

**Appendix to Chapter 13,  
entitled  
“Distorting and Polarizing,”  
from  
*Echo Chamber: Rush Limbaugh and the Conservative Media  
Establishment***

[Appendix 13.1](#) (see page 224 of *Echo*)  
**Polarization of Attitudes after Exposure to PTR, 1996 PTR Experiment**

[Appendix 13.2](#) (see page 225 of *Echo*)  
**Polarization of Policy Positions by News Media Groups, 1996 PTR  
Survey**

[Appendix 13.3](#) (see page 226 of *Echo*, Note 13)  
**Polarization of (Additional) Policy Positions by News Media Groups,  
1996 PTR Survey**

[Appendix 13.4](#) (see page 228 of *Echo*, Note 17)  
**Perceived Ideology of Candidates for all Respondents, 2000**

[Appendix 13.5](#) (see page 229 of *Echo*)  
**Perceived Ideology of Candidates by Limbaugh Group, 2004**

[Appendix 13.6](#) (see page 232 of *Echo*)  
**Distortion of Candidates’ Positions by Media Exposure, 2004**

## **Appendix 13.1 (see page 224 of *Echo*)**

### **Polarization of Attitudes after Exposure to PTR, 1996 PTR Experiment**

The data for this appendix come from the PTR experiment conducted spring 1996. Details about the experimental design and procedures are available in Appendix 5.3.

#### **Assisted Suicide**

The question of assisted suicide received a great deal of attention in political talk radio as well as the mainstream news media in spring of 1996. When Dr. Jack Kevorkian is arrested or assists a person in committing suicide there is comment in both the mainstream and PTR. This topic received considerable treatment during the period in 1996 we monitored PTR.

Attitudes toward assisted suicide and Dr. Kevorkian were measured in a variety of ways. Based on factor analysis and scale reliability, five measures were adopted. Means and SDs across experimental condition are summarized in the following table. Although a more parsimonious set could have been generated, we adhered to the requirement of reliable, additive scales.

Of the five measures, four exhibited significant effects for experimental condition and the fifth an interaction with conservatism toward assisted suicide. The variation across conditions is captured primarily by the differences between the conservative messages and those having some liberal content (TOTN, the two-sided liberal-conservative, and the liberal programs). The conservative PTR message on assisted suicide is to oppose it and this shows up as less favorable views toward assisted suicide among the listeners of this programming. The Limbaugh show does not seem to operate like conservative PTR does on this issue except with regard to the measure on voting for assisted suicide which includes a question asking if God is the only one allowed to make life and death decisions. Here, the Limbaugh audience is like the conservative audience and less favorable than the audiences getting liberal messages. These effects are similar across ideological and religious groups. The effects are not large, ranging between 2.5 and 7.1% of the variance in attitudes. However, this amount of change occurred in a single hour of exposure for a range of people who are both ideologically disposed and opposed to the host's positions. Although no messages compete with those of the host, the small changes result from relatively modest amounts of influence.

Table A13.1.1. Attitudes related to assisted suicide by PTR group (adjusted): Significant effects only.

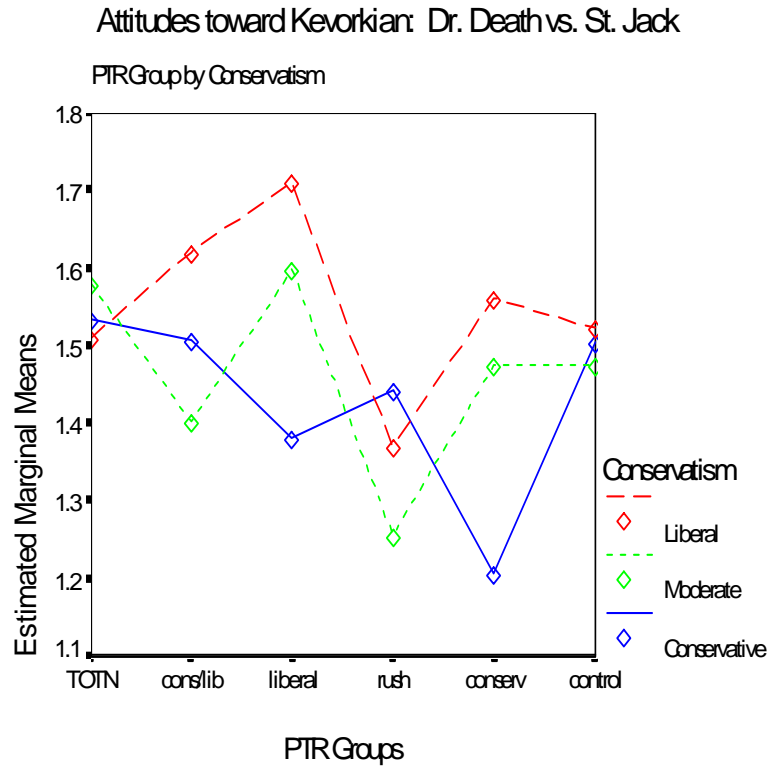
**Assisted Suicide by PTR Group (adjusted means): Significant effects only**

PTR Group	Dependent Variable							
	Personal Choice F(3,385)=2.81, p=.016		Dr. Assisted F(5,385)= 4.41, p < .001		Vote Suicide F(5,385)= 5.84, p < .0001		Favor Kevorkian F(5,385)= 2.19, p =.055	
	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error
TOTN	6.16	.16	10.57	.27	1.58	.03	8.04	.29
cons/lib	6.29	.16	11.21	.28	1.59	.04	8.59	.31
liberal	6.10	.15	10.68	.25	1.62	.03	8.63	.28
rush	6.30	.15	10.00	.27	1.42	.03	8.16	.29
conserv	5.64	.14	9.64	.25	1.46	.03	7.51	.27
control	5.94	.15	10.06	.26	1.48	.03	8.16	.28

One measure of attitudes toward Dr. Kevorkian asked two forced choice questions about labeling the doctor and – implicitly – his motives. This did not exhibit differences across condition but there was a nearly significant interaction with a measure of conservatism toward suicide (change in  $R^2 = .014$ ,  $F(5,379)= 1.98$ ,  $p =.08$ ). The interaction indicates that those in the liberal and conservative PTR groups aligned their attitudes toward Kevorkian consistent with their prior ideological and religious positions while those in other groups were less ideologically motivated.

The graph below shows the pattern. The lines show that liberals, moderates, and conservatives line up from more favorable to less favorable in the liberal group and in the conservative group. And the three groups are spread apart. In the other groups either the rank order of conservatism is different from the rank of attitude or the spread is not as great. In effect, there is polarization among the ideological groups within PTR audiences. And the groups likely to activate ideological thinking do so. In this case, the Limbaugh group is not implicated in attitudinal polarization.

Figure A13.1.1. Mean attitudes toward Dr. Kevorkian (adjusted): PTR group and conservatism (suicide).



## Attitudes toward Flat Tax

The issue of a flatter income tax was a hot topic in the presidential primaries of January through April 1996. Steve Forbes made it the central – indeed the only – issue in his bid for the nomination. It became a topic of intense scrutiny in the news media including PTR. We were able to include it as a topic.

Six measures of attitudes toward a flat income tax were used. Based on factor analysis and scale reliability, five of the items were kept as single item measures. These were:

Capital gains: (1-7 agree-disagree: eliminating the capital gains tax would increase investment)

Deficit: (1-7 agree-disagree: flat tax will increase deficit spending unless there are cuts)

Rich favored: (1-7 agree-disagree: rich will pay less with a flat tax)

Loopholes: (1-7 agree-disagree: flat tax will close loopholes)

Forbes: (1-7 favorable-unfavorable)

The sixth measure was a weighted sum of two items correlating at .73: How much do you favor or oppose the flat tax? And second, “In a scenario about an election for Congress where the candidate is campaigning on a flat tax platform: would you favor, oppose such a candidate or are you not sure?”

Table A13.1.2. below presents the means for the four measures that were significant in univariate tests for PTR exposure along with means, standard errors, and significance levels. The flat tax as a proposal was evaluated less favorably by those hearing TOTN, liberal PTR, and liberal-conservative PTR and more favorably by the control, conservative, and Limbaugh sources. The liberal voices seemed stronger in that the attitudes of their audiences were below the control group’s attitudes while the conservative voices had little effect in comparison to the control. Also, when liberal and conservative positions were in the same message, the liberal arguments clearly predominated. On questions about the indirect impact of the flat tax on the deficit, tax loopholes, and benefits for the rich, once again the arguments of TOTN and liberal PTR produced attitudes less favorable to the flat tax proposal than were evident in the control and less favorable than those reported by the audience of conservative PTR. The size of these effects ranges from a small variance explained of .024 (eta squared) for deficit to a substantial .087 for the flat tax proposal itself.

Table A.13.1.2

Adjusted means for attitudes toward the flatter income tax by PTR group

PTR Group	Dependent Variable <sup>a</sup>							
	Loopholes F(5,386)=4.60, p<.0001		Rich Favored (R) F(5,385)=6.43, p < .0001 <sup>b</sup>		Deficit (R) F(5,386)=1.94, p<.09		Flat Tax F(5,386)=7.37, p<.0001	
	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error
TOTN	3.22	.24	2.32	.21	3.24	.20	.93	.05
Cons/lib	3.63	.26	3.60	.23	3.66	.21	.98	.05
Liberal	3.41	.23	2.53	.20	3.39	.18	.94	.04
Limbaug	4.04	.24	3.38	.20	3.71	.19	1.20	.04
Conserv	4.31	.22	3.39	.19	3.92	.18	1.17	.04
Control	4.34	.23	3.27	.20	3.89	.19	1.11	.04

a. Footnote. All measures are scored so that higher scores indicate more support of the flat tax and its impact.

b. Footnote. (R) indicates rversed item.

## **Appendix 13.2 (see page 225 of *Echo*)**

### **Polarization of Policy Positions by News Media Groups, 1996 PTR Survey**

*Proposed policies.* During the primary and election numerous proposals are raised by the candidates and discussed in the media by journalists, pundits, and talk hosts. At each wave, policies proposed and under public scrutiny were evaluated by respondents. Proposed policies are different from general attitudes toward groups (e.g. the Christian Coalition) and toward broad and continuing social issues (e.g. affirmative action for minorities and women). Proposed policies are specific and current to the campaign. For example, during the primary, Steve Forbes' flat tax proposal received a great deal of discussion and commentary, especially on Rush Limbaugh's radio show, until Forbes was finally eliminated from the field of contenders. Over the three waves, 11 distinct proposed policies were evaluated, 7 at wave 1, 7 at wave 2, and 4 at wave 3. Some were measured at two or more waves allowing tests for changes in polarization. These were Steve Forbes' flat tax (waves 1, 2, 3); legalizing same-sex marriages (waves 2 and 3); reducing welfare payments to mothers (waves 1 and 2); vouchers (waves 1 and 2); NAFTA (waves 1 and 2); and eliminating affirmative action (waves 2 and 3).

*Controls.* Basic demographic information about the survey participants as well as information about the participants' political orientation and party affiliation was collected during initial interviews. To ascertain their political orientation, participants were asked, "in general, would you describe your political views as very liberal, liberal, moderate, conservative, or very conservative?" To measure party affiliation, participants were asked whether they considered themselves a Republican, a Democrat, or an independent. In order to clarify further the survey respondents' positions, those who indicated a formal party affiliation were asked if they were "a strong [Republican/Democrat] or not a strong [Republican/Democrat]". Those who identified themselves as independents were asked which party they leaned toward most. Other controls for education, age, sex, and race were included in all analyses because of variation between media groups on these factors.

#### *Analysis*

To complete the analysis, listening groups were coded as categorical variables in a general linear model with extensive control variables as covariates. Limbaugh listeners were the comparison group. Age, sex, race, education level, political ideology, and party affiliation were controlled for in each comparison of audiences' evaluations of the election explanations.

To test hypotheses, differences between Limbaugh listeners and other groups are evaluated. Specifically, if polarization is present, we should find differences between Limbaugh listening group and heavy consumers of mainstream mass media, between Limbaugh and other PTR groups, and between PTR groups in general and the heavy MSMM group.

The following table refers to a regression analysis of favorability toward the flat tax early in the primary period when Limbaugh was a strong advocate. Five media exposure groups are compared with the Limbaugh PTR group used as the baseline. The definition of the five media news groups is described in Appendix 12.1.

### Tests of Between-Subjects Effects

Dependent Variable: Favorability toward the Flat Tax (1= oppose strongly, 5= favor strongly)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	282.636(a)	10	28.264	13.548	.000
Intercept	60.374	1	60.374	28.939	.000
partyln	66.938	1	66.938	32.086	.000
ideol5	12.152	1	12.152	5.825	.016
white	3.885	1	3.885	1.862	.173
sex.r	29.771	1	29.771	14.270	.000
educyrs	1.034	1	1.034	.496	.481
age	.540	1	.540	.259	.611
w1medgr1	33.187	4	8.297	3.977	.003
Error	3185.679	1527	2.086		
Total	16286.000	1538			
Corrected Total	3468.315	1537			

a. R Squared = .081 (Adjusted R Squared = .075)

### Parameter Estimates

Dependent Variable: same as above

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.002	.337	5.940	.000	1.341	2.663
partyln	.147	.026	5.664	.000	.096	.198
ideol5	.106	.044	2.413	.016	.020	.193
white	.143	.105	1.365	.173	-.063	.349
sex.r	.282	.075	3.778	.000	.136	.429
educyrs	.012	.017	.704	.481	-.021	.045
age	.001	.002	.509	.611	-.003	.006
[w1medgr1=1.00]	-.500	.142	-3.507	.000	-.779	-.220
[w1medgr1=2.00]	-.336	.139	-2.412	.016	-.610	-.063
[w1medgr1=3.00]	-.453	.123	-3.675	.000	-.694	-.211
[w1medgr1=4.00]	-.409	.163	-2.506	.012	-.729	-.089
[w1medgr1=5.00]	0(a)	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

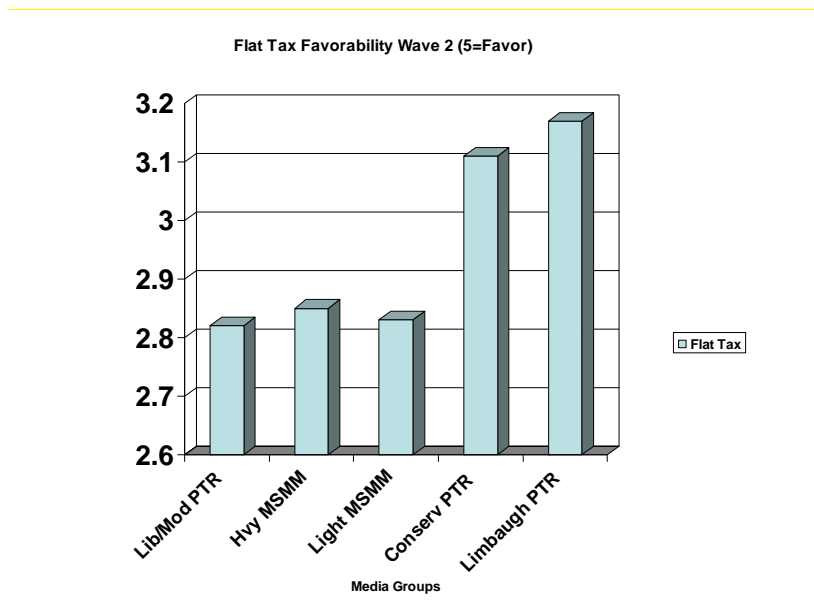
The results are graphed in Chapter 13, page 224, of *Echo Chamber* and show Limbaugh listeners with much more strongly positive views of this policy position. Later in the primary period, after Steve Forbes had dropped out, positions on the flat tax remained similar to those early in the primary with listeners to conservative PTR catching up to the positions of Limbaugh listeners.



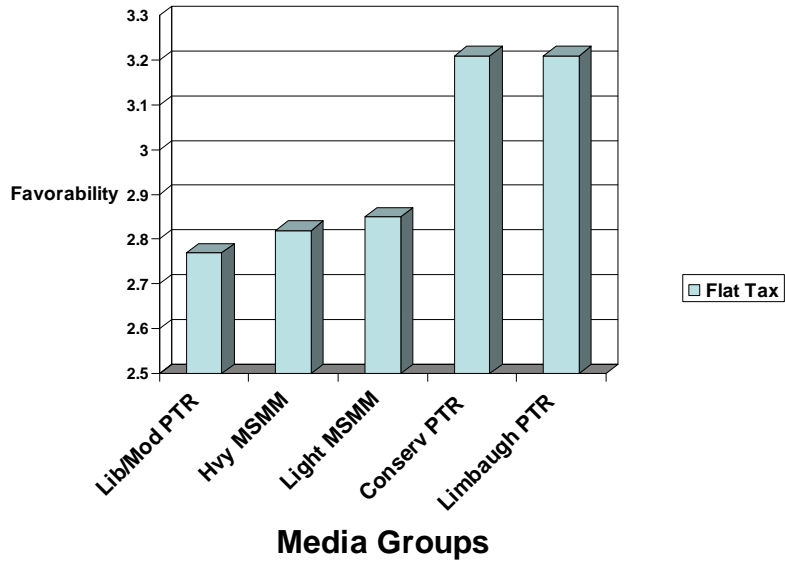
### Appendix 13.3 (see page 226 of *Echo*, Note 13) Polarization of (Additional) Policy Positions by News Media Groups, 1996 PTR Survey

In the two graphs below, favorability toward the flat tax proposal is graphed at two later waves during the primary season of 1996. Results are derived from identical regression models as for wave 1 (see appendix 13.2). By wave 2, Limbaugh listeners are no different from those listening to conservative talk radio other than Limbaugh but remain different from all other groups in their favorability ( $p < .05$  at least).

Figure 13.3.1. Favorability toward a flat tax proposal at waves 2 and 3 of 1996 primary: Five media groups.



Flat Tax (5= Favor) Wave 3



**Appendix 13.4 (see page 228 of *Echo*, Note 17)**  
**Perceived Ideology of Candidates for all Respondents, 2000**

These data analyses were prepared by Danna Goldthwaite Young, PhD.

**Perceptions of Candidate Liberalness 2000**

OLS regressions were run to predict perceived liberalness of Bush and Gore using Rush Limbaugh listening and multiple controls to account for confounding variables. The data come from the ANES 2000 survey for the period December 14, 1999 through December 22, 2000. The tables indicate that Limbaugh listeners see Bush as more conservative than non-listeners controlling for education, gender, income, party identification, following of politics, age, newspaper reading, network news viewing, local news viewing, and cable news viewing (see Table A13.4.1.). Also, Limbaugh listeners see Gore as more liberal than non-listeners controlling for education, gender, income, party identification, following of politics, age, newspaper reading, network news viewing, local news viewing, and cable news viewing (see Table A13.4.2.).

**Table A13.4.1.: Predicting perceived liberalness of Bush**

Variables	Unstandardized Coefficients		Standardized Coefficients	Sig.
	B	Std. Error	Beta	
(Constant)	3.35	0.04		0.00
Years Education	-0.06	0.00	-0.16***	0.00
Income	0.00	0.00	-0.03***	0.00
Party (1 strong Rep, 7 strong Dem)	0.00	0.00	0.01	0.14
Age	0.00	0.00	0.04***	0.00
Female	-0.04	0.01	-0.02***	0.00
Follow politics	-0.10	0.01	-0.11***	0.00
Newspaper reading	0.00	0.00	0.00	0.98
Watched Network news	0.00	0.00	0.00	0.69
Watched local news	0.01	0.00	0.03***	0.00
Watched cable news	0.00	0.00	0.00	0.89
<b>Limbaugh listener</b>	<b>-0.08</b>	<b>0.02</b>	<b>-0.03***</b>	<b>0.00</b>

Dependent Variable: perceived Bush liberalness

Note. \*\*\*p<.001, \*\*p<.01, \*p<.05

N=30,177

Adjusted R-square = .053

**Table A13.4.2. Predicting perceived liberalness of Gore**

Variables	Unstandardized Coefficients		Standardized Coefficients	Sig.
	B	Std. Error	Beta	
(Constant)	2.75	0.04		0.00
Years Education	0.05	0.00	0.12***	0.00
Income	0.00	0.00	0.04***	0.00
Party (1 strong Rep, 7 strong Dem)	-0.12	0.00	-0.26***	0.00
Age	0.00	0.00	0.04***	0.00
Female	-0.08	0.01	-0.04***	0.00
Follow politics	0.13	0.01	0.13***	0.00
Newspaper reading	0.00	0.00	-0.01	0.10
Watched network news	-0.01	0.00	-0.02*	0.02
Watched local news	-0.02	0.00	-0.05***	0.00
Watched cable news	0.00	0.00	0.01	0.41
<b>Limbaugh listener</b>	<b>0.54</b>	<b>0.02</b>	<b>0.15***</b>	<b>0.00</b>

Dependent Variable: perceived Gore liberalness

Note. \*\*\*p<.001, \*\*p<.01, \*p<.05

N=29,850

Adjusted R-square = .18

**Appendix 13.5 (see page 229 of *Echo*)**  
**Perceived Ideology of Candidates by Limbaugh Group, 2004**

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**Rush Limbaugh and Perceptions of the Liberalness and Conservativeness of the Candidates in the 2000 election**

These data analyses were prepared by Danna Goldthwaite Young

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**Purpose:**

To determine if Rush Limbaugh listeners perceive Democrats to be more liberal than non-Rush listeners in the 2000 campaign

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**Data:** Part I, II, and III: RCS from December 14, 1999 through December 22, 2000. Unweighted  $N = 56,815$ .

**Distribution of Rush listening** in sample restricted to December 14, 1999 through December 22, 2000:

	<b>Frequency</b>	<b>Valid Percent</b>
Limbaugh listeners	4350	7.7%
Listen to talk radio but not Limbaugh	9379	16.6%
Listen to talk radio but don't know host	8635	15.3%
Do not listen to talk radio	34231	60.5%
Missing	220	
Total	56815	

**Method:**

- To control for selective exposure to Limbaugh as a function of partisanship, analyses were limited to Strong Republicans and Strong Democrats.
- Created 7-day and 13-day moving averages of the following dependent variables, broken down into Strong Democrats, Strong Republicans who listen to Limbaugh, and Strong Republicans who do not listen to Limbaugh:
  - Perceptions of Bush's liberalness
  - Perceptions of Gore's liberalness
  - Perceptions of Gore's liberalness minus Bush's liberalness
  - Perceptions of McCain's liberalness

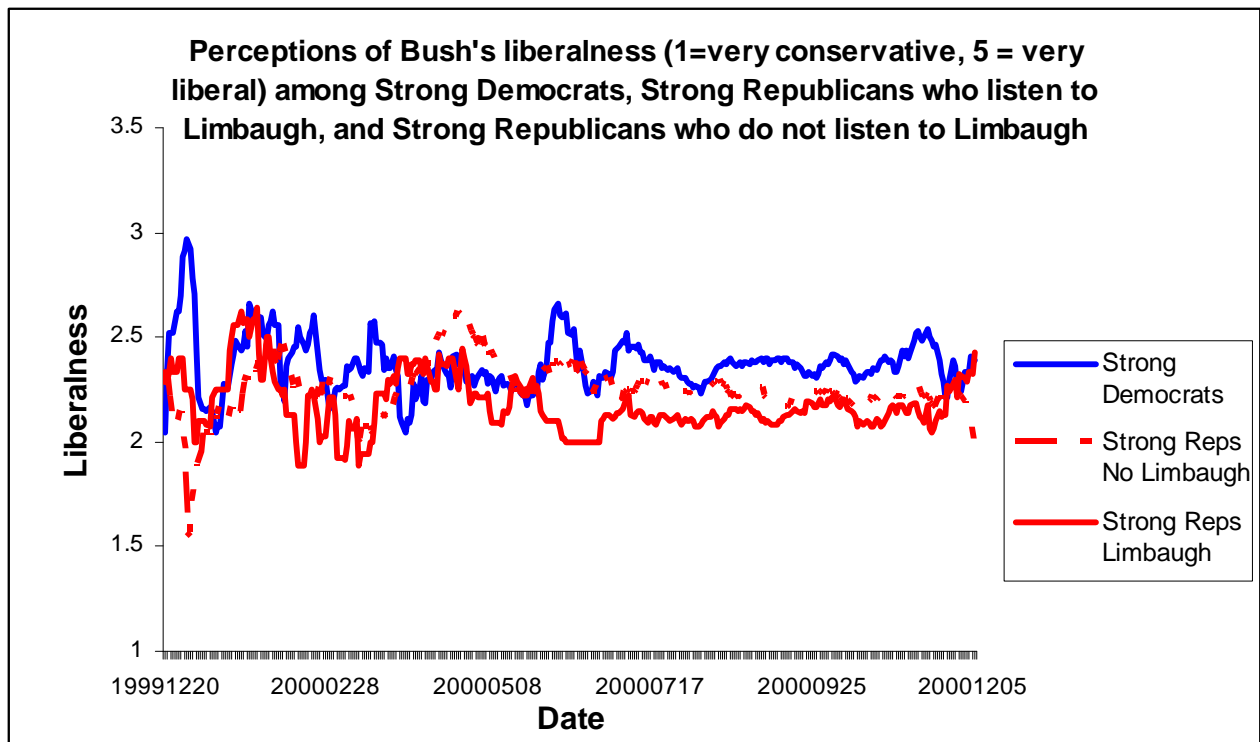
**Measures:**

**Perceived liberalness** was measured on a 5-point scale. Respondents were asked, “Which of the following do you think best describes the views of George W. Bush? Very conservative (1), conservative (2), moderate (3), liberal (4), or very liberal (5)?”

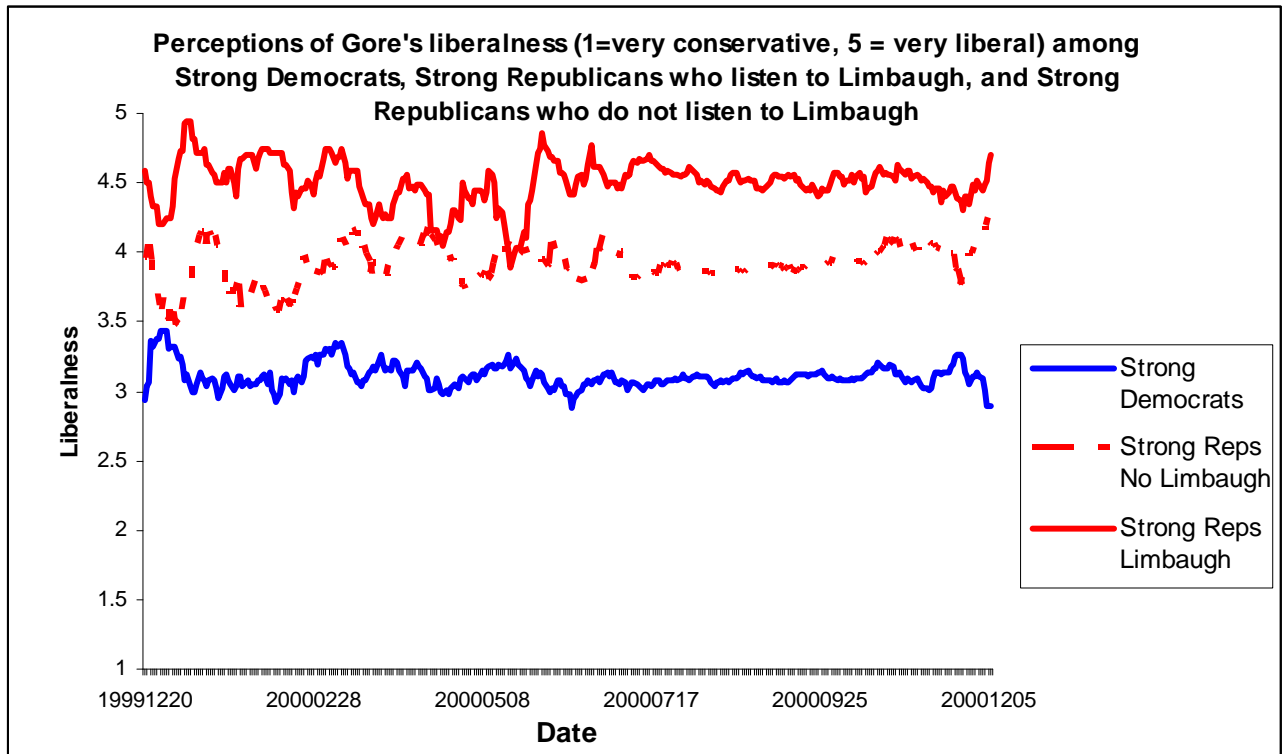
**Rush Limbaugh listeners** were defined as those subjects who indicated Rush as one of their five possible radio hosts listened to.

**Findings.**

**Figure A13.5.1. Bush liberalness**



**Figure A13.5.2. Gore liberalness**



**Figure A13.5.3. Gore liberalness minus Bush liberalness**

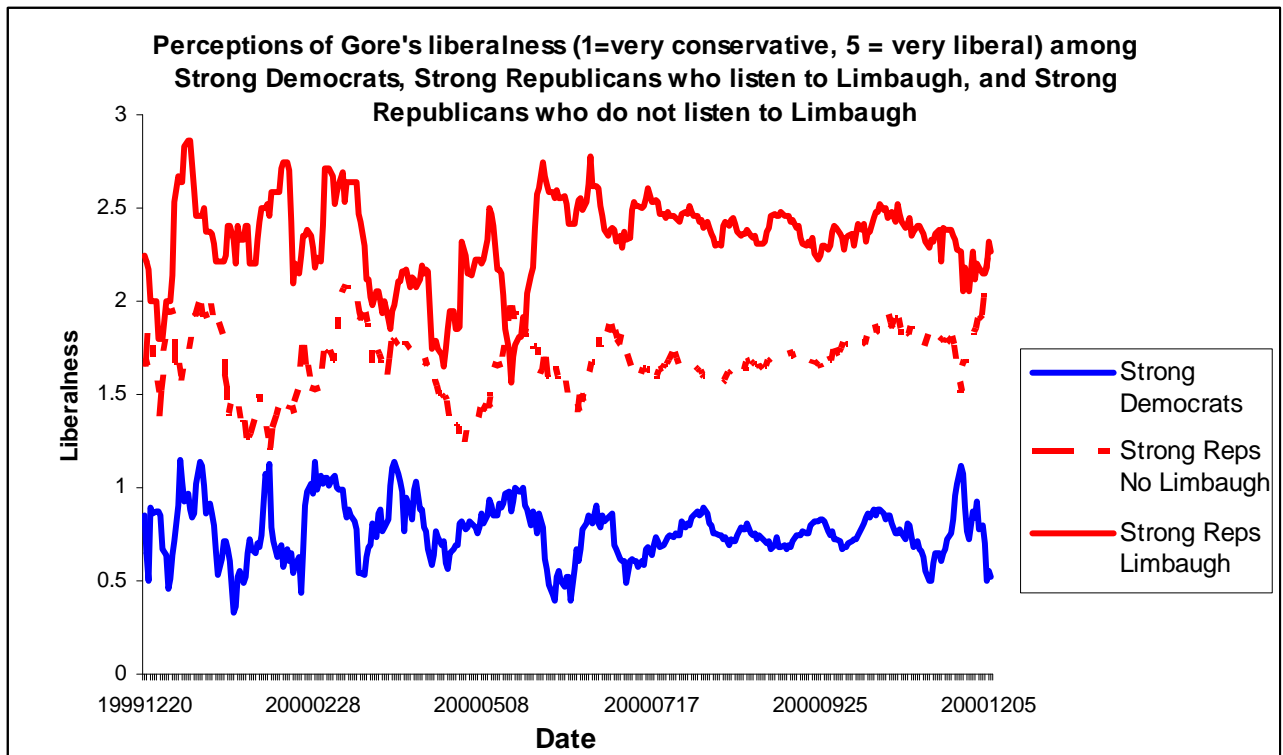
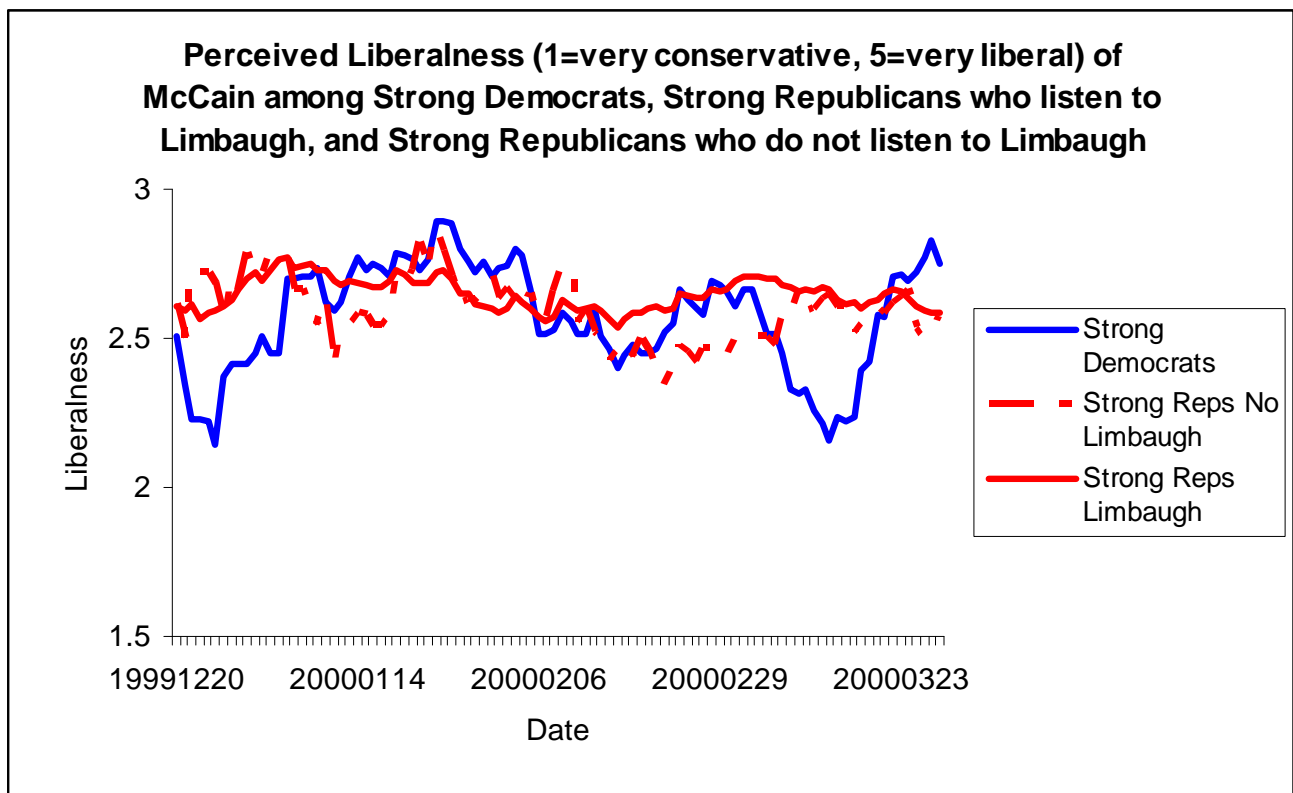


Figure A13.5.4. McCain Liberalness



- Strong Democrats and Strong Republicans (both those who listen to Rush and those who don't) rate Bush similarly on the conservative-liberal scale. From about the summer until Election Day Democrats perceived Bush as *slightly* more liberal than strong Republicans, but this difference was generally less than .15 on the 5-point scale (see Figure 13.5.1).
- Looking at perceptions of Gore's liberalness, however, large differences appear between Strong Democrats and Strong Republicans, and between Rush-listening and non-Rush listening strong Republicans. Strong Democrats perceive Gore as less liberal than Republicans. Strong Republicans who listen to Rush perceive Gore to be more liberal than strong Republicans who do not listen to Rush (see Figure 13.5.2).
- When Bush's liberalness is subtracted from Gore's and the difference score is tracked over time, it is clear that Limbaugh-listening strong Republicans found Gore's liberalness far greater than Bush's, even more so than strong Republicans who did not listen to Limbaugh. However, it seems that from mid-March through the end of May, this difference between Rush-listening and non-Rush-listening strong Republicans decreased, only to grow large again from early June through the election (see Figure 13.5.3).
- McCain's perceived liberalness also appears to have varied by the partisanship of the respondent during certain points in time. From about February 13 through March 14, strong Republicans who listen to Rush see McCain as more liberal than do strong Republicans who do not listen to Rush (see Figure A13.5.4).



## **PART II Method:**

- Compared means of non-Limbaugh listening strong Republicans (partyid = 1) and Limbaugh-listening strong Republicans on the following variables:
  - Perceptions of Bush's liberalness
  - Perceptions of Gore's liberalness
  - Perceptions of McCain's liberalness

## **Measures:**

**Perceived liberalness** was measured on a 5-point scale. Respondents were asked, "Which of the following do you think best describes the views of George W. Bush? Very conservative (1), conservative (2), moderate (3), liberal (4), or very liberal (5)?"

**Rush Limbaugh listeners** were defined as those subjects who indicated Rush as one of their five possible radio hosts listened to.

## **Findings: (see Tables A13.5.1 and 2)**

- Among strong Republicans, Limbaugh listeners perceived Bush to be significantly more conservative than non-listeners.
- Limbaugh listeners also perceived Gore to be significantly more liberal than non-listeners.
- No significant differences found across listening groups with perceived liberalness of McCain.

**Table A13.5.1.**

Means comparison **within strong Republicans** between 1) those who listen to Limbaugh, 2) those who listen to PTR other than Limbaugh, 3) those who listen to PTR but don't know the host, and 4) those who do not listen to PTR at all on Bush, Gore, and McCain perceived liberalness (1=very conservative, 5 = very liberal).

	<b>Limbaugh listeners</b>			<b>PTR but no Limbaugh</b>			<b>PTR but don't know host</b>			<b>No PTR</b>		
	<i>Mea</i> <i>n</i>	<i>SD</i>	<i>N</i>	<i>Mea</i> <i>n</i>	<i>SD</i>	<i>N</i>	<i>Mea</i> <i>n</i>	<i>SD</i>	<i>N</i>	<i>Mea</i> <i>n</i>	<i>SD</i>	<i>N</i>
<b>Bush</b> perceived liberalness***	<b>2.14</b>	0.52	1441	<b>2.23</b>	0.66	929	<b>2.21</b>	0.6 4	69 5	<b>2.25</b>	0.6 8	271 3
<b>Gore</b> perceived liberalness***	<b>4.52</b>	0.71	1435	<b>4.13</b>	0.90	920	<b>3.87</b>	0.9 6	69 1	<b>3.84</b>	0.9 7	266 7
<b>McCain</b> perceived liberalness#	<b>2.67</b>	0.80	95	<b>2.76</b>	0.72	67	<b>2.73</b>	0.9 9	45	<b>2.51</b>	0.7 9	158

Note. ANOVA results comparing listening groups \*\*\* $p < .001$ , #  $p < .01$

**Table A13.5.2.** Means comparison **within strong Republicans** between 1) those who listen to Limbaugh and 2) those who do not on Bush, Gore, and McCain perceived liberalness (1=very conservative, 5 = very liberal).

	<u><b>Limbaugh listeners</b></u>			<u><b>Non-Limbaugh listeners</b></u>		
	<i>Mean</i>	<i>SD</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
<b>Bush</b> perceived liberalness***	<b>2.14</b>	0.52	1441	<b>2.24</b>	0.67	4337
<b>Gore</b> perceived liberalness***	<b>4.52</b>	0.71	1435	<b>3.91</b>	0.96	4278
<b>McCain</b> perceived liberalness	<b>2.67</b>	0.80	95	<b>2.61</b>	0.81	270

Note. ANOVA results comparing listeners and non-listeners \*\*\* $p < .001$

### **PART III Method:**

Regressions predicting perceived liberalness of Bush, Gore, and McCain using Rush listening and **multiple controls** to control for potential confounding variables.

### **Measures:**

**Perceived liberalness** was measured on a 5-point scale. Respondents were asked, “Which of the following do you think best describes the views of George W. Bush? Very conservative (1), conservative (2), moderate (3), liberal (4), or very liberal (5)?”

**Rush Limbaugh listeners** were defined as those subjects who indicated Rush as one of their five possible radio hosts listened to.

### **Findings:**

- Limbaugh listeners see Bush as more conservative than non-viewers controlling for education, gender, income, party identification, following of politics, age, newspaper reading, network news viewing, local news viewing, and cable news viewing (see Table A13.5.3).
- Limbaugh listeners see Gore as more liberal than non-viewers controlling for education, gender, income, party identification, following of politics, age, newspaper reading, network news viewing, local news viewing, and cable news viewing (see Table A13.5.4).
- Controlling for demographic and sociopolitical characteristics, Limbaugh listeners are no different from non-listeners in their perceived liberalness of McCain (see Table A13.5.5).

**Table A13.5.3: Predicting perceived liberalness of Bush**

Variables	Unstandardized Coefficients		Standardized Coefficients	Sig.
	B	Std. Error	Beta	
(Constant)	3.35	0.04		0.00
	-			
Years Education	0.06	0.00	-0.16***	0.00
Income	0.00	0.00	-0.03***	0.00
Party (1 strong Rep, 7 strong Dem)	0.00	0.00	0.01	0.14
Age	0.00	0.00	0.04***	0.00
	-			
Female	0.04	0.01	-0.02***	0.00
	-			
Follow politics	0.10	0.01	-0.11***	0.00
Newspaper reading	0.00	0.00	0.00	0.98
Watched network news	0.00	0.00	0.00	0.69
Watched local news	0.01	0.00	0.03***	0.00
Watched cable news	0.00	0.00	0.00	0.89
	-			
<b>Limbaugh listener</b>	<b>0.08</b>	<b>0.02</b>	<b>-0.03***</b>	<b>0.00</b>

Dependent Variable: perceived Bush liberalness

Note. \*\*\*p<.001, \*\*p<.01, \*p<.05

N=30,177

Adjusted R-square = .053

**Table 13.5.4. Predicting perceived liberalness of Gore**

Variables	Unstandardized Coefficients		Standardized Coefficients	Sig.
	B	Std. Error	Beta	
(Constant)	2.75	0.04		0.00
Years Education	0.05	0.00	0.12***	0.00
Income	0.00	0.00	0.04***	0.00
Party (1 strong Rep, 7 strong Dem)	-			
	0.12	0.00	-0.26***	0.00
Age	0.00	0.00	0.04***	0.00
	-			
Female	0.08	0.01	-0.04***	0.00
Follow politics	0.13	0.01	0.13***	0.00
Newspaper reading	0.00	0.00	-0.01	0.10

	-			
Watched network news	0.01	0.00	-0.02*	0.02
	-			
Watched local news	0.02	0.00	-0.05***	0.00
Watched cable news	0.00	0.00	0.01	0.41
<b>Limbaugh listener</b>	<b>0.54</b>	<b>0.02</b>	<b>0.15***</b>	<b>0.00</b>

Dependent Variable: perceived Gore liberalness

Note. \*\*\*p<.001, \*\*p<.01, \*p<.05

N=29,850

Adjusted R-square = .18

**Table 13.5.5. Predicting perceived liberalness of McCain**

Variables	Unstandardized Coefficients		Standardized Coefficients	Sig.
	B	Std. Error	Beta	
(Constant)	3.38	0.15		0.00
	-			
Years Education	0.04	0.01	-0.11***	0.00
Income	0.00	0.00	-0.04	0.17
Party (1 strong Rep, 7 strong Dem)	0.00	0.01	-0.01	0.79
Age	0.00	0.00	-0.01	0.84
Female	0.03	0.04	0.02	0.50
	-			
Follow politics	0.07	0.03	-0.07**	0.01
Newspaper reading	0.01	0.01	0.02	0.46
Watched Network news	0.00	0.01	0.00	0.98
	-			
Watched local news	0.01	0.01	-0.02	0.55
Watched cable news	0.00	0.01	0.01	0.83
<b>Limbaugh listener</b>	<b>0.06</b>	<b>0.07</b>	<b>0.02</b>	<b>0.41</b>

Dependent Variable: perceived McCain liberalness

Note. \*\*\*p<.001, \*\*p<.01, \*p<.05

N=1,638

Adjusted R-square = .017

## **Appendix 13.6 (see page 232 of *Echo*) Distortion of Candidates' Positions by Media Exposure, 2004**

### CONTESTED CLAIMS

Rush Limbaugh Listeners/ Fox viewers more likely to believe pro-Republican/anti-Democrat campaign claims; CNN viewers less likely to accept claims

2004 NAES ( $N=3,400$ ; data collected 11-10-2004 to 12-15-2004)

The analyses in this section were completed by Bruce Hardy, doctoral candidate, Annenberg School for Communication

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**Summary:** Testing the opinion enclave effect of Limbaugh and Fox – as outlined in chapter 13 of *Echo Chamber*.

**Dependent Variable:** Using the list of claims outlined in chapter 13 (Variable Names in ANES 2005 dataset – B4, B5, c1b, c3, c1d, c2, c6, c11, c14, c57, c17, c39, c31, c41, c38, c43, c44, c48, c50, c53, c32, c46, c58, c1c, c20, c40, c42) the dependent variable was constructed by taking the mean of all of these variables coded as described in *Echo Chamber* chapter 13, page 232.

The volunteered “don’t know” responses were coded as missing.

### **Listen to Rush Limbaugh**

This measure was created by combining two questions. One set asked respondents to list the talk radio programs that they listened to in the last week and recorded up to 6 responses. Anyone who listed Rush Limbaugh received a score of 1 and those who did not a score of 0. The second question asked respondents which they listened to most.

### **24-Hour Cable News:**

#### **Fox, CNN, and MSNBC Viewers**

Measured by a single follow-up question – to a question that tapped general 24-hour cable news – that asked respondents which of the cable news networks they watched the most:

- 1 Fox News
- 2 CNN
- 3 MSNBC
- 4 Other (SPECIFY)
- 5 All equally (VOLUNTEERED)
- 6 None (VOLUNTEERED)
- 8 Don't know

Dummy variables were created for the Fox, CNN, and MSNBC variables.

**National Television News**

This question was worded as follows: “How many days in the past week did you watch the national network news on TV—by national network news, I mean Peter Jennings on ABC, Dan Rather on CBS, Tom Brokaw on NBC, and Jim Lehrer NewsHour on PBS.

**PBS**

This was measured by a follow-up question that asked respondents which of the following would you say you watch most often

- 1 Peter Jennings on ABC
- 2 Dan Rather on CBS
- 3 Tom Brokaw on NBC
- 4 Jim Lehrer NewsHour on PBS
- 8 Don't know

**Controls variables included:**

**Female** – female coded as 1, male as 0

**Age** – measured in years

**Education** – recoded to approximate years of education completed

**Party ID** – Republican =1; else=0

**Ideology** – conservative coded high

Table A13.6.1: Pro-republican, anti-democratic contested campaign claims: Without MSNBC

	B	Std. Error	Beta
Gender (Female)	.000	.005	-.001
Age	-.001	.000	-.059**
Education	-.004	.001	-.061**
Republican	.104	.006	.281**
Ideology (Conservative coded high)	.032	.003	.183**
National Broadcast TV News	-.002	.001	-.027
Newspaper	.002	.001	.028
NPR	-.005	.001	-.071**
PBS	-.008	.013	-.010
CNN	-.015	.006	-.038*
Fox News	.062	.007	.152**
Rush Limbaugh	.057	.010	.090**
$R^2(\%) = 28.0$ ; ** $p < .01$ ; * $p < .05$			

**Results Table A13.6.1:** Fox and Limbaugh produce positive relationships with accepting claims in the Republican direction. NPR and CNN produce negative relationships. PBS does not produce a significant relationship. MSNBC is not included in this model. Therefore, Fox and CNN are compared against the baseline that consists of MSNBC viewers and all other respondents who didn't report watching these specific shows (including those that volunteered and "other," "don't know," and "watch all equally") and respondents that did not report watching any 24-hour cable news.



Table A13.6.2: Pro-republican, anti-democratic contested campaign claims: With MSNBC

	B	Std. Error	Beta
Gender (Female)	.000	.005	-.001
Age	-.001	.000	-.058**
Education	-.004	.001	-.061**
Republican	.104	.006	.281**
Ideology (Conservative coded high)	.032	.003	.183**
National Broadcast TV News	-.002	.001	-.029
Newspaper	.002	.001	.027
NPR	-.005	.001	-.071**
PBS	-.008	.013	-.010
MSNBC	.013	.010	.021
CNN	-.012	.007	-.032*
Fox News	.065	.007	.158**
Rush Limbaugh	.056	.010	.089**
$R^2(\%) = 28.0$ ; ** $p < .01$ ; * $p < .05$			

**Results Table A13.6.2:** Fox and Limbaugh produce positive relationships with accepting claims in the Republican direction. NPR and CNN produce negative relationships. MSNBC is included in this model and the effects of these shows are compared against the baseline consisting of respondents who didn't report watching these specific shows (including those that volunteered and "other," "don't know," and "watch all equally") and respondents that did not report watching any 24-hour cable news.

**Correlation Matrix:**

	Fox	Limbaugh	NPR	PBS	National Broadcast TV News
Fox	1.0				
Limbaugh	0.239**	1.0			
NPR	-0.053**	0.067**	1.0		
PBS	-0.050**	0.027	0.193**	1.0	
National Broadcast TV News	-0.070**	-0.048**	0.048**	0.107**	1.0
** $p < .01$ ; * $p < .05$					

**UNCONTESTED CLAIMS**

All news media (newspaper, national broadcast TV, NPR, PBS, MSNBC, CNN, Fox, and Rush Limbaugh) are significantly and positively related to correct identification of uncontested facts.

2004 NAES – Deception Survey ( $N = 3,400$ ; data collected 11-10-2004 to 12-15-2004)

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**Dependent Variable:** Using the list uncontested facts as outlined in chapter 13 of Echo Chamber, the dependent variable was constructed by taking the mean of all of these variables after they were coded as indicated in the chapter. Correct responses received a score of 1, all other responses received a score of 0.

**Listen to Rush Limbaugh.** This measure was created by combining the questions asking respondents to list the talk radio programs that they listened to in the last week and recorded up to 6 responses. Anyone who listed Rush Limbaugh received a score of 1 and those who didn't a score of 0. A second question asked respondents which they listened to most.

**24-Hour Cable News:  
Fox, CNN, and MSNBC Viewers**

Measured by a single follow-up question – to a question that tapped general 24-hour cable news – that asked respondents which of the cable news networks they watched the most:

- 1 Fox News
- 2 CNN
- 3 MSNBC
- 4 Other (SPECIFY)
- 5 All equally (VOLUNTEERED)
- 6 None (VOLUNTEERED)
- 8 Don't know
- 9 Refused

Dummy variables were created for the Fox, CNN, and MSNBC variables.

**National Television News:** “How many days in the past week did you watch the national network news on TV—by national network news, I mean Peter Jennings on ABC, Dan Rather on CBS, Tom Brokaw on NBC, and Jim Lehrer NewsHour on PBS.

**PBS:** This was measured by a follow-up question that asked respondents which of the following would you say you watch most often:

- 1 Peter Jennings on ABC
- 2 Dan Rather on CBS
- 3 Tom Brokaw on NBC
- 4 Jim Lehrer NewsHour on PBS
- 8 Don't know

**Socio-demographic controls included Female; Age; Education** – recoded to approximate years of education completed; **Party Id** – Republican =1; else=0; **Ideology** with conservative coded high.

Table A13.6.3: Correct recall of uncontested claims: Without MSNBC

	B	Std. Error	Beta
Gender (Female)	-.027	.004	-.120**
Age	.000	.000	-.053**
Education	.002	.001	.042*
Republican	.003	.005	.011
Ideology (Conservative coded high)	-.004	.002	-.032
National Broadcast TV News	.002	.001	.042*
Newspaper	.002	.001	.065**
NPR	.002	.001	.052**
PBS	.028	.010	.052**
CNN	.019	.005	.078**
Fox News	.024	.005	.093**
Rush Limbaugh	.027	.007	.068**
$R^2(\%) = 28.0$ ; ** $p < .01$ ; * $p < .05$			

**Results Table A13.6.3:** All media measures in the model are positively related to correctly identifying uncontested facts. MSNBC is not included in this model. Therefore, Fox and CNN are compared against the baseline that consists of MSNBC viewers and all other respondents who didn't report watching these specific shows (including those that volunteered and "other," "don't know," and "watch all equally") and respondents that did not report watching any 24-hour cable news.

Table 13.6.4: Correct recall of uncontested claims: With MSNBC

	B	Std. Error	Beta
Gender (Female)	-.027	.004	-.121**
Age	.000	.000	-.051**
Education	.002	.001	.043*
Republican	.003	.005	.012
Ideology (Conservative coded high)	-.003	.002	-.031
National Broadcast TV News	.002	.001	.037**
Newspaper	.002	.001	.063**
NPR	.002	.001	.051**
PBS	.028	.010	.052**
MSNBC	.017	.007	.043*
CNN	.022	.005	.091**
Fox News	.027	.005	.104**
Rush Limbaugh	.027	.007	.066**
$R^2(\%) = 28.0$ ; ** $p < .01$ ; * $p < .05$			

**Results Table A13.6.4:** Similar to table 13.6.3, all media measures in the model are positively related to correctly identifying uncontested facts. MSNBC is included in this model and the effects of these shows are compared against the baseline consisting of respondents who didn't report watching these specific shows (including those that volunteered and "other," "don't know," and "watch all equally") and respondents that did not report watching any 24-hour cable news.

**Correlation Matrix:**

	Fox	Limbaugh	NPR	PBS	National Broadcast TV News
Fox	1.0				
Limbaugh	0.239**	1.0			
NPR	-0.053**	0.067**	1.0		
PBS	-0.050**	0.027	0.193**	1.0	
National Broadcast TV News	-0.070**	-0.048**	0.048**	0.107**	1.0
** $p < .01$ ; * $p < .05$					