

## Chapter 5

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### **Presentation style and beyond: How print newspapers and online news expand awareness of public affairs issues**

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#### **Abstract**

Traditional newspapers have shown to improve knowledge of politics and other societal issues and to widen the perceived public agenda. But what about their online counterparts and other types of news sites on the Internet? The consequences of differences in presentation style are addressed. A large survey representative of the Dutch adult population has been used to examine how much print newspapers and online news expand the perceived public agenda, both in terms of its extent in general, and within politics in particular. Our results show that printed newspapers are more effective than online newspapers in increasing the overall number of perceived topics and the number of political topics, but only if readers are interested and rely on newspapers. Other types of news sites, however, seem to widen the overall and the political public agenda, even without specific interest and reliance of their users.

### Communication channels and the public agenda

Democracy needs citizens able to deliberate on issues relevant to society as a whole, and not only those that each individual may be personally concerned about (Habermas, 1962). Media have a decisive role in this respect: In larger democratic societies, media are supposed to help create the public space for the discussion of societal issues - with as many citizens as possible participating in the public discourse. For this purpose, media present and contextualize the issues the public is, or should be, concerned about. Media often even *select* those issues - they *set* the public agenda. The media's task is actually twofold (e.g., Gans, 2003; Luhmann, 1971; Schudson, 1995): On the one hand, they should bundle the (principally) infinite number of issues a society could worry about and narrow those issues down to the most urgent. On the other hand, the media should—at least most of the time—keep the public from becoming too preoccupied, too monomaniac, about just one issue. The media should remind their users of what else there is to be dealt with. It is this latter function of the media, their “agenda-expanding” one, which is the focus of this study.

As early as in 1977, Shaw and McCombs made us aware of the differential impact of the media in this respect. Shaw and McCombs' study revealed a greater influence of newspapers than of television on the salience of issues on the public agenda. Subsequently, the majority of comparative studies demonstrated a prevalence of newspapers over television in affecting awareness of issues relevant to society. Quite a number of those studies showed that newspapers, in particular, help increase the span of the public agenda and contribute to *agenda richness* (see e.g., Allen & Izcaray, 1988; Culbertson, Evarts, Richard, Sandell & Stempel, 1994; Eveland, Seo & Marton, 2002; Guo & Moy, 1998; McLeod, Scheufele & Moy, 1999; Schulz, 2003).

Often this superiority of newspapers has been explained by their large space for simultaneous information. That space allows print newspapers to cover relatively more topics of public concern than television (news) programmes (see e.g., Furnham, Gunter & Green, 1990; Schoenbach, 1983). If that is true, however, then nowadays the Internet should make users aware of even more topics in the public sphere. The

amount of space available for topical information is definitely larger on the Internet than in printed newspapers.

Several studies have investigated this assumption: How does web-based content, as compared to print media, affect the public agenda? Interestingly, the results indicate that the print format is still more successful when it comes to learning about societal issues (e.g., Althaus & Tewksbury, 2002; Eveland & Dunwoody, 2001, 2002; d'Haenens, Jankowski & Heuvelman, 2004; Schoenbach, De Waal & Lauf, 2005; Tewksbury & Althaus, 2000).

Of course, individual online news sites may simply not make best use of their spatial potential. The online editions of newspapers, for instance, often do not offer more information and stories than their offline counterparts (see e.g., Bressers, 2006; Engebretsen, 2006; d'Haenens, Jankowski & Heuvelman, 2004; Van der Wurff, & Lauf, 2005; Zürn, 2000). But another - even more plausible - explanation could be found in the way that information is organised and presented. In order to access news stories online one has to make many individual choices, and in doing so encounter a wealth of information, links and details along the way. And all these details may just be too overwhelming and distracting, Eveland and Dunwoody (2001) demonstrated. In addition, Southwell and Lee (2004) demonstrated how important the pre-structuring of the information offer is. The more the subjects in their experiments were allowed to put together their information-‘diet’ individually - typical for the possibilities that the Internet offers - the less likely people were to remember complex media content.

So, maybe, printed newspapers are still better for learning about societal issues, because they essentially *guide* their readers through the content. With their linear structure and finiteness, traditional newspapers encourage a paging-through behaviour. Paging through should increase chance encounters with topics that a reader may not have been interested in initially. In addition, newspapers use quite a number of cues of relevance, such as the ordering of the articles in the paper as a whole and on every page, as well as font size, colours, pictures, and so forth. These cues may stimulate attention for information one had not initially been searching for (Garcia & Stark, 1991).

News on the Web, as opposed to the content of traditional newspapers, is typically presented in a nonlinear fashion. The multi-layered

arrangement of information demands opening-pages to serve as tables of content. This, combined with a more limited screen size, allows fewer cues at one glance that could lure users into reading something they did not plan to (Althaus & Tewksbury, 2002; Engebretsen, 2006, Eveland, Marton & Seo, 2004). Almost immediately users have to click and scroll, and are encouraged - even forced - to pursue their individual path and to select information that matches their own interests (Tewksbury & Althaus, 2000; d'Haenens, Jankowski & Heuvelman, 2004, Mensing & Greer, 2006; Prior, 2005; Tewksbury, 2003; Watters, Shepherd, Burkowski, 1998). Certainly, determined *print* readers too can skip sections that they are not interested in and read 'out of order,' but for users of hypermedia this is the structural norm (Eveland & Dunwoody, 2002).

All in all, it seems plausible to assume that traditional newspapers confront their readers with information that the individual user may not have sought. But because it is placed on the front page or, for example, accompanied by an emotional photograph, readers may, incidentally, become at least aware of that information. Of course, incidental exposure is also possible online (Pew, 2004; Tewksbury, Weaver & Maddex, 2001), but it should be easier to avoid whole thematic areas such as politics when surfing the Internet than when reading a traditional newspaper. So, newspaper readers seem more likely to become aware of societal issues more passively, without really being motivated to find out about those issues. The concept of *passive learning* from the media was described as early as 1970 by Krugman and Hartley (see also Zukin & Snyder, 1984) and, under the label of *incidental learning*, by Culbertson and Stempel (1986; see also Guo & Moy, 1998).<sup>1</sup> Incidental or passive learning may be enough to become aware of what society finds important once one simply encounters those societal topics prominently and often enough. In other words, people with little interest in public affairs may be *trapped* by information about those affairs (about "trap" effects of communication channels see Schoenbach & Lauf, 2002, 2004).

The Internet may further a different kind of learning, though. If users are allowed to follow their own path of interest, their motivation to learn is likely to be greater (Bandura, 1982; Schunk, 1991); and, accordingly, their attention levels are higher (Chaffee & Schleuder, 1986). Individual (and therefore possibly more effective) ways of information processing may

be stimulated (Kinzie, Sullivan & Berdel, 1988; Young, 1996). So, user control can be valuable for learning about what is going on in the world as well, but presumably that reflects more in-depth learning about those topics one is personally interested in (Prior, 2005).

There are fears about a downside of this kind of *customized learning*, however: if a communication channel allows its users to easily avoid topics beyond their initial interests, chance encounters with socially relevant issues should be less likely. Therefore the joint agenda for the public discourse in a democracy may be seriously endangered (see e.g., Andersen & Nørgaard Kistensen, 2006; Boczkowski, 2002; Bonfadelli, 2002; Katz, 1996; Mindich, 2005; Papacharissi, 2002; Schoenbach, 2004, 2005; Sunstein, 2002; Tewksbury, 2003). To put it more specifically, the chance to trap for example those not interested in politics by political information may decrease. So far, however, the empirical evidence of such a plausible expectation has been scarce. Prior (2005) has shown that increasing individual choice among different media content - which is facilitated by "high-choice" media such as the Internet - decreases encounters with *news and political content*, in particular. Tewksbury and Althaus (2000; Althaus & Tewksbury, 2002) have found online readers to read and recall fewer political, national and international news stories and topics than print newspaper readers.

Almost all studies investigating the differential effect of traditional newspapers and Internet information on one's perceived public agenda are experiments. The freedom to select one's information sources or to stop reading completely has intentionally been suppressed, as well as potential distractions. Accordingly, a possible difference in the everyday effects of Internet information, on the one hand, and from newspapers, on the other, may have been underestimated - because subjects may have felt forced to be attentive whatever the communication channel was they had to use. The difference between print and online information could also have been overestimated - because the experimental situation emphasized the differential features of those channels. According to Behr & Iyengar (2001, p. 53) "...analyses of media agenda-setting that ignore real-world conditions will arrive at severely inflated estimates of media influence."

With this study we attempt to investigate with a survey, thus in a non-experimental, natural setting, how online news as compared to print

newspapers affects the public agenda. More specifically: Does exposure to printed newspapers indeed lead to a greater number of topics in the public sphere one is aware of? On the basis of our theoretical considerations so far, we expect different agenda-expanding effects of exposure to print newspapers and online offers:

H1: Exposure to printed newspapers increases the overall number of perceived societal topics more strongly than exposure to online news does.

In addition, we test the notion that the political agenda, in particular, may suffer from the Internet (see above - Sunstein, 2002; but also Mindich; Prior, 2005; Tewksbury, 2003) by examining how much newspapers and online news affect the number of perceived political topics:

H2: Exposure to printed newspapers increases the number of perceived political topics more strongly than the exposure to online news does.

Finally, we test the idea that people with little interest in public affairs may be particularly prone to ignore societal issues if they use the Internet as a source of information. Traditional newspapers, however, should be able to trap those citizens (see above). If print newspaper readers profit from chance encounters with information unsought-after, print papers should neither need a readership interested in specific information, nor rely on newspapers as a source of that information. Just spending time reading newspapers should be sufficient. Online news, on the other hand, should typically inform users of topics of personal interest, and not go beyond those topics:

H3: Exposure to printed newspapers increases the number of perceived societal topics in general and of political topics in particular more strongly than the exposure to online news does - even if readers are not particularly interested in societal/political topics and do not particularly value newspapers as a source for those topics.

## Method and measurement

Our analysis is based on survey data representative of the Dutch adult population. 986 respondents were interviewed by telephone in December 2002 by the market-research company TNS NIPO. The interviews lasted 16 minutes on average. The minimum response rate (AAPOR, 2004) was 41 percent<sup>2</sup>.

The distribution of gender, age and education in the survey mirrored very closely the composition of the Dutch population 18 years and older. Our survey included 48 percent males and 52 percent females (the population rates were exactly the same). The distribution rates of age and education in our sample were as follows (the population rates are between brackets): 18 to 24 years, eight percent (10%); 25 to 34 years, 17 percent (20%); 35 to 44 years, 26 percent (21%); 45 to 54 years, 21 percent (19%); 55 to 64, years 17 percent (13%); 65 to 98 years, 11 percent (16%); elementary education, three percent (8%); lower vocational education, 11 percent (23%); lower general secondary education, 14 percent (14%); intermediate vocational education, 26 percent (25%); higher general secondary and pre-university education, eight percent (8%); higher vocational education, 29 percent (18%); higher education, 9 percent (3%); other, zero percent (1%)<sup>3</sup>.

The survey included measures of the issues perceived in society, media uses and perceptions, interests and socio-demographics.

### Perceived issues

As dependent variables we investigate the number of perceived issues. In typologies of agenda-setting effects, this comes close to what has been called *perceived issue salience* (McLeod, Becker & Byrnes, 1974). The perceived issue salience is traditionally measured by a question about the *most important problem* (MIP) facing the nation. For the purpose of our study - comparing the agenda-expanding function of print newspapers and online news - we do not focus on the most important issue, but on the general extent of one's perceived societal agenda, the so-called *nominal agenda* (see e.g., Peter & De Vreese, 2003). It measures how many different topics one can reproduce in total. Accordingly, the dependent variables of our analysis are derived from all the issues that respondents claimed to perceive as topical for the Netherlands and the world. Specifically, our survey asked which topics came

to mind when respondents were thinking about what was going on in the Netherlands and in the world. Plausibly, this question opened the interview. Subsequently it was asked if one could name more topics, no matter in which area, and finally, if anything else came to mind until one stopped mentioning anything. Thus, respondents could name a potentially infinite number of subjects.

To determine the extent of the nominal agenda, we use the number of different answers per person. We chose a wide definition of the difference between answers; virtually only synonyms were not counted as an extra answer. Our hypotheses require two different kinds of dependent variables - the overall number of topics perceived and the political ones. The respondents named up to 17 different topics in general, with an average of 4.2 and a standard deviation of 2.3. We clustered the answers into thematic subcategories to determine the number of topics within the area of politics. The classification of the answers to our perceived-issue question is inspired by McCombs and Zhu (1995) and Bara (2001). The category "politics" includes politics in general, as well as specific domestic and international political issues such as: issues dealing with national government and political decision making, elections in the Netherlands and foreign countries, Iraq - U.S. issues, Israel - Palestine issues, EU issues, and so forth. A second coder recoded ten percent of all the answers; the coefficient of reliability (Holsti, 1969) was .95. The respondents named up to eight political topics, with an average of 2.4 and a standard deviation of 1.4.

### **Media exposure and demographics**

The independent variables of our analysis comprise *generic exposure* to print newspapers, online editions of newspapers and "other," or "non-paper" news sites (such as the news websites of radio and TV stations and online-only news sites like *Yahoo* and *Google News*)<sup>4</sup>, measured in minutes per average day (see appendix B). These generic exposure-measures are based on self-reports of our respondents. Next to simple generic exposure we use a more sophisticated measure of *specific exposure* (see also McLeod & McDonald, 1985) - based on the answers to two questions: (1) how interested respondents were in specific thematic areas (e.g., in politics, sports, economy etc.), and (2) how important each media channel was for

each respondent personally to get information of that type. By multiplying the scores of both interest in a topic and the relevance of a channel to find out about that topic we get an index that tells us how respondents individually evaluate a communication channel for specific information. As opposed to generic exposure we consider this variable an indicator of *theme-specific* exposure (see the specific exposure index in appendix A for exact wording and calculations for both dependent variables).

### **Analysis**

We use linear multiple regressions, with generic and specific exposure to print newspapers, online newspapers and other news sites as independent variables, and with the number of perceived societal topics in total and the number of perceived political topics as dependent variables. We control for both types of exposure to all other information channels - television, teletext, radio, magazines, and free local newspapers. In addition, the possible influence of demographic variables - age, gender and education<sup>5</sup> - on the extent of one's perceived agenda is controlled for.

With our regression analyses we presume that a causal effect of media exposure on the extent of one's agenda is more plausible than the opposite causal direction, the extent of the agenda in the minds of people leading to the use of specific media (see also the discussion in Palmgreen, 1979; and more recently, evidence from longitudinal data: Behr & Iyengar, 2001 and evidence from panel data: Eveland, Hayes, Shah & Kwak, 2005).

## **Findings**

### **The overall number of issues**

Generic exposure to print and online newspapers does not significantly widen the overall span of topics that our respondents came up with when they were asked what was going on in the Netherlands and in the world. But spending time on other, non-paper news websites has a positive impact on the extent of one's agenda. This is also true for specific exposure to print newspapers: Printed newspapers significantly increase the number of the issues our respondents perceive if those papers are considered a valuable source for various types of information and if readers are also interested in a variety of those themes. Furthermore, two socio-demographics, education

Table 5.1: The impact of exposure to print newspapers and online news on the number of perceived topics

	<i>All topics</i>	<i>Political topics</i>
<i>Exposure to print newspapers and online news</i>		
<i>Generic exposure</i>		
Print newspapers	-.02	-.04
Online newspapers	.03	.04
Online news sites	.07**	.06*
<i>Specific exposure</i>		
Print newspapers	.10**	.18***
Online newspapers	.03	.04
Online news sites	.02	-.02
<i>Exposure to other media channels</i>		
<i>Generic exposure</i>		
Radio	-.03	.02
Television	-.04	-.04
Teletext	.05	.08*
Magazines	.05	-.04
Free local newspapers	.04	.04
<i>Specific exposure</i>		
Radio	.06	.00
Television	-.01	.01
Teletext	-.01	-.03
Magazines	-.06	.03
Free local newspapers	.03	.01
<i>Demographics</i>		
Education	.21***	.17***
Age	.08**	.05
Gender	.01	.03
Constant	1.718***	1.192***
R <sup>2</sup>	.084	.097
Adj. R <sup>2</sup>	.061	.074
N at least 786		

*Note.* Cell entries are beta's from linear multiple regressions, with the number of perceived topics as dependent variable, exposure to print newspapers and online news as independent variables, and controlled for exposure to other media channels and demographics. \* $p < .10$ ; \*\* $p < .05$ ; \*\*\*  $< .01$

and age, are positively related to more societal topics of all sorts in one's mind.

### **The number of political issues**

Within the realm of "politics," we find almost the same pattern. The number of topics does not significantly increase with just more time spent on reading newspapers, be that printed or online ones. Our data reveal a weak impact of spending time on other news websites though, and again a fairly strong impact of specific exposure to print newspapers: Print newspapers expand the number of perceived political issues, significantly and fairly strongly, once exposure to newspapers specifically for politics is high, that is, if they are considered an important source for political information and if this kind of information is deemed interesting. Among our controls, the time spent on teletext enlarges the number of political topics. Furthermore, education is again a significant predictor of more perceived political topics.

## **Conclusions & discussion**

Although our findings show a weak impact of media exposure on the number of public-affairs topics that people can name spontaneously, this is plausibly a realistic picture, due to the method used here. As opposed to the experimental design of virtually all previous research, our survey study neither forced nor limited encounters with media content. Nor did it measure recall directly after exposure to information, at least not systematically. In a natural situation, effects of specific communication channels notoriously blur and often are hardly measurable any more as distinct (see Maurer, 2004). Moreover, in our analysis, our independent variables had to compete with numerous other information sources and other control variables.

One of those control variables, education, has been a strong predictor of naming more societal issues. One might think that a better education alone cannot make people *aware* of more topical issues in their environment - people still need to be exposed to information. But education provides citizens the skills that they need to access, use and acquire

information effectively (see e.g., Bonfadelli, 2002), and this is plausibly what our analysis has demonstrated.

As to the first two of our three hypotheses, we get a mixed picture. We had assumed that, compared to using news sites on the Internet, reading traditional newspapers would lead to more chance encounters and thus increase more strongly the number of societal issues in one's mind and the number of political topics, in particular. True, exposure to online *newspapers* does not show any significant effect at all in our analysis, and other news websites expand awareness of issues less strongly than printed newspapers. But, the exposure to print newspapers has to be specific to have its impact - just reading a newspaper does not help. Instead, people have to be at least somewhat interested and to rely on print newspapers. In other words, our third hypothesis - even people with minimal interest and no particular reliance on traditional newspapers grab a variety of societal topics from newspapers - is not supported.

So, on the one hand, this study confirms former evidence that printed newspapers are a good source for public-affairs topics. But on the other hand, our results disappoint all those hoping that public discourse could profit from simply encouraging people to read newspapers more extensively. Chance encounters alone cannot explain newspapers' success in preparing citizens for public discourse. Newspapers are not superior because they trap uninterested individuals by their wealth of information and by their cues that alert inattentive readers of what they should look at. Rather, in order to make people aware of more societal topics, readers have to be already convinced of the value of newspapers as a source of information and interested in public-affairs topics beforehand. Under those conditions, newspaper readers indeed seem to profit from the extensive but restricted content of the traditional newspaper, from its emphasis on public affairs and its well-structured offer.

This is a function for society that print newspapers may have begun to work on as their niche, their 'unique selling proposition,' but only recently - as a reaction to an ever-decreasing circulation in most Western countries (WAN, 2006). So maybe at least the earlier studies that had demonstrated the agenda-expanding power of traditional newspapers (see above) were simply conducted at a time when newspapers still functioned as the universal information medium for many. According to our results, the

printed newspaper may have turned into a valuable, agenda-expanding source for those who care.

Still, chance encounters with information unsought-after seem to trap people with minimal interest in public affairs. As expected, it is not the online newspaper editions that have such an impact. But interestingly, a different mode of topical information on the Web, non-paper news sites (e.g., news sites of TV and radio stations and online-only news sites like News), seems to increase the number of societal topics even for those not particularly interested. Just spending enough time on this type of news sites suffices to make people aware of more topics in society. So, apparently, chance encounters are not restricted to the print format (anymore). This is in line with the finding of Tewksbury, Weaver & Maddex (2001) and supports more recent findings from trend research that revealed that Internet users increasingly come across news inadvertently (Pew, 2004).

We can only speculate why this is the case for other news sites but not also for online *newspaper* sites. Possibly motives to use the online editions of traditional printed newspapers differ from the motives to use online-only news sites for instance. Online papers, as the counterpart of the printed ones, may be used for more background and in-depth information on specific topics. This may explain why they do not *expand* their users' societal agenda. Extensive users of other, non-paper news sites (such as News, Planet News, MSN News or news sites of broadcasters) could typically be looking for quick updates of what is going on the world. Accordingly they may sign up for news alerts or scan several news sites even to get the latest news.

All in all, our study suggests that civic society still profits from traditional newspapers, but their impact looks a little like 'preaching to the converted'. In the new information environment, then, are non-paper news websites our hope for informing citizens about public affairs, even if those citizens are only minimally interested in politics?

Finally, as the uses and offerings of print newspapers, their online equivalents and other news sites on the Internet are rapidly evolving today, we cannot expect their effects to remain stable over time. But our study signals some interesting patterns that may help us understand the changes in a rapidly changing media environment.

### Notes

1. In their *peripheral route of persuasion*, Petty and Cacioppo (1986) also draw on the idea of being confronted inadvertently with information not necessarily sought: The peripheral route leads to - an admittedly superficial - attention to persuasive messages, if only there are enough (and sufficiently striking) chance encounters with those messages.
2. The completion rates were as follows: Of all persons randomly selected for the interview 26 percent could not be contacted (no answer or busy lines) and 26 percent refused; 7 percent was not contacted a second time after having agreed to have an interview on another hour.
3. TNS Nipo provided the population rates.
4. Online news in the Netherlands is very similar to online news in the U.S., for instance: there are Dutch versions of *Google News*, *Planet News*, *Yahoo News*, *MSN News* and the like.
5. Education was gauged as one's highest school or university degree.

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## Appendix: Question wording

### Generic exposure

- On average, how many days a week, do you read Dutch national or local printed newspapers?

This question was also asked for “visiting websites of Dutch national or local newspapers on the Internet” and for “*other* news websites.”

For websites of newspapers and *other* news sites, questions about the frequency of their use were even more extensive:

- On average, how many times a day do you visit websites of Dutch national or local newspapers on the Internet?

Again the same question was asked for “other news sites on the Internet.”

- On average, for how long do you read Dutch national or local printed newspapers at any given time?

This question was also asked for “visiting websites of Dutch national or local newspapers on the Internet” and for “other news websites.”

- On average, for how long do you watch television a day?

The same question was asked for “reading teletext on television or the Internet” and “listening to the radio.”

- On average, for how long do you read magazines a week?

The same question was asked for “free local newspapers”.

For every channel the answers to the above mentioned questions were recoded into minutes per day.

### Specific exposure index

For this index, we multiplied “interest” and “channel reliance” (see the methods and measurement section).

*Interest*

- In general, how much are you interested in politics: very much, somewhat or not interested?

The same question was asked for interest in “sports,” “theatre, films and literature,” “economy and finance,” “reports on celebrities,” “reports on accidents and crime,” and “local news.”

*Channel reliance*

- How important are printed newspapers for you personally if you would like to keep up to date with politics: very important, somewhat or not important?

The same question was asked for the other topical areas “sports,” “theatre, films and literature,” “economy and finance,” “reports on celebrities,” “reports on accidents and crime,” and “local news.”

And this whole battery was also asked for all other communications channels: “online newspapers,” “other news sites on the Internet,” “television,” “teletext,” “radio,” “magazines” and “free local papers”.

For our dependent variable “number of *all* perceived topics” the specific exposure index includes interest and channel reliance measures for all categories: politics, sports, culture, economy, celebrities, crime and local news, added up per communication channel. For our dependent variable “number of perceived *political* topics” the specific exposure index includes interest and channel reliance measures for politics only.