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ORIGINAL ARTICLE

A Test of Rivaling Approaches to Explain News Effects: News on Issue Positions of Parties, Real-World Developments, Support and Criticism, and Success and Failure

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Different “paradigmatic” approaches to explain news effects on voting may supplement each other, because their starting points are based on different news types in political campaign news: news on issue positions of parties, news on real-world developments, news on support or criticism for parties, and news on success and failure of parties. Daily content analysis data and a weekly multiwave panel survey from the 2003 election campaign in the Netherlands are used for a simultaneous test. A logistic regression analysis demonstrates that the paradigmatic approaches supplement each other. The data reveal a huge impact of the news from a campaigner’s point of view in spite of a huge variety in responses to the news at the level of individual respondents.

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Many approaches have been proposed for studying the effects of the news on political preferences during election campaigns. Agenda setting (McCombs & Shaw, 1972), priming (Druckman, 2004; Iyengar & Kinder, 1987), framing (McCombs, Pablo Llamas, Lopez-Escobar, & Rey, 1997; Shah, Watts, Domke, & Fan, 2002), issue ownership (Petrocik, 1996), news on economic cues (Hetherington, 1996), conflict-oriented news (Cappella & Jamieson, 1997), and horse-race news (Patterson, 1993) may serve as examples.

Research that combines different theoretical approaches in a single empirical study (e.g., Blais, Turgeon, Gidengil, Nevitte, & Nadeau, 2004) is scarce. Apparently, most researchers consider them as mutually exclusive research paradigms, each of them rendering the other ones superfluous. Therefore, we still do not know whether these theoretical approaches indeed exclude each other. This article combines a number of rivaling approaches in a single study so as to answer the research question of whether they exclude or supplement each other.

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Different rivaling approaches to news effects would exclude each other almost by definition, if they were to derive different predictions from precisely the same type of news. However, if each approach were to take a unique news type as the basis for its predictions, then each approach could supplement the other approaches, at least when the assumption is taken for granted that each unique news type may well have some effects. Therefore, the theory section starts from an inventory of four unique, mutually exclusive news types that are typical of election campaign news so as to arrive at an integrated theory of news effects.

Theory

Characteristics of political campaign news

In the context of news about politics, the definition, evaluation, and presentation of issues by parties and politicians lie at the heart of the political process (Reese, 2001). News on the issue positions of parties is therefore the backbone of political news. Ultimately, politics is about policy outcomes with respect to these issues, about real-world developments, and about what is going right or wrong in society and in the economy. But politics is also about the power and the competence to implement a policy derived from one's issue positions. Because powerful parties use mediated conflicts instrumentally to gain support from their constituencies (Kepplinger, Brosius, & Staab, 1991), news about political support lent to parties, and about criticisms and attacks passed on them, is relevant too. In a political context, news is also worthwhile that regards who is succeeding and winning and who is failing and losing in debates, in the polls, in qualifying ("horse") races, or in policy negotiations. Therefore, we will concentrate on four news types: (a) news on *issue positions* of political actors, (b) news on *real-world developments*, (c) news on *support and criticism* for political actors, and (d) news on *success and failure* of political actors. The next question is what the rivaling approaches tell us about the kind of effects that can be expected from each news type.

News on issue positions

The first theory that comes to mind when thinking of the effects of news on issues is agenda setting. Agenda setting in its original form means that issues that appear frequently in the news tend to become the issues that voters deem important (McCombs & Shaw, 1972). From the many empirical studies on agenda setting, we know that attention for issues has a strong effect on voters' judgment of the importance of these items (Dearing & Rogers, 1996). Priming adds to the original hypothesis that attributes that appear frequently in the news become the evaluation criteria for voters when judging parties and candidates (Iyengar & Kinder, 1987).

Agenda setting and priming do not predict, however, which candidate or party will be preferred when a given issue is salient in the voter's mind. Issue ownership theory (Budge & Farlie, 1983; Petrocik, 1996) enables such a link. Issue ownership theory predicts that parties are expected to emphasize not only their own issues

(Sigelman & Buell, 2004), which is not relevant here, but also what the effects of such an emphasis will be (Abbe, Goodliffe, Herrnson, & Patterson, 2003). Issue ownership theory predicts that a party will attract voters when the news emphasizes issues on which that party already has a solid vested reputation. A party “owns” an issue if the voters spontaneously associate a party with a specific position and a strong reputation on that issue. The combination of theories on agenda setting, priming, and issue ownership gives rise to the hypothesis that media attention for issues “owned” by a party increases the likelihood that a person will vote for that party (Sheafer & Weimann, 2005). Our first hypothesis can be formulated as follows: More news on a party’s position on owned issues increases the likelihood to vote for that party.

News on real-world developments

The public choice literature (Mueller, 2003) documents the impact of issue developments in the real world on the vote. Positive real-world developments, such as full employment, are beneficial for incumbent parties, whereas real-world problems, such as unemployment, are beneficial for opposition parties. In the first case, the incumbent parties are rewarded for their achievements, and in the latter case, they are punished for the lack of results.

Quite a few studies found that the media portrayal of issue developments exerts an autonomous influence in addition to the role of the real-world developments themselves (Behr & Iyengar, 1985; Hetherington, 1996; Shah, Domke, Fan, Fibison, & Watts, 1999). Effects should be expected not only from *news on real-world developments* with respect to the economy but also from developments regarding social issues such as crime, health care provisions, and the number of low-educated illegal immigrants. Our second hypothesis is as follows: More positive news regarding real-world developments on issues increases the likelihood to vote for the incumbent parties.

News on support and criticism

The general hypothesis that positive evaluations (support) are beneficial, whereas negative evaluations (criticisms) are detrimental for the party or the politician being evaluated, is supported by dozens of empirical studies (Beck, Dalton, Greene, & Huckfeldt, 2002; Kahn & Kenney, 2002; Kepplinger, Donsbach, Brosius, & Staab, 1990); among others, by the studies based on the ideodynamic model of David Fan (Domke et al., 1997; Fan, 1996). Criticisms in the news are not limited to editorials or op-ed programs (Kahn & Kenney, 2002). However, the position of the source toward the supported or criticized party may have an impact too. A few studies indicate that attacks from *traditional enemies* may increase the distinctiveness of a party (Kleinnijenhuis, Oegema, de Ridder, van Hoof, & Vliegenthart, 2003; Shah et al., 2002). In the United States, President Clinton’s affair with Monica Lewinsky was a moral issue, but severe attacks from Republican leaders such as Neil Gingrich and Kenneth Starr on the Democratic presidency turned this news issue gradually into just another round of the traditional sparring match between Republicans and Democrats. The public reacted with a boomerang effect by supporting the president

in spite of the scandal. Criticisms from other parties may only hit home when the party attacked does not seize the occasion to strike back with news on owned issues or new evidence of societal support.

Criticisms from *societal sources* that are usually deemed unimpeachable, such as issue experts, enterprises, private interest groups, ordinary citizens, or social movements, will decrease the likelihood to vote for the criticized party. Criticisms from the *media* themselves—editorials but also explicit journalistic judgments in other news—serve as an interesting “in between” case. One may expect that cynical voters, who are aware of the inclination of today’s media toward negative news, may regard media criticisms on a party as a signal of that party’s viability.

News on support and criticism leads to two hypotheses. News on support from actors with a neutral or positive relation toward a political party (members of one’s own party and societal sources) increases the likelihood to vote for that party. Support from actors with a negative relation toward a political party (such as traditional political opponents and the media) will decrease that likelihood.

News on success and failure

Media attention for success and failure and for strengths and weaknesses of candidates and political parties is an indispensable element of every modern campaign. Attributions of success and failure are add-ons of journalists that appear as statements of fact in the news. They give the voters an appetite for who fails, who succeeds, who wins, and who loses (Iyengar, Norpoth, & Hahn, 2004). For our purpose, it is irrelevant whether these attributions are a reflection of the latest polls, policy results, performance in debates, or merely of the impressions and personal preferences of journalists. Our last hypothesis is as follows: News on success of a political party will increase the likelihood to vote for that party.

The 2003 electoral campaign in the Netherlands

To test our hypotheses, we use data from the campaign preceding the Dutch parliamentary elections on January 22, 2003. These elections came only 8 months after the previous election on May 15, 2002. The 2002 elections had resulted in an unprecedented “earthquake” in Dutch politics due to Pim Fortuyn, a newcomer to the political scene, who raised the issue of Islamic immigrants and attacked the vested “old” political parties with his new party, labeled as the LPF (List Pim Fortuyn). The election campaign came to a bizarre apotheosis when Fortuyn was assassinated on May 6, 2002, just 9 days before the elections.

In July 2002, the Christian Democrats (Christe Democratisch Appel [CDA]) and the late Pim Fortuyn’s LPF found the right-wing liberals (Vereniging voor Vrijheid en Democratie [VVD]) willing to join in a new coalition government, named Balkenende I after CDA’s prime minister. The LPF ran into trouble very quickly due to all types of internal squabbling. Once the LPF had dropped in the polls to less than 10 seats, the VVD and the CDA initiated the fall of the Cabinet on October 16, 2002, but it was the VVD that was portrayed in the press as the party that had “pulled the plug out.”

At the elections on January 22, 2003, the LPF indeed suffered dramatic losses (from 26 to 7 seats in a 150-seat parliament). The CDA, headed by the incumbent Prime Minister Jan Peter Balkenende, remained the largest party (from 43 to 44 seats), but the Social Democrats (Partij van de Arbeid [PvdA]) headed by their new leader Wouter Bos made a remarkable comeback (from 23 to 42 seats). The right-wing liberals (VVD) headed by Gerrit Zalm only regained a few seats (from 24 to 28 seats). The left-wing liberals (Democraten '66[D66]) lost again.

Method

The data for a simultaneous test come from a combination of a daily content analysis of the news with a multiwave panel survey study regarding the electoral campaign in the Netherlands that preceded the elections on January 22, 2003, commencing on the day that the previous Cabinet (including the LPF) fell, on October 16, 2002.

We opted for a research design that enables us to trace the effects of short-term weekly shifts in the news in order to exclude the possibility that estimated "effects" of news could actually be spurious or even an artifact of causation in the reverse order (journalists picking up the mood of voters). It should be acknowledged that voters themselves could (a) read party manifestoes, (b) experience real-world developments such as crime and unemployment, (c) attend political meetings to see who supported or criticized whom, and (d) express opinions in public opinion surveys that would be reflected in the media. However, preferences of voters who rely on their own information gathering would not continually follow shifts in the news.

The research design deals with the effects of the news but not with its origins. From this study, we will therefore not learn whether estimated effects of the four news types should be considered as *purely autonomous effects* of journalism, or as effects that were merely *mediated* by the news, but *initiated* by (a) the parties that emphasized specific issue positions, (b) real-world developments of which the news was merely a reflection, (c) political and social actors who supported and criticized each other in meetings that were attended also by objective journalists, and/or (d) performances of parties in the polls, debates, or in policy making that were reported in the press straightforwardly as success or failure.

Data collection I: A daily content analysis of campaign coverage

To account for the news that was consumed by the majority of Dutch citizens, we analyzed the news from five national newspapers (*Algemeen Dagblad*, *NRC Handelsblad*, *De Telegraaf*, *Trouw*, and *de Volkskrant*) and two television stations (Nederlandse Omroep Stichting [NOS; public broadcast], Radio Télévision Luxembourg [RTL; Commercial broadcast]). Each newspaper article or television item containing the name of a party, the name of a politician, or a political issue in its head, lead, or in the opening sentences was analyzed. The four news types were measured by considering the news as a series of elementary statements as in relational content analysis (Popping, 2000; Roberts, 1997). The head and lead of each news

article, as well as the complete television news item, were reduced to elementary statements of the type “source: subject/predicate/object” according to the *NETwork* analysis method for content analysis (Kleinnijenhuis, de Ridder, & Rietberg, 1997).

News on party's position on owned issues

Party-related issue news can be operationalized as news sentences in which the subject is a party (representative) and the object is an issue. Attention for the party's position on owned issues is operationalized as the *sum* of the viewpoints expressed by a party regarding issues, weighted by the degree to which an issue is owned. To what degree a party was the owner of an issue was decided on the basis of the relative frequency of the answers from a representative survey of the Dutch population held by Blauw research to the questions “about what *Y* do you think of first (next) when you think of *X*,” where *Y* should be picked from a list of 14 major issues that were included also in the content analysis and *X* is any of the parties included in the analysis who were likely to enter parliament on the basis of recent polls (Kleinnijenhuis *et al.*, 2003). Each issue position expressed by a party according to the media is recoded on a positive–negative scale (–1 to +1) with –1 indicating that a party expresses the opposite of its traditional stance and +1 indicating that a party succeeds in expressing its traditional message.

News on real-world developments

News on social and economic conditions was measured as the net sum of positive and negative statements regarding the real-world development of issues. Whether a development is positive or negative was decided on the basis of the majority opinion in the Netherlands from 2002 to 2003. Thus, more employment is coded as positive, more inflation as negative, more asylum seekers as negative, higher taxes as negative, an increase of social security as positive, and so on. Each sentence that asserts a plain improvement in the real world is recoded as +1; each sentence that comes down to a deterioration is recoded as –1. Whether the news on real-world developments is positive or negative for a given party depends on whether that party is a governing party. Because negative issue developments are expected to have a positive influence on the support for opposition parties, the sign of the resulting variable is reversed when the support for opposition parties is to be explained.

News on support and criticism

The factor support and criticism is measured as the net sum of the support (signed +1) and criticisms (signed –1) that a party, according to the news, receives from others. Support and criticism from within a party, from traditional enemies, from societal actors, and from media will be measured separately. During an election campaign, as in this study, each of the other parties can be considered as a traditional enemy. A zero outcome may indicate either the absence of such attributions or an equal number of attributions of support and criticism.

News on success and failure

Attribution of success and failure is measured as the sum of the success and failure of a party per sentence phase of this type. Each sentence or sentence phrase that

expresses a plain party success is coded as +1; each sentence that expresses a plain party failure is coded as -1. A zero sum outcome may indicate either the absence of such attributions or an equal number of attributions of success and failure.

Content analysis data obtained

Eight coders, selected on the basis of having gained high marks for related undergraduate courses, coded the news for the 2002 and 2003 campaigns. Five thousand three hundred and thirty-nine television items and newspaper articles were coded for the 2003 campaign, which resulted in 26,607 statements. On average, 17.8% of these statements refer to party-related issue news, 9.8% to real-world issue developments, 26.7% to all types of support and criticism (either attack news or compromising news), whereas 10.1% deals with news about success and failure. About 35.5% of the political news statements deal with other news, either with nonparty actors or with other news types (e.g., causal assertions) that will not be dealt with here. Summing up then, almost two thirds of the statements consist of the four types of news that have been selected for this study. These four types of news can therefore be expected to be responsible for a substantial part of the effects of the news.

A *reliability analysis* was performed to assess the reproducibility of the outcomes of such a content analysis on the basis of 49 articles coded by these eight coders. The first reliability question is whether coders agreed upon the number of statements per article with respect to the news types that were distinguished. Both the ordinary correlation coefficient and the Krippendorff's alpha for interval-level data amounted to .67. This level of agreement is acceptable, although low. An analysis of the reasons for the disagreement showed that coders disagreed on the number of statements when the lead was not demarcated clearly. In articles without a demarcated lead, such as short articles and editorials, coders disagreed about the number statements fairly often. Disagreement about the number of sentences to be coded does not imply that the codings do not reflect the news, however. Next, coders had to agree on the question of whether the direction of the news for a given news type and a given party was positive or negative. Both the ordinary correlation coefficient and the Krippendorff's alpha for interval scales amount to .76, which indicates a fair level of reliability.¹

Data collection II: A multiwave panel survey on changes in party preferences

Panel survey data on public opinion were kindly made available by NIPO Inc. All in all, 3,395 respondents participated in NIPO's panel survey. Shortly after the 2002 elections, 3,199 respondents answered the question on which party they had voted for. During nine weekends preceding the Dutch national elections on January 22, 2003, respondents were asked for which party they were intending to cast their vote. Because only 725 respondents responded in each wave, we included respondents in the analysis whenever they responded not only in the current wave but also in the previous one. Table 1 gives a chronological overview of the content analysis data and panel wave data and the major news events.

To rule out the possibility that the test results would depend on selective panel attrition, chi-square cross-table tests were performed to see whether panel attrition

Table 1 Chronological Overview of Panel Waves, Content Analysis Periods, and Major News Events

Wave	Date	<i>n</i> Respondents ^a	<i>n</i> Statements ^b	Major News Events
	October 16, 2002		7,119	Fall cabinet Balkenende I
1	December 1–3, 2002	2,256	842	
2	December 8–10, 2002	1,750	1,059	
3	December 15–17, 2002	1,687	914	
4	December 22–24, 2002	1,478	782	
5	December 29–31, 2002	1,391	468	
6	January 5–7, 2003	1,550	794	First television debate: Bos wins (January 3)
7	January 12–14, 2003	1,873	1,318	Second television debate: (January 8); CDA wants to govern with VVD (January 9)
8	January 19–20, 2003	1,979	1,967	
9	January 25–27, 2003	2,314	789	Election day (January 22)

Note: CDA = Christian Democrats; VVD = right-wing liberals.

^a*n* respondents who responded also in previous wave.

^b*n* statements content analysis regarding the selected news types and the selected parties (not weighted) in between the previous and the current panel wave (cut-off at election day for Wave 9).

depended on various recodings of social and demographic characteristics of the respondents, namely sex, age, region, urbanization level, educational level, social class, and occupation. Panel attrition was statistically independent of all these social and demographic characteristics, with one exception. For younger respondents (aged below 35), the U-shaped response sequence was slightly steeper than for older respondents ($\chi^2 = 32.5$, $df = 8$, $p < .001$), but the explained variance in panel attrition due to age is still extremely low ($\eta^2 = .002$). Panel attrition therefore does not pose a problem in this study.

Method of data analysis

The research question asks for the autonomous effects on the intention of a specific voter to vote for a specific party concerning four types of news about that party in the previous week. Four variables with respect to the news types were assigned as contextual variables to the respondents in a given week so as to enable a direct quantitative estimation of the effects of these four news types.

For each news type, we will first present *ordinary correlation coefficients* to assess the strength and the direction of the relationship between the news in a given week with respect to a specific party and a respondent's vote intention for that party.

Next, *partial correlation coefficients* will be presented to test whether this relationship between the previous week's news about a party and the intention either to vote

or not to vote for that party disappear after controlling for whether one intended to vote for that party in the previous wave of the panel survey. One's previous party preference encompasses the influence of all sociodemographic factors that had an influence on the vote before the previous week. The lagged dependent variable will typically absorb structural long-term influences on the vote of one's ethnicity, religion, party affiliation, and so on. Earlier research shows that news effects on public opinion are distributed over a time lag of 1–3 weeks (Kepplinger et al., 1990) or even a month (Kleinnijenhuis et al., 2003). This means that the lagged dependent variable will also absorb a part of the news effects, which will result in an underestimation of news effects. A slight underestimation of news effects is a fair price, however, for filtering out the influence of structural long-term influences.

Neither correlation coefficients nor partial correlation coefficients tell us whether the effects of each news type on the vote supplement or suppress each other. A *logistic regression model* will be estimated with the party preference of a voter in a given week for each of the seven major parties as the dependent variable to assess the unique effects of each news type, with one's previous party choice once more as a control variable. A logistic regression model is called for because whether or not to vote for a given party is a dichotomous variable.

This amounts to a pooled analysis of news effects in various panel waves, for various respondents concerning various parties. The seven major parties were the CDA (24.3% of the responses), the Social Democrats (PvdA, 20.0%), the right-wing liberals (VVD, 16.5%), the successors of the late Pim Fortuyn (LPF, 3.5%), the left-wing liberals (D66, 3.6%), the ecologists (GroenLinks, 4.4%), and the left-wing socialists (SP, 9.9%). The undecided voters, the respondents who do not want to cast a vote, and the voters for the smaller parties serve as the base category (17.9%). We excluded the last 2 days before the elections (Wave 9) from the final analysis because of the potentially disturbing effect of a very short time period in between the measurements, which results in 13,964 respondents from Waves 1 to 8 (cf. Table 1) and therefore with seven parties in 97,748 units of analysis.

The advantage of a pooled time-series model is that small effects that would have otherwise remained indiscernible now become statistically discernible. Incidental effects, which are found with small *ns*, tend to disappear when a pooled model is tested. The other side of the coin is that pooled estimates of the influence of news types do not provide a clue to the variance of these estimates for separate parties and single respondents (Skrondal & Rabe-Hesketh, 2004). Therefore, we also look at microlevel models for each respondent separately.

Results

News types in the 2003 Dutch election campaign

Table 2 presents for each news type and each party an overview of the news. For each news type, the amount of news for a party is represented as a percentage of the total amount of statements with respect to that news type. The direction of the news is

Table 2 Amount of News and Direction of the News per Party (Rows) and per News Type (Columns)

Party—Leader	Party's	Real-World	Support and Criticism								Success and Failure	
	Owned Issues	Developments	Internal		Societal		Other Parties		Media			
	Direction and Column %											
	%	Direction	Direction	%	Direction	%	Direction	%	Direction	%	Direction	%
CDA—Balkenende	9	−0.2	−0.1	9	0.0	24	−0.5	24	−0.5	22	0.0	20
VVD—Zalm	25	−0.2	0.1	29	−0.3	20	−0.3	22	−0.2	21	−0.4	20
LPF—Herben	17	−0.2	0.1	39	−0.3	29	−0.5	17	−0.4	26	−0.4	24
PvdA—Bos	17	0.2	0.3	17	0.3	17	−0.8	29	−0.2	20	0.5	24
D66—de Graaf	12	0.2	1.0	1	−0.1	2	0.0	2	0.2	4	−0.3	3
GL—Halsema	12	0.2	0.7	2	−0.2	3	−0.3	2	0.4	3	0.1	3
SP—Marijnissen	8	0.2	0.6	3	0.5	4	−0.6	4	−0.3	5	0.5	5
<i>n</i> statements	5,927	2,527		616		482		1,094		471		1,116

Note: All column percentages, directions of the news, and overall number of statements are weighted according to the size of the audience of separate newspaper and television news magazines, Wave 9 excluded. CDA = Christian Democrats; VVD = right-wing liberals; LPF = List Pim Fortuyn; PvdA = Social Democrats; D66 = left-wing liberals; GL = Groenlinks [Ecologist Party]; SP = Socialist Party.

represented in this table as an average of the direction of all the statements, within a range from -1 to $+1$.

News on party's position on owned issues

Issues on which Rightist parties such as the LPF and the VVD have a strong reputation—crime, asylum seekers, taxes, and privatization—gained a lot of media attention. The percentage distribution of attention for owned issues shows that the right-wing liberals (VVD, 25%) and the successors of Pim Fortuyn (LPF, 17%) gained relatively much attention for these issues.

News on real-world developments

Social and economic conditions as reported in the news, especially with respect to crime, and valence issues such as unemployment and rising costs of living, were unfavorable. The number of asylum seekers decreased, however, as the coalition government had hoped. Taken together, a slightly negative outlook remains for the governing parties (-0.2), which is assumed to work out well for the opposition parties (where the sign is reversed to $+0.2$).

The CDA with Prime Minister Balkenende asked the voters to give him a second chance because his first coalition government with the VVD and the LPF had only been able to survive 87 days. An interesting question is therefore whether voters attributed the poor conditions to the coalition parties that governed 87 days in 2002 or to the coalition parties that governed from 1994 until July 2002 (PvdA, VVD, and D66).

News on support and criticism

Especially the PvdA is criticized by other parties (29%, -0.8 on the average). The news indicates also that the PvdA is supported by societal actors (17%, $+0.3$). According to the media, the LPF was criticized most by societal interest groups (-0.3 , 29%). The media looked often to the LPF to see whether LPF politicians would criticize each other, as was the case during the 87 days of the Balkenende I coalition (39%).

A closer look at the 2003 election campaign is worthwhile if we wish to understand these figures. The campaign accelerated from the first television debate (the RTL debate on January 3, 2003). Wouter Bos (PvdA) was immediately declared to be the winner by commentators in the RTL studio but also in the media during the days that followed. On January 8, the party leaders faced each other again in the 2Vandaag/EUR debate. Whereas Jan Peter Balkenende (CDA) kept a low profile in the first debate, he proved to be at least as quick-witted as Wouter Bos in the second debate. But this time, the morning headlines of January 9 did not frame the debate in terms of success or failure, but rather in terms of support and criticism, by stating that Balkenende had made an overture to the PvdA. On January 9, the CDA campaign team sunk their teeth into a strategy that was quite unusual for the CDA as a middle-of-the-road party that always kept its options open. The television evening news stated that the CDA was determined to continue the government coalition with

the VVD. The unconditionally positive CDA statements about the VVD rendered as largely unsuccessful the attempts of VVD leader Zalm to gain media attention for the somewhat more Rightist economic program of the VVD as compared to the CDA program. The CDA move caused the media to focus merely on the negative statements of the right-wing parties VVD, CDA, and LPF in the direction of the Social Democrats (PvdA) as the largest opposition party.

The story behind the figures on support and criticism in Table 2 suggests that in a multiparty system, media coverage of attacks from other parties contributes to the newsworthiness of the party attacked. An attacked party may use the given opportunity to create favorable news with owned issues or support from societal actors.

News on success and failure

The last columns in Table 2 provide data on the attributions of success and failure to parties in the news. The PvdA and LPF gained most attention in this category of news statements (both 24%). But the overall attribution of success and failure works out very well for the PvdA (+0.5) and very poorly for the LPF (−0.4). The VVD is depicted as a losing party (−0.4) also.

A simultaneous test

Table 3 presents the coefficients to estimate the influence of the news on party preferences. The first column in Table 3 displays correlation coefficients between one's party preference in the current wave of the panel survey and the news between the previous wave of the panel survey and the current wave. These correlation coefficients, which indicate the possibility of news effects, turn out to be highly significant ($p < .001$). Their direction is in line with what was expected, with one interesting exception. News reports about negative social and economic conditions

Table 3 Correlation, Partial Correlation, and Logistic Regression Coefficients to Assess the Impact of News Types

	<i>r</i>	Partial <i>r</i> , Conditional on Vote (<i>t</i> −1)	Logistic Regression Coefficients ^a
Vote (<i>t</i> −1)	.86*	—	6.09*
News on owned issues	.03*	.02*	0.02*
News on real-world developments	−.05*	−.02*	−0.04*
News on support and criticism			
Internal, society	.05*	.05*	0.06*
Other parties, media	−.10*	−.04*	0.005 <i>ns</i>
News on success and failure	.08*	.05*	0.10*

Note: $n = 97,748$ units of analysis (respondents who responded in two successive waves $\times$ eight panel waves $\times$ seven parties).

^aConstant = −4.29, Nagelkerke $R^2 = .75$.

* $p < .001$. *ns* nonsignificant; — coefficient not applicable.

are expected to be disadvantageous for the governing parties. The negative correlation coefficient ($r = -.05$) indicates the effectiveness of Jan Peter Balkenende's request to the voters to attribute these poor conditions to the Cabinets, which ruled the country from 1994 until 2002 rather than to his first coalition government, which was able only to survive 87 days due to dissent within the LPF. The boomerang effect of criticisms from other parties and the media ($r = -.10$) was expected. The high correlation between one's previous party preference and one's current party preference ($r = .86$) indicates that voters usually, but not always, stick to their previous party preference.

Because these correlation coefficients between the news and the vote could be spurious due to long-term influences from factors such as party identification, race, income, and education, one should test whether these correlations vanish when long-term influences are filtered out. By definition, long-term influences are already incorporated in one's previous party preference. The partial correlation coefficients conditional upon one's previous party preference in the middle column of Table 3 shows that the correlations do not vanish. They remain highly significant ($p < .001$), and their direction remains unaltered. Thus, not only one's current party preference but also the *change or stability* of one's party preference as compared to the previous week's party preference is influenced by the news.

Only a multivariate analysis can determine whether these effects supplement each other or cancel each other out. Unlike the partial correlation coefficients per news type, the logistic regression coefficients in the last column in Table 3 incorporate also whether the effects remain when all news types are taken into account simultaneously. These effects do indeed supplement each other ($p < .001$), with one noteworthy exception. Although news about criticisms from other parties and the media was actually "good news" on the basis of both the correlation coefficient and the partial correlation coefficient, this effect becomes insignificant when other news types are taken into account. One explanation is that seemingly positive effects of attacks from other parties are actually positive effects of having seized the opportunity to use the increased newsworthiness due to the attacks of others to launch "good" news, for example on owned issues, on support from societal actors, or on attributions of success.

All in all, the logistic regression coefficients in Table 3 show supplementary effects from news on party's position on owned issues, real-world developments, conflicts with societal actors, and attribution of success, whereas news on support or on attacks from other parties serves as an additional opportunity to launch news that attracts voters. The explained variance in party preference amounts to $R^2_{\text{Nagelkerke}} = .75$.

Attribution of success and failures according to the media appears to have the most powerful effect on weekly changes in party preferences (logistic regression coefficient = $+.10$). Newspapers and television news magazines alike portrayed PvdA party leader Wouter Bos as the rising star in Dutch politics. The unprecedented speed of communication flows in today's information society apparently causes a *parrot disease* among journalists. Reputations quickly spread from one medium to another

because each individual journalist lacks the time to verify the actual performance on which reputations are based.

Microlevel effects and macrolevel impact

The correlation coefficients and partial coefficients, as well as logistic regression coefficients in Table 3 are highly significant, which indicate that the macrolevel impact of the news is beyond doubt: The number of voters that a party attracted through the news in the expected direction surely outnumbered those who were put off by it. But the small size of the (partial) correlation coefficients (all of them $<.10$) signals a large spread of the observations around the regression line (King, 1986), which entails that it is impossible to predict at the microlevel *which respondents* are sensitive to the previous week's news. Unfortunately, the logistic regression coefficients in Table 3 do not provide any further information, either to enable us to understand the magnitude of the macrolevel impact of the news or to understand the spread in the reactions to the news at the microlevel of individual respondents. Any interpretation of the values of a single logistic regression coefficient depends on the level of each of the other variables in the model (King), whereas $R^2_{\text{Nagelkerke}}$, a pseudomeasure of explained variance (R^2) for logistic regression, is determined almost completely by one's previous vote. $R^2_{\text{Nagelkerke}}$ increases with less than .01 when news variables are added to the logistic regression model in addition to one's previous vote.

To arrive at an understanding of the *macrolevel impact* of the news, it is helpful to compare aggregated actual support for a party in a given week with the aggregated predicted support on the basis of the logistic regression model. Figure 1 is restricted to the three major parties in the campaign (PvdA, VVD, and CDA) for reasons of surveyability. Figure 1 shows at a glance that the logistic regression model, notwithstanding its small effect parameters, fits the developments in aggregate party support quite well. Among others, the model predicts the remarkable rise of the PvdA in the polls. The fit of the model at the aggregate level amounts to $R^2_{\text{adj}} = .94$, so at the aggregated level the model fits the data tightly. For parties, interest groups or private enterprises, which all use the news to get more votes or to sell more products, impact at the aggregate level rather than accuracy at the microlevel is what counts.

To arrive at an understanding of the spread or volatility of news effects at the level of individual respondents, news effects should be estimated for each respondent separately. Because expected effects as well as boomerang effects will show up at the level of individual respondents for each news type, combining them in a single model for all respondents, as in Table 3, may lead to weak coefficients. Per respondent, 41 preferences for specific parties in specific weeks were available on average, which is sufficient to test whether a partial correlation coefficient between the news and one's vote preference—controlled for one's previous vote preference—is significant for each individual respondent, but insufficient for estimating all the parameters of a multivariate logistic regression model for each individual respondent. Table 4 presents the percentage of respondents for whom news effects are significantly positive, as well as the percentage of respondents for whom news effects are

Figure 1 Actual share of the vote (%) according to NIPO panel survey and its prediction on the basis of the model for three parties.

Note: $R^2_{\text{adj}} = .94$ based on the seven parties included in logistic regression analysis, $R^2_{\text{adj}} = .92$ for the three parties selected here.

significantly negative at the usual level of significance ($p < .05$, two sided).² The percentage of respondents for whom the news effect on one's current party preference, controlled for one's previous party choice, is significantly in the expected direction exceeds for each news type the percentage of respondents for whom a significant "boomerang" effect is evident. Significant partial correlation coefficients for individual respondents amounted to roughly $+.45$ or $-.45$ on the average, which gives another perspective on the "weak" effects in Table 3. The percentages in Table 4 show that even the news from 1 week may lead to a dramatic loss or a dramatic rise in the number of voters who intend to vote for that party. News on a party being supported from within or by societal actors may exert a boomerang effect on 1.8% of the voters but will have a straightforward effect on 15.8% of the voters. From a political campaigner's point of view, these percentage changes within a week are substantial. A very rapid rise in the polls is to be expected if a party attracts a good press with respect to a number of news types for a number of weeks.

Discussion

Many rivaling approaches have been proposed for studying the effects of the news on political preferences during election campaigns. This article shows that many of these approaches supplement each other. Approaches to news effects can be expected to complement rather than to exclude each other in any case when they refer to mutually

Table 4 Percentage of Respondents for Whom the News Has a Significant Effect

News Type	Negative Effect (%)	Positive Effect (%)
News on owned issues	0.3	10.5
News on real-world developments	1.1	0.4
News on support and criticism		
Internal, society	1.8	15.8
Other parties, media	11.1	1.3
News on success and failure	3.0	7.5

Note: Table entries are percentages of voters with significant partial correlation coefficients between the news aspects and the vote, controlled for one's party preference at the previous wave of the panel study (% of respondents with $p < .025$, one sided). Table entries are based on $n = 1,084$ respondents.

exclusive types of news statements. We distinguished four types: (a) news on party positions on owned issues, (b) news on real-world developments, (c) news on support and criticism, and (d) news on success and failures. Different approaches such as agenda setting, priming, issue ownership, economic voting, and bandwagon effects were used to formulate hypotheses to predict news effects derived from each of these four news types. Some of these paradigmatic approaches could be developed one step further to sharpen or broaden the explanation of news effects on the vote. Agenda setting was combined with issue ownership theory to predict which party would benefit from a media emphasis on a given issue. The theory of news on economic conditions was generalized to news on other real-world developments, such as health care or the number of immigrants. Expected effects of news on support and criticism for political actors were broken down into the trustworthiness of their source, which resulted in an expected backlash effect for criticisms from traditional opponents and media.

The test of the simultaneous model is whether fluctuations in public support for seven parties in the 2003 election campaign in the Netherlands can be explained, starting from a daily content analysis of television and newspaper news and a nine-wave panel survey study.

The effect estimates show indeed that the effects derived from the four news types complement rather than exclude each other. Although issue news is often regarded as the most important news type (e.g., Blais *et al.*, 2004), news on success and failures in the media appeared to be the foremost important success factor in the Dutch 2003 electoral campaign. The estimated effects show that voters are remarkably sophisticated in interpreting support and criticism for political parties. Criticisms from within a party and from societal actors such as consumer groups, private interest groups, or ordinary citizens are taken into account, whereas criticisms from other parties and from media are discounted. Apparently, negative news that comes from opponents may signal to voters the importance and the political momentum of the criticized party. These results may indicate that casting a vote is not entirely a rational

process in the sense that voters are guided by issue considerations only. Strategic considerations like who is winning the game are taken into account also. At this point, we do not know how the distinguished news types interact. It might well be that news on support and criticism or news on success and failure gives parties the opportunity to put their own issues in the spotlight. More than claiming that issue voting is overruled by strategic considerations, this study indicates that the different news types interact in a rather complex way.

From the point of view of campaigners, this study demonstrates strong effects of the news in a single week at the macrolevel of electoral results, in spite of its inability to predict at the microlevel which voters will be affected precisely by the news and in what direction. The lesson to be derived for communication research is that different approaches to media effects can be combined in a single study. The 2003 Dutch election campaign provides a rich variety of data, and tests for other Dutch elections show similar results.³ The surplus value of simultaneous tests of varying theoretical approaches should be assessed in other contexts also.

The result that the overall direction of change at the macrolevel can be predicted fairly accurately from the news, whereas it is impossible to tell at the microlevel which news consumers will change in which direction, calls for future research at the microlevel into the differential impact of the news on voters with a varying political awareness, or with very different social networks, a different media use, or other different personal characteristics. To explain the interactions between such personal characteristics on the one hand and the selective attention, selective acceptance, and selective discounting of specific types of news statements on the other hand, such research could also make use of psychological theories about priming, dual processing, cognitive consistency, and/or social identification.

Whereas this study combined the effects of various types of news in an additive, linear fashion, future research should also look at the interactions between seemingly unrelated news types. Can horse race news about success and failures of political parties, which is deemed attractive (Iyengar *et al.*, 2004) although it increases political cynicism (Cappella & Jamieson, 1997), inspire citizens to choose the side of a particular party—when, according to the news, parties always criticize each other? Can conflict-oriented news about (coalitions of) political actors who criticize rather than support each other nevertheless increase the persuasiveness of the issue positions that really matter in politics?

Notes

- 1 Krippendorff's alpha was also computed for the direction of each news type from the research model separately, resulting in alpha's of .74 for issue positions weighted by issue ownership, .62 for news on real-world developments, .75 for support and criticism from within a party or from societal actors, .76 for issue support and criticism from other parties and the media, and .82 for news on success and failures of parties. The low reliability of the news on real-world developments was primarily due to the lack of agreement with respect to health care and with respect to the issue of immigrants and

asylum seekers. Apparently, it was ambiguous for coders whether health care and the conditions of immigrants and asylum seekers improved or deteriorated according to the news. Omitting these two issues would have resulted in Krippendorff's alpha for real-world developments being .71.

- 2 From a methodological point of view, a random coefficients model appeared to be a proper model (Skrondal & Rabe-Hesketh, 2004). One may conceive the data as a cluster sample with two levels: First, a random choice of respondents, and next, within respondents a (not so random) choice of weeks to evaluate a given number of parties. A random coefficients model would not only estimate the strength and the direction of effects at the level of respondents—as an ordinary (logistic) regression model—but also the *variance* of the strength and direction of these effects *between* respondents. However, negatively estimated variances indicate that STATA (procedure GLLAMM) is unable to estimate a logistic random coefficients model, presumably because the actual distribution of effects did not at all resemble the normal distribution of effects, which is assumed in random coefficient models. Instead of estimating the parameters of a logistic random coefficients model, we therefore simply computed partial correlations per respondent.
- 3 Papers on similar media effects in other Dutch elections are available from the authors on request.

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