. Republicans				.004 (.08)
Moderates vs. Republicans				.002 (.08)
LISTENING GROUP	3	8.64	.001	
Nonlisten				-.36 (.09)***
Oth Reg Con				-.25 (.12)*
Oth Reg Lib/Mod				-.005(.11)
AGE	1	14.1	.001	.007(.002)***
IDEOLOGY (5=conservative)	1	.15	.69	.001(.03)
WHITE	1	.08	.78	-.002(.08)
SEX (Male)	1	.29	.59	.003(.06)
EDUCATION	1	65.1	.000	.29(.04)***
Political Indifference		5.26	.02	-.12 (.05)*
Political Inefficacy		30.2	.001	-.17(.03)***
Mistrust of Government		11.46	.001	.13 (.04)***
Total N	N=1527	R ² (adj) =	.128	

Note: *** p<.001; **p<.01; *p<.05; #p<.10

Results for differences among PTR groups were substantively similar with the three trust and efficacy predictors omitted

Table A8.3.2. ANCOVA for political involvement (Wave 4): PTR groups and controls.

Source	df	F	p	B(SE)
Intercept	1	31.72	.000	1.33(.21)
Democrat	1	26.3	.001	.47 (.09)***
Republican	1	5.09	.02	.21 (.09)***
LISTENING GROUP	3	11.91	.001	
Nonlisten vs. Limbaugh				-.62 (.11)***
Other Con vs. Limbaugh				-.32 (.16)*
Lib/Mod vs. Limbaugh				-.375(.14)**
WHITE	1	3.93	.048	-.21(.11)*
SEX (male)	1	.07	.79	-.02(.07)
AGE	1	45.2	.001	.01(.002)
EDUCATION	1	79.1	.001	.38(.04)***
LIBERAL	1	.86	.35	-.09 (.10)
CONSERVATIVE	1	1.70	.19	.11 (.09)
Total N	N=1353	R ² (adj) = .135		

Note: *** p<.001; **p<.01; *p<.05; #p<.10

Measures of political inefficacy, political indifference, and mistrust of government were unavailable at wave 4.

Appendix 8.4 (see page 131 of *Echo*)
Mistrust of Government and Political Participation, 1996

Test of interaction effect of Trust in Government and PTR group on Political Involvement

To see the way that mistrust of government is functioning in the audiences of PTR, we present its relationship to self-reported voting in general and political participation (both assessed at wave 1) for the subgroups of listeners and nonlisteners.

Table A8.4.1. Correlations between mistrust, political inefficacy, political indifference, and two participation measures for four Listening groups

	All (N=1633-1653)	Nonlisteners (N=964-979)	Conserv PTR (N=138-139)	Lib/Mod PTR (N=280-283)	Limbaugh (N=208-211)
Mistrust					
Vote	-.037	-.046	-.068	-.117	.072
Pol Involve	.034	-.020	.135	.053	.138*
Inefficacy					
Vote	-.219**	-.197	-.182*	-.272*	-.171*
Pol Involve	-.227**	-.216	-.162	-.168**	-.261**
Indifference					
Vote	-.270**	-.262	-.138	-.375**	-.154*
Pol Involve	-.137**	-.141	-.085	-.159**	-.054

The most interesting difference in this table is the positive correlation between mistrust of government in Washington by Limbaugh and listeners to other conservative PTR, significant only in the case of Limbaugh but the differences are inconsequential. While inefficacy and indifference function as expected in their association to political involvement, mistrust of government is more an ideological evaluation by some listeners rather than a cynical distancing.

The patterns in the correlations were tested in ANCOVA to see if the interaction between PTR group and mistrust of the government in Washington was statistically significant in the presence of other controls. The results from this analysis are presented in table A8.4.2.

Table A8.4.2. ANCOVA for political participation (Wave 1): PTR listening groups, mistrust of government, their interaction, and controls.

Source	df	F	p	B (SE)
Intercept	1	2.35	0.13	-.64 (.39)
PARTY	2	0.81	0.444	.002(.08) -.007 (.07)
PTR LISTENING GROUP (NL vs Limbaugh)	3	1.23	0.30	.62 (.38)# .11 (.52) .49 (.44)
(Conser PTR vs Limbaugh)				.006 (.002)***
Lib/Mod PTR vs Limbaugh				
AGE	1	11.62	0.001	.001 (.03)
IDEOLOGY	1	0.15	0.70	.002 (.08)
WHITE	1	0.07	0.80	.005 (.06)
SEX	1	0.74	0.39	.37 (.04)***
EDUCATION	1	113.29	0.001	
Mistrust in Government	1	11.99	.001	.31 (.11)**
Listening Grp X Mistrust	3	3.34	0.02	
Mistrust*(NL vs Limbaugh)				-.32 (.11)**
Mistrust*(Conserv vs Limbaugh)				-.098 (.16)
Mistrust*(Lib/Mod vs. Limbaugh)				-.16 (.14)
Total	1528	R ² (adj) = .109		

The effect of trust on political involvement is positive implying that those who are more mistrusting of government in Washington are more politically involved (B=0.310, p=.003); nonlisteners exhibit a less strong relationship between trust and involvement than Limbaugh listeners (p=.005) while Limbaugh listeners are no different from other PTR listeners in the impact of government mistrust on their political involvement.

**Appendix 8.5 (see page 132 of *Echo*, Note 5)
Data from *The Executive Branch* study, 2003**

Data can be found at:

<http://www.annenbergpublicpolicycenter.org/NewsDetails.aspx?myId=28>

Appendix 8.6 (see page 132 of *Echo*)
Trust in Government by PTR Listeners, 2003 Executive Branch Study

Data can be found at: <http://www.annenbergpublicpolicycenter.org/NewsDetails.aspx?myId=28>

Appendix 8.7 (see page 132 of *Echo*)
Limbaugh's Content versus Other Sources, Primary, 1996

Table A8.7.1. Subjects Covered by Mainstream Media and the Rush Limbaugh Radio Program February-March 1996.

Subject Discussed	Number of News Stories* % of total	Number of News & Editorials* % of Total	Limbaugh*** # of mins. % of Total	Broadcast News** # of mins. % of Total
Foreign & Military Affairs	158 27.1%	355 27.2%	58 2.2%	457.6 24.1%
Clinton & Scandal	7 1.2%	24 1.8%	68.5 2.8%	20.2 1.1%
Pres. Clinton Administration/General	12 2.1%	26 2.0%	163 6.1%	12.7 0.7%
Republican Candidates/Primary Campaign	163 28%	316 24.2%	567.5 21.3%	481.1 25.3%
Congress	23 3.9%	37 2.8%	264 9.9%	10.8 0.6%
Third Party/Religious Right	2 0.3%	8 0.6%	143 5.4%	5.7 0.3%
The Media	5 0.9%	34 2.6%	113 4.2%	36.3 1.9%
Federal Budget, Taxes, Deficit, Role of Gov't	50 8.6%	111 8.5%	313.5 11.7%	197.2 10.4%
Family, Education & Public Ethics	21 3.6%	58 4.4%	157.5 5.9%	131 6.9%
Human Rights & Minorities	20 3.4%	78 6.0%	52.5 2.0%	99.3 4.8%
Crime, Punishment & Justice	20 3.4%	58 4.4%	28.5 1.1%	164.3 8.6%
Business, Commerce & Technology	102 17.5%	196 15.0%	505 18.9%	289 15.2%
Personal Efficacy & Public Optimism	0 0%	5 0.4%	235.5 8.8%	4 0.2%
Totals	583 articles	1306 articles	2669.5 mins.	1900.2 mins

*Washington Post, New York Times, Wall Street Journal (weekdays)

**ABC, NBC, CBS evening news programs (weekdays)

***The Limbaugh totals are for 7 weeks with guest hosts of 3/18-3/22/96 excluded.

Table A8.7.2. Comparison of Media Agendas for Two Weeks (Weekdays Only): March 4 - March 15, 1996
part 1 of 2

Subject	Limbaugh Talk Radio	Conservative Talk Radio	Moderate Talk Radio	Liberal Talk Radio	Network PM News	Print - N Only
Foreign & Military Affairs	25 minutes 3.2%	304.5 mins. 17.6%	149.5 mins. 16.3%	70 mins. 6.9%	173.8 mins. 35.6%	43 articles 27.9%
Clinton & Scandal	11.5 mins. 1.5%	58 mins. 3.3%	1.5 mins. 0.2%	11 mins. 1.1%	5.5 mins. 1.1%	0 arts. 0%
Pres. Clinton/ Admin. General	36 mins. 4.6%	36.5 mins. 2.1%	9 mins. 1.0%	28 mins. 2.8%	6.5 mins. 1.3%	4 arts. 2.6%
Rep. Candidates & Primary Campaign	164.5 mins. 20.9%	296.5 mins. 17.1%	114.5 mins. 12.4%	186 mins. 18.3%	102.6 mins. 21.1%	48 arts. 31.1%
Congress	63 mins. 8.0%	76.5 mins. 4.4%	25 mins. 2.7%	48.5 mins. 4.8%	0 mins. 0%	7 arts. 4.5%
Third Party & Religious Right	33.5 mins. 4.3%	26 mins. 1.5%	17.5 mins. 1.9%	36 mins. 3.5%	0 mins. 0%	0 arts. 0%
The Media	14.5 mins. 1.8%	79 mins. 4.6%	65.5 mins. 7.1%	19.5 mins. 1.9%	0 mins. 0%	0 arts. 0%
Fed. Budget, Taxes & Deficit, Role of Gov't	65.5 mins. 8.3%	184 mins. 10.6%	110 mins. 12.0%	102.5 mins. 10.1%	26 mins. 5.3%	8 arts. 5.2%

Comparison of Media Agendas for Two Weeks (Weekdays Only): March 4 - March 15, 1996

part 2 of 2

Subject	Limbaugh Talk Radio	Conservative Talk Radio	Moderate Talk Radio	Liberal Talk Radio	Network PM News	Print - N Only
Family, Education & Public Ethics	39.5 mins. 5.0%	209.5 mins. 12.1%	131 mins. 14.2%	288.5 mins. 28.4%	28.3 mins. 5.8%	3 articles 1.9%
Human Rights & Minorities	22.5 mins. 2.9%	128 mins. 7.4%	66.5 mins. 7.2%	67.5 mins. 6.7%	19.8 mins. 4.1%	3 arts. 1.9%
Crime, Punishment & Justice	5 mins. 0.6%	184.5 mins. 10.7%	173 mins. 17.2%	89.5 mins. 8.8%	31.9 mins. 6.6%	7 arts. 4.5%
Business, Commerce & Technology	195.5 mins. 24.9%	139.5 mins. 8.1%	67 mins. 7.3%	68 mins. 6.7%	92.3 mins. 19%	31 arts. 21.1%
Personal Efficacy & Public Optimism	109 mins. 13.9%	9.5 mins. 0.5%	5 mins. 0.5%	0 mins. 0%	0 mins. 0%	0 arts. 0%
Totals	785 minutes	1732 minutes	920 minutes	1015 mins	486 minutes	154 artic

Table A8.7.3. Spearman Rank-order Correlations for 13 Categories of Content: March 4 through March 15, 1996

	Limbaugh	Print News & Op-ed	Print News Only	TV PM News
Conserv PTR	.04	.85***	.74**	.87***
Moderate PTR	-.01	.67**	.79***	.79***
Liberal PTR	.22	.69**	.63*	.75**
Limbaugh PTR	XXX	.43	.09	.16

Note: *** $p < .001$; ** $p < .01$; * $p < .05$.

One possible objection to the conclusion that Limbaugh has a different topical priority than other forms of PTR is that the three ideological types of PTR are based on individual shows on or near March 4 and March 11 while the data from Limbaugh are across a two-week period. To counter this objection, we conducted the same analysis during the same two-week period for three PTR shows representative of their ideological type: G. Gordon Liddy's show representing the conservative voice; Jim Bohannon representing the moderate voice; and Tom Leykis the liberal. The results show that the three PTR shows exhibit strong similarities to mainstream media and to the conservative, moderate, and liberal snapshots while they are unrelated statistically to the Limbaugh show.

Table A8.7.4. Spearman Rank-order Correlations for 13 Categories of Content: March 4 through March 15, 1996

	Leykis	Bohannon	Liddy
Limbaugh	.19	.16	.00
Print News & Op-ed	.60*	.72**	.80***
Print News Only	.54*	.62*	.75**
TV: PM News	.60*	.61*	.88***

Note. *** $p < .001$; ** $p < .01$; * $p < .05$.

Appendix 8.8 (see page 137 of *Echo*)
Emotional Reactions and Candidate Preference, Election, 1996

Table A8.8.1. Means and standard deviations for different emotionality scores by talk radio listening groups.

	Non-listeners (n=855)	Limbaugh (n=207)	Other Conservative (n=111)	Liberal/Mod (n=200)	F
Total Emotionality (0=none to 8)	3.10 ^a (1.61)	3.59 ^b (1.26)	3.68 ^b (1.45)	3.59 ^b (1.63)	11.8***
Neg Emotion Clinton (0 to 2)	.77 ^a (.77)	1.31 ^b (.75)	.95 ^a (.80)	.81 ^a (.73)	28.5***
Neg Emotion Dole (0 to 2)	.61 ^a (.75)	.42 ^b (.63)	.66 ^{abc} (.75)	.81 ^c (.82)	9.42***
Pos Emotion Clinton (0 to 2)	1.02 ^a (.87)	.44 ^b (.72)	.98 ^a (.86)	1.20 ^a (.85)	32.1***
Pos Emotion Dole (0 to 2)	.69 ^a (.81)	1.41 ^b (.81)	1.08 ^c (.84)	.76 ^a (.83)	45.3***

Note: Two different letters in a row of means represent statistically significant mean differences between groups at $p < .05$.

*** $p < .05$ at least.

Strength of Vote Intention: Clinton-Dole 1996 election

The role of positive and negative emotional response was explored in a wide variety of ways during the election and afterward (waves 4 and 5 of the 1996 PTR Survey). These included regressions for political participation at wave 4, favorability toward the candidates individually, and intentions to vote for the candidate. Different measures of emotion were employed including overall indices of positive emotion toward Clinton relative to positive emotion toward Bob Dole.

The general conclusion across all analyses taken together was that listeners to Rush Limbaugh were no more likely to use their emotional reactions to make candidate judgments than were other involved groups (e.g. listeners to other PTR). In addition, emotional reactions to political candidates were positively associated with political participation overall ($r = .195, p < .001$) and negatively associated with political inefficacy ($r = -.085, p < .01$) and political passivity ($r = -.188, p < .001$).

One of our analyses is presented in Table A8.2.2. using strength of voting intention for Clinton relative to Dole in October 1996. Predictors included perceived issue similarity between candidate and respondent (W4), character judgment (honest, likable, good ideas, and good judgment), and emotional reaction as well as PTR listening groups and other controls.

Table A8.2.2. Unstandardized regression weights for intention to vote for Clinton and intention to vote for Dole (3 = strong Clinton, -3 = strong Dole): Four listening groups.

Predictor	Nonlisteners N=690	Limbaugh N=189	Conservative N=98	Liberal/Moderate N=168	All (weighted) N=1147
Clinton Similarity	.12*	.04***	.09	.22**	.11***
Dole Similarity	-.06	-.10	-.13	-.04	-.04
Party Strength (5=strong Rep)	-.36***	-.25***	-.26***	-.20***	-.33***
Emotion Pos Clinton	.24***	.62***	.65***	.48***	.29***
Emotion Pos Dole	-.54***	-.34**	-.54***	-.23**	-.55***
Clinton Character	.33***	.21***	.30***	.37***	.33***
Dole Character	-.20***	-.32***	-.14	-.16***	-.21***
R ²	.79***	.82***	.85***	.79***	.82***

Note: Other controls were also used including education, age, race, and sex; these are not reported here.