We show that the demand for news varies with the perceived affinity of the news organization to the consumer’s political preferences. In an experimental setting, conservatives and Republicans preferred to read news reports attributed to Fox News and to avoid news from CNN and NPR. Democrats and liberals exhibited exactly the opposite syndrome—dividing their attention equally between CNN and NPR, but avoiding Fox News. This pattern of selective exposure based on partisan affinity held not only for news coverage of controversial issues but also for relatively “soft” subjects such as crime and travel. The tendency to select news based on anticipated agreement was also strengthened among more politically engaged partisans. Overall, these results suggest that the further proliferation of new media and enhanced media choices may contribute to the further polarization of the news audience.


The division of the United States into predictably “red” and “blue” states and the gradual decline in the number of genuine “battlegrounds” (Abramowitz & Saunders, 2006) where either party has a genuine chance of victory suggests that American politics today is more polarized than in eras past. The standard explanation for polarized politics is the tendency for candidates to cater to the preferences of political activists. Because activists on both sides represent the far ideological wings of the parties (McCloskey, Hoffman, & O’Hara, 1960; Stone, Rapoport, & Abramowitz, 1990), rational candidates avoid middle-of-the-road appeals (Abramowitz, Alexander, & Gunning, 2006; Fiorina, Abrams, & Pope, 2005; Jacobson, 2000).

Political activists are polarized, but at the level of the mass public there is considerable debate. Some scholars believe that increased polarization is only an illusion, stemming from the tendency of the media to treat conflict as more newsworthy than consensus (Fiorina et al., 2005). Alternatively, the impression of mass polarization may reflect the nomination of extreme rather than centrist candidates, and an electorate that votes along party lines (Layman & Carsey, 2002). Other researchers,
however, point to evidence that increasing numbers of ordinary citizens have migrated to the opposite ends of the liberal–conservative scale. Between 1972 and 2004, for instance, the average difference in ideological self-placement between non-activist Democrats and Republicans more than doubled (Abramowitz & Saunders, 2006).

An alternative indicator of political polarization—and one that also suggests increased polarization at the mass level—is the intensification of partisan attitudes. There is a wealth of time series data tracking Americans’ evaluations of the incumbent president. These data show that on balance, Democrats’ and Republicans’ negative evaluations of a president of the other party have steadily intensified (Abramowitz & Saunders, 2006; Jacobson, 2006). The approval data document a widening partisan chasm between Republicans and Democrats; the percentage of partisans who respond at the extremes (“strong approval” or “strong disapproval”) has increased significantly over time. In fact, polarized assessments of presidential performance are higher today than at any other time in recent history, including the months preceding the resignation of President Nixon. In this sense at least, mass public opinion is polarized.

Media consumption as an antecedent of polarization

It is no mere coincidence that the trend toward a more divided electorate has occurred simultaneously with the revolution in information technology. Forty years ago, the great majority of Americans got their daily news from one of three network newscasts. These newscasts offered a homogeneous and generic “point–counterpoint” perspective on the news, thus ensuring that exposure to the news was a common experience. The development of cable television and the explosion of media outlets on the Internet have created a more fragmented information environment in which cable news, talk radio, and 24-hour news outlets compete for attention. Consumers can access—with minimal effort—newspapers, radio, and television stations the world over. Given this dramatic increase in the number of available news outlets, it is not surprising that media choices increasingly reflect partisan considerations. People who feel strongly about the correctness of their cause or policy preferences seek out information they believe is consistent rather than inconsistent with their preferences.

The revival of selective exposure

The argument that people prefer to approach supportive over nonsupportive information precedes the onset of new media and dates back to the heyday of cognitive consistency theories in the 1950s (Festinger, 1957). The theory predicted that as a means of minimizing dissonance, people would seek out information they expected to agree with. Given the nonpartisan, “objective” content of mainstream American press coverage, early tests of this hypothesis focused on exposure to political campaigns rather than news and documented the tendency of partisan voters to report
greater exposure to appeals from the candidate or party they preferred (Lazarsfeld, Berelson, & Gaudet, 1948; Schramm & Carter, 1959; Sears & Freedman, 1967). This pattern of exposure to in-party appeals was considered the principal explanation for the reinforcing effects of campaigns (Klapper, 1964).

An important theoretical limitation of the early work on selective exposure was that it failed to distinguish between deliberate or motivated exposure and “de facto” exposure that was a by-product of voters’ personal networks or social context. High-income voters, for instance, might have encountered more pro-Republican messages not because they actively screened out information about the Democrat, but because their friends and neighbors were disproportionately Republican (Cotton, 1985; Sears & Freedman, 1967).

More direct tests of whether people deliberately avoid exposure to disagreeable information yielded mixed results suggesting that dissonance avoidance was a relatively weak motive for the acquisition of information (McGuire, 1968; Sears, 1968). Although some controlled studies uncovered traces of motivated exposure to in-party sources (Bartlett, Drew, Fahle, & Watts, 1974; Iyengar & McGrady, 2007; Stempel, 1961; Sweeney & Gruber, 1984), others did not (Chaffee & Miyo, 1983; Meffert, Chung, Joiner, Waks, & Garst, 2006; Sears, 1968). Moreover, the preference for congenial information seemed to occur under limited circumstances (Frey, 1986). For example, people first asked to make a decision and then presented with information choices tended to select information consistent with their decision (Jonas, Schulz-Hardt, Frey, & Thelen, 2001).

The fact that researchers have been hard pressed to detect consistent traces of partisan selective exposure among American voters is attributable in part to the evolving institutional context of campaigns. As political campaigns became less controlled by political parties and more media based (Polsby, 1983), voters found it increasingly difficult to encounter partisan messages or messengers (Mutz & Martin, 2001). Instead, they encountered the same “point–counterpoint,” unbiased media coverage no matter where they turned (Allen & D’Alissio, 2000). But, this overtly neutral media environment changed dramatically with the diffusion of cable television and the Internet. The new, more diversified information environment makes it not only more possible for consumers to seek out news they might find agreeable but also provides a strong economic incentive for news organizations to cater to their viewers’ political preferences (Mullainathan & Schleifer, 2005). The emergence of Fox News as the leading cable news provider is testimony to the viability of this “niche news” paradigm. Between 2000 and 2004, although Fox News increased the size of its regular audience by some 50%, the other cable providers showed no growth (Pew Research Center for the People and Press, 2004).

A growing body of evidence suggests that consumers are in fact exercising greater selectivity in their news choices. In the first place, in keeping with the well-known “hostile media” phenomenon (Gunther, Christen, Liebhart, & Chia, 2001; Vallone, Ross, & Lepper, 1985), partisans of either side have become more likely to impute bias to mainstream news sources (Smith, Lichter, & Harris, 1997). Cynical
assessments of the media have surged most dramatically among conservatives; according to a Pew Research Center for the People and the Press survey, Republicans are twice as likely as Democrats to rate major news outlets including the three network newscasts, the weekly news magazines, NPR, and PBS as biased (Pew Research Center for the People and Press, 2004). As indicated by the recent furor over The New York Times’ front-page story suggesting an inappropriate relationship between Senator John McCain and a female lobbyist (Rutenberg, Thompson, & Kirkpatrick, 2008), critical coverage from a source viewed as biased becomes a rallying event for supporters of the targeted candidate. In the immediate aftermath of the publication of the report, the McCain campaign set a record for the amount of money raised online (Bumiller, 2008).

In response to their perceptions of hostile bias in the mainstream media environment, partisans of both sides have begun to explore alternative sources of news. A study of self-reported media exposure during the 2000 and 2004 campaigns uncovered significant evidence of differential media use among Republicans and Democrats (Pfau, Houston, & Semmler, 2007). Republicans gravitated to talk radio, radio news, and television advertising, whereas Democrats avoided talk radio and tuned in to television news magazines and late-night entertainment television (Pfau et al., 2007, pp. 36–38).

In short, there is growing evidence that in the new media environment, partisans attribute bias to mainstream news outlets and gravitate to alternative sources perceived as more congenial to their preferences. But are these perceptions grounded in reality? Put differently, is there evidence that “new” media do in fact deliver more slanted or biased news? At least in the case of Fox News, the answer is in the affirmative.

In its relatively short life span, Fox News has staked out a distinctive reputation for delivering a proconservative perspective on issues and events. A systematic comparison of Fox News’ coverage of national issues with the coverage provided by other new media and two “old” media (AP and UPI) demonstrated that Fox News’ reputation was deserved—the outlet’s news coverage showed a consistently pro-Republican slant (Groeling & Baum, 2007). Despite the fact that real-world conditions generated significantly more “bad news” stories about Republican candidates contesting the 2006 congressional elections (due mainly to the series of lobbying-related scandals involving Republican incumbents), Fox News was the only news outlet in which negative stories about Republicans did not outnumber balanced or positive stories. Unlike previous studies of media bias in which the key indicator of bias is not news content per se but some proxy for content (Gentzkow & Shapiro, 2006; Groseclose & Milyo, 2005), this study provides direct content-based evidence of ideological slant in Fox News. The availability of Fox News, in fact, makes it possible for Republicans and conservatives to seek out a more sympathetic perspective and, conversely, to avoid exposure to discordant points of view.

Given the evidence concerning partisans’ perceptions of Fox News and the actual slant conveyed by the outlet, we may anticipate significant behavioral (as opposed to
self-reported) differences between partisan groups in exposure to Fox News: Conservatives and Republicans should seek it out while Democrats and liberals do the opposite. Moreover, given the current political environment, we further anticipate that an “approach–avoidance” behavioral pattern will vary across the subject matter of news reports. In a world of polarized news consumers, conservatives should most prefer exposure to Fox News when the subject of the news is some controversial policy issue (e.g., the war in Iraq). They might also prefer Fox coverage when the news focuses on less politicized subjects (e.g., healthcare or travel), but to a lesser degree.

**Method**

**Experimental design**

We designed an online experiment to investigate the extent to which partisans on the right treat Fox News as a preferred provider. More specifically, we observed whether attention to the identical news story was increased or decreased when the story was attributed to Fox News, NPR, CNN, or the BBC.

Using the MSNBC daily news feed (which includes reports from a wide variety of news organizations), we randomly assigned news stories to one of four sources—Fox, NPR, CNN, or BBC. We attained the maximum level of realism by providing participants with the most recent news stories in real time. Study participants were provided with a brief headline accompanied by the logo of the news organization and asked to indicate (by clicking a box) which of four reports displayed on the screen they would like to read. Because respondents could also click a “Can’t Say” box, each respondent had a choice between five alternatives. They repeated this task across six different subject matter categories evenly divided between “hard” and “soft” topics. The former included reports on American politics (e.g., the relations between President Bush and Democrats in Congress), the war in Iraq, and race relations. The soft topics included crime, travel, and sports. We also included a baseline or control condition in which all source logos were deleted; here participants could only choose between the reports based on the text of the accompanying headlines.

In the analyses that follow, the control condition formed the baseline to which the selection rate of news stories in the treatment condition was compared. Any difference in the rate of selecting a particular story between the control and treatment conditions can only be attributed to the presence or absence of the source label because the same set of stories were provided to both groups.

All other aspects of the presentation were equalized across the different conditions. For instance, the placement of a particular story or news source on the screen was randomized so that no particular source gained from being the first or last on the screen. Stories and sources were randomly matched. Thus, the design was fully counterbalanced on order, story headline, and news logo. The study was run between March 30 and April 16, 2006. The total sample of news stories was 383. Because the MSNBC feed features more rapid daily replacement of stories on political issues
(i.e., Iraq and politics), the sample included more stories on Iraq and politics (60 and 71, respectively) than the more specialized topics of race and travel (40 and 11, respectively).

The sample
Using the services of Polimetrix—an opinion research firm—we administered the experiment on a nationally representative sample of 1,023 (772 and 251 assigned to the treatment and control conditions, respectively) registered voters. Polimetrix has developed a new methodology for sampling from pools of opt-in respondents (the sampling methodology is available at www.polimetrix.com). Their two-stage procedure first draws a conventional probability sample a large-scale random digit dialing (RDD) sample (the target sample). Next, for each member of the target sample, Polimetrix selects one or more matched members from their pool of opt-in Internet respondents. This is called the matched sample. Polimetrix implements matching—searching for an available opt-in respondent who is as similar as possible to the corresponding member of the target sample—using the variables of race, gender, age, education, and imputed party identification and ideology. The end result is a sample of opt-in respondents with equivalent characteristics as the target sample on the matched characteristics listed above; under most conditions, the matched sample will converge with a true random sample (Rivers, 2005).

Hypotheses
Given the lineup of news sources, we naturally hypothesized that the demand for news stories would be heightened among Republicans and those with conservative political views when stories were labeled as Fox reports. Conversely, we expected participants on the left of the political spectrum to show greater interest in stories assigned to CNN or NPR. Even though CNN and NPR both claim to be committed to nonpartisan and objective reporting (as does Fox), in the context of the four sources available to study participants, the content provided by CNN and NPR more closely matched the preferences of Democrats than the content provided by Fox. And since the BBC is a foreign news source with a well-known reputation for independent journalism, we expected uniform indifference for the BBC label among Democrats, Republicans, and nonpartisans alike.

We further hypothesized that the effects of the source manipulation would be stronger for political subject matter where partisan divisions are intense, but weaker when the news dwelled on nonpolitical subjects such as travel destinations or sporting events.

Based on the polarization literature, we also hypothesized that the source manipulation would be weakened among less attentive partisans and those with no party preference since they are likely to be unaware of the partisan slant of particular news outlets, while more attentive partisans are well aware of the partisan location of Fox, NPR, or CNN. Thus, we expected that the interaction of political interest and
ideology/partisanship would significantly affect news selection—more interested conservatives, for instance, would display stronger preferences for Fox.

**Analysis**

Our dependent variable consisted of five “unordered” choices. An unordered choice situation is one in which outcomes cannot be scaled, that is, outcome A does not necessarily denote more of the underlying concept than outcome B, and B more than C for all observations. Thus, the appropriate analytic tool is an unordered choice model in which individuals choose the option that gives them the most utility. For the $i$th individual with $j$ choices, the utility of the $j$th choice can be given by: $U_{ij} = X_{ij} \beta + u_{ij}$. Because this individual’s choice reveals his preference, if any individual $i$ chooses $j$, then the utility of $j$ is great than the utility from all other options, say, $k$.

Although multinomial logit (Agresti, 1996; Maddala, 1983) is the conventional way of modeling random utility functions, it is unsuitable for the current choice problem at hand. In multinomial logit (MNL), the explanatory variables ($X$), being characteristics of an individual, are themselves constant across the choice alternatives. A limitation of the MNL model is that it allows only one response function (the type of restriction imposed on the dependent variable) for all independent variables in the model. In practice, this means that MNL cannot be used to examine a choice situation where choices can be attributed to characteristics of the choice alternatives. That is, the basic MNL model typically permits only individual-specific attributes to be included as covariates. On the other hand, we specify that $Pr(Y_i = j)$ is a function of both alternative- and individual-specific attributes and their interactions. More specifically, in our current study, the key alternative-specific attributes are the labels associated with the different news reports respondents encountered, whereas the individual attribute of primary interest is respondents’ political ideology.

A more flexible specification of choice functions is provided by the conditional logit model (Long, 1997; Maddala, 1983; McFadden, 1974). Conditional logit is appropriate for examining situations in which a choice among alternatives is treated as a function of the characteristics of the alternatives in addition to the characteristics of the individual making the choice. More succinctly, the conditional logit model can be written as follows:

$$P_{ij} = \frac{\exp(X_{ij}\alpha)}{\sum_k \exp(X_{ik}\alpha)},$$

where $X_{ij}$ indicates variables measuring the characteristics of alternative $j$ relative to individual $i$ and disturbances $u_{ij}$, are assumed to be independent across alternatives.

In McFadden’s conditional logit model, variables characterizing the choices (i.e., the categories of the dependent variable in the MNL model) can be included as covariates. In other words, news story attributes that differ across alternatives but
are constant across respondents within an alternative can be in the vector of explanatory variables since they could be reasons for choosing one alternative over another. Accordingly, the conditional logit model partitions covariates into (a) alternative-specific attributes of the choices (such as news story labels) and (b) characteristics of the individual (such as education, party identification, etc.). To estimate the effects of some individual characteristic, the researcher typically creates $j - 1$ dummy variables for choices and interacts each of them with an individual-level attribute variable.\(^8\) Intuitively, conditional logit groups together the alternatives in each participant’s choice set (or menu). A binary outcome variable shows which alternative was actually picked; it is a dummy variable equal to 1 for the alternative at which the respondent matriculated and 0 for all of the other alternatives.

McFadden’s conditional logit model has been applied to a wide variety of choice situations including employer preferences for characteristics of employees (e.g., Logan, 1996), consumer preferences for product attributes (Berry, 1994), employees’ choice of health insurance plans (e.g., Parente, Feldman, & Christianson, 2004), voters’ candidate choices (e.g., Adams & Merrill, 2000; Cutler, 2004), government formation in parliamentary democracies (e.g., Martin & Stevenson, 2001), or, in the canonical example, preferences for transportation options (e.g., McFadden, 1974).\(^9\)

**Results**

**Overall effects of news labels**

Prior to assessing the degree of partisan polarization in news selection, we begin by considering the simple main effects of the source labels. We constructed four dummy variables (coded 0 or 1) denoting each of the four news sources: (a) FOX, (b) CNN, (c) NPR, and (d) BBC. We further included an indicator variable denoting those who answered “can’t say” (ABST). Table 1 displays the coefficient estimates from a conditional logit model predicting the selection of news stories with the individual-level data. As noted above, the selection rate of “unlabeled” news stories forms the baseline in our analysis. Thus, the four dummy variables—FOX, NPR, CNN, and BBC—capture differences in the selection rate associated with the presence of each label in any given subject matter dimension.

Overall, the results suggest that news source labels are an important cue for readers. Fourteen of the 24 coefficient estimates presented in Table 1 were positively signed and statistically significant ($p < .05$). These results indicate that, holding constant the content differences of news stories, the presence of a news organization label increases the appeal of news stories across all subject matter dimensions. Consumers tend to ignore “anonymous” news reports.

The Fox label had the strongest impact on story selection in five of the six issue dimensions examined. As can be seen from Table 1, for the categories of politics, race relations, Iraq, sports, and crime, the Fox label increased the likelihood of respondents selecting news stories beyond that of nonlabeled stories. More formally, we tested the null hypothesis $H_0: \beta_{FOX} = \beta_{k}$\(^{10}\) where $k$ is the second largest coefficient.
Table 1 Baseline Versus Labeled Conditions (conditional logit estimates)

<table>
<thead>
<tr>
<th></th>
<th>Hard News Dimension</th>
<th>Soft News Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Politics</td>
<td>Race Relations</td>
</tr>
<tr>
<td>FOX</td>
<td>.613 (.267)*</td>
<td>.743 (.201)**</td>
</tr>
<tr>
<td>NPR</td>
<td>.223 (.271)</td>
<td>.373 (.206)</td>
</tr>
<tr>
<td>CNN</td>
<td>.306 (.270)</td>
<td>.380 (.206)</td>
</tr>
<tr>
<td>BBC</td>
<td>.125 (.272)</td>
<td>.346 (.206)</td>
</tr>
<tr>
<td>ABST</td>
<td>-.908 (.219)**</td>
<td>-.056 (.160)</td>
</tr>
<tr>
<td>N</td>
<td>1,023</td>
<td>1,023</td>
</tr>
<tr>
<td>Likelihood ratio $\chi^2$</td>
<td>155.88**</td>
<td>47.84**</td>
</tr>
<tr>
<td>Pseudo $R^2$</td>
<td>.047</td>
<td>.015</td>
</tr>
</tbody>
</table>

Note: Cell entries are given as conditional logit estimates with their standard errors (SE) in parenthesis. Coefficient estimates show deviations in news selection rates from the baseline in labeled conditions.

*p < .05. **p < .01.
estimate in any given topical dimension. As shown in Table 2, the null hypothesis was rejected in four of five cases: politics ($\chi^2_1 = 9.53, p < .01$), race relations ($\chi^2_1 = 11.90, p < .01$), Iraq ($\chi^2_1 = 11.80, p < .01$), and crime ($\chi^2_1 = 9.02, p < .01$). On the other hand, in the case of travel news where CNN proved to be the most popular source based on the point estimates, the null hypothesis $H_0: \beta_{FOX} = \beta_{CNN}$ could not be rejected ($\chi^2_1 = .38, \text{n.s.}$), indicating that CNN was not necessarily more popular than Fox in the case of travel news. All told, these results indicate that among the four news organizations included in the current study, the Fox label was the most appealing. Clearly, Fox’s strategy to cater to a conservative audience has worked to increase its market share.

**Evidence of selective exposure in news selection**

Next, we turn to assessing the role of respondent attributes in news story selection, that is, who chose which news stories to read? Of course, our primary focus was to assess whether respondents’ ideological leanings induced a polarizing effect in news selection. As a first-cut at the data, we plotted story selection rates with and without source labels for Republicans, Independents, and Democrats (Figure 1). Here, the unit of analysis is the individual news story and the selection rate is the proportion of respondents clicking on this story. As described earlier, one-quarter of the study participants were provided with the news reports without source labels. Therefore, we can compare the fraction of the study participants who selected the same story when it was either unlabeled, or attributed to Fox, CNN, or NPR.

Figure 1 provides considerable evidence of political selectivity: The very same news story on crime or Iraq or politics or racial issues attracts a different audience when labeled as a Fox, CNN, or NPR report. Consistent with our expectations, the effects of the Fox label were weakened for nonpolitical news. Nonetheless, the effects of the Fox label nearly doubled the selection rate for travel and sports stories among Republicans. While Republicans were drawn to the Fox label, they avoided CNN and NPR. On average, the probability that a Republican would select a CNN or NPR

### Table 2: Formal Tests of Labeling Effects (Wald test statistics)

<table>
<thead>
<tr>
<th>Hard News</th>
<th>Null Hypothesis</th>
<th>$\chi^2_1$</th>
<th>$p$ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hard News</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Politics</td>
<td>$H_0: \beta_{FOX} = \beta_{CNN}$</td>
<td>9.53</td>
<td>$p &lt; .01$</td>
</tr>
<tr>
<td>Race relations</td>
<td>$H_0: \beta_{FOX} = \beta_{CNN}$</td>
<td>11.90</td>
<td>$p &lt; .01$</td>
</tr>
<tr>
<td>Iraq</td>
<td>$H_0: \beta_{FOX} = \beta_{CNN}$</td>
<td>11.80</td>
<td>$p &lt; .01$</td>
</tr>
<tr>
<td><strong>Soft news</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports</td>
<td>$H_0: \beta_{FOX} = \beta_{CNN}$</td>
<td>3.11</td>
<td>n.s.</td>
</tr>
<tr>
<td>Crime</td>
<td>$H_0: \beta_{FOX} = \beta_{NPR}$</td>
<td>9.02</td>
<td>$p &lt; .01$</td>
</tr>
<tr>
<td>Travel</td>
<td>$H_0: \beta_{CNN} = \beta_{FOX}$</td>
<td>.38</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

*Note:* Test statistics concern the differences between the largest and second largest coefficient estimates in each subject matter category.
The report was around 10%. As for the Democrats, they were just as averse to Fox as the Republicans were to CNN and NPR. But unlike the Republicans, they did not seem to converge on a particular news source. Although the CNN and NPR labels boosted interest among Democrats, the effects appeared somewhat weak.

Next, we proceed to a more rigorous test of the polarization hypotheses based on individual rather than story-level data. More specifically, we created interaction terms between the respondent’s self-reported political ideology 11 (IDE) and the Fox, NPR, CNN, and BBC labels. 12 Note that no individual attributes are included in the vector of explanatory variables by themselves. As explained earlier, this is because the respondent’s own characteristics remain the same regardless of the choice he makes, so they cannot—on their own—be a reason for choosing one news story over another; it is only when they are interacted with news story attributes (or choice-specific attributes such as the source labels) that they can influence the respondent’s choice.

Our results demonstrate that the divide in news selection between conservatives and liberals is considerable. As shown in Table 3, in every subject matter dimension but one, the FOX × IDE interaction was positive, 13 and four of the coefficients were statistically significant at the $p = .01$ level. These findings suggest that the Fox label attracted a disproportionately large number of conservatives when holding the content of news stories constant. In sharp contrast, all the coefficient estimates for other news outlets (i.e., CNN, NPR, and BBC) were negative, and 10 of 18 were statistically significant.

As a further test of polarization in news selection, we conducted Wald tests of the difference between the most and the second-most positive coefficient estimates in each subject matter dimension (see the three middle columns in Table 4). After Fox, conservatives preferred NPR in politics, BBC in race relations and Iraq, and CNN in the three soft news subjects (i.e., sports, crime, and travel). As shown in Table 4, the null hypotheses were clearly rejected ($p < .01$), meaning that the difference between

![Figure 1 Effects of story label on story selection.](image-url)
Table 3: Antecedents of News Selection: Conditional Logit Estimates

<table>
<thead>
<tr>
<th></th>
<th>Hard News Dimension</th>
<th></th>
<th></th>
<th></th>
<th>Soft News Dimension</th>
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<tr>
<td></td>
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<td>Iraq</td>
<td></td>
<td>Sports</td>
<td>Crime</td>
<td>Travel</td>
<td></td>
</tr>
<tr>
<td>FOX</td>
<td>-2.537 (.769)**</td>
<td>.214 (.729)</td>
<td>-.435 (.803)</td>
<td></td>
<td>-3.06 (.672)</td>
<td>1.344 (.850)</td>
<td>.142 (.725)</td>
<td></td>
</tr>
<tr>
<td>NPR</td>
<td>-3.143 (.849)**</td>
<td>-.608 (.836)</td>
<td>-1.101 (.887)</td>
<td></td>
<td>-1.518 (.938)</td>
<td>1.130 (.866)</td>
<td>1.736 (.666)**</td>
<td></td>
</tr>
<tr>
<td>CNN</td>
<td>-3.079 (.841)**</td>
<td>.282 (.791)</td>
<td>-.948 (.850)</td>
<td></td>
<td>-.524 (.759)</td>
<td>1.770 (.866)**</td>
<td>1.850 (.647)**</td>
<td></td>
</tr>
<tr>
<td>BBC</td>
<td>-2.208 (.816)**</td>
<td>.633 (.775)</td>
<td>-.328 (.840)</td>
<td></td>
<td>.599 (.798)</td>
<td>1.222 (.883)</td>
<td>1.249 (.708)</td>
<td></td>
</tr>
<tr>
<td>ABST</td>
<td>-.972 (.228)**</td>
<td>-.095 (.165)</td>
<td>-.464 (.187)*</td>
<td></td>
<td>1.917 (.133)**</td>
<td>-.123 (.167)</td>
<td>1.046 (.130)**</td>
<td></td>
</tr>
<tr>
<td>FOX × PI</td>
<td>.897 (.218)**</td>
<td>.163 (.197)</td>
<td>.314 (.221)</td>
<td></td>
<td>.182 (.180)</td>
<td>-.227 (.227)</td>
<td>-.017 (.194)</td>
<td></td>
</tr>
<tr>
<td>CNN × PI</td>
<td>1.025 (.237)**</td>
<td>.081 (.215)</td>
<td>.453 (.233)*</td>
<td></td>
<td>.255 (.203)</td>
<td>-.386 (.232)</td>
<td>-.385 (.175)*</td>
<td></td>
</tr>
<tr>
<td>NPR × PI</td>
<td>1.029 (.239)**</td>
<td>.329 (.226)</td>
<td>.419 (.243)</td>
<td></td>
<td>.444 (.250)</td>
<td>-.192 (.237)</td>
<td>-.375 (.181)*</td>
<td></td>
</tr>
<tr>
<td>BBC × PI</td>
<td>.727 (.232)**</td>
<td>-.022 (.212)</td>
<td>.229 (.232)</td>
<td></td>
<td>-.245 (.223)</td>
<td>-.222 (.236)</td>
<td>-.268 (.192)</td>
<td></td>
</tr>
<tr>
<td>FOX × IDE</td>
<td>.183 (.138)</td>
<td>-.051 (.105)</td>
<td>.514 (.119)**</td>
<td></td>
<td>.498 (.089)**</td>
<td>.461 (.100)**</td>
<td>.414 (.094)**</td>
<td></td>
</tr>
<tr>
<td>CNN × IDE</td>
<td>-.466 (.140)**</td>
<td>-.633 (.111)**</td>
<td>-.181 (.118)</td>
<td></td>
<td>-.141 (.086)</td>
<td>-.035 (.101)</td>
<td>-.270 (.082)**</td>
<td></td>
</tr>
<tr>
<td>NPR × IDE</td>
<td>-.456 (.141)**</td>
<td>-.693 (.111)**</td>
<td>-.242 (.123)*</td>
<td></td>
<td>-.163 (.097)</td>
<td>-.157 (.100)</td>
<td>-.346 (.085)**</td>
<td></td>
</tr>
<tr>
<td>BBC × IDE</td>
<td>-.551 (.143)**</td>
<td>-.595 (.111)**</td>
<td>-.177 (.121)</td>
<td></td>
<td>-.172 (.116)</td>
<td>-.101 (.100)</td>
<td>-.397 (.088)**</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>978</td>
<td>978</td>
<td>978</td>
<td></td>
<td>978</td>
<td>978</td>
<td>978</td>
<td></td>
</tr>
<tr>
<td>Likelihood ratio $\chi^2$</td>
<td>300.05**</td>
<td>162.06**</td>
<td>254.71**</td>
<td></td>
<td>778.22**</td>
<td>129.42**</td>
<td>223.41**</td>
<td></td>
</tr>
<tr>
<td>Pseudo $R^2$</td>
<td>.095</td>
<td>.052</td>
<td>.081</td>
<td></td>
<td>.247</td>
<td>.041</td>
<td>.071</td>
<td></td>
</tr>
</tbody>
</table>

Note: Coefficient estimates show deviations in news selection rates from the baseline in labeled conditions. IDE = ideology, PI = political interest. *$p < .05$. **$p < .01$. 
Table 4 Formal Tests of Polarization: Wald Test Statistics

<table>
<thead>
<tr>
<th></th>
<th>Interactions with Political Interest</th>
<th>Interactions with Ideology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Null Hypothesis</td>
<td>$\chi^2$</td>
</tr>
<tr>
<td>Hard news</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Politics</td>
<td>$\beta_{NPR} = \beta_{BBC}$</td>
<td>2.33</td>
</tr>
<tr>
<td>Race relations</td>
<td>$\beta_{NPR} = \beta_{BBC}$</td>
<td>3.11</td>
</tr>
<tr>
<td>Iraq</td>
<td>$\beta_{CNN} = \beta_{BBC}$</td>
<td>1.44</td>
</tr>
<tr>
<td>Soft news</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports</td>
<td>$\beta_{NPR} = \beta_{BBC}$</td>
<td>4.73</td>
</tr>
<tr>
<td>Crime</td>
<td>$\beta_{CNN} = \beta_{NPR}$</td>
<td>1.07</td>
</tr>
<tr>
<td>Travel</td>
<td>$\beta_{FOX} = \beta_{CNN}$</td>
<td>3.06</td>
</tr>
</tbody>
</table>

*Fox versus non-Fox organization with the most (least) positive (negative) coefficient estimates.

bThe most (least) positive (negative) coefficient estimate versus the second- most (least) positive (negative) coefficient estimate among non-Fox channels.
Fox and the second-most selected source were consistently significant for conservatives, thus adding to the case for ideology-based polarization in news selection.

It is worth noting that ideological polarization occurred in all six subject areas. As expected, the test statistics shown in Table 4 reveal that the divide between conservatives and liberals proved considerably larger in the hard news dimension (i.e., politics, race relations, and the war in Iraq) when compared with the soft news categories (i.e., sports, crime, and travel). Nonetheless, a considerable ideological divide was apparent even in exposure to soft news. Conservatives prefer Fox even when reading about vacation destinations, whereas liberals avoid Fox when the focus is sports. These findings illustrate the pervasiveness of the ideological divide in news selection.

For purposes of comparison, we also tested the equivalent null hypotheses concerning interactions between political interest and the four news outlet dummies (see the first three columns in Table 4). Here, we applied much looser criteria (for the purpose of finding any traces of division between the more and the less interested) by testing the difference between the most and the least positive coefficient estimates. We detected no consistent pattern of polarization by interest; the null hypothesis could be rejected in only one (sports) of the six subject matter dimensions. These contrasting results suggest that our findings of the ideological divide in news selection do not stem from some unknown methodological artifact.

It is also worth noting that liberals did not converge on a single source; instead they divide their selections between the non-Fox News channels making little distinction among them. To pursue this question further, we again conducted Wald tests to detect any significant differences between non-Fox News channels by choosing a pair of non-Fox News organizations with the largest difference among liberals in terms of the point estimates (see the last three columns in Table 4). As shown in Table 4, none of the tests revealed any statistically significant differences; liberals have a strong aversion to Fox, but no particular affinity for any of the non-Fox sources.

### Table 5 Polarization Among the More Interested: Likelihood Ratio Tests

<table>
<thead>
<tr>
<th></th>
<th>LR $\chi^2$</th>
<th>$p$ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard news</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Politics</td>
<td>5.23</td>
<td>.265</td>
</tr>
<tr>
<td>Race relations</td>
<td>10.31</td>
<td>.036</td>
</tr>
<tr>
<td>Iraq</td>
<td>11.96</td>
<td>.018</td>
</tr>
<tr>
<td>Soft news</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports</td>
<td>.89</td>
<td>.926</td>
</tr>
<tr>
<td>Crime</td>
<td>4.18</td>
<td>.382</td>
</tr>
<tr>
<td>Travel</td>
<td>5.42</td>
<td>.247</td>
</tr>
</tbody>
</table>

**Note:** Test statistics concern the significance of the increase in the model’s log-likelihood after including four 3-way interaction terms between the channel, ideology, and political interest.
Are more involved partisans more selective?

Next, we turn to testing a higher order version of the polarization hypothesis, namely, that polarization is intensified among the more engaged strata. As noted earlier, some contend that polarization is limited to activists, whereas the general public remains centrist (e.g., Fiorina et al., 2005). We tested this prediction by creating 3-way interaction terms between respondents’ political interest, ideology, and the four news outlet dummies. The significance of these interactions tells us whether polarization occurs at a differential rate for more and less interested partisans. Although most of the 3-way interaction terms proved nonsignificant, at least in the case of two hard news subjects (politics and the war in Iraq), the interactions proved significant. For example, in the case of news stories about politics, the more interested conservatives (liberals) avoided (preferred) CNN ($b = -2.372, p < .05$). Similarly, the more involved conservatives (liberals) preferred (avoided) Fox News ($b = .348, p < .05$) in the case of the Iraq war.

We also tested the statistical significance of the four 3-way interaction terms as a block in each topical dimension. That is, for each subject matter category, we tested the significance of the differences in the likelihood of the full and reduced models before and after including all four 3-way interaction terms. As shown in Table 5, the results provide at least partial support for the “greater polarization among activists” hypothesis. Although the increase in the likelihood ratio was marginal in four of the six topical dimensions, it proved statistically significant in the cases of more contentious topics such as race relations and the war in Iraq. These findings suggest that the polarization pattern is especially pronounced among the more interested, at least when the media cover controversial issues. When the media turn to relatively nonpolitical subjects, more and less engaged conservatives and liberals are equally divided in their news choices.

Conclusion

No matter how we sliced the data—either at the level of individuals or news stories—the results demonstrate that Fox News is the dominant news source for conservatives (the results presented above are equally strong if we substitute party identification for ideology). Although Fox’s brand advantage for conservatives is especially strong when the news deals with politicized subjects, it also applies to subject matter typically not associated with partisan division. Indeed, the most surprising of our findings is the substantial level of polarization in exposure to soft news.

The emergence of Fox News as the cable ratings leader suggests that in a competitive market, politically slanted news programming allows a new organization to create a niche for itself. Recent theoretical work in economics shows that under competition and diversity of opinion, newspapers will provide content that is more biased: “Competition forces newspapers to cater to the prejudices of their readers, and greater competition typically results in more aggressive catering to such prejudices as competitors strive to divide the market” (Mullainathan & Schleifer, 2005, p. 18).
Thus, as the audience become polarized over matters of politics and public policy, rational media owners stand to gain market share by injecting more rather than less political bias into the news (Gentzkow & Shapiro, 2006). The recent experience of MSNBC is revealing. The network’s most popular evening *Countdown with Keith Olbermann*—conveys an unabashedly anti-Bush Administration perspective. The network now plans to “to showcase its nighttime lineup as a welcome haven for viewers of a similar mind” (Steinberg, 2007). When the audience is polarized, “news with an edge” makes for market success.

A further implication of voters’ increased exposure to one-sided news coverage is an “echo chamber” effect—the news serves to reinforce existing beliefs and attitudes. During periods of Republican governance, for instance, criticisms of the incumbent administration conveyed by mainstream news organizations can be dismissed as evidence of “liberal bias” thus further increasing partisan polarization. After the revelations in the news media that the Bush Administration’s prewar intelligence claims were erroneous, Democrats (when asked whether the U.S. had found weapons of mass destruction (WMD) in Iraq), switched to the “no WMD” response by a factor of more than 30%. Independents also switched, by more than 10 percentage points. But Republicans remained steadfast in their beliefs affirming the presence of WMD—between June 2003 and October 2004 the percentage of Republicans acknowledging that the United States had not found WMD increased by less than five points (Iyengar & McGrady, 2007; Kull, Ramsay, & Lewis, 2003).

The importance of source cues to news exposure and the resulting “reinforcement of priors” effect will only grow as technology diffuses and consumers increasingly customize their online news menus. Our results are consistent with the argument that Internet technology will, in practice, narrow rather than widen users’ political horizons. Although an infinite variety of information is available, individuals may well limit their exposure to news or sources that they expect to find agreeable. Over time, this behavior is likely to become habituated so that users turn to their preferred sources automatically no matter what the subject matter. The observed behavior of Republicans in this study may be attributed, in part, to their 20 years of experience with a favored news provider, thus reinforcing their information-seeking behavior. As Democrats and politically inclined independents also begin to establish media preferences, consumers will be able to “wall themselves off from topics and opinions that they would prefer to avoid” (Sunstein, 2001, pp. 201–202). The end result is likely to be a less informed and more polarized electorate.

Selective exposure is especially likely in the new media environment because of information overload. New forms of communication not only deliver much larger chunks of campaign information, but they also facilitate consumers’ ability to attend to the information selectively. The audience for conventional news programs is hard pressed to avoid coverage of the candidate they dislike because news reports typically assign equal coverage to each. But when browsing the web, users can filter or search through masses of text more easily. Thus, as candidates, interest groups, and voters all converge on the Internet, the possibility of selective exposure to political
information increases. As we have found, people prefer to encounter information that they find supportive or consistent with their existing beliefs.

Notes

1 More recent work has confirmed this pattern. Studies using a dynamic information board designed to mimic the flow of information during a presidential campaign, for instance, found that voters on average learned slightly more about the in-party than the out-party candidate (Lau & Redlawsk, 2006; also see Bartlett et al., 1974).

2 Of course, it is possible that there are also nonpolitical reasons for the competitive edge enjoyed by the Fox Network.

3 The target sample is drawn from the 2004 American Community Study, conducted by the U.S. Bureau of the Census, which is a probability sample of size 1,194,354 with a response rate of 93.1 percent.

4 The fact that the Polimetrix (PMX) sample was matched according to a set of demographic characteristics does not imply that the samples are unbiased. All sampling modes are characterized by different forms of bias and opt-in Internet panels are no exception. Systematic comparisons of PMX matched samples with RDD (telephone) samples and face-to-face interviews indicate trivial differences between the telephone and online modes, but substantial divergences from the face-to-face mode (Hill, Lo, Vavreck, & Zaller, 2007; Malhotra & Krosnick, 2007). In general, the online samples appear biased in the direction of politically attentive voters. For instance, in comparison with National Election Study respondents (interviewed face-to-face), PMX respondents were more likely by eight percentage points to correctly identify the Vice President of the U.S.

5 Thus, in practice, MNL estimates a set of \( J - 1 \) coefficients \( (\beta_j) \) for each individual-specific explanatory variable. The estimated coefficients show the effects of the \( X \) variables on the probability of choosing each alternative relative to one alternative that serves as a common benchmark.

6 If we were to employ the basic MNL model, control group participants would have to be dropped from our analysis. This is because the presence of a logo is an alternative-specific attribute, and not everyone encountered these “unlabeled” alternatives. For clarification, in this case, the baseline category would have to be set as one of the alternatives labeled as either Fox News, CNN, NPR, BBC, or “Can’t say,” where those who encountered unlabeled news stories (i.e., control group participants) cannot be included in the analysis.

7 When the conditional logit model does not include choice characteristics, the likelihood function is equivalent to that of the MNL model, producing the same coefficients and standard errors.

8 Technically we can only justify using the conditional logit model if we can make the independence of irrelevant alternatives (IIA) assumption (Alvarez & Nagler, 1996; Greene, 2003). However, when having five choices, one has to draw from a four-dimensional multivariate normal, and the computation burden becomes excessive in most cases (Alvarez & Nagler, 1996). Accordingly, we believe that our current analytical strategy seems most feasible since often the IIA property is neither relevant nor particularly restrictive (Dow & Endersby, 2004).
As Alvarez and Nagler (1996) note (p. 69), the superiority of the conditional logit model over multinomial logit is not a new notion in the literature (Agresti, 1990; Hoffman & Duncan, 1988).

For testing for the differences between coefficients, Wald tests (Fox, 1997; Lehmann, 1959) were conducted.

We asked, “When it comes to politics, do you usually think of yourself as liberal, slightly liberal, moderate or middle of the road, slightly conservative, conservative, or haven’t you thought much about this?” Responses to this question were rescaled to range between −2 to 2 yielding a 5-point ideology scale. The results are consistent when we substitute party affiliation for ideology. Instead of creating separate dummy variables for conservatives and liberals, we used an ordered 3-point ideology scale because the relationship between ideology and channel selection proved linear (Figure 1).

We acknowledge that the interaction effects of ideology may represent effects of unknown variables that are associated with ideology. In order to reduce for possibility of confounded variables, we reran the analysis controlling for two major predictors of ideology—age and education. Although not shown here, the results were unchanged, and these results are available from the authors.

From Figure 1, the relationship between partisan preference and channel selection seemed more or less linear. Accordingly, for parsimony, we did not create separate dummy variables for conservatives and liberals. Instead, we included a single scale of the respondent’s political ideology and its interactions with the four news organization dummies.

For example, we chose the NPR–BBC pair in the case of politics; similarly, we chose the CNN–BBC pair for sports news.

References


Los Medios Rojos, los Medios Azules: La Evidencia de la Selectividad Ideológica en el Uso de los Medios

Shanto Iyengar
Stanford University
Kyu S. Hahn
Yonsei University and University of California, Los Angeles

Resumen
Mostramos que la demanda de noticias varía con la percepción de la afinidad con las organizaciones de noticias en las preferencias políticas del consumidor. En un ambiente experimental, conservadores y Republicanos prefirieron leer reportes de noticias atribuidos a la cadena de noticias Fox y evitaron las noticias de CNN y NPR. Los Demócratas y liberales exhibieron el síndrome exactamente opuesto – dividiendo su atención igualmente entre CNN y NPR, pero evitando las noticias de la cadena Fox. Esta pauta selectiva de exposición basada en la afinidad partidaria es sostenida no solo con respecto a la cobertura de noticias de hechos controversiales, sino también con respecto a materias relativamente “blandas” tales como el crimen y el viaje. La tendencia a seleccionar noticias basadas en un acuerdo anticipado fue aumentada también entre los partidarios políticamente más comprometidos. En general, los resultados sugieren que la mayor proliferación de los nuevos medios y las opciones mejoradas de los medios pueden contribuir a una mayor polarización de las audiencias de noticias.
摘要

我们发现新闻需求会随着新闻机构对观众的政治倾向的感知性靠近程度而变化。在一个实验场景中，保守派和共和党倾向阅读源自 Fox News 的新闻报道，而避免阅读来自 CNN 和 NPR 的新闻。民主党和自由派则展示了相反的现象：他们将注意力平均分布在 CNN 和 NPR 方面，而避免接触 Fox News。这个基于党派倾向的选择性暴露模式不仅出现在有争议性议题的报道方面，也出现于有关诸如犯罪和旅游等相对温和性议题的报道方面。在政治参与程度更深的人群当中，根据所预期的政治认同度而选择新闻的倾向也得到了加强。总的来说，这些结果表明，新媒体的进一步发展和媒体选择的进一步增强可能导致新闻观众进一步的两极分化。
붉은 미디어, 파란 미디어: 미디어 사용에 있어서의 이념적 선택의 증거

Shanto Iyengar
Stanford University
Kyu S. Hahn
Yonsei University and University of California, Los Angeles

요약

우리는 뉴스에 대한 요구는 소비자의 정치적 성향에 대한 뉴스기관의 인지된 친화관계에 따라 다양하다는 것을 보여주었다. 실험적 상황에서, 보수적인 공화당원들은 Fox뉴스와 같은 속성의 뉴스를 좋아하는 반면, CNN과 NPR뉴스를 기피하려는 성향이 있다. 민주당원들과 자유주의자들은 정반대의 경향을 보여주었다. 즉, 그들의 관심을 동등한 정도로 CNN과 NPR에 두고 있는 반면, FOX뉴스는 회피하였다. 정당적 편향에 근거한 이러한 선택적 노출의 형태는 논쟁적인 이슈들의 뉴스 보도에서만 나타나는 것이 아니라, 범죄나 여행 등 비교적 연상 뉴스들에서도 나타났다. 반대적인 동의에 근거한 뉴스 선택 성향은 또 정치적으로 더욱 연루된 당원들 사이에 강하게 나타났다. 전체적으로, 이러한 결과들은 뉴스 미디어의 확산과 향상된 미디어 선택들은 뉴스 청취자들의 극화를 더욱 촉진하는데 기여할 것이라는 것을 예측할 수 있게 해 주고 있다.