ORIGINAL ARTICLE

Toward a Theory Relating Political Discourse, Media, and Public Opinion

Adam F. Simon[1] & Jennifer Jerit[2]

1 Department of Political Science, Yale University, New Haven, CT 06520
2 Department of Political Science, Florida State University, Tallahassee, FL 32314

This paper presents a multimethod investigation of framing in the government–media–public interaction during the so-called partial-birth abortion (PBA) debate in the U.S. Operationalizing framing as the use of the word "baby" or "fetus," content analysis first shows that opposing political elites employed almost exclusive vocabularies in attempts to justify their views and shape attitudes. Time-series analysis then charts the path of "baby's" discursive dominance from congressional discourse through news and editorials to citizens. Finally, experimental results support 2 microlevel hypotheses. First, uptake—exposure to articles featuring the exclusive use of "baby" or "fetus," respectively, increased or decreased support for banning PBA. Second, emergence—participants exposed to discourse using both terms converged upon a response independent of the words' relative proportions. In contrast to probabilistic survey response models, these findings support the idea that a kind of public reason can emerge from the interaction of citizens' judgment processes and elite communication.

When thinking about politics in the United States, democratic ideals suggest a simple causal relationship, namely, that citizens' wants drive government action. Extant macropolitical communication research, however, generally portrays effects that flow in the opposite direction—from the government through media to the public. Important models and studies imply that political discourse essentially determines public opinion. Further, these models suggest that the media plays a passive part in transferring messages from the government to the public (Fan, 1988; Zaller, 1992). Opposing views typically see the public as sovereign, presuming that politicians take positions and craft their discourse according to anticipated changes in public opinion (Stimson, MacKuen, & Erikson, 1995). While appealing from a populist perspective, this alternative seems to leave little space for understanding political leadership. Thus, can a theory covering the communicative interaction between government, media, and the public reconcile an independent role for politicians with public sovereignty?

Corresponding author: Adam F. Simon; e-mail: adam.simon@yale.edu.

This paper, drawing upon the well-known idea of framing, develops such a theory. In short, the argument holds that political entrepreneurs embed particular vocabularies, designed to create favorable attitudes, within their messages. In addition to other message components, this word choice in turn affects subsequent survey response. The theory is not wholly deterministic; citizens can exercise a form of reasoning consistent with popular sovereignty. In facing political discourse, they display the ability to "select" a certain vocabulary over another without filtering according to their political predispositions and without regard to its proportion in the news.

Data to evaluate the theory's viability come from a case study of discourse and opinion in the so-called partial-birth abortion (PBA) debate. We begin by investigating elite discourse in *Stenberg v. Carhart* (2000), the leading U.S. Supreme Court case concerning PBA, which featured self-identified opponents in public argument. Using transcripts, we catalog both sides' vocabularies in order to identify linguistic cleavages, finding that opponents and supporters almost exclusively used the words "baby" and "fetus," respectively. Given this apparently critical word choice, we move to a time-series analysis covering the years between 1996 and 2000 to chart the pattern of influence between political discourse (the U.S. Congress), media (the *New York Times* [*NYT*]), and aggregate levels of public support for banning PBA. Here, media use of "baby" relative to "fetus" followed (rather than lead) congressional usage. Further, these trends in word usage seem to correlate with support for banning the procedure in aggregate public opinion.

Finally, an experimental design examines microcausality and attempts to probe the nature of citizens' roles. Results support two basic notions labeled "uptake" and "emergence." The idea of uptake suggests that the exclusive use of particular words within discourse strengthens mental associations that later activate and influence judgment (Simon, 2002). Thus, participants exposed to articles featuring the exclusive use of "baby" or "fetus," respectively, evinced increased support or opposition to banning PBA. The idea of emergence covers competitive discursive situations. Here, participants exposed to an article that alternated the use of "baby" and "fetus" seemed to select "baby" when making judgments. Thus, these participants' attitudes were statistically indistinguishable from those exposed only to "baby"; moreover, their responses were not moderated by partisanship or other predispositions. Overall, the results are consistent with the theory that successful democratic governance grows out of an interaction between citizens' judgmental processes and the discourse of competing political elites.

Theoretical background

Laying a foundation for this project requires drawing upon several literatures, first concerning public policy, media, and survey response and then moving to the particulars of the PBA case.

Public policy and opinion

What is the role of public opinion in the policy making process? At one extreme, Stimson et al. (1995) restate a populist vision:

> Institutions [i.e. government] seem to pay attention not only to the overall levels of public opinion … but also to the year-to-year shifts in opinion … Hardly indifferent, these politicians are keen to pick up the faintest signals. (p. 559)

Jacobs and Shapiro (2000) have a different view:

> Public opinion is not propelling public policy decisions as it did in the past. Instead, politicians' own policy goals are increasingly driving major policy decisions and public opinion research, which is used to identify the language, symbols, and arguments to "win" public support. (p. xv)

Although the literature offers more nuance, the landmark macrostudies within recent political communication research, particularly those of Fan (1988) and Zaller (1992), appear to support the latter view.

Kingdon (1995) described the movers and shakers within the political elite as "policy entrepreneurs," arguing that these actors turn private political agendas into public policy. In his view, politics is a continuous competition for decision-making attention in a mélange of three streams—problem, policy, and political. Entrepreneurs attempt to manage the streams through a combination of highlighting particular aspects of problems, offering palatable alternatives, and shaping the political environment. When successful, these entrepreneurs create a "window" that leads to governmental action (Kingdon, 1995). Present interest concerns entrepreneurial communication, in particular, word choice. Our attempt to isolate the effects of word choice begins with a review of the media effects literature, centering on studies of framing.

The definition and measurement of framing

Goffman's (1974) seminal work argued that rhetorical structure—the frame—channeled subsequent reactions. A frame is the "central organizing idea or storyline that provides meaning" (Gamson & Modigliani, 1989, p. 143). Thus, framing explores message content more directly than agenda setting, which focuses almost exclusively on message volume (Pan & Kosicki, 1993). Psychologists generally see frames as the way context alters the meaning of information. Minsky (1975), for instance, defined frames as templates relating informational bits. In economics, the now-famous studies of Kahneman, Slovic, and Tversky (1982) investigated the impact of different descriptions of mathematically identical problems.

One problem in framing research, identified in several reviews (Brosius & Eps, 1995; Druckman, 2002; Entman, 1993; Scheufele, 1999), seems to be the lack of consistent measurement across studies. Examining the conceptual content, that is, word choice (see Murphy, 2004), within messages might provide a consistent as well as practical way to chart the presence of frames. On the other hand, focusing on the

minutia of particular frames by using word choice forecloses any examination of broader content (e.g., Gamson & Lasch, 1983). Nevertheless, this analysis examines the role of words; in fact, this case study of PBA discourse and its effects centers on a single substitution, that of "fetus" for "baby" in descriptions of the medical procedure. Of course, the idea of linguistic influence is not new (cf. Whorf, 1956); Pan and Kosicki (1993) argue that the divergence of lexicons in public discourse has important implications. Here, we would add that if interlocutors accept different terms as references to an object, then the consequences of substituting these terms stem from framing.

The consequences of framing

According to Price and Tewksbury (1997), framing works by "activating certain constructs which then have an increased likelihood of use in evaluations made in response to the message" (p. 197). The mechanism underlying word choice's effects should be similar. The first hypothesis—uptake—predicts that exposure to particular words heightens the applicability of certain associations that influence judgment (Price & Tewksbury, 1997; see also Druckman, 2004, p. 674). A brief review of the psychological literature on memory also leads us to propose a second hypothesis called emergence.

Cognitive scientists divide memory into two main types: long-term and working memory. Working memory serves as a scratch pad used in mental functions, holding small amounts of information (McNamara, 1992). Long-term memory, by contrast, is theoretically infinite and relatively permanent. Long-term memory is thought to be organized as a network with links between concepts as a primary feature. In making a judgment, a request enters working memory driving activation—the recall of information from long-term to working memory. Activation may include affective "tags" that influence judgment accordingly (Bargh, Chaiken, Govender, & Pratto, 1992).

Collins and Loftus (1975) propose that concepts with stronger links are activated first in response to given prompts. These ideas seem to trivialize the prediction of actual judgments, but there are at least two obstacles. First, cognitive science's model of mental computation is underdeveloped although it should be possible to predict the outcomes of simple requests. Second, it remains technologically impossible to map the contents of an individual's long-term memory. Collins and Loftus do suggest that links strengthen through a learning process whenever two concepts are activated simultaneously. In this way, discourse teaches audiences to associate certain concepts that can activate to influence judgment. In addition to explaining framing effects, these ideas have implications for individual reactions when facing more complex discursive environments, especially those that feature competing attempts to strengthen associations.

According to a leading model of survey response, people answer survey questions probabilistically by drawing a thought as the question ends (Zaller & Feldman, 1992). The proportion of pro and con messages in elite discourse affects which thoughts come to mind and therefore serves as the central determinant of opinion (Zaller,

1992). These judgments are further moderated by political predispositions, in that Republicans and Democrats reject information that runs counter to their beliefs. In sum, this top-of-the-head model holds that the net value of relevant incoming information, after accounting for the filtering of incoming messages, determines survey response (Zaller, 1992).

Given the cognitive literature, the probabilistic model seems unrealistic. If linkages activate based on their strengths with the strongest activating first, then it seems unlikely that respondents engage in a probabilistic search. In addition, when attending to ordinary political discourse, citizens may lack the capacity to actively filter messages at the level of word choice. Instead, incoming messages may pass into long-term memory automatically strengthening links. Hence, the emergence hypothesis holds that citizens can use a form of linguistic reasoning to select between competing vocabularies, providing responses dictated by subsequent link strength. Further, emergence holds that the consequences of these messages will not be moderated by political partisanship or similar predispositions; thus, the effect of specific word choices will not display any interactive effects (Baron & Kenny, 1986). Additional speculation on this mechanism is relegated to the concluding discussion.

In short, we envision a process in which political entrepreneurs and journalists produce public discourse. Professional ethics, like notions of fairness, oblige journalists to cover the same story similarly, but they have discretion over their terminology or frame (McQuail, 1994). Political entrepreneurs may seek to capitalize on this discretion by encouraging journalists to adopt their frames and the words therein. These frames should pass on to affect citizens' judgments. However, citizens may not treat competitive terminologies equally; they accept some and reject others without regard to the vocabularies' relative frequency or proportion and without regard to their political loyalties.

The debate over PBA

Scholars see abortion as an "easy" political issue, in that it is "so ingrained over a long period that it structures voters' 'gut responses' to candidates and political parties" (Carmines & Stimson, 1980, p. 78; Adams, 1997). This issue's discursive structure formed with *Roe v. Wade*, the 1973 Supreme Court decision that legalized many procedures (Tribe, 1992). The terms "prolife" and "prochoice" appeared as self-descriptive names for movements that evolved to oppose and support abortion's legality. The pivotal question in this debate is: When does life begin? Abortion opponents, of course, argue it begins at conception, whereas supporters argue it begins later (Gorney, 2000). Given the easiness of the issue, the prominence of this key belief indicates that the manipulation of abortion attitudes may be relatively straightforward.

This case study involves the debate over PBA. Abortion opponents crafted this laden term. Notably, one prior labeling attempt failed; the term "brain suction abortion" (BSA) did not catch on, possibly because it was too graphic. BSA first

appeared in February 1995 when an Ohio newspaper reported on a State Representative's proposed ban. A variant, "brain-sucking abortion," appears in the *Congressional Record* seven times. These aside, we found no evidence of BSA's use. BSA and PBA refer to the intact dilation and extraction (DAE) procedure (American College of Obstetricians and Gynecologists, 1997). Relative to DAE, PBA was the dominant term. In the newspaper content analysis presented below, PBA saw 14 times more use than DAE. During the period we examined, PBA bans passed Congress three times (in 1995, 1997, and 1999/2000) to be vetoed by President Clinton twice and overturned by the Supreme Court in *Stenberg v. Carhart*. At the same time, the estimated number of DAEs almost linearly declined, from around 18,000 in 1990 to around 15,000 in 2000 (Herndon et al., 2002). Nonetheless, despite the issue's putative easiness, public support for banning PBA rose substantially over this period, as revealed below.

Examining word choice among competing elites in PBA rhetoric

Did political entrepreneurs adopt contrasting vocabularies in articulating their support? *Stenberg v. Carhart* and a brief parallel analysis of the *Congressional Record* provide a clear yes. In *Stenberg*, Nebraska fired Carhart for performing a PBA; the Supreme Court heard the case on appeal after a lower court ordered rehire. Stenberg, the petitioner, was Nebraska's attorney general. Carhart favored and Stenberg opposed PBA; the court ultimately ruled for Carhart and against a ban.

In the proceedings, 34 amicus briefs identified with a side were filed, 22 supporting Stenberg (the sole neutral brief was excluded). Table 1 categorizes the words these briefs used. These data stem from categories—the left-hand column— developed based on the Wordstat software thesaurus (Péladeau, 1998). Other columns in Table 1 display the frequency of usage and the proportion of usage by the proban side. As the right-hand column highlights, the most disparate categories were baby/child, birth, choice, and religious, with the proban side using the first two and the antiban side the last two. Of these, baby/child appears to be the major difference; ban proponents used this term six times as often as opponents with the root "baby" accounting for 98% of that use.

Table 2 focuses on the competitive use of "baby" or "fetus" in the briefs, oral arguments, and opinions. The first set of rows represents the briefs. The proban side used the word "baby" three times often. Further, Stenberg's brief used the word "baby" almost exclusively 93% of the time. The oral arguments, presented in the next set of rows, continued this pattern. Carhart's attorney used "baby" 16% of the time, whereas opposing counsel used this word 80% of the time. In comparison, the justices used "baby" roughly 60% of the time in their questions. Interestingly, the transcripts suggest that the respondents may have succeeded. The majority/concurring and dissenting opinions, presented in the final rows, used the word "baby" roughly 45% of the time, much closer to the level of the respondents, the case's victors. Of course, this correspondence may be coincidental.

Table 1 Word Choice by Competing Elites in *Stenberg v. Carhart*

Word Category	For Ban	Total Usage	% For Ban	Select Usage Ratio
Abortion	1,821	3,183	57	
Baby/child	716	832	86	6.17 to 1
Birth	625	807	77	3.43 to 1
Choice	95	402	23	1 to 3.23
Death	642	841	76	
Dilation and extraction	72	125	57	
Fetus	550	1,176	46	
Health	462	1,272	36	
Life	636	1,009	63	
Partial	985	1,301	75	
Physician	1,185	2,137	55	
Pregnancy	585	1,123	52	
Procedure	946	1,539	61	
Religious	230	840	27	1 to 2.65
Woman	728	2,245	32	

Note: Entries in the rightmost column represent the ratio of antiban word usage to proban word usage.

A similar but less dramatic pattern can be found in the U.S. House of Representatives. Specifically, the text of all the House's floor remarks and extensions mentioning PBA was subjected to the same kind of analysis performed above. Republicans tended to use "baby" more often, and this gap grew over time. In the

Table 2 Use of "Baby" or "Fetus" in Stenberg Briefs, Oral Arguments, and Opinions

	Antiban		For Ban	
Amicus briefs	Respondent	Friends	Friends	Petitioner
Total words	141	579	1,654	289
% Baby	38	40	76	93
Usage ratio (baby to fetus)	1 to 1.6	1 to 1.5	3.2 to 1	13.3 to 1
Oral arguments	Respondent	Questions	Petitioner	
Total words	24	41	5	
% Baby	16	63	80	
Usage ratio (baby to fetus)	1 to 5.3	1.7 to 1	4 to 1	
Opinions	Majority/concurring		Dissenting	
Total words	116		172	
% Baby	44		45	
Usage ratio (baby to fetus)	1 to 1.13		1 to 1.2	

Congresses of 1995–1996, 1997–1998, and 1999–2000, Republicans used the word "baby" relative to "fetus" 85, 92, and 94% of the time, whereas the Democrats used it 86, 85, and 84% of the time, respectively. Using National Abortion and Reproductive Rights Action League (NARAL) scores instead of party produced the same pattern. The reason for the high Democratic usage of "baby" remains unclear; perhaps, it relates to the loss of every PBA floor vote.

Assessing the discourse, media, and opinion interaction over time

A time-series analysis examines the relationships between entrepreneurs and media within congressional discourse and the *NYT*. Maintaining focus on the usage of "baby," we constructed three weekly time series: news coverage, editorials, and congressional rhetoric. Each was based on a content analysis of full-text sources mentioning PBA from 1996 to 2000 (available on Lexis-Nexis), and each series charts the use of "baby" (relative to "fetus") in a given week ($N = 386$). Congressional discourse includes floor remarks and extensions as well as committee reports and some other documents. Use of the *NYT* reflects its status as a journalistic leader (Shoemaker & Reese, 1996), though we replicate the results with a second newspaper.

To examine the relationship between the three series, we estimated a vector autoregression (VAR). In VAR, the current value of each variable is regressed on the lagged values of all the other variables in the analysis. Thus, the proportion of "baby" mentions in the *NYT* is regressed against its lagged values as well as the lagged values of all other measures. The same was done with editorial content and congressional rhetoric. Thus, there are three simultaneous equations, with each measure serving as the dependent variable in one equation. Granger tests assess causality. A measure x is said to "Granger cause" a measure y, if y can be better predicted from past values of x and y together than the past values of y alone (Freeman, 1983). If the media act as a faithful transmitter, the causal path should run from congressional rhetoric to news and editorial content. This pattern should disappear or reverse itself if the media act independently.

The arrows in Table 3 indicate Granger causality from the coefficients in the second column to the dependent measure in the first column. Two key findings emerge from this analysis. First, "baby" usage in congressional discourse significantly predicts usage in news content ($p \leq .01$; top panel), even after controlling for the effect of previous news coverage and editorials. Second, congressional discourse is largely exogenous, influenced only by its own past values ($p < .01$; second panel). Similar results can be obtained with the *Atlanta Journal-Constitution* (available upon request).

The Granger tests suggest that congressional rhetoric influences PBA news coverage. Simulations based on the VAR allow us to estimate the magnitude of these effects. Specifically, as the proportion of "baby" mentions in congressional rhetoric rises, subsequent news coverage registers a .06 increase in the word "baby." Though the increase is small (the mean value of the news series is .22), the effect persists for approximately 4 weeks.

Table 3 Granger Causality Tests Examining the Elite–News Relationship

Dependent Variable	Coefficient Block	x^2	p Value
News	← Congressional rhetoric	11.13	.01
	← News	22.24	.00
	Editorials	2.24	.53
Congressional rhetoric	← Congressional rhetoric	13.22	.00
	News	2.23	.53
	Editorials	4.31	.23
Editorials	← Congressional rhetoric	7.41	.06
	← News	10.03	.02
	← Editorials	5.14	.08

Note: Arrows indicate Granger causality from coefficient block to the dependent variable. Three lags of each independent variable are included in the model. Diagnostic tests indicate no evidence of autocorrelation (up to four lags). Model residuals are white noise. $N = 386$. Analyses were done using STATA 8.2.

Public opinion regarding PBA is measured infrequently, making it impossible to include aggregate opinion in the time series analysis. Instead, responses to 12 similarly worded questions from 1996 to 2000 were charted (each asked respondents to indicate their level of support for a PBA ban). Figure 1 shows that aggregate support for a ban seemed to rise and fall in tandem with the proportion of "baby" usage in news stories about PBA.
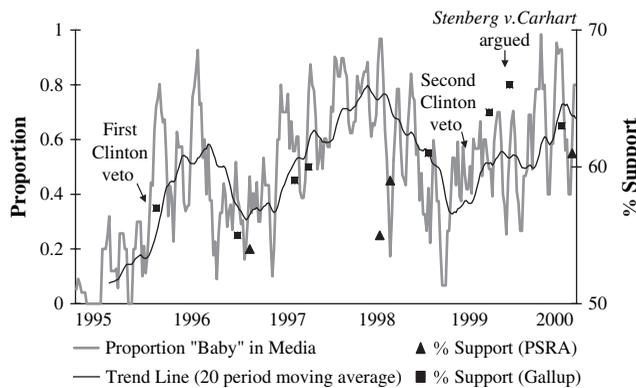

Figure 1 Relationship between media discourse and public support for partial-birth abortion ban.

Note: The media series represents a 5-week moving average of the proportion of "baby" mentions. Public opinion data come from similarly worded questions in surveys by Gallup (squares) and Princeton Survey Research Associates (triangles). These items ask respondents about their level of support for a ban on partial-birth abortion. Question wording can be obtained from LexisNexis or the iPoll database at the Roper Center for Public Opinion.

Word choice experiment

In the final analysis, an experiment tests the causal force of the use of "baby" versus "fetus" on attitudes toward a PBA ban and assesses the uptake and emergence hypotheses.

Participants

The experiment was conducted among 185 people during the summer of 2001, including a roughly equal number of adults and undergraduates (Sears, 1986). Subsequent analyses detected no statistically significant differences in responses across age. Approximately 36% of the sample had a college degree or had attended some college. Forty-six percent of the subjects were women, and the mean age of the participants was 26 years. Forty-six percent of the sample identified themselves as Democrats, 33% as Independents, and 20% as Republicans.

Design

The experiment featured three conditions plus a control, all between subjects. The treatment condition featured a manipulated newspaper article as the only stimulus. Control participants read no article but answered the same questions, as possible. To create the stimuli, an *NYT* article that described PBA and reported on a pending Congressional ban was edited to produce three new versions (see Appendix). They were identical with the exception of one global substitution, corrected for singular or plural form. In the "fetus" condition, the article was left alone; here, the word "fetus" appeared 16 times. In the "baby" condition, the word "baby" was substituted for all 16 appearances of "fetus." In the "competitive" condition, the word "baby" was substituted for every other appearance of "fetus," producing eight appearances for each term (with "fetus" always appearing first).

Procedure

The articles were presented in identical packets along with the self-administered questionnaire. Instructions described the exercise as a study in news comprehension. Participants were asked about their political orientation and media habits before reading the article and, afterward, were asked to summarize the article and rate their support for banning the procedure on a 7-point Likert scale. Subjects were instructed to "indicate your support or opposition for partial-birth abortion where a one indicates strong support for legalizing partial-birth abortion and a seven indicates strong opposition to legalizing partial-birth abortion." The control condition was identical, except that participants read no article and did not summarize. Approximately 50 people were assigned to each of the treatment conditions; 35 were in the control group. Auxiliary analyses indicate that the randomization worked; there were no differences across participants in the four conditions on a range of demographic and attitudinal variables. On completion of the experiment, participants were debriefed and paid.

Hypotheses

The experiment tests two hypotheses. First, under uptake, participants will evince the use of the word "baby" or "fetus" in judgments about PBA. Consistent with past research, these words should activate particular associations and influence judgment. Specifically, after exposure to the "fetus" stimulus, participants will be more likely to use the word "fetus" and oppose banning PBA, whereas subjects in the "baby" condition will behave in a symmetrically opposite fashion. The competitive condition tests the idea of "emergence." Here, participants exposed half to "baby" and half to "fetus" will converge on one or the other in judging support. Thus, instead of averaging their opinions, participants in the competitive condition will produce monolithic judgments. As argued above, this process will not be moderated by a person's ideological or partisan predispositions. Finally, the control condition provides a rough baseline as to where the participants might have stood in the absence of exposure.

Experimental results

Table 4 shows average support for a ban across the four conditions. Other than the "fetus" condition, where participants expressed a mean support of 3.96 (on a 7-point scale), the participants in the rest of the conditions express almost exactly the same level of support, around 4.8 on average. A one-way analysis of variance shows significant differences in the mean level of support for a PBA ban across the four conditions, $F(3, 181) = 2.73$, $p \leq .05$. The difference between the "fetus" condition and the other three is highly significant, $F(1, 183) = 8.25$, $p < .01$. This pattern supports the uptake hypothesis because the word substitution affected expressed attitudes. In the control group, expressed support is statistically indistinguishable from that of the "baby" condition ($t = -.18$, $df = 84$, $p = .86$) suggesting that the prevailing discursive climate encoded the word "baby." The emergence hypothesis finds support as well; mean support in the competitive condition does not fall near the point halfway between support expressed in the "baby" and "fetus" conditions; in fact, it is indistinguishable from the "baby" condition ($t = -.02$, $df = 98$, $p = .99$).

Examination of the article summaries supports the expectation that the experimental conditions strengthened particular mental associations. When asked to

Table 4 Support for Partial-Birth Abortion Ban Across Experimental Conditions

Condition	Mean	SD
Fetus ($N = 50$)	3.96	2.15
Competitive ($N = 49$)	4.84	1.79
Baby ($N = 51$)	4.84	1.88
Control ($N = 35$)	4.91	1.66

Note: Entries represent condition averages in response to the question: "On a scale of 1 to 7, indicate your support or opposition for partial-birth abortion where a one indicates strong support for legalizing partial-birth abortion and a seven indicates strong opposition to legalizing partial-birth abortion."

summarize the article in their own words, subjects in the "fetus" condition used the word "fetus" more than "baby" ($t = 2.27$, $df = 50$, $p < .05$); the opposite pattern appeared for those in the "baby" condition ($t = -4.03$, $df = 50$, $p < .01$). Interestingly, there was no difference in the number of "baby" and "fetus" mentions for subjects in the competitive condition ($t = .91$, $df = 48$, $p = .37$; for further analysis, see Simon & Xenos, 2004).

We provide a final test of our hypotheses with a regression analysis of ban attitudes. The uptake hypothesis predicts that individuals in the "fetus" condition will be less likely to support a ban on PBA even once we control for factors such as age, gender, and partisan identification. According to the emergence hypothesis, this is a largely unconscious process, meaning that experimental subjects will not filter incoming messages according to their political predispositions. We therefore expect the interaction between partisanship and condition to be insignificant (Baron & Kenny, 1986). Besides a dummy variable indicating the "fetus" condition, we controlled for partisanship (-1 = Democrat, 0 = Independent, 1 = Republican), age (17–70, 70 = 70 years old), gender (0–1, 1 = female), and newspaper readership (0–1, 1 = reads newspaper regularly).

Consistent with expectations, respondents in the "fetus" condition were significantly less likely to voice support for a ban on PBA ($B = -.84$, $SE = .35$). The only other factor exerting a significant effect was Republican identification ($B = .68$, $SE = .22$). The interaction between condition and partisanship was not significant ($B = -.01$, $SE = .41$), suggesting that Republicans in the "fetus" condition were indistinguishable from Democrats and Independents—that is, they did not filter the experimental treatment in a manner consistent with their political predispositions. We obtained similar results in models that substitute a measure of ideology for partisan identification ($B_{conservative} = .87$, $SE = .23$; $B_{conservative \times condition} = -.25$, $SE = .40$) and an indicator for the number of days the participant reads a paper ($B = -.09$, $SE = .07$).

We also examined whether attitudes in the *competitive* condition were moderated by partisanship. In this regression, the indicator for experimental condition was insignificant ($B = .35$, $SE = .34$), as was the interaction between condition and partisanship ($B = -.23$, $SE = .41$). Once again, partisanship was significantly related to ban attitudes ($B = .76$, $SE = .22$). Identical results can be obtained using ideology ($B_{conservative} = .80$, $SE = .24$; $B_{conservative \times condition} = -.03$, $SE = .41$). In sum, the experimental evidence provides support for the idea that word choice influences the strength of particular mental associations and subsequent attitudes about PBA. Moreover, these effects remain unmoderated by subjects' political predispositions, even in the competitive condition.

Discussion

These analyses yield three main results. First, elites use distinctive vocabularies when advancing their political agenda. Next, entrepreneurial discourse influences word choice in the news, in a seemingly regular way. Finally, media's word choice drives

citizens' survey response. The last result merits additional discussion, given some of the limitations of our data.

Two distinct evidentiary lines support the idea that word choice drives response. The data on aggregate public opinion, although admittedly sparse, suggest that the rise and fall in media's proportional usage of "baby" coincided with changes in aggregate levels of support for banning the PBA procedure. Unfortunately, too few points were observed to use time series analysis to provide a more definitive conclusion. Here, the experimental data help fill in the blanks. And yet, it should be noted that experimental results do not always generalize to the public at large. The sample in question went beyond college sophomores to some degree, but it is limited to a possibly idiosyncratic location and time. On the other hand, the results display experimentation's strength; the substitution of "baby" for "fetus" in a newspaper article exerted a powerful causal influence among this sample. Further, the uptake hypothesis is fairly uncontroversial, comfortably consistent with the framing literature. On the whole, it seems plausible that this pattern of media usage affected mass attitudes concerning a ban on PBA.

The emergence hypothesis is more novel, so some discussion of the underlying mechanism is in order. As discussed above, the emergence result runs counter to the dominant probabilistic model of survey response in that respondents failed to average across competing words. Instead, respondents seemed to engage in selection, in effect choosing "baby" over "fetus," thus leading to judgments that exhibited the same attitudes as those only exposed to "baby." Essentially, this means that the media—taking the form of the competitive article—did not fully determine respondents' judgments, rather something within the respondents combined with this stimulus to make a determination. Equally important, the lack of a statistical interaction between partisanship and judgment indicates that these responses were unfiltered. Notwithstanding the limitations of the analysis, the experimental results stand as an example of how the public might behave. Indeed, this evidence is consistent with the claim that these citizens were using a kind of reason that allowed them to choose one representation despite the alternative's presence.

To illustrate, reason requires disproportionate response. If one person hears two arguments of equal volume and averages to make a judgment, an observer could plausibly say the person had compromised and split the difference. Similarly, if a second person hears two arguments, one in a whisper and one in a scream, and chooses to endorse the scream, an observer might say the person merely had been bludgeoned. Yet, if that same second person endorses the whisper over the scream, a perhaps astonished observer could infer the use of reason—reason being Habermas' (1984) "unforced force" that overcomes volume. By analogy then, the first person would also be using a kind of reason in choosing one of two equally weighted arguments.

The cognition literature offers a plausible account regarding the uptake hypotheses, as discussed above; however the literature on spreading activation requires further elaboration to cover the emergence result (Klinger, Burton, & Pitts, 2000). Our expertise allows only speculation, but recent psychological work regarding

emotion appears relevant. Beginning with Damasio (1994), cognitive researchers have revised traditional views of reasoning, holding that judgment processes mingle cognition and affect. Haidt (2001) likewise suggests that research into moral judgment comports best with seeing it as a function of social intuition as opposed to a deliberative process. He employs the distinction between automatic and controlled mental processes (Shiffrin & Schneider, 1977), contending that humans typically generate responses to everyday moral questions, including surveyed attitudes, spontaneously and without conscious thought. Further support for this view stems from examining the motivations behind judgment. Specifically, Tetlock (2002) argues that because judgment serves a social function, response is not an isolated process but a contributor to societal maintenance.

Given the brevity of this sketch, we apply this psychology to the emergence result with caution. Recall, though, that any mention of "baby" significantly shifted participants' attitudes toward banning PBA; only the stimuli missing "baby" entirely prompted different conclusions. In keeping with social intuitionism, respondents could have generated this judgment automatically, cueing off the word "baby" and attendant societal impulses toward protection. The fact that the cueing process was not mediated by partisanship points toward automaticity, on the part of Democrats as well. In this way, the presence of "baby" dominated that of "fetus" in judgment. Before speculating further on what such processes entail for the exercise of public reason, we consider the strengths and weaknesses of these analyses as part of a particular case study.

The study suffers from the broader weakness common to all case studies—the critical question of whether the findings generalize to other cases. More precisely, the PBA case has several possibly idiosyncratic features. Chief among these is the pivotal role played by the word "baby." Although in this study the substitution was echoed in the analysis of public discourse, the substantial impact of "baby" usage on attitudes may not be replicable across other issue vocabularies. Further, one could question the substitution's appropriateness. Imagine an editor grilling a reporter, saying "using 'fetus' has political implications." But the reporter might respond, "every word does." This seems to be the lesson so far (cf. Schuman & Presser, 1981).

Turning to the broader question, democracy requires that governors respect citizens' wishes. At the same time, citizens learn about government partially from the governors. Thus, the classic scheme of accountability can be colored by what may be called propaganda. This investigation suggests that in the case of PBA, politicians generally lead the public. Further, media seemed to take their cue from entrepreneurial discourse rather than communicating independently.

On the other hand, two findings point toward a more optimistic view. The emergence result underscores the fact that citizens can be an active factor in the democratic equation. Participants in the competitive condition chose, in some sense, to support a ban—a power that presumably could have gone the other way under the right prompting. This result suggests that citizens do more than probabilistically choose between competing messages. In short, individual judgments are grounded in

a discursive process linking government and citizens. Thus, we would expect that in more complicated situations the variety and content of messages in public discourse, rather than its sheer proportion, would determine citizens' views.

In addition, although the data portray media as faithful transmitters, the PBA story reveals media rejected the earlier BSA label, implying that media play a larger role in the early stages of issue development (e.g., Jerit, 2006). What remains, of course, is an examination of these phenomena in other contexts to test these findings and to elaborate upon a more general theory of the relationship between elites, media, and the public.

References

Adams, G. D. (1997). Abortion: Evidence of issue evolution. *American Journal of Political Science*, **41**, 718–737.

American College of Obstetricians and Gynecologists. (1997). *Statement of policy on intact dilation and extraction*. Washington, DC: Author.

Bargh, J., Chaiken, S., Govender, R., & Pratto, F. (1992). The generality of the automatic attitude activation effect. *Journal of Personality and Social Psychology*, **62**, 893–912.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, **51**, 1173–1182.

Brosius, H. B., & Eps, P. (1995). Prototyping through key events. *European Journal of Communication*, **10**, 391–412.

Carmines, E., & Stimson, J. (1980). The two faces of issue voting. *American Political Science Review*, **74**, 78–91.

Collins, A. M., & Loftus, E. F. (1975). A spreading activation theory of semantic processing. *Psychological Review*, **82**, 407–428.

Damasio, A. R. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York: Putnam Publishing Group.

Druckman, J. N. (2002). The implications of framing effects for citizen competence. *Political Behavior*, **23**, 225–256.

Druckman, J. N. (2004). Political preference formation: Competition, deliberation, and the (ir)relevance of framing effects. *American Political Science Review*, **98**, 671–686.

Entman, R. M. (1993). Framing: Towards clarification of a fractured paradigm. *Journal of Communication*, **43**, 51–58.

Fan, D. P. (1988). *Predictions of public opinion from the mass media: Computer content analysis and mathematical modeling*. New York: Greenwood Press.

Freeman, J. R. (1983). Granger causality and the time series analysis of political relationships. *American Journal of Political Science*, **27**, 327–358.

Gamson, W. A., & Lasch, K. E. (1983). The political culture of social welfare policy. In S. E. Spiro & E. Yuchtman-Yaar (Eds.), *Evaluating the welfare state: Social and political perspectives* (pp. 397–416). New York: Academic Press.

Gamson, W. A., & Modigliani, A. (1989). Media discourse and public opinion on nuclear power. *American Journal of Sociology*, **95**, 1–37.

Goffman, E. (1974). *Frame analysis*. New York: Harper & Row.

Gorney, C. (2000). *Articles of faith: A frontline history of the abortion wars*. New York: Simon & Schuster.

Habermas, J. (1984). *The theory of communicative action, Vol. 1: Reason and the rationalization of society* (T. McCarty, Trans.). Boston: Beacon Press.

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, **10**, 814–834.

Herndon, J., Strauss, L. T., Whitehead, S., Parker, W. Y., Bartlett, L., & Zane, S. (2002). Abortion surveillance. *Centers for Disease Control Surveillance Summary*, **51**, 1–32.

Jacobs, L. R., & Shapiro, R. Y. (2000). *Politicians don't pander: Political manipulation and the loss of democratic responsiveness*. Chicago: University of Chicago Press.

Jerit, J. (2006). Reform, rescue, or run out of money? Problem definition in the Social Security reform debate. *Harvard International Journal of Press/Politics*, **11**, 9–28.

Kahneman, D., Slovic, P., & Tversky, A. (1982). *Judgment under uncertainty: Heuristics and biases*. New York: Cambridge.

Kingdon, J. W. (1995). *Agendas, alternatives and public policies*. New York: Harper Collins.

Klinger, M. R., Burton, P. C., & Pitts, G. S. (2000). Mechanisms of unconscious priming: Response competition, not spreading activation. *Journal of Experimental Psychology: Learning Memory and Cognition*, **26**, 441–455.

McNamara, T. P. (1992). Priming and constraints it places on theories of memory and retrieval. *Psychological Review*, **99**, 650–662.

McQuail, D. (1994). *Mass communication theory*. London: Sage.

Minsky, M. (1975). A framework for representing knowledge. In P. H. Winston (Ed.), *The psychology of computer vision* (pp. 211–277). New York: McGraw-Hill.

Murphy, G. (2004). *The big book of concepts*. Cambridge, MA: MIT Press.

Pan, Z., & Kosicki, G. M. (1993). Framing analysis: An approach to news discourse. *Political Communication*, **10**, 55–75.

Péladeau, N. (1998). *Word stat content analysis module for SIMSTAT*. Montreal, Canada: Provalis Research.

Price, V., & Tewksbury, D. (1997). News values and public opinion: A theoretical account of media priming and framing. In G. Barnett & F. J. Boster (Eds.), *Progresses in the communication sciences* (pp. 173–212). Greenwich, CT: Ablex.

Roe V. Wade, 410 U.S. 113 (1973).

Scheufele, D. A. (1999). Framing as a theory of media effects. *Journal of Communication*, **49**, 103–119.

Schuman, H., & Presser, S. (1981). *Questions and answers in attitude surveys: Experiments in question form, wording, and context*. New York: Academic Press.

Sears, D. O. (1986). College sophomores in the laboratory: Influences of a narrow data base on social psychology's view of human nature. *Journal of Personality and Social Psychology*, **51**, 515–530.

Shiffrin, R. M., & Schneider, W. (1977). Controlled and automatic human information processing: Perceptual learning, automatic attending, and a general theory. *Psychological Review*, **84**, 127–190.

Shoemaker, P. J., & Reese, S. D. (1996). *Mediating the message*. New York: Longman.

Simon, A. F. (2002). *The winning message: Candidate behavior, campaign discourse, and democracy*. Cambridge, U.K.: Cambridge University Press.

Simon, A. F., & Xenos, M. (2004). Dimensional reduction of word frequency data as a substitution for intersubjective content analysis. *Political Analysis*, **12**, 63–75.

Stenberg, Attorney General of Nebraska, et al. V. Carhart, 530 U.S. 914 (2000).

Stimson, J. A., MacKuen, M. B., & Erikson, R. S. (1995). Dynamic representation. *American Political Science Review*, **89**, 543–565.

Tetlock, P. E. (2002). Social functionalist frameworks for judgment and choice: Intuitive politicians, theologians, and prosecutors. *Psychological Review*, **109**, 451–471.

Tribe, L. (1992). *Abortion: The clash of absolutes*. New York: W.W. Norton.

Whorf, B. L. (1956). *Language, thought, and reality*. Cambridge, MA: MIT Press.

Zaller, J. R. (1992). *The nature and origins of mass opinion*. Cambridge, U.K.: Cambridge University Press.

Zaller, J. R., & Feldman, S. (1992). A simple theory of the survey response: Answering questions versus revealing preferences. *American Journal of Political Science*, **36**, 579–616.

Appendix

Experimental stimulus

Congress, Nation Still Divided Over Partial-Birth Abortion
By David Brown

Washington DC, February 27—Congress passed a bill in its last session that would have banned the abortion technique, which is known technically as "intact dilation and evacuation" (D&E). The debate was graphic and contentious, with some long-time abortion rights supporters in Congress voting to ban the procedure. President Clinton vetoed the bill, saying the measure failed to include exceptions to protect the health of the women involved. Officials expect that bills to ban it will be reintroduced soon.

Intact D&E is used by some physicians to remove a relatively large /fetus/baby/ from the womb in one piece. The feet of the /fetus/baby/ are removed first, then the brain is removed by puncturing the back of the head. By doing so, the /fetus'/baby's/ skull is partially collapsed for easy removal through the cervix, the narrowest part of the birth canal. Often the /fetus/baby/ is dead before the procedure begins, although occasionally it is alive. Sometimes the procedure is done at a stage in gestation when the /fetus/baby/ has no chance of surviving outside the womb were it born alive. Sometimes it is done later, when the chance of survival, albeit small, exists. The moment in development when that transition to "viability" occurs is not fixed. However, after about 25 weeks of gestation, many premature /fetuses/babies/ survive.

The most common alternative to intact D&E is "dismemberment dilation and evacuation," in which the /fetus/baby/ is removed in pieces. Some physicians believe the intact technique is safer because it is less physically traumatic to the pregnant woman. There are no statistics on the number of intact D&E procedures performed on /fetuses/babies/ in the United States each year. Reporting by several newspapers suggests that at least 2,000 are performed. That research also suggests that at least

half, and possibly the great majority, of intact D&Es are done on healthy /fetuses/ babies/ carried by women who are themselves healthy. That last impression contrasts with statements made by most prochoice organizations and their spokesmen. In general, they say that in most cases the procedure is done only when the /fetuses/ babies/ have severe abnormalities, or when the woman is so ill that ending her pregnancy is imperative.

The mixed reaction to the bill can be found in the most surprising of sources. For example, a representative from the National Coalition of Abortion Providers, stated in an interview that when the bill to ban intact D&Es on /fetuses/babies/ was initially introduced, he called many abortion clinics in his organization and asked how common the procedure was and on what condition of babies it was generally performed. Although he is a staunch abortion rights supporter and usually aligns with the views represented by the prochoice party line, he was surprised to learn that the procedure is typically performed on healthy /fetuses/babies/ rather than malformed / fetuses/babies/, as prochoice backers had previously believed.

These findings have affected his response to the bill. "I felt very uneasy about it, knowing what I knew … I just decided not to interject myself into the debate," he said. Prochoice and antiabortion groups will continue to face-off over the highly debated issue of D&E abortion procedures, and the legality of aborting not only malformed but also healthy /fetuses/babies/ late in pregnancy. One antiabortion supporter reemphasized the party line: "This is murder, plain and simple."