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Issue News and Corporate Reputation: Applying the Theories of Agenda Setting and Issue Ownership in the Field of Business Communication

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Effects of issues in business news on corporate reputation are often assumed, but less often put to a test. To study these effects, this study combines a recent extension of agenda-setting theory—the second level of agenda setting—with issue ownership theory. A content analysis of business news is linked to a panel survey to measure corporate associations and corporate reputation. The results provide empirical evidence both for the second level of agenda setting and for issue ownership, thereby showing that theories from the field of political communication are valuable for understanding the effects of issues in business news.

Although scholars have studied both corporate reputation and media effects for decades, only a few attempts have been made to test media effect theories in the field of corporate reputation. Stone, Dunphy, and Bernstein (1996) stressed the need for empirical research on this topic, but little was done for nearly 25 years. Fombrun and Shanley (1990) conducted a pioneering study in this field. Their focus on the amount and the tone of news recurs in two other studies on the effects of news on reputation (Verčič, 2000; Wartick, 1992) and in a study on the effects of news on return on average assets (Deephouse, 2000).

Even fewer studies (Carroll, 2004; Carroll & McCombs, 2003) examine the effects of issue news on corporate reputation. This is remarkable, seeing that in the field of political communication, the emphasis has been on issue news during the past 20 years of empirical research on the agenda-setting process (McCombs, 1992). Clearly, organizations deal with issues such as investments, profits, and product quality. They also deal with societal issues such as the environment, energy consumption, wages, and inflation. Obviously, issue news enables experts and others to evaluate companies on the basis of their issue performance, for example, to make

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fashionable or informed decisions about purchasing products or selling stock war-
rants. The omnipresence of issues for organizations clarifies why, according to
a recent overview (Botan & Taylor, 2004), issues management may be the foremost
important tool in public relations. Therefore, in this study the focus will be on the
effects of issue news on corporate reputation. The effects of news on corporate
reputation in the present study will be viewed from two theoretical perspectives:
agenda setting and *issue ownership*.

Theoretical perspectives

Agenda setting

The agenda-setting hypothesis (McCombs & Shaw, 1972) has been investigated widely
with fairly robust results. Dearing and Rogers (1996) concluded on the basis of their
review of 112 empirical studies that 60% of the studies support the hypothesis that the
position of an issue on the media agenda is important in determining that issue's
salience on the public agenda. Although agenda-setting effects were studied mainly in
political communication settings, Carroll and McCombs (2003) argue that the central
theoretical idea—the transfer of salient issues from the media agenda to the public
agenda—fits equally well in the field of business communication.

McCombs, Llamas, Lopez-Escobar, and Rey (1997) differentiated two levels of
agenda setting. The first level of agenda setting deals with the salience of an object or
an actor, whereas the second level of agenda setting deals with the *attributes* of the
object or the actor concerned. First-level agenda setting is apparent when respon-
dents consider the environment as an important issue after extensive news reports on
environmental pollution. First-level agenda setting also occurs when respondents
consider Shell as an important oil company, after a period in which Shell received
more media attention than other oil companies. Second-level agenda setting is
apparent when the audience associates Shell primarily with an issue that received
much attention in the news about Shell, for example, solar energy.

Carroll (2004) tested both levels of agenda setting in a business news context. The
hypothesis with regard to the first level of agenda setting predicted that more media
coverage about a firm would result in a higher degree of public awareness of that firm.
The second level of the agenda-setting hypothesis predicts a correlation between the
amount of news coverage devoted to particular issues or attributes of the firms and the
proportion of the public describing the firm in terms of these issues. Carroll analyzed
the business news in the *New York Times*, which served as a proxy for U.S. news in
general. Corporate reputation data were obtained from the Annual Reputation Quo-
tient[SM] survey study (see Fombrun, Gardberg, & Sever, 2000, for a description of the
development of this measure). Carroll's study included the U.S. firms that were part of
the 1999 and 2000 surveys. Support was found for the first level of the agenda-setting
hypothesis (Carroll, 2004). After controlling for the previous year's public agenda,
results revealed that the news influences which firms are thought about in the first
instance. The amount of media coverage devoted to the attributes of executive

performance and workplace environment tallied with the use of these attributes by the respondents, which provided support for the second level of the agenda-setting hypothesis. However, no relationship was found between the media coverage and the issue salience of organizational attributes such as financial performance, products and services, or social responsibility and their salience in public opinion. This second-level agenda-setting hypothesis will be tested in the present study. In this study, the term "association" is used as a synonym for the term "attribute."

> H1: The more attention a medium devotes to an issue in the context of organizational news, the higher the likelihood that this issue will become a salient association with an organization in the minds of the users of that medium.

Issue ownership

In issue ownership theory (Budge & Farlie, 1983; Petrocik, 1996; Petrocik, Benoit, & Hansen, 2003) reputations are crucial. When issues in business news become salient in the public mind, they may act as a yardstick for evaluating firms. Issue ownership theory, which was developed for the purpose of understanding political party competition (Budge & Farlie; Petrocik; Petrocik et al., 2003), suggests that the effect of the salience of a particular issue on the attitude toward various competing organizations is determined by preestablished issue-specific reputations of these organizations. When taxes, rather than health care topics, become the most prominent issue in the U.S. news, American voters will probably vote for a right-wing party, because left-wing parties have a poor reputation on lowering taxes. The strong reputation of the Republicans on the issue "taxes" can be explained by the work of Lakoff (2004). He describes how Republicans frame the issue taxes as "tax relief." This metaphor postulates that taxation is something bad, and the persons (the Republicans) who take it away are the good guys, whereas the persons (the Democrats) who are trying to stop these heroes are the bad guys (Lakoff, 2004). However, the question of how companies can create their "own issues" was not the focus of this study and will be considered upon in the discussion section.

Issue ownership does a fair job in predicting which issues will be emphasized by which party (Petrocik et al., 2003), as well as in predicting the outcomes of elections on the basis of the dominant issues in the news (Budge & Farlie, 1983). If issue ownership theory is applied in a business news context, then the public will ask itself what organizations have the best reputations on these issues. If there is news about an issue that the public perceives the organization to be handling successfully, that is, an owned issue, then the reputation of the organization will improve. The opposite also holds true: If there is news about an issue that the public regards the organization as being incapable of handling, that is, a poorly owned issue, then the reputation of the organization will worsen. For example, the reputation of the Dutch Railways (NS) company will improve when environmental pollution is a hot item in the news because of the preestablished notion that trains are less harmful for the environment than airplanes or cars. However, news on the environment might be especially

detrimental for Exxon and Shell because such news will remind the public of the much disputed 1989 oil slick disaster caused by the *Exxon Valdez* or of Shell's plan in 1995 to dump the Brent Spar in the bottom of the sea. The issue ownership hypothesis can be formulated as follows:

> H2: The higher the salience of an issue associated with a company, the better the reputation of the organization that "owns" that issue.

Issue salience is both the dependent variable in the first hypothesis and the independent variable in the second hypothesis. The second hypothesis entails that issue ownership modifies the relationship between issue salience and corporate reputation.

Method

Research design

In the present study, two types of data were used: media data and panel survey data on the salient beliefs and reputations held by news consumers. Because the media use of each of the respondents was known, it was possible to take the individual media use of the respondents into account when assigning the news and advertising data to the respondents. This makes it possible to take individual differences among audience members into account, which enables a better understanding of the effects of media on the audience (Atwood, Sohn, & Sohn, 1978). The Netherlands is a suitable country for testing the effects of media coverage in a real-life situation because subscriptions to daily newspapers amount to 85% of the country's total newspaper circulation (Bakker & Scholten, 2003). This means that a respondent's subscription or subscriptions to a certain newspaper is an accurate predictor of the print news consumption of the respondent because the reach of single issue is relatively small.

Selection of focal companies

Bearing in mind the generalizability of the results, we chose to examine different industrial branches, with two companies in each industry. The industries focused upon were the oil industry (Shell and British Petroleum [BP]), the banking industry (ABN AMRO and the Rabobank), the retail trade food industry (Albert Heijn and Super de Boer), the transport industry (NS and Amsterdam Airport Schiphol), and two professional sectors, the Dutch police and Dutch agriculture. Two focal companies from each industry were selected in order to make sure that, in general, they were coping with similar issues, such as economic developments, environmental problems, consumers, and stakeholders. Large organizations and professional sectors were selected in order to ensure enough news was generated about the companies to study news effects.

Survey data on corporate associations and corporate reputations

A market research agency—TNS NIPO (Dutch Institute for Public Opinion and Market Research)—conducted a survey with respect to the selected focal companies

and sectors among their representative sample of respondents. The data were gathered using the NIPO Telepanel. This is a national Dutch representative panel made up of approximately 1,000 households, all of which are provided with computers. The respondents received and returned the questionnaires via modem. To prevent the respondents from finding the questions tedious, they were required to fill out the questions for only 6 organizations (and not for all 10).

The panel surveys were conducted in the summers of 3 consecutive years from 1998 to 2000. Not all respondents took part in each of the three waves. Six hundred six respondents took part once, 306 respondents took part twice, and 446 respondents took part three times. This resulted in approximately 830 respondents for the cross-sectional tests per company of the first hypothesis. For the models with a lagged dependent variable (autoregressive models) that were used to test the first hypothesis, approximately 280 respondents per company were available. This number is considerably lower because respondents have to participate at least two times in consecutive years to be included in the autoregressive models. Data from 1998 could not be used to test the second hypothesis because the question regarding the overall organizational reputation was posed only from 1999 onward. The number of respondents used to test Hypothesis 2 is considerably lower than in the analyses of Hypothesis 1 because specific associations were selected to test Hypothesis 2.

The salience of corporate associations

In this study, the term "corporate associations" is used to refer to people's beliefs about a company (Brown & Dacin, 1997). The salience of corporate associations was measured by asking the respondents to choose their two most salient associations from a checklist consisting of 12 substantive potential associations and the categories "don't know" and "other." The checklist for each of the organizations consisted of issues related to the core business of an organization (e.g., gasoline stations in the case of oil companies, diversity of products in the case of supermarkets), economic performance criteria (e.g., profits, prices, efficiency), and a few societal issues (e.g., the environment). Items that were opposite sides of one association, such as efficiency and inefficiency, were offered as two different associations to the respondents. Such related items, as well as associations that were mentioned infrequently, were recoded afterward, after which 8–10 associations remained, with the police (5) and agriculture (6) as exceptions.

The salience of corporate associations is a binary variable. The value "0" was assigned if a certain association was not salient, the value "1" was assigned if a certain association was salient.

Corporate reputation

The term "corporate reputation" is used in this study to refer to the overall evaluation (usually in terms of good or bad) of a company.[1] The concept "overall evaluation" appeared in various definitions of corporate reputation (Fombrun, 1996; Maathuis, 1999). Because "evaluation" is a central element in the definition of

"attitude" (e.g., Eagly & Chaiken, 1993), corporate reputation is characterized in the present study as an attitude toward an organization or sector. The variable reputation was measured by asking the respondent to give a "report mark" for the organization concerned. In the Netherlands, a report mark is a familiar 10-point scale to express performance because "report marks"[2] (rather than A–D grades) are used throughout the educational system and therefore in public opinion surveys as well (e.g., Dawar, Parker, & Price, 1996).

Content analysis of issues in organizational news

The content analysis of the articles was based on the method for the network analysis of evaluative texts (Kleinnijenhuis, de Ridder, & Rietberg, 1997), which is one of the methods used for relational content analysis (Popping, 2000). The distinctive feature of relational content analysis as opposed to thematic or "ordinary" content analysis is that not only is the appearance of an issue coded but also its relationship with actors and other issues. Because the topic of the present study is purely "thematic," only the appearance of an issue matters.

The selection and weighting of newspaper articles and television news

Media coverage about the focal companies in newspapers and on television was analyzed for the period from July 24, 1997, to July 22, 2000. This period was selected in agreement with the public opinion polling data; all the media coverage from the year preceding the poll was analyzed. The newspaper articles were selected from the five largest Dutch daily newspapers: *De Telegraaf*, *Algemeen Dagblad*, *NRC Handelsblad*, *Trouw*, and *de Volkskrant*. Of the television news, the news broadcasts of the public broadcasting company NOS and the commercial channel RTL 4 were analyzed.

The relevant articles were retrieved as far as possible from electronic newspaper archives (LexisNexis, Nederlandse Persdatabank). The key terms to retrieve the articles contained the name and, if available, the abbreviation of the focal company. This resulted in 9,285 articles. The *headlines* of all articles were analyzed. A weight factor was used to take the position of the article (the page number)[3] and the magnitude of the article into account (see Appendix A).

Data about news broadcasts by the public broadcasting company NOS and the commercial channel RTL 4 were gathered in cooperation with NOS and RTL. Both organizations have an archive with items of spoken text (the transcriptions). In the case of television news, the transcriptions were analyzed, whereas in the case of print news, only headlines were coded. A total of 2,225 news items were analyzed. A weight factor was used to take the importance of items within a news item into account (see Appendix A).

The coding procedure

The coders coded the frequency of news about the various issues. For each of the industry, a list of issues was compiled: one list for Shell and BP, one list for ABN

AMRO and the Rabobank, one list for the NS and Schiphol, one list for Albert Heijn and Super de Boer, one list for the Dutch agricultural sector, and one list for the Dutch police. Examples of issues in the case of Shell and BP are profit, mergers and the environment (news about sustainable products). Schiphol and the Dutch police received the most media attention,[4] whereas BP and Super de Boer received the least media attention.[5]

The coders used the Excel computer program because it is more user friendly than the MS DOS program CETA2 developed by de Ridder (1994). A user-friendlier version of CETA2, called *iNET*, was not yet available, although it was being developed at that moment.

Coding reliability

An aspect of improving coder reliability is the training of the coders. Most of the seven coders in the present study were selected on the basis of their results in a course of which content analysis formed a major part. The coders were trained further by the authors, who did not code themselves, as recommended by Lombard, Snyder-Duch, and Campanella Bracken (2002). As advised by Riffe, Lacy, and Fico (1998), the training tests were not conducted with the content used for the actual study, but with content about the same focal organizations 1 month before the research period. If the training tests showed that the classification system needed refinement, the coding instruction was adjusted.

The coders coded an additional 10% of the headlines and news items in order to determine intercoder reliability. The headlines and news items for the reliability analysis were interspersed throughout the dataset that each coder received. This means that the coders were not aware of which headlines or news items would be used to measure intercoder reliability. The question of whether a specific issue appears in a specific article or news item can be answered for each combination of an issue and a dual-coded article. Therefore, combinations of issues and dual-coded articles and news items served as the units of analysis. The overall agreement is 98%, $n_{issues} = 23$, $n_{sum\ of\ the\ number\ of\ news\ items\ coded\ by\ different\ pairs\ of\ coders} = 1,376$. This overall agreement is largely based on the agreement that most issues are absent in most articles. Because the presence of an issue is a nominal variable, Scott's π—which is equivalent to Krippendorf's α for nominal variables—was applied to correct for chance agreement. The value of Scott's $\pi = .80$ provided a good level of reliability.

Matching the media dataset with the public opinion dataset

In order to test Hypothesis 1, a fine-grained dataset was needed to take into account the association of the respondent with a certain organization and the news about that issue. For example, in the case of the NS, the respondents who associated the NS with "delays" were "matched" with the amount of news about delays. This resulted in a "Year × Organization × Association × Respondent dataset," with 118,893 cases.

Results

The impact of the frequency of issue news on the salience of associations
In accordance with the agenda-setting hypothesis, it is expected that if respondents are asked what they think of when they think about an organization, they will mention associations (issues) that are mentioned in the media. At the same time, this hypothesis is also important for testing the hypothesis on issue ownership. If the salience of an issue influences reputation, and the frequency of issue news influences the salience of an issue, the issue ownership hypothesis is tested in a two-step approach. The model of this section is as follows:

$$\text{Salience}_{i,a,t,o} = b_0 + b1 \text{ (frequency of issues, television news}_a)$$
$$+ b2 \text{ (frequency of issues, print news}_a) + e_i$$

Because the dependent variable is dichotomous, logistic regression was used. The model with the data of all the 10 companies and sectors together, the pooled model, is presented in Table 1.

It appears from Table 1 that the amount of news about a certain issue influences the salience of that issue. This means that the more Shell was in the news in relation to the issue "environment," the more respondents associated Shell with the environment. This was the case for both television news about a certain issue (*B* television news = .01, odds ratio = 1.01) and for print news about a certain issue (*B* print news = .01, odds ratio = 1.01), in the cross-sectional model. In the pooled model, only the effect of television news remained significant after controlling for the lagged salient association.

Separate models were made per organization (these models are not shown in Table 1). These models were in agreement with the results that were found in the pooled model. It appeared that television news about issues had a positive influence

Table 1 Logistic Regression Analysis of the Frequency of Issue News on Issue Salience

Predictors (variable names)	Cross-Sectional		Autoregressive	
	B	Odds Ratio	*B*	Odds Ratio
Frequency of issues, television news	.01***	1.01	.01***	1.01
Frequency of issues, print news	.01***	1.01	.006	1.01
Salience issue, $_{t-1}$	—	—	2.54***	12.61
Constant	−2.28***		−2.81***	
Nagelkerke R^2	.03		.22	
N	118,893		41,697	

Note: Cell entries are unstandardized regression coefficients and odds ratios from binary logistic regression. For BP, no significant media effects were found. General issues were not included in the models.
*** $p \leq .001$.

on the salience of association for the models of eight organizations, whereas issue news in the print media was significant in the predicted direction in the models of six organizations. Remarkably, in the case of the supermarkets and the agricultural sector, besides a positive effect, a negative effect of the amount of news on the salience of an issue was found. In the case of Albert Heijn and the agricultural sector, these effects disappeared in the autoregressive model. In the case of Super de Boer, this effect remained in the autoregressive model.

Different salient associations lead to different reputations

In this subsection, specific comparisons will be made per organization between an issue that the researchers did not expect to be an owned issue of the organization (such as the issue environment in the case of Shell and BP) and a more general issue (such as the issue "gas stations" in the case of the two oil companies). It was expected that the respondents would assign a lower report mark to the organization if they associated the organization with an issue that was not an owned issue for the organization than they would if they associated the organization with a more general issue or an issue that was owned by the company. A repeated-measures analysis of variance (ANOVA) with between-subjects factors was used to test the significance of the difference.[6] Corporate reputation is the repeated-measures variable (measured in 1999 and in 2000). The respondents were categorized in a maximum of four groups, according to their association with the organization in a certain year.[7] Seeing that each of the four groups should contain enough respondents to conduct the repeated-measures ANOVA, and we could not control the group size (the associations of the respondents), we sometimes compared a group of respondents who associated the company with a *not-owned* issue with those who compared the company with a *neutral* issue, whereas in other cases we compared a group of respondents who associated the company with a neutral issue with those who associated the company with *an owned* issue. In all cases, the basic idea is that the reputation of a company will be improved if it is associated with an owned issue and will worsen if it is associated with a not-owned issue.

Table 2 presents the effects of the salience of a corporate association on the formation of corporate reputation. In the second column, an issue that is not owned by the company or a neutral issue is listed. In the third column, an issue that is owned by the company or a neutral issue is listed. If the respondents associate Shell with a not-owned issue in 1999 (such as "environmental pollution") and with a neutral association in 2000 (such as "gasoline stations"), the expected change in reputation is positive. If the associations were reversed, a negative change in reputation is expected. The last column of the table presents the within-subject Year $\times$ Issue interaction, in other words the effect of a change in issues on reputation.

The model with the data of all the 10 companies and sectors together—the pooled model—is the first model that is presented in Table 2. Respondents who associate the organization with an owned issue give a higher report mark than

Table 2 Effects of (a change in the) Salience of an Association on Corporate Reputation

Company	Association of the Company With a Not-Owned or Neutral Issue	Association of the Company With an Owned or Neutral Issue	Main Effect of Association on Reputation	Within-Subjects Interaction of Year × Association
Pooled model			$F(3, 1442) = 27.73$, $\eta_p^2 = .06$, $p = .000$	$F(3, 1442) = 14.15$, $\eta_p^2 = .03$, $p = .000$
Shell	Environmental pollution	Gasoline stations	$F(2, 203) = 9.34$, $\eta_p^2 = .08$, $p = .000$	$F(2, 203) = 1.52$, $\eta_p^2 = .02$, $p = .222$
British Petroleum	Environmental pollution	Gasoline stations	$F(2, 184) = 1.70$, $\eta_p^2 = .02$, $p = .186$	$F(2, 184) = .56$, $\eta_p^2 = .01$, $p = .573$
ABN AMRO	Bank cards	Profit	$F(2, 136) = 3.51$, $\eta_p^2 = .05$, $p = .03$	$F(2, 136) = 1.84$, $\eta_p^2 = .03$, $p = .16$
Albert Heijn	Price	Wide selection	$F(3, 136) = 16.75$, $\eta_p^2 = .27$, $p = .000$	$F(3, 136) = 6.03$, $\eta_p^2 = .12$, $p = .001$
Super de Boer	Price	Wide selection	$F(3, 73) = 4.29$, $\eta_p^2 = .15$, $p = .008$	$F(3, 73) = 3.31$, $\eta_p^2 = .12$, $p = .025$
Schiphol	Environmental pollution	KLM	$F(3, 139) = 13.09$, $\eta_p^2 = .22$, $p = .000$	$F(3, 139) = 2.93$, $\eta_p^2 = .06$, $p = .036$
Railways (NS)	Delays	Transport	$F(3, 163) = 18.35$, $\eta_p^2 = .25$, $p = .000$	$F(3, 163) = 0.70$, $\eta_p^2 = .01$, $p = .554$
Police	Weak action	Authority	$F(3, 108) = 11.21$, $\eta_p^2 = .24$, $p = .000$	$F(3, 108) = 7.50$, $\eta_p^2 = .17$, $p = .000$
Agricultural sector	Environmental pollution	Fresh products	$F(3, 150) = 7.54$, $\eta_p^2 = .13$, $p = .000$	$F(3, 150) = 2.21$, $\eta_p^2 = .04$, $p = .090$

Note: NS = Dutch Railways.

respondents who associate the organization with a not-owned issue, $F(3, 1442) =$ 27.73, $\eta_p^2 = .06$, $p = .000$). In addition, the last column of Table 2 shows that respondents who associate the organization with a not-owned issue in 1999 and with an owned issue in 2000 will attribute a significantly better reputation to the organization in 2000 than in 1999, $F(3, 1442) = 14.15$, $\eta_p^2 = .03$, $p = .000$).

This will be illustrated by elaborating on the results of Schiphol. Respondents were divided into the following four groups: a group of respondents who associated Schiphol twice with an owned issue, the Royal Dutch airline, KLM ($n = 84$); a group that associated Schiphol twice with a not-owned issue, environmental pollution ($n = 6$); a group that associated Schiphol with the airline KLM in 1999 and with environmental pollution in 2000 ($n = 22$); and a group that associated Schiphol with environmental pollution in 1999 and with KLM in 2000 ($n = 31$).

As becomes clear from Figure 1, respondents who associated Schiphol with the not-owned issue environment in 1999 were more negative ($M = 5.4$, $SD = 1.48$) than in 2000, when they associated Schiphol with the Royal Dutch airline, KLM ($M = 5.9$, $SD = 1.23$, $p = .02$). In other words, the within-subjects interaction of Year $\times$ the Type of Attribute was significant, $F(3, 139) = 2.93$, $\eta_p^2 = .06$, $p = .036$. There was also a significant main effect of the associations with Schiphol on the report mark of Schiphol, $F(3, 139) = 13.09$, $\eta_p^2 = .22$, $p = .000$. This means that respondents who associated Schiphol twice with KLM gave a higher report mark than respondents who associated Schiphol twice with environmental pollution.

To summarize, in the pooled model and in the models per organization, with the exception of BP and the Rabobank,[8] a significant main effect was found. Respondents' associations with the organization significantly influenced their opinion about the organization. The group of respondents who associated an organization with an owned issue assigned a higher reputation score to the organization than those who associated the organization with a not-owned issue. In addition, in the pooled model and in the models of four organizations, the within-subjects interaction of Year $\times$ the Type of Association was significant. This means that respondents who associated
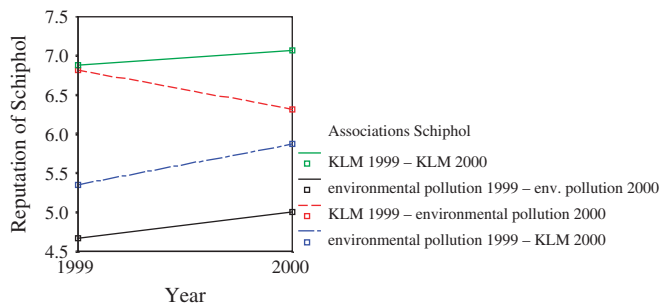

Figure 1 Respondents assigned a lower report mark to Schiphol when they associated the airport with "environmental pollution" than when they associated Schiphol with the airline "KLM."

the organization with a not-owned issue in 1999 and with an owned issue in 2000 attributed a significantly better reputation to the organization in 2000 than in 1999, and vice versa.

Conclusions

The present study found strong support for the second level of agenda-setting effect. News about a certain issue in relation to the organization stimulated the salience of that issue. This means that if a lot of television news about Shell and the environment were broadcast, then the respondents were more likely to associate Shell with the environment. These effects were demonstrated for a model that contained the data of all organizations/sectors and for the (cross-sectional) models of eight organizations.

In addition, support was found for the issue ownership hypothesis. This hypothesis was tested in a two-step approach. The first step was to test whether the amount of news about issues influences the salience of an association. This step overlaps with the testing of the second level of agenda-setting theory. The second step was to examine whether the reputation of an organization rested on the respondents' associations of that organization with specific issues. It was expected that respondents will assign a lower reputation to the organization when they associate it with an issue that is not owned by the organization than if they associate it with a more general issue or an owned issue. For five organizations (Albert Heijn, Super de Boer, Schiphol, the police, and the agricultural sector) and for the pooled model (the model with the data of all the organizations) significant differences, in line with the hypothesis, were found *within* groups. For example, respondents who associated Super de Boer in 1999 with "price" and in 2000 with "fresh products" rated the reputation of Super de Boer in 2000 as being better than in 1999. In the case of eight organizations as well as for the pooled model, significant differences were found *between* groups. For example, respondents who associated Super de Boer both in 1999 and in 2000 with price gave lower report marks than respondents who associated Super de Boer both in 1999 and in 2000 with fresh products.

In summary, the second level of agenda-setting hypothesis demonstrated that the amount of news about issues determined the salience of an issue. In testing issue ownership theory, it was shown that the salience of an issue determined corporate reputation.

Discussion and suggestions for future research

This study showed that theories from the field of political communication apply in a business communication context, as was already argued by Carroll and McCombs (2003). Future studies on issue ownership in a business context may focus on the question of which issues should be downplayed or emphasized to enhance the corporate reputation of specific firms. In our opinion, studies that cross the borders of the subdisciplines of communication science (political communication, public

relations, organizational communication, interpersonal communication) may add to the understanding of communication phenomena in each subdiscipline.

In applying a second level of agenda setting, this study focused on the different issues with which the companies were in the news. This is what McCombs and colleagues (McCombs, Lopez-Escobar, & Llamas, 2000; McCombs et al. 1997) refer to as the "substantive (or cognitive)" dimension of the attribute agenda. The substantive aspects of political candidates include their issues positions, perceived qualifications, personality, and integrity. McCombs et al. (1997, 2000) also distinguish another dimension of the attribute agenda, the "evaluative (or affective)" dimension. To measure the evaluative aspects of the political candidates' images, McCombs et al. (2000) coded the substantive statements for their tone as positive, negative, or neutral. This study combined the use of the substantive dimension of the second-level agenda setting with issue ownership theory. In the case of issue ownership, whether an organization "owns" an issue determines whether news about that issue will have a positive influence on its reputation. For example, news on the environment may boost sympathy for environmental pressure groups but not for polluting firms. Nevertheless, for some issues the transfer of valence will be equal for every organization associated with it. For example, issues such as "fraud" and "delays" always carry over their negative valence; being associated with the Enron scandal, was considered by all to be bad news for any firm.

Issue ownership could derive from the framing of facts by organizations, which could have been framed differently. For example, if the large number of passengers visiting Schiphol is framed as an "opportunity to create jobs," it creates a far more positive image than if it is framed as "environmental waste." Hallahan (1999) and Knight (1999) describe the potential applications of framing for public relations. Future research may address the influence of the framing of corporate issues on issue ownership. Such studies would need a theoretical exploration of the relationship between the concepts of framing, issue ownership, and agenda setting. A discussion is being held between scholars who point to the theoretical convergence between the concepts of framing and second-level agenda setting (Kiousis, Bantimaroudis, & Hyun, 1999; McCombs et al., 1997, 2000) and those who argue against the attempts to combine these two concepts into a single theoretical framework (Scheufele, 1999, 2000). The framing concept has been defined in two ways, as "*central theme* versus *aspects*" (McCombs et al., 2000 p. 79). In this study, the perspective of the second level of agenda-setting approach was used because this study did not fit with the central theme definition of framing.

The measurement of "own issues" in the application of issue ownership theory in a business context leaves room for debate. Petrocik (1996) could measure own issues by asking respondents whether the Democrats or the Republicans would be more successful in handling a certain issue. In business communication, the entrants to the playing field are less neatly arranged. The saliency of issues is not only dependent on traditional competitors but also on potential entrants, governmental agencies, and pressure groups. Imagine that in this study it was asked whether Exxon or Texaco (or

Shell or BP) was doing better concerning the environment and that Texaco came out as handling the issue of the environment better than Exxon. That would bypass the possibility that a third party like Greenpeace is the "real issue owner" of the environment, despite the fact that the general public is quite aware that pressure groups are not capable of handling issues on their own. Greater media attention for the environment could nevertheless damage the reputation of Exxon because pressure groups are the "real issue owners" of the environment.

A limitation of this study is that corporate reputation is measured with a single item. A disadvantage of using one item only is that measurement errors do not cancel each other out as the number of items increases (Fishbein & Azjen, 1975; Himmelfarb, 1993). However, news indicators easily tap other concepts, such as associations of organizations with specific issues. This may explain why reputation was measured with a single item in other studies as well, both in the field of corporate communication (Verčič, 2000) and in the field of political communication (Dalton, Beck, & Huckfeldt, 1998; Hertog & Fan, 1995; Miller & Krosnick, 2000; Shah, Watts, Domke, & Fan, 2002).

Another point of discussion concerns the test of the issue ownership hypothesis. In this study, the relationship between the news about owned issues and corporate reputation was tested in two steps. Future research in the field of corporate communication should consider whether a single model can be developed and tested to account for the interdependencies between the news (or shifts in the news), long-term issue ownership, the saliency of corporate associations, and corporate reputation.

Acknowledgments

Notes

1 For definitions of the related corporate image concept, see, for example, Meijer (2005).
2 Percentage scores do not automatically translate into a prescribed report mark or grade.
3 LexisNexis did not indicate the page numbers of the articles from *De Telegraaf*. Therefore, the average page number of *De Telegraaf* articles selected manually is taken to be the page number of *De Telegraaf* articles retrieved from the LexisNexis database.

4   Schiphol $n_{issues, 1998} = 768$, $n_{issues, 1999} = 520$, $n_{issues, 2000} = 282$; Dutch police $n_{issues, 1998} =$ 495, $n_{issues, 1999} = 477$, $n_{issues, 2000} = 307$.

5   BP $n_{issues, 1998} = 7$, $n_{issues, 1999} = 53$, $n_{issues, 2000} = 9$; Super de Boer $n_{issues, 1998} = 30$, $n_{issues, 1999} = 2$, $n_{issues, 2000} = 6$.

6   Because there were two points in time and hence the assumption of sphericity will not be violated, Maucly's test of sphericity will not be reported.

7   However, 27% of the respondents could be classified in two or more different groups, seeing that respondents gave two associations per organization. These respondents were classified in groups that gave two different associations because those groups were the most interesting ones from a theoretical point of view.

8   For the Rabobank, the numbers of cases per group were too low ($n_{bank\ cards\ -\ profit} = 5$; $n_{profit\ -\ profit} = 0$).

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Appendix A

The weight factor to weight the news

The weight factor for newspaper articles is composed of two weight factors: one takes into account the page number of the article and the other the total number of words in the article. An article on the front page is assigned the value "2." The articles on pages 2 and 3 are assigned the same weight factor, namely, 0.91 (which is 1/ln(page number) in the case of even page numbers, and 1/ln(page number +1) in the case of uneven page numbers). It was assumed that the economic section is important for people with an interest in news about companies. Although the economic section usually starts from page 11, page 11 is assigned the same value as an article on page 3 in the case of news about companies. The weight factor, which is composed of the number of words, is a linear factor that is topped off at the top and at the bottom. The two weight factors are multiplied and divided by two (the weight factor of the page number and the weight factor of the number of words have the same weight in the total weight factor).

The weight factor of television news is based on the viewer ratings of a random week in the middle of the research period. The 8 o'clock evening news, which is watched most often, was assigned the maximum value of "2." The newscast watched the least was assigned the minimum value of "0.5."

The "total" weight factor of newspaper and television news is applied in such a way that before and after weighting, the dataset consisted of approximately the same number of assertions. This is done by first calculating the sum of the weight factor. Subsequently, the sum of the weight factor is divided by the original number of assertions. That outcome is multiplied by the weight factor. After multiplication, the sum of the new weight factor equals the original number of assertions.