Effects of Election News Coverage: How Visibility and Tone Influence Party Choice

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Effects of Election News Coverage: How Visibility and Tone Influence Party Choice

DAVID NICOLAS HOPMANN, RENS VLIEGENTHART, CLAES DE VREESE, and ERIK ALBÆK

Previous research has shown that a party’s election results can depend on visibility and tone in the media. Using daily content data from the major news bulletins and daily survey data from the 2007 national election campaign in Denmark (N = 5,083), our analysis improves upon two central aspects of this earlier research. First, the effects on vote choice of the parties’ visibility and tone in the media are studied concurrently in the same model. Second, a distinction is made between the effects of direct exposure to specific news content and the effects of the cumulative information environment created by the media. Overall, it is found that the more visible and the more positive the tone toward a given party is, the more voters are inclined to vote for this party. The effects are primarily effects of the information environment, not effects of direct exposure, though undecided voters are also directly affected. In the discussion, central conditions for the strength of media effects are identified.

Keywords public opinion, media effects, elections, surveys, content analysis

Most voters are informed about politics through the media (Schulz, 1994), especially television (Mazzoleni & Schulz, 1999). This fact is notably relevant when it comes to political parties, since the vast majority of voters hear and see the candidates only in the media and not in person. Hence, there are obvious reasons to assume that the media has an effect on voters’ perception of parties and their candidates and whether, ultimately, they vote for the candidates of one party or another (Beck, Dalton, Greene, & Huckfeldt, 2002; Mendelsohn, 1996; Schulz; Wattenberg & Brians, 1999). Despite this insight, most studies of the impact of media deal with the agenda-setting, framing, and priming effects of issues in the news (McLeod, Kosicki, & McLeod, 2002; Scheufele, 2000; Weaver, 1996), not with the effects of how parties are represented. This focus of past research is all the more surprising in light of the very careful attention paid to questions of stopwatch balance of politicians’ media appearances in many countries (e.g., Gunter, 1997; Starkey, 2007).

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Studies have shown that the media can have direct effects on political opinions through direct exposure to the content of a particular broadcast or newspaper article (e.g., Norris, Curtice, Sanders, Scammell, & Semetko, 1999, pp. 130–143). Additionally, indirect effects of media coverage to which an individual is not directly exposed can be expected through, for example, interpersonal communication (Boomgaarden & Vliegenthart, 2009; Mutz, 1998). These indirect effects can be captured using an aggregate measure of the characteristics of media coverage and the information it provides in a certain context (for example, a country). This aggregation has been coined the “information environment” by Jerit, Barabas, and Bolsen (2006).

We are not aware of any previous study that includes measures for the effects of both direct media exposure and the information environment when it comes to parties in the news. The present study advances earlier research by analyzing both direct media effects and the information environment created by the media. Rather than examining the effects of how single candidates, such as party leaders, are depicted in the media, we investigate the overall effects on party choice of how parties are depicted in television news during an election campaign. In particular, drawing on a content analysis of daily election news coverage and daily opinion polls, we examine whether the portrayal of parties in television news coverage influenced party preferences in the Danish national elections of November 2007.

Visibility and Tone

When analyzing the effects that direct exposure and the information environment around parties have on how people actually vote, two aspects are of major importance: the visibility of parties in the media and the media’s tone toward the parties (Schulz, 1994, p. 323; Walgrave & de Swert, 2004, p. 481). Both are included in this study.

Visibility of Parties in the News

Although most studies on agenda setting deal with political issues, one can also think of the salience of parties and their representatives in a similar fashion; that is, as Weaver (1996) notes, they can, just like issues, be “ranked in terms of how much coverage they receive” (p. 213). Weaver’s remark is notably relevant in those (Western) democracies where not only 2 or 3, but 5 or sometimes even 10, parties compete for the media’s and, ultimately, the voters’ attention. This context implies that voters can choose between a number of parties that do not necessarily differ much in their ideology and issue stances. The visibility of politicians is all the more important to study when bearing in mind that irrespective of whether a voter bases his or her vote on issue positions—which primarily are presented by a party’s candidates (Oegema & Kleinnijenhuis, 2000, p. 58)—or on the candidates’ personal traits, the candidates must be visible to the voter.

That said, despite the attention paid to the visibility of political actors when it comes to political bias in the media, only a few studies investigate whether mere visibility of parties and their candidates has any impact on voting. One exception is the study by Semetko and Schoenbach (1994), which found that media “content data provide evidence to suggest that even slight changes in the mere visibility of political actors could be the most important content characteristics for explaining the direction of information exposure effects on party evaluations” (p. 113). Similar results are found in a study by Oegema and Kleinnijenhuis (2000) on the Dutch national elections of 1998: greater media visibility of party leaders increased the likelihood that people voted for that party’s candidate. However, in an
experiment conducted during the British national elections in 1997, Norris et al. (1999, pp. 130–143) systematically varied the visibility of the parties and found no effect.

The three studies above have some limitations. The first two studies matched respondents to news contents from media outlets consumed habitually; more detailed information on exposure to media content was not collected. The third study did not investigate effects of media coverage over a longer time period. By contrast, in our study the media effects of visibility of parties are analyzed as the effects of direct exposure and the information environment. Guided by the majority of the cited studies, one would expect a positive impact of visibility on party preferences. This assumption also seems reasonable in our case: a recent Danish study on preferential votes for single candidates found that certain candidates can have an impact on the overall election result of a party (Thomsen & Elklit, 2007, p. 325). That is, after having decided to vote for the left or right bloc, some voters tend to opt for politicians whom they “know” within this bloc, presumably through the media. And since politicians represent parties, this finding implies that voters tend to vote for parties that they also have come to “know” through the media. In sum, we expect that the more present a party is in the news, the more voters will vote for that party—as an effect of both direct exposure (H1a) and the information environment (H1b).

**Tone of the News Toward Politicians**

Obviously, parties can be presented in the media in a positive or a negative fashion. Therefore, one also needs to consider the tone of the parties’ media presence. For most citizens—who do not have or make use of the possibility of meeting party representatives in person and, hence, have nowhere else to go than the media—the media’s tone must be assumed to be an important cue as to whether one should vote for a party or not. This dynamic has been spelled out by, for example, Zaller (1992, 1996), who demonstrated how the tone of elite and news messages, under certain conditions, can provide an information flow affecting voters’ attitudes and voting behavior.

In the earlier-mentioned experiment conducted by Norris et al. (1999, pp. 130–143), results indicate that a positive tone toward particular parties leads voters to have more positive evaluations of those parties. Similar results are found in a study on the Dutch elections of 2003: “Although issue news is often regarded as the most important news type . . . news on success and failures . . . appeared to be the foremost important success factor” (Kleinnijenhuis, van Hoof, Oegema, & de Ridder, 2007, p. 381). In addition, matching answers from a daily cross-sectional survey with daily media content in Canada, Fournier et al. (2004) show that the media’s tone toward parties has an effect on those voters who decide upon their party choice only during the campaign, that is, voters who have no strong party identification (see below). Moreover, a long-term German study covering both election and routine periods finds that the tone of evaluations in the media correlates with public contentment or discontentment with party leaders (Brettschneider, 2002, p. 267).

Summing up, the tone toward, and not only the visibility of, parties in the media seems to be important. Hence, based on earlier results, we expect that the more positive the tone toward a party in the news, the more voters will vote for that party—as an effect of both direct exposure (H2a) and the information environment (H2b).

**Effects and Vote Decisions**

Media can affect voters in different ways. Campaigns and media messages can mobilize or demobilize (e.g., Aarts & Semetko, 2003; Hillygus, 2005; Schuck & de Vreese,
reinforce partisans’ vote intentions (e.g., Ansolabehere & Iyengar, 1995), or persuade undecided voters or independents on how to vote (e.g., Hillygus & Jackman, 2003). Whether voters are decided or undecided about how to vote is of particular importance when analyzing media effects on vote choice: undecided voters are expected to be more sensitive to media influences than decided voters (Chaffee & Rimal, 1996). In many Western countries, the volatility of the electorate and thus the number of undecided voters has increased due to trends such as declining partisanship (e.g., Fournier et al., 2004; Hansen, Slothuus, & de Vreese, 2007).

In Chaffee and Rimal’s (1996) review of findings on the timing of voting decision, television coverage is mentioned as an important source. However, only general media consumption—and not specific media content—is discussed. In a study analyzing the effects of media content on vote choice, Fournier et al. (2004) show that Canadian voters who decide upon their party choice during the campaign do not have a systematically different background from voters who have decided upon their party choice prior to the campaign. However, the first group, but not the second, is influenced by the media’s tone toward parties during the campaign. The second group consists of voters who “are already strongly committed to a particular party or candidate, and so they are not easily persuaded to change their mind” (Fournier et al., p. 675). Consequently, we also need to investigate how parties’ visibility in the media, as well as the media’s tone toward those parties, affects undecided voters. As an undecided voter by definition is in doubt about whom to vote for, we assume that media effects are larger for this subgroup of the electorate (H3).

Direct Exposure Versus Environmental Media Effects

Ultimately, many media effects studies are aimed at explaining vote choice (McLeod et al., 2002). Here, not only the direct effects of media coverage that an individual is exposed to have to be taken into consideration, but also indirect effects of media coverage can be expected. These indirect effects stem from information that is transmitted to the individual indirectly, for example, through interpersonal communication. In a similar vein, Mutz (1998) suggested that perceptions of opinions, not necessarily stemming from direct media exposure, may affect individuals’ personal opinions. Considering these indirect effects acknowledges the fact that the individual is embedded in a wider context and recognizes the role of neighborhoods, workplaces, and family in filtering and transmitting information (see also Jerit et al., 2006, p. 269). Colleagues, family, or friends might in conversations or discussions refer to things they saw on television or read on the Internet during the preceding days, a classic view of the two-step flow model and subsequent research (e.g., Scheufele, 2002; Schmitt-Beck, 2003; de Vreese & Boomgaarden, 2006). In that way, media content might spread and reach individuals only indirectly and after a certain period in time.

To fully assess which information an individual ultimately received through such indirect paths is probably impossible to assess, at least in a survey design. However, Jerit and colleagues (2006) propose the information environment, which we consider a useful analytical concept to investigate those indirect media effects.1 This information environment entails an aggregation of media content characteristics (such as visibility and tone) of some of the widely used media sources within a certain context. These measures can be considered proxies for the information that is available in this context. Next to the expectation that both direct effects and the information environment matter for individuals’ vote choice, there are two additional reasons for this distinction.
The first reason relates to (normative) discussions about political balance in the news. In many democracies there is, as mentioned, an ongoing concern about maintaining a political balance in the media (Gunter, 1997; Starkey, 2007). In this context, it is important to determine what type of media output should be, and reasonably can be, balanced—whether within each news bulletin or, over a longer period of time, across bulletins (Gunter; Gurevitch & Blumler, 1982). If parties’ visibility and the tone toward them within single bulletins do not have a discernible impact on political opinions, then one does not need to worry about maintaining a balance with regard to parties in single news bulletins.

Second, there is a methodological question about what data are actually the most important to collect. Only rarely, for example, are survey data available on individuals’ exposure to specific media outlets at specific points in time. It would therefore be helpful to determine whether there are, in all cases, compelling reasons to collect such detailed information if one’s goal is to understand the impact of the media on political opinions. If our study showed that the media’s effects on political opinions are largely caused by the information environment instead of direct exposure, this finding would imply that not all research questions would have to be answered using detailed measures of individual media use (Slater, 2004). Moreover, it would also open an important line of new research aimed at disentangling the relative importance of environmental and individual effects.

In sum, our hypotheses on the effects of the visibility of politicians (H1) and the tone toward politicians (H2) on vote choice are formulated with respect to direct media effects (H1a and H2a) and environmental media effects (H1b and H2b).

The Case

On October 24, 2007, with a notice of 20 days, the then prime minister of Denmark, Anders Fogh Rasmussen, announced that the next national election would be held November 13. Prior to the announcement, the members of the minority coalition, the Liberals and the Conservatives, had poll ratings indicating that they would stay in office (which they eventually did). Their supporting party, the Danish People’s Party (DPP), was also doing well. At the same time, polls indicated that the main opposition party, the Social Democrats, did not have a good chance of taking over government power.

That said, the results of the campaign were far from certain. A few months prior to the election campaign, prominent members of the Social-Liberal and Conservative parties had founded a new party, the so-called New Alliance (NA), primarily in protest against the government’s close collaboration with the DDP. Although the NA did not campaign for a change in government, for quite some time it looked as if the parliamentary majority—the minority coalition with the DPP—was endangered. Also, the left wing of Danish politics was in motion: after 15 years, the Socialist People’s Party (SPP) had elected a new leader, and the polls pointed to a doubling of the party’s seats in parliament (and in the end, it was even more than that). At the same time, the socialist Red–Green Alliance was struggling for its seats in parliament, with opinion figures approaching the election threshold of 2%. In other words, the campaign of 2007 was anything but boring.

Over the last few decades, the proportion of Danish voters who switch parties and decide late during the campaign has not increased in the way that it has in many other countries (Hansen et al., 2007, p. 68). About one-third of all Danish voters decide upon their party choice during the election campaign, and half of them switch parties. Denmark can therefore be seen as a critical case: since in this study we are investigating the effects on party change (see below) of media coverage of the campaign, we would not expect to
find large effects in Denmark—most voters have already made up their mind before the campaign starts.

**Methods**

To capture changes in public opinion and voting, we conducted two studies: a survey and a media content analysis. The setup of the survey—a daily cross-sectional opinion poll in the weeks preceding the election—resembles the rolling cross-sectional design that was developed in the Canadian campaign context and applied in the National Annenberg Election Survey (NAES) in the United States (Romer, Kenski, Winneg, Adasiewicz, & Jamieson, 2006). It is especially suitable to capturing public opinion dynamics throughout a campaign. This survey enables us, moreover, to connect the opinion data to a content analysis of media coverage about the election campaign on an individual level.

The polling institute Capacent Epinion was commissioned to conduct computer-aided telephone interviews with 250 to 300 respondents each day who were randomly selected from public telephone books. In total, the data set contains 5,083 respondents interviewed at some point during the almost 3 weeks of the election campaign. Both the overall sample and the daily samples approximate the general population in terms of age, gender, and vote in the last national election. The response rate was 16.9% (AAPOR RR1). This modest response rate is largely due to the 1-day fieldwork period, which results in a low contact rate. Only 31.8% of the sampled respondents were successfully contacted, though of all respondents reached, 53% participated in the survey (AAPOR CR1).

The respondents were asked about their party preference in the ongoing campaign and past vote choice in 2005. If they answered that they were undecided about whom to vote for, they were asked a follow-up question regarding whether they nevertheless had a particular party in mind, that is, a party preference in the campaign. In the first part of the analysis—when studying all voters—we do not distinguish whether a party preference was mentioned in the first or in the follow-up question. In the second part of the analysis—when studying the differences between decided and undecided voters—we do distinguish between respondents who indicated a party preference in the first question (that is, decided voters) and those who indicated one only in the follow-up question (undecided voters who provided, when asked, a party preference).

Respondents were also asked about their media consumption. As they were interviewed during the early evening, they were asked which of the four major evening news bulletins on Danish television they had watched the night before (and not just habitually). We thus followed Slater’s (2004) suggestion to be as specific as possible when tapping respondents’ actual media exposure; they were asked about specific news bulletins at one recent, specific point in time.

Table 1 provides an overview of news watching in the sample (voters 18 years and older) as well as the television-meter figures published by Gallup (viewers 12 years and older). Comparing the two samples, slightly fewer than expected of the respondents in our survey answered that they had watched the late news bulletin on the commercial TV2. Nevertheless, assuming that the Gallup TV-meter figures represent a reasonable standard for assessing actual television watching, our sample appears to be generally representative of the population with respect to news watching. In total, about one-third of the respondents in our sample had seen at least one news broadcast, though it is also worth noting that voters who are undecided about their party choice watch news bulletins somewhat less often than the general population.
Table 1

Proportions watching the four major Danish television news bulletins each night

<table>
<thead>
<tr>
<th></th>
<th>Campaign sample</th>
<th>Gallup TV-meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR1 18.30</td>
<td>13 (9)</td>
<td>11</td>
</tr>
<tr>
<td>DR1 21.00</td>
<td>12 (8)</td>
<td>15</td>
</tr>
<tr>
<td>TV2 19.00</td>
<td>17 (11)</td>
<td>17</td>
</tr>
<tr>
<td>TV2 22.00</td>
<td>6 (5)</td>
<td>11</td>
</tr>
</tbody>
</table>

Note. Numbers for undecided voters are in parentheses.

Sources: The campaign sample is based on Capacent Epinion for the University of Southern Denmark (N = 5,083, 18 years and older; weighted data). The Gallup TV-meter sample is based on TNS Gallup (week 44 in 2007; N = 2,234, 12 years and older).

Media Content

The content of all four major news bulletins was analyzed for each day during the campaign. Television coverage was chosen because it is the most used source of political information (Lund, 2001; Mazzoleni & Schulz, 1999).

In this study, we are interested in the media coverage of parties, not single candidates such as party leaders. Since parties in most cases obviously are represented in the media by their candidates, we coded not only the coverage of parties (e.g., “party X proposes to . . .”), but also the appearances of all party representatives. For all news stories referring to the campaign or at least one Danish party or politician, all actors appearing in a news story were coded (1,367 appearances of parties and politicians included in this study were coded), and the party affiliation of each politician was coded. Similar to Fournier et al. (2004), we also coded whether the depiction of a party or politician—as likely perceived from his or her perspective—had a neutral or mixed (coded as 0), negative (−1), or positive (1) tone.9

For each news bulletin, the visibility of each party was computed by adding up the number of actors from a given party. The data for parties’ visibility are relative to all other parties in a specific news bulletin. Similarly, the tone for a party in a news bulletin is the average tone for all actors from this party. Statistical tests revealed that there were substantial differences between the four news bulletins included in the study. Because all stations were reporting the same day’s news, the relative daily visibility of parties correlates moderately though far from perfectly; the tone toward the parties is virtually uncorrelated.10

To measure the effects of exposure to specific media content, each respondent is matched with the data (visibility and tone) for the news bulletin he or she reports to have watched. If a respondent indicated having watched two or more news bulletins, an average was computed. If a respondent reported not having watched the news, there obviously were no data to match.

To measure the information environment, we developed a variable summing media coverage during the last 5 days. Our four major news shows represent good variation and are almost exhaustive of television news offerings that are available in Denmark. The sum measure is therefore an appropriate proxy for the general information environment. First, we computed daily averages of party visibility and tone for all four news bulletins. Second, following previous research with similar models, at any specific point in time the data for the preceding 5 days were added using an exponential decay with a half-life of 1 day (cf. Domke et al., 1997, 1999). Note that these environmental data are attached to every respondent (as direct exposure is not required), whereas on the individual level media content is
matched only with those respondents who actually watched one or more of the coded news shows. We acknowledge that our measures of direct exposure and the information environment are not fully independent, but that’s only to be expected: Actual exposure is itself embedded within the information environment. Nevertheless, we consider our approach a substantial step forward in the direction of disentangling these two effects.\footnote{11}

**Analyses**

A list of all variables and their operationalization is shown in Table 2. As can be seen, we differentiate between several levels. Each respondent is included eight times in the data set, one time for each party included in this study. It consequently follows that each respondent normally will have a “0” seven times and a “1” once (if no party preference is reported, the respondent will have a “0” eight times). The dependent variable in the analysis is therefore a dummy variable—indicating for each party whether or not the respective respondent answered that she or he intends to vote or not for that party. Since these observations are nested within days (time), proximity to the election is included as a control, on the assumption that voters are more likely to be decided as election day nears.

Following previous research (Kleinnijenhuis et al., 2007, p. 374; Oegema & Kleinnijenhuis, 2000, p. 50), party choice in the previous national election (2005) is included in the model as an important predictor of current party choice. It is captured in a dummy variable for each party-respondent combination in a similar way to the dependent variable. As a control, we also included a party’s standing in the polls at $t - 1$ in the model. Larger parties, by their very definition, attract more voters (for a discussion on party size and voting behavior, see Hopmann, 2008).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Party preference</td>
<td>Preference of a respondent for a party (yes/no)</td>
</tr>
<tr>
<td>Individual media consumption</td>
<td></td>
</tr>
<tr>
<td>Partyvisibility</td>
<td>Proportion of all actors from a political party in a news bulletin seen yesterday</td>
</tr>
<tr>
<td>Partytone</td>
<td>Average tone toward all actors from a political party in a news bulletin seen yesterday</td>
</tr>
<tr>
<td>Information environment</td>
<td></td>
</tr>
<tr>
<td>Partyvisibility_env</td>
<td>Pooled visibility in all news bulletins of all political actors from a party decreasing exponentially (weighted by 1 for $t - 1$, 1/2 for $t - 2$, and progressively to 1/16 for $t - 5$)</td>
</tr>
<tr>
<td>Partytone_env</td>
<td>Pooled average tone in all news bulletins against all political actors from a party decreasing exponentially (weighted by 1 for $t - 1$, 1/2 for $t - 2$, and progressively to 1/16 for $t - 5$)</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
</tr>
<tr>
<td>Vote2005</td>
<td>Vote choice in the preceding national election (2005)</td>
</tr>
<tr>
<td>Pollenv</td>
<td>A party’s standing in the polls at $t - 1$</td>
</tr>
<tr>
<td>$T_{day}$</td>
<td>Day of the campaign</td>
</tr>
</tbody>
</table>

*Table 2*

Variables included in the analysis
As described in the next two sections, the analysis will proceed in two steps, and by computing logistic regressions with clustered standard errors (individuals being the clusters). This type of regression is widely applied, and the results are intuitively interpretable. In order to study the exact differences between decided and undecided voters, we also present a model that includes the relevant interactions of a dummy variable for undecided voters with the media content data. Finally, we conducted several checks of robustness to examine whether the results we found are to a considerable extent determined by the findings for one or more specific parties included in the analysis. While not all effects hold for all of the different individual parties, the differences between the parties are moderate, and the results are largely similar for each one of them—indicating that the results are not driven by one or two individual parties.

Results

Direct Exposure

In a first analytical step, a model with direct media effects only is computed. The empirical question is whether any explanatory power is gained by not including only control variables (Vote05, Pollenv, Tday). For those respondents who answered that they had watched one or more of the four major evening news bulletins, media variables for visibility of parties (Partyvisibility) and tone toward parties (Partytone) are added.

In both cases, significant results are found (see Table 3, Model 1). The mere visibility of parties does make a significant difference (Partyvisibility, \( p < .001 \), one-tailed). The odds ratio being higher than 1 indicates that the more present that a political party is in the news,

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds ratio</td>
<td>Z</td>
</tr>
<tr>
<td>Partyvisibility</td>
<td>1.008</td>
<td>3.90</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>Partytone</td>
<td>1.940</td>
<td>3.75</td>
</tr>
<tr>
<td></td>
<td>(0.343)</td>
<td></td>
</tr>
<tr>
<td>Partyvisibility_env</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Partytone_env</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Vote05</td>
<td>44.942</td>
<td>63.75</td>
</tr>
<tr>
<td></td>
<td>(2.682)</td>
<td></td>
</tr>
<tr>
<td>Pollenv</td>
<td>1.043</td>
<td>16.17</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td></td>
</tr>
<tr>
<td>Tday</td>
<td>1.013</td>
<td>5.45</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>Log pseudo-likelihood</td>
<td>(-8,298.172)</td>
<td>(-8,260.5051)</td>
</tr>
</tbody>
</table>

Note. \( N = 40,664 \). To correct for each respondent being included eight times in the data set, robust standard errors clustered around each respondent are computed (\( N = 5,083 \)). Data are weighted.
the more likely that respondents who watched the news are to answer that they would vote for that party. Also, the result for the media’s tone toward parties turns out to be significant (Party\text{tone}, p < .001, one-tailed). In sum, as media attention increases and the tone of the news coverage becomes more positive, the higher a party’s vote share becomes (supporting H1a and H2a).

The control variables that are included also point in the expected direction. With respect to prior vote choice, it is found that voters tend to stay with the party they voted for earlier. The odds ratio of prior vote is high, indicating that voters are very likely to vote for the same party as the last time. We also found that the proximity to election day (T_{day}) makes a difference: the closer to election day, the more voters will have decided for a party or at least have a particular party to vote for in mind. Finally, the results show that the electoral size of a party, as expected, has an impact (Poll_{env}). Overall, the model is better at predicting party preference than is a constrained model without the two variables for media consumption, and the improvement is statistically significant, $\chi^2(2) = 10.426$, $p = .005$.

**Direct Exposure and the News Environment**

In the next analytical step, two variables for the information environment are included (Table 3, Model 2). First, this model is significantly better at explaining party preference than both Model 1 as presented in the previous section, $\chi^2(2) = 37.667$, $p < .001$, and the model without any media variables, $\chi^2(4) = 48.093$, $p < .001$. Note also that all odds ratios point in the expected direction.

For the variables covering individual media consumption, it is again found that the visibility of parties (Party\text{visibility}) is significant ($p = .004$, one-tailed), but the tone toward parties (Party\text{tone}) is no longer significant ($p = .075$, one-tailed). The variables for the information environment—both parties’ visibility and the tone toward them—are clearly significant (supporting H1b and H2b). In other words, it seems predominantly to be the information environment that has an effect on voters. This finding will be elaborated in the Discussion section.

Summing up, in line with previous research analyzing the general tone in the media with aggregated (e.g., Domke et al., 1997) or individual opinion poll data (e.g., Fournier et al., 2004), it is found that the information environment has an influence on party preferences. In addition, direct exposure, but only visibility (not tone), remains influential on party preference.

**Undecided Voters**

Based on earlier findings, media effects are expected to be stronger on undecided voters than on decided voters (H3). The findings in Table 4 show the differences between these two groups. Model 2 (presented in Table 3) has been modified by adding interactions with a dummy variable for undecided voters and for media content; significant results therefore indicate differences between decided and undecided voters. The results demonstrate that undecided voters overall score lower on the probability to express a vote intention for any party. This result is plausible since this group of voters is more likely to refrain from expressing an intention at all. As can be seen from the interaction terms, one significant difference in media effects is found: the effect of being directly exposed to a party differs positively ($p < .001$), meaning it has a stronger influence on undecided voters than on decided ones. Since we included the interaction term in an uncentered form, the coefficient
Table 4
Logistic regression for media effects on party preference including a dummy variable for undecided voters (Coded as 1)

<table>
<thead>
<tr>
<th></th>
<th>Odds ratio</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partyvisibility</td>
<td>1.000</td>
<td>−.21</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>Partytone</td>
<td>1.312</td>
<td>1.42</td>
</tr>
<tr>
<td></td>
<td>(0.250)</td>
<td></td>
</tr>
<tr>
<td>Partyvisibility_env</td>
<td>1.030</td>
<td>3.92</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td></td>
</tr>
<tr>
<td>Partytone_env</td>
<td>5.000 × 10^6</td>
<td>5.73</td>
</tr>
<tr>
<td></td>
<td>(1.34 × 10^7)</td>
<td></td>
</tr>
<tr>
<td>Undecided voter</td>
<td>0.490</td>
<td>−4.32</td>
</tr>
<tr>
<td></td>
<td>(0.081)</td>
<td></td>
</tr>
<tr>
<td>Undecided</td>
<td>1.023</td>
<td>3.31</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td></td>
</tr>
<tr>
<td>Voter × Partyvisibility</td>
<td>1.039</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>(0.681)</td>
<td></td>
</tr>
<tr>
<td>Undecided</td>
<td>1.013</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td></td>
</tr>
<tr>
<td>Voter × Partyvisibility</td>
<td>783.107</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>(5225.940)</td>
<td></td>
</tr>
<tr>
<td>Voter × Partytone_env</td>
<td>47.258</td>
<td>63.15</td>
</tr>
<tr>
<td></td>
<td>(2.885)</td>
<td></td>
</tr>
<tr>
<td>Vote05</td>
<td>1.028</td>
<td>5.96</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td></td>
</tr>
<tr>
<td>Tday</td>
<td>1.010</td>
<td>4.59</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>Log</td>
<td>−8,213.5724</td>
<td></td>
</tr>
<tr>
<td>pseudo-likelihood</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note.** *N* = 40,664. To correct for each respondent being included eight times in the data set, robust standard errors clustered around each respondent are computed (*N* = 5,083). Data are weighted.

For the visibility variable (Partyvisibility) indicates the effect of visibility when the “undecided voter” dummy has a score of 0 (i.e., when the voter has decided upon his or her preference). The effect for decided voters turns out not to be significant (p = .833). In other words, undecided voters are affected by the visibility of parties through direct exposure, whereas decided voters are not. In the other cases, no significant differences between the two groups of voters are found.

To get a more precise picture of the differences, Figure 1 graphs the predicted probabilities for decided and undecided voters to have a party preference, as dependent upon the extent of parties’ visibility in the election news coverage while keeping all other variables at their means. As is depicted in the figure, the difference in effect of visibility is significant only in those instances where the respondent is especially heavily exposed to a particular party rather than others. When this direct exposure has a score of around 22% or more
of party appearances that a respondent saw in the news the previous evening, undecided voters are more strongly influenced than decided voters ($p < .01$). Overall, these results give considerable support to our third hypothesis.

**Discussion**

To sum up, through studying both direct exposure and environmental media effects during the 2007 Danish election campaign, it is found that both the visibility of and the tone toward parties have an influence on party choice. Overall, the cumulative information environment, both for parties’ visibility and tone, had an “across the board” effect on vote choice (supporting H2a and H2b). The findings for the effects of direct exposure are mixed: parties’ visibility does have an effect on undecided voters, but not on decided ones (partly supporting H1a); the tone toward parties has no effect at all (H2a is not supported). In sum, effects of direct media exposure are found only for undecided voters, which offers support for the third hypothesis. Given the stability in the compositions of the daily survey samples with respect to background characteristics of the respondents (see Note 3), we are confident that the findings presented here are not simply the result of random fluctuations in the samples (e.g., that on a day with many Social Democrats in the news there coincidentally happened to be many voters in the survey sample who decided to change their previous vote choice and opt for the Social Democrats this time).

The remaining questions are how to explain these findings substantially and whether they are generalizable to other democratic countries. Looking at the first question, one might wonder whether voters mindlessly vote for whomever they have seen (positively depicted) on their television screens. Relating the findings to other studies on voting behavior and media effects, however, this conclusion seems not very plausible for at least two reasons.

First, earlier research indicates that voters confronted with politicians and opinions they disagree with do not simply feel (socially) forced to adapt (consider, e.g., the “spiral of silence”). Rather, this confrontation can induce a process of consideration of why one disagrees with a certain point of view. This process of reasoning can then lead to a change of opinion (for a more elaborate presentation of this argument, see Hopmann, 2008; Mutz,
Effects of Election News Coverage

1998). Hence, the visibility of parties and the tone toward them can indirectly change voters’ opinions if this visibility leads to a process where they consider why they agree or disagree with certain positions.

Second, in the Danish context, extant research indicates that voters are primarily issue oriented (Nielsen, 2007). Though this result may appear to be *prima facie* contradictory, it is not. As mentioned, visibility is one necessary condition for being elected—irrespective of whether voters judge issue positions or candidates’ personal traits the highest when casting their ballot.17

That said, an important methodological problem to consider is the coding of the variables used in this study. First, concerning the dependent variable, it would have been preferable if a voter’s probability to vote for a party was available, which would make more precise analyses possible than can be carried out with a yes/no variable for having a party preference (van der Eijk, van der Brug, Kroh, & Franklin, 2006). Second, respondents were asked twice by a stranger if they wanted to vote for a party. Similar to findings showing that interviewees tend to overreport voting in general (Karp & Brockington, 2005), one could suggest that some undecided respondents simply answered with the party that happened to be at “the top of their heads”—that is, which they lately had seen in the news—when confronted with the second question on their party preference, but without an actual intention to vote for that party. Hence, we need to study in more detail whom voters finally vote for and whether the answers given actually reflect vote choices. Third, in order to more precisely disentangle effects of direct exposure and the general news environment, it would be better (if circumstances allowed) to ask for information on media exposure over several days.

The final question is how generalizable the findings are to other electoral settings. It is not unique for Denmark that media attention to parties is closely related to electoral results (e.g., van Aelst, Maddens, Noppe, & Fiers, 2008). Concerning undecided voters, earlier studies seem to indicate that the openness to persuasion by new information during a campaign is dependent on the specific circumstances of a campaign (Chaffee & Rimal, 1996). Nevertheless, as mentioned, since comparatively few Danish voters change their party choice from one election to the next, media effects would presumably be larger, if anything, in countries with less stability in voting behavior.

The findings of this study imply that a general political bias in the news can make a difference. Obviously, the degree to which party representatives are telegenic can only partly explain how much media attention they receive; other factors (e.g., incumbency) also play a major role. That said, on the one hand, this demand for telegenicity may create a dilemma for journalists: how to cover a campaign when, for example, the leader of party A is in power and telegenic, but the leader of party B in opposition is utterly nontelegenic? On the other hand, the practical implications are probably not so large: politicians are well aware of what the media demands in order to be covered. That is why parties professionalize in their approaches to the media (van Aelst et al.; Blumler & Kavanagh, 1999; Mazzoleni & Schulz, 1999). Moreover, high-ranking politicians are probably also chosen by their parties because of their media viability (van Aelst et al.; King, 2002). The study at hand shows that this selection process is strategically wise. But to what degree should journalists cater to and reinforce such strategies? And how much political bias in election news coverage is too much? These are normative decisions (McQuail, 1992) that our study cannot answer. But what the study does show is that journalists need to consider what parties (and their representatives) they bring into their news programs, because it does have an impact on voters and, consequently, on the election itself.
Notes

1. It should be acknowledged that Jerit and colleagues look at the effects of the information environment on the individual, in their case on citizens’ political knowledge, but they do not distinguish between indirect and direct effects. In general, they devote little attention to the mechanisms by which media can have effects on individuals’ attitudes and behavior.

2. Preliminary analyses based on data from the Danish Election Study indicate that the proportion of late deciders was slightly higher in 2007; about two-fifths decided during the campaign.

3. In a rolling cross-sectional design, if a respondent is not reached on the first day, several attempts are made during the consequent days to contact that person. The strategy pursued in our case is slightly different, as new attempts to call a respondent are made only during the same day (up to seven times).

4. Comparing the reported prior vote choices in 2005 (including blanks and abstention) with the actual result from the 2005 election yields the following results: all daily samples correlate (Pearson r) at least .93 with the election outcome of 2005 (p < .001; unweighted data: .92, p < .001; n = 13 equivalent to the number of choices voters had, i.e., to vote for one of the parties or candidates running in the campaign, to abstain, or to cast a blank vote). Of all respondents, 52.3% were women (51.0% in the adult population) with an average age of 49.9 years (female adult population: 47.6), whereas men’s mean age was 49.3 (male adult population: 49.7). Of the respondents, 43.3% had completed a higher education, which is higher than the proportion of the adult population aged 20–69 (27.6%). There are no statistically significant differences with respect to the daily mean age. On 2 of the 18 days, there was a slightly larger proportion of men.

5. Of the 32,563 randomly chosen telephone numbers called over 18 days, 81 were out of order, 20,528 were unanswered, 2,395 were answered but ineligible (e.g., business or government offices), 4,476 refused (including break-offs), and 5,083 accepted participation. To ensure the representativeness of the daily samples, Capacent Epinion assigned weights based on gender, age, education, and prior vote choice to all respondents, varying from .32 to 3.16 with a mean of 1 (e.g., using the weights, the percentage with higher education decreases to 25.3%, which is very close to the actual percentage in the population). In addition, the analyses presented here were also conducted with unweighted data, yielding no substantial differences. More generally, we note that a high response rate is not necessarily a prerequisite for representativeness (Krosnick, 1999).

6. Question wordings were as follows: “Whom will you vote for in the general election November 13?” (68.8% reported a preference, 25.2% were in doubt, 1.3% were not entitled to vote, 4.7% refused to answer) and “It can be difficult to remember whom one voted for in the last general election, or if one voted at all—can you remember whom you voted for in the last election?” (87.0% reported a choice, 5.8% were not entitled to vote, 7.2% did not remember or refused to answer).

7. Question wording was as follows: “Although you are in doubt whom to vote for, I’d like to ask you if you are leaning toward a party?” (66.5% reported a preference, 33.5% reported no preference).

8. Question wording was as follows: “Did you watch news on DR or TV2 yesterday?” (see Table 1).

9. Of all media appearances by actors with party affiliations, 10% were coded as valenced (note that numerous actors typically appear in a news story). This raises the question as to whether the applied coding captured all leanings; possibly some instances of unidirectional, but not strong, leaning were not captured due to the application of three codes only. The initial coding during pretesting included a more detailed coding scheme, but the analyses suggested that the overall story tendency yielded reliable results and were in line with previous similar studies. The tests of intercoder reliability yielded a Krippendorff alpha of .96 for affiliation and .75 for media tone toward actors (Krippendorff, 2004).

10. For visibility, the correlation coefficients for the daily relative visibility of parties in the four news bulletins range between .329 and .531 (Pearson r). The correlation coefficients for tone are not significant except for one case (DR 21.00 and TV2 19.00), where a minor negative correlation is found.

11. Without doubt, it is hard to disentangle effects attributable to the information environment from those attributable to accumulated direct news exposure. The analyses presented below are
replicated by replacing the information environment variable by a variable that is constructed on
the basis of an extrapolation of yesterday’s media exposure to the preceding days, assuming that
media exposure in the 4 preceding days is similar to yesterday’s media exposure. Results indicate a
less good model fit in the latter instance, suggesting that information from media content to which
the respondent is not directly exposed adds to the explanation of political preferences.

12. However, one can also think of the data set as having a multilevel structure: individuals
nested within parties nested within days. Therefore, the following analyses were also estimated as
three-level models using MCMC estimations in MLwiN. First, these analyses yielded essentially the
same results as reported here. Second, calculating an intraclass correlation coefficient as suggested
by Snijders and Bosker (1999, p. 224) for the highest level (i.e., days) yields a very small coefficient
(< .001), indicating very little variance at the day level.

13. Detailed results of our robustness checks can be downloaded at http://www.rensvliegenthart.
com/polcom.

14. Adding different background characteristics does not change the results of the models
presented here. This also makes sense intuitively: those background variables might influence the
probability that a respondent indicates a preference for a certain party, but when taking all parties
together, as is done here, background characteristics can affect only the probability of indicating a
preference for any party.

15. We also tested for possible interaction effects, for example between the party tone in the
information environment (Party tone_env) and day of campaign (T_day). Including these interactions did
not significantly improve the explanatory power of the model.

16. For the first two hypotheses, one can also expect a reversed causal effect, where high stand-
ings in the polls contribute to more visibility and more favorable coverage of the party. While these
are plausible expectations, here we focus on the reverse causal relationship. Our research design is
especially suitable to do so: by taking a low level of analysis (the unit of analysis is the respondent’s
position with regard to a party) and only considering media content that the respondent is (likely to
be) exposed to before being asked vote intention, we believe claims about causal mechanisms based
on the results are persuasive.

17. Following the reasoning on the importance of parties’ ownership of particular issues, one
wonders whether issue ownership should have been included in our models. The basic idea of the
concept of issue ownership is that certain parties “own” certain issues and that increased media atten-
tion to those issues will produce a gain for their owners (Budge & Farlie, 1983; Green-Pedersen,
2007). However, no data on issue ownership at the party level is available for the 2007 election
campaign. Modeling issue ownership on the basis of parties’ press releases (data kindly made avail-
able by Christian Elmelund-Præstekær) and including these data in our models does not change the
substantial findings presented here (for similar results, see Kleinnijenhuis et al., 2007).

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