Preceding issue salience and agenda-setting. A large-scale experimental study.

INTRODUCTION

Public agenda-setting is one of the most—if not the single most—influential theory in political communication (Graber, 2005). When mass media devote attention to an issue, the audience tends to follow the media and the issue gets more priority among the public. Since McCombs and Shaw's (1972) labeled this process as agenda-setting, the research has expanded enormously. Literally hundreds of studies have corroborated the basic agenda-setting idea that the amount of information on issues available in the mass media determines people's opinion about the relative importance of issues (Dearing & Rogers, 1996; Scheufele & Tewksbury, 2007). In the process, agenda-setting has gained much by way of methodological and theoretical refinement. Methodologically, recent studies moved far beyond the simple aggregated rank-order correlations between surveys and media content as employed by the founders in their seminal 1972 paper. Agenda-setting has gradually moved beyond surveys and their problematic causal inferences towards the increasing use of experiments (Iyengar & Kinder, 1988). Also, theoretically, agenda-setting has moved forward and—although critics still consider its theoretical base to be weak (Lee, 2004; Bennett & Iyengar, 2008)—we now know much more about the conditions under which agenda-setting effects (fail to) occur. Theories on agenda-setting from the side of the receiver's have made particular progress: the public does not just 'roll over and declare their conversion'. Instead the agenda-setting process often takes on a more subtle form, resonating with an individual's predispositions (Iyengar & Simon, 2000: 158).

The issues themselves, or better, the so-called issue-characteristics, have also become an integral part of the research on public agenda-setting. But this attention to issues has not yet led to a broad consensus on how the nature of issues should be

incorporated in agenda-setting research. Most research duly refers to the seminal contribution by Zucker (1978) about the 'obtrusiveness' of issues in terms of people's personal experience with them. However, the way issue-characteristics are conceptualized and measured on an *individual* level remains problematic. An issue may have different meanings for different people and the definition of issue characteristics on an aggregate level leads to a loss of information. Therefore, this study tries to clarify the role of issues on an individual level and proposes a simple alternative indicator that can explain why media coverage on some issues leads to more agenda-setting effects than coverage on other issues. In particular, we focus on the position issues take on a person's personal agenda *before* media coverage. We expect that media matter most and boost an issue's saliency especially among people for whom this issue was fairly unimportant before and got 'unexpected' coverage. The research question this paper deals with is the following: *to what extent is the agenda-setting effect of mass media coverage moderated by preceding salience of the issue at stake?*

To examine the role of preceding issue salience we set up a large-scale online experiment involving about 4,000 subjects in Belgium[1]. We confront our subjects with a fake news item embedded in a real news show. Issue salience is tested before and after exposure to the stimulus and compared to the control group that is not experimentally treated with the fake news item. We control for several individual characteristics of our subjects, including individual issue sensitivity and issue novelty.

ISSUE CHARACTERISTICS AS AGENDA-SETTING MODULATORS

Shortly after the founding work of McCombs & Shaw (1972), Funkhouser (1973) and others started to develop and refine the agenda-setting approach in several ways. A major breakthrough was the shift towards the individual level away from the aggregate rank-order correlation studies (Roessler, 1999). Researchers

[1] The study was conducted in Flanders, the Dutch-speaking part of Belgium containing about 60% of the population.

acknowledged that media coverage did not impact all people to the same extent, but that the media's influence was dependent on contingent conditions (Winter, 1981). Initially, most attention went to the personal characteristics and attitudes of the receiver. For instance, the psychological concept 'need for orientation' became a requisite part of agenda-setting research dealing with influence on the individual level (Weaver, 1977; see Matthes, 2006 for a recent overview). Need for orientation refers to both interest in a certain subject and uncertainty about it. Another intervening variable that has often been examined is the degree of interpersonal communication (Roessler, 1999), but it has thus far remained unclear whether interpersonal communication strengthens or weakens the agenda-setting impact of the media (Hügel et al., 1989). Other audience characteristics that have been successfully tested in agenda-setting research are, among others, demographics (Wanta, 1997), opinion leadership (Waiman & Brosius, 1994), and different variables related to media use and source or channel credibility (Dearing & Rogers, 1996).

Besides audience traits, issue characteristics have also become a prominent contingent condition; several agenda-setting scholars have developed issue typologies. Protess and colleagues (1987) distinguished 'recurring' and 'non-recurring' issues, Yagade & Dozier (1990) developed the idea of 'concrete' versus 'abstract' issues, while Soroka (2002) worked with 'prominent', 'sensational' and 'governmental' issues. These and other typologies mostly build upon or at least refer to the work of Zucker (1978). Zucker's concept of *issue obtrusiveness* has become a classic in agenda-setting research. An issue is obtrusive when the public has direct contact with it and it is unobtrusive when the public lacks personal experience. According to Zucker, the media has far greater influence on people' priorities when it comes to unobtrusive issues as personal experience does not mitigate the information given by the media. The classical example of an unobtrusive issue is foreign policy, where most people rely solely on the news media. Inflation is an often cited example of a typical obtrusive issue: people do not need the media to tell them that consumer

prices have gone up. Overall, the idea of obtrusiveness of issues as a moderator of media impact has received empirical support (Winter, 1981; Palmgreen & Clarke, 1977; Hügel et al., 1989). In their classic campaign study, Weaver and colleagues (1981) only found an agenda-setting effect after distinguishing both types of issues.

However, the simple concept of obtrusiveness has turned out to be less straightforward than initially assumed (McCombs et al., 1997). The main problem with issue obtrusiveness is that it is defined as an aggregate-level characteristic of an issue, as if all individuals share the same personal experiences. For 'extremely' obtrusive or unobtrusive issues like inflation or foreign policy, this may actually be the case, but for most others issues it is not. Unemployment, crime or health care can be, as a result of past experiences or present conditions, very obtrusive, while for other individuals they may be very distant and not directly perceivable. A concept that addresses this shortcoming is that of *issue sensitivity* as developed in the pioneer work of Erbring and colleagues (1980). They were among the first to show that is useful "*to proceed issue by issue when examining the effects of the media's agenda-setting*" (Erbring et al., 1980) and they stressed that the same issue when covered in the media can have different effects on individuals. They found that, for instance, people that recently witnessed unemployment in their family were more sensitive to media coverage about unemployment and that their salience of the unemployment issue increased more with the amount of coverage. The same was found for crime, with older people and women proving shown to be more sensitive to crime coverage since they have a greater fear of being the victims of crime .

Some authors have relabeled issue sensitivity as cognitive priming "*stating that conditions in a person's environment sensitize or prime the individual's attention with respect to the issue in question*" (Lee, 2004: 152). According to Demers et al. (1989) cognitive priming or personal issue sensitivity is a better way to deal with issue differences than the general obtrusiveness-unobtrusiveness typology; one is sensitive to an issue because it is more obtrusive. Hügel and colleagues (1989),

in contrast, believe both concepts are complementary and can be used in the same research. They treat obtrusiveness as an aggregate-level characteristic while issue sensitivity is an individual-level issue characteristic. "*If one differentiates between more specific sensitivities (mainly regarding obtrusive issues) and more general sensitivities (mainly regarding unobtrusive issues) the concept of issue sensitivity could be applied to both categories of obtrusive and unobtrusive issues*" (Hügel et al., 1989: 205). Also Lee (2004) showed that both issue categorizations are complementary rather than mutually exclusive, especially if a time dimension is included. Obtrusive issues, Lee states, are more easily activated, and as a consequence, agenda-setting effects show up within a shorter time period as compared to unobtrusive issues.

The seminal experimental studies of Iyengar & Kinder (1988) as well suggested that time matters for some issues. Results varied depending on the specific time context. In one experiment the unemployed were more influenced by media coverage on unemployment, while in another experiment several months later, it appeared to be the other way around and they were less affected. Iyengar & Kinder explained this by the *novelty* of the issue, which is closely related to Downs' issue attention cycle (1972). During their first experiment the issue of unemployment was low on the public agenda, but after several months of recession and growing unemployment this had changed and unemployment also became important to the employed. So, if an issue spends a longer amount of time at the top of the media agenda, those individuals whose personal lives are untroubled by the issue become influenced to the same extent (or even more) than those directly involved, "*whose concerns may have reached maximum levels*" (Iyengar & Kinder, 1988: 53).

The sophisticated research of Iyengar & Kinder shows that the role of issue characteristics in agenda-setting is exceedingly complex. Not only do the effects vary from issue to issue on an aggregate level (issue obtrusiveness), they also vary, across issues, from person to person (issue sensitivity), and they vary, across issues and

persons, between different points in time during an issue's attention cycle (issue novelty). So, the character of an issue is difficult to define in general as it is bound to a certain time, place and person. The issue of climate change, for instance, is unobtrusive for most people in Western-Europe but this is far less so for people living in the Arctic or parts of Africa, where the impact of rising temperatures on every day life is directly observable. This situation might change in a couple of years as the problem becomes 'real' in Europe too. The rapid transformation of issue characteristics was also shown by the issue of terrorism, which after 9/11 changed from rather abstract and relatively unimportant to a very real and prominent issue for a sizeable number of US citizens (Matsaganis & Payne, 2005).

As issue sensitivity and issue novelty may vary from person to person and from time to time, we need time-bound specific individual measures to assess how and to what extent issue characteristics matter and moderate the agenda-setting effect. We propose to rely on a very straightforward albeit indirect measure: individuals' preceding issue salience before media exposure. This is an easy and one-dimensional issue indicator that can be attributed to a specific person in a certain political context at an exact moment in time. In fact, we contend that an individual's preceding issue saliency taps the different individual-level issue dimensions discussed above. First, it captures issue sensitivity as it indirectly takes into account the specific conditions people live in; we expect people to consider an issue to be more important before media exposure when they are primed to do so by their environment. Second, the novelty of an issue is partially grasped by preceding issue salience. New issues will be low on an individual's agenda, 'old' issues may appear higher on the priority list. Of course, preceding issue saliency is only an indirect measure that does not directly measure sensitivity and novelty and it 'unidimensionalizes' the existing typologies (that are probably highly correlated anyway). Nevertheless, it has the major advantages of simplifying the issue characteristic puzzle and being very easy to measure.

Our key hypothesis is, hence, that the media play a large role in 'making' issues important that were a low public priority before, that the media's role is less outspoken for previously moderately important issues, and that the media hardly matter for issues that already have a relatively high priority. We are not the first to come up with this idea. In fact, the already mentioned experimental study of Iyengar & Kinder (1988) showed the relevance of preceding issue saliency, although the authors hardly stress it and do not elaborate on their finding. An issue's saliency before experimental exposure turned out to be the single best predictor for the increase of importance. On a scale from 1 to 100, a previously low-importance issue such as defense gained most (+20 points), a moderate-importance issue like arms control rose a bit in importance (+6), while inflation that started of at a high level hardly moved at all (+1).

This paper further tests the explanatory power of preceding issue salience. In an innovative large-scale experiment we check whether it holds in different circumstances while controlling for direct measures of issue sensitivity and issue novelty, the two main individual-level issue characteristics that have been suggested in the literature. We want to find out whether media exposure to an issue significantly interacts with preceding issue saliency *on top of* the effects of issue sensitivity and issue novelty.

DATA AND METHODS

We draw upon an experiment embedded in the University of Antwerp Web Panel 2007 (UAWEP07). This is a four-wave pre- and post-electoral panel including a total of 11,164 voters in Belgium (Flanders) carried out in February-June 2007. Following the work of people like Paul Sniderman, survey embedded experiments are gradually gaining ground in political communication (for example: Hagendoorn & Sniderman, 2001; Walgrave et al. 2009). UAWEP07 does not contain a representative sample of the Belgian population but is internally more diverse than

the typical experiments conducted on college students (Iyengar, 2001). Our main goal is to test for effects of experimental stimuli and representativity is not required for such a design.

UAWEP07 has four consecutive waves: three pre-campaign waves and one post-electoral wave. Before applying the experimental stimulus in the second wave in April 2007, we pre-measured all relevant dependent and independent variables in the first wave of the panel in February 2007. After exposure in the second wave in April 2007 we re-measured issue saliency. As the experiment was embedded in an ongoing research project about media and elections, and as all respondents had participated before, we are confident that the large majority of the respondents were not aware of the fact that they had been watching a fake news item. The realism of the experiment was further enhanced by the fact that respondents were not invited to come to an artificial laboratory environment but instead simply filled in the questionnaire at their home or office . After treatment we asked a series of diversion questions concerning the personal and political qualities of the politicians the respondents had been exposed to. The issue saliency question was put only at the end of the questionnaire while the stimulus was applied at the beginning.

The stimulus consisted of a fake news item embedded in a longer and real excerpt of the main evening news of the Belgian public broadcaster (VRT). The stimulus was preceded by a very short item, and followed by two other news items. The total excerpt lasted approximately three to four minutes. All 11,164 UAWEP07 respondents were invited to watch the clip and answer the related questions. More than half of the respondents of the second wave (N=4,920) participated in the experiment, watched the fake news broadcast and answered the questions relevant to this study. As we wanted to make sure that our respondents really watched the news excerpt we only took into account respondents who spent at least three minutes in ‘streaming video’ mode. We resurveyed these respondents in wave three and 4,414 of

the experiment's original participants, or 90 percent, answered a follow-up issue battery permitting us to test the durability of the treatment effects.

The stimulus itself was a very short news item lasting between 30 and 60 seconds containing one or two leaders of Belgium's five main parties talking about a political issue. The news anchor introduced the fake item stating: "In a few weeks, we have general elections. In the run-up to these elections we provide time to a (two) party(ies) to explain their position on an issue. Today we have X (and Y) (politician) of Z and W (party) who will give us their party's opinion on A (issue)." The anchor announced the news item in the well-known news studio wearing the same clothes as when announcing the previous and the following real news items. The party leaders' statement invariably started with "The point of view of Z (party) on A (issue) is that..."

The stimulus we applied to our subjects was weak and latent. The news item was announced as a routine item; it was by no means special or conspicuous; it was not reinforced with footage; it only showed a standard and well-known political head talking in a perfectly normal environment (e.g. party headquarters with party logo in the background). The item was not triggered by a spectacular real-world event but was presented as routine coverage in the run-up to the elections. Also, the fake item was very brief. In sum, respondents had probably seen hundreds of similar news items before and, as the experiment was conducted in the campaign period, they most likely had been exposed to similar items in the very days before. The stimulus itself may have been weak, however, but the survey questions immediately after issue exposure drew ample attention to the stimulus as several diversion questions were asked right after exposure. This may have created a larger awareness of the news item's content than in a natural situation and may have reinforced its effects.

All national party leaders of the five main parties—the VLD (Liberals), CD&V (Christian-Democrats), Sp.a (Social-Democrats), Groen! (Greens), and Vlaams Belang (Extreme-Right)—were prepared to make six short statements about the

experimental issues. Party leaders voiced their party's real views. The fake items' realism was enhanced further by using a microphone with the typical official "foam tip" wearing the public broadcaster's logo. Below on the screen the subjects saw the typical "name bar" with the station's logo and colors (see Figure 1). The interview was conducted by one of the authors but the interviewer was never filmed nor did the respondents hear his voice. After the elections, all participants were debriefed by email explaining that they had been exposed to a fake news item and that the results of the experiment would be used for scientific research.

<Figure 1 about here>

We asked each party leader to provide us with a statement on six issues: (1) climate, (2) crime, (3) pensions, (4) taxes, (5) family, and (6) defense. These six issues represent a broad spectrum of issues in Belgian politics in several ways. First, they are a mixture of both obtrusive (taxes, family) and non-obtrusive issues (climate, defense). Some of these issues are clearly owned by specific Belgian parties while others are not (Walgrave & De Swert, 2007b). Most important for our central claim is that we have incorporated both salient and high profile issues as well as non-salient and low profile issues. Using these statements we constructed 13 different news items (12 containing an actual stimulus and one control group), which were shown to 13 groups of respondents. The control group consisted of people who where exposed to the same news video but without the fake item or with a fake news items on another topic. The 12 fake items each dealt with one of the six issues and alternatively contained one or two politicians addressing the topic. What we basically wanted to vary with this design was the intensity of exposure: double exposure items had a double the duration of single exposure items. Since the length of exposure did not make a difference, we collapsed both groups, leaving us with six conditions: exposure

to one of the six issue statements (alternatively by one or two politicians). Table 1 contains details of the set-up.

<Table 1 about here>

We did not randomly assign the respondents to the 12+1 groups but stratified the panel's entire population; we assigned people to groups beforehand so as to make sure that the 12+1 groups were similar in all relevant respects. Drawing on information obtained in earlier waves of the panel, we stratified on age, sex, education, party preference, and political interest.

We measure the *dependent* variable, issue saliency, by asking the following question in wave 2 for each of the six experimental issues: "If there would be elections now, based on what issues would you make your vote choice?" Individual answers scored the importance of an issue on a scale from 1 (totally unimportant) to 5 (very important). There are of course alternative ways to assess issue saliency—for example working with open questions. But these methods are less suited for repeated measurements and for tapping small changes per issue on the respondent-level (Schuman & Presser, 1996). Also, the question wording referring to elections resembles measurements of priming—that is: the effect media have on the criteria people use to evaluate parties/politicians. Yet, since the question clearly gauges issues and not parties or politicians in relation to issues, we are confident it taps issue salience.

The key *independent* variables are operationalized as follows.

Preceding issue salience – This is simply the same variable as the one explained above. It consists of asking the subjects in wave 1 (before treatment) to what extent the issues are important in their voting choice. We expect the variable to interact with exposure in a negative way: the higher the preceding salience, the smaller the exposure effect.

Issue sensitivity – This variable refers to personal characteristics that make people particularly sensitive to certain issues. For example, older people are expected to be more sensitive to the pension issue while working and taxpaying people are expected to care more about the tax issue. For each issue and each participant we constructed a dummy variable that grasps to some extent the sensitivity of the issue at stake. For the tax issue, we asked respondents whether or not they had a paid job; this is a clear-cut measurement that should provide a good indicator of sensitivity to taxes. For family policy we differentiated between people with children and people without, again a straightforward measurement of something that is very likely to increase sensitivity to family related policies. Sensitivity to defense was measured through an agree/disagree scale on whether or not countries should be able to intervene militarily in their own national interest . This measurement was dummified for the analysis. Crime sensitivity was assessed through direct experiences of theft or vandalism. If a respondent had been exposed to these, he or she was treated as being sensitive to the issue, and vice versa. Finally, sensitivity to pension policy was measured through age: respondents younger than 55 years of age were treated as being non-sensitive while people 55 years and older were treated as sensitive[2]. *Issue novelty* – To assess whether exposure to the experimental stimulus was situated in a time period with much or little attention to the issue in the Belgian media, we constructed an individual issue novelty variable for each participant/issue combination. The variable represents the result of a detailed content analysis of the main television news broadcasts[3] between wave 1 and wave 2. The proportion of media coverage of the six issues in the main evening news multiplied by the self-reported intensity of news watching defines the variable. For example, if a respondent indicated he was exposed occasionally to news broadcasts (score of 3) and the news

[2] The official retirement age is 65, but in Belgium special policies are in place that allow people to retire from age 55. Furthermore, we assume that as the retirement age approaches, sensitivity to the issue increases.

[3] The content analysis included the main evening news of both the Flemish public broadcaster (VRT) and the main commercial channel (VTM) and was based on the data of the Belgian Electronic News Archive (http://www.nieuwsarchief.be/).

media reported a lot on the issue (e.g. a score of 5.6) the exposure variable for that respondent would be 16.8.

Among the respondents in wave 1 prior to exposure, the defense issue was considered to be least important (2.2 on a 1-5 scale). Indeed, defense was the single least important of all 20 surveyed issues, scoring lower than family policy (3.5), tax (3.6) and crime (3.6), which scored in the middle of the scale. Pensions (3.8) and climate (3.9) scored high but unemployment was the most important (4.3) of all 20 issues. Note that even for the issues that have a salient 'start position' (pensions and climate) in wave 1, there still was ample of room for an increase in saliency as their start score did not approach the maximum of the scale. Thus, any failure to find an increase after experimental treatment for pensions and crime would not be due to a simple ceiling effect of having reached the maximum score on the scale. To test for this, we separately ran all analyses presented below deleting all subjects that scored '5' in wave 1—respondents that technically could not increase their salience after exposure. This did not change any of the results, and therefore, the presented results are based on the entire sample. Our analysis was performed on a stacked file as we used measurements for all six issues for each respondent[4].

RESULTS

Table 2 shows the bivariate results for each condition/issue (aggregated for the single and double exposure groups) from waves 1 through 3. In most cases, we find statistically significant increases in issue saliency after exposure (wave 1 → wave 2). The table also documents that aggregate obtrusiveness is not a very powerful explanation of the differences between agenda-setting effects for different issues. For the climate issue, for example, which we earlier defined as a typically unobtrusive issue, we do not find any short-term effect at all. If the aggregate obtrusive-unobtrusive distinction operated as expected, we should have found such an effect.

[4] This procedure strengthens the design as it allows us to include more data into the model (six issue scores per respondent instead of one).

This suggests that for high profile and salient issues—before exposure, climate scored very high across our six issues—media coverage may matter less if at all. In line with the obtrusive-unobtrusive hypothesis, for the other unobtrusive issue in our sample, defense, we see that it increases most and we find the strongest effects of the experimental treatment (average increase of .28); these effects remain significant even in the longer term. For family policy and taxes, both arguably obtrusive issues, we do find significant increases in issue saliency after treatment; the obtrusiveness hypothesis would have us expect the opposite. Table 2 documents that the simple aggregate obtrusive-unobtrusive distinction does not perform very well in explaining differences across issues. Also, the table indicates that effects disappear over time. While we see many significant differences between wave 1 and wave 2, most of these effects have disappeared after two months and in wave 3 few significant differences are recorded compared to wave 2.

<Table 2 about here>

Our main concern in this study is to test to what extent the previous *individual* issue saliency, rather than *aggregate* issue obtrusiveness, moderates the agenda-setting effect. Therefore we run OLS-regressions with individual-level predictors. Only respondents that were exposed to a stimulus were included in the experiment. The dependent variable in these regressions is the individual issue saliency score for each of the issues in wave 2, that is: after exposure (or non-exposure) to media coverage. The independent variables are a number of key variables such as preceding issue salience, but also issue sensitivity and issue novelty and some controls. Results can be found in Table 3.

<Table 3 about here>

Model I includes the treatment variables and the issue dummies in addition to the control variables. First, it documents that there is much continuity in issue salience: salience in wave 1 (before treatment) largely determines saliency in wave 2 (after treatment). Second, experimental treatment results in a significant increase in issue saliency: when subjects are confronted with politicians talking about issues, they subsequently increase the importance attributed to the issue. Third, and most importantly for this paper, there is a significant interaction between treatment and the preceding issue salience score. This confirms our central claim: when issues are non-salient for individuals, chances are high that exposure to media coverage increases salience more than compared to when individuals are exposed to coverage about issues they already care about. It is safe to say that preceding issue salience does significantly increase the exposure effect on top of the mere longitudinal effect of the wave 1 issue score. Fourth, compared to the issue of defense, all other issues score higher on salience in wave 2, as is indicated by positive and significant beta coefficients of the five issue dummies (defense being the reference category). As defense was the lowest scoring issue in wave 1, this is not surprising; more importantly, adding the dummies to the model triples the beta coefficient for the interaction effect between exposure and preceding issue saliency from .018 (not in table) to .062. This strengthens our central argument: preceding issue salience matters. Finally, the model shows that two of the three control variables, age and gender, are significant. For the six issues under study here, women consider them on average to be more important, as do older people. However, their contribution to the explained variance of the model is limited (R^2 =0.21), and more importantly, the interaction effects with exposure turn out to be non-existent. Women and older people devote more attention to the six issues but they do not react more strongly to media cues than men and younger people do.

Model II introduces the two alternative individual-level issue characteristics: issue sensitivity and issue novelty, and their interaction effects with experimental

treatment. As for issue sensitivity—individual socio-demographic characteristics that may increase a person's susceptibility for an issue—we see that it significantly affects issue salience. For example, older people do care more about pensions, working people care more about taxes than not-working etc. Yet, the interaction term of issue sensitivity and exposure is not significant. This means that while some people tend to attribute more importance to issues, this does *not* seem to affect their reactivity to media cues. When those 'sensitive' people are exposed to 'their' issue, they do not increase their saliency scores more than people who are less sensitive. A similar story applies to issue novelty. New issues that did not get much media attention in the period leading up to the treatment had an average different score than old issues that received more media attention. However, the interaction term with experimental treatment is not significant. This implies that for the effect of exposure, it does not make a difference whether the covered issue is new or not; people exposed to news coverage addressing issues that have not received a lot of attention before do not report a different change in saliency than when they receive coverage on old issues. Incorporating these alternative explanations in the model, does not affect the key variable this paper focuses upon: the interaction between preceding issue salience and exposure to media coverage; the size of the coefficient and its significance are hardly affected. When we tested for a model without preceding issue salience, but with sensitivity and novelty (and their respective interaction terms with exposure), the interaction between sensitivity and exposure remained insignificant (Beta of .000, sig .074), while the interaction between novelty and exposure became significant (Beta of -.013, sig .020). This confirms our contention that the novelty of an issue is partially grasped by preceding issue salience

CONCLUSION AND DISCUSSION

The study establishes that individual-level issue characteristics matter for the size of the media's agenda-setting influence; the agenda-setting effect depends on the

position of an issue among people's priorities. Drawing upon a large-scale online experiment in Belgium we showed that the importance attached to an issue prior to media coverage of that issue determines to what extent media coverage affects an individual's agenda.

We believe our study contributes to our knowledge of public agenda-setting in several respects. First, it substantiates that classifying issues a priori into aggregate categories is largely unhelpful in understanding agenda-setting effects. Issue characteristics, paradoxically, are in fact foremost features of the *individuals* who perceive issues and are exposed to coverage about them. Issues are not obtrusive or unobtrusive per se, and this varies from person to person and probably also from time to time. In a sense, our study shows that we should probably drop altogether the idea that issues have certain fixed characteristics: the nature of issues depends crucially on the receiver and differs widely. Second, we propose a very simple and straightforward measurement of what issues mean for people, namely their assessment of the importance of an issue before they are exposed to media coverage about it. This indicator may seem rather trivial, but we contend that, in all its simplicity, it captures the essence of previous typologies of issues: the (un)obtrusiveness of issues, the issue sensitivity of individuals and the novelty of issues. Although both issue sensitivity and issue novelty do affect to what extent people find issues important, they do not *moderate* the effect of media exposure. Sensitive people do not react more fiercely to coverage, and coverage of new issues does not result in larger effects. Third, we tested our ideas based on a large scale, innovative and compelling experimental design covering six different issues. Our findings are robust and effects appeared across the board.

What do our findings imply for agenda-setting? We think our results account for a part of the mixed evidence agenda-setting studies have come up with when distinguishing different types of issues. Our findings suggest that agenda-setting effects may differ across countries just as the saliency of issues varies across

countries. For example, defense appears to be an unimportant issue in Belgium leading to large media effects when the media devotes exceptional attention to defense. In the US context, in contrast, defense is probably much higher on the agenda, meaning that media coverage of defense topics is likely to have less impact on what Americans think about the defense issue. This might be attributed to the principle of diminishing returns: as people already possess more information on the issue, additional coverage has less impact. Also, our study to some extent contradicts the general idea that mass media have most impact when they 'resonate' with pre-existing attitudes and cognitions (Iyengar & Simon, 2000: 158). Our study seems to suggest that the opposite is true: when people do not care about an issue they are most likely to be influenced by media coverage about the issue. The fact that issue sensitivity did not act as a moderator of the exposure effect further reinforces the claim that, at least when it comes to agenda-setting, reinforcement is not what happens; indeed the reverse seems to occur.

The most important consequence of our study is that, in the real world, the media's agenda-setting power is severely limited. Media coverage only has a substantial effect when it covers issues that individuals had not previously considered to be important.. In the real world, though, mass media largely cover issues that are already on the agenda. In fact, media coverage is, to some extent, path-dependent and yesterday's media agenda defines today's media coverage (Vliegenthart & Walgrave, 2008). Consequently, mass media often do not set the public's agenda, or at least they do not *change* the public's agenda that often. In other words: we expect media to have most impact on what people care about when they suddenly start devoting attention to issues that they have been neglecting before. When events, accidents, blunders, scandals, disasters and the like suddenly draw ample media attention to the underlying issues, media probably matter most. In contrast, the top of the public agenda is rather immune to short term media influence while we expect the media to devote especially a lot of attention to these eternal and classic issues like

unemployment. In sum, mass media to some extent 'mainstreams' public opinion. They do not affect the already highly salient issues but manage to boost unimportant issues to a position higher up the public agenda. We found, though, that this effect is ephemeral and temporary. Only a few weeks after exposure, effects have withered and largely disappeared. This finding resembles the 'mean diversion tendency' that implies that people only score extremes occasionally and revert to more centrist positions over time when the reason for their extremist position have become less compelling.

Finally, we must be cautious with generalizing from experimental findings as the specific conditions of our experimental setting may have boosted the agenda-setting effect in some cases. We found that for low importance issues the possible agenda-setting impact is largest and that people's priorities can change significantly after 'forced exposure.' The problem is that in the real world forced exposure does not happen. How realistic is the assumption that citizens will absorb a lot of information on issues they consider to be rather unimportant and that they do not really care about? Media may matter most in such situations, but these are probably rare. In most cases, people will simply avoid this information and focus on the issues that are already on top of their personal agenda. Further experimental research scrutinizing preceding issue salience, therefore, should allow more freedom of choice of stimuli for the subjects. Also more variation in the type of stimuli, as we only included talking politicians here, could improve the generalizability of our findings.

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FIGURES AND TABLES

Figure 1: Screen shots of typical stimuli

Table 1: Overview of the experimental conditions and groups

Condition: single exposure	*Issue*	*N*
1. Vera Dua (Groen!)	climate	365
2. Jo Vandeurzen (CD&V)	family	390
3. Johan Vande Lanotte (SP.A)	crime	400
4. Frank Vanhecke (Vlaams Belang)	pensions	373
5. Bart Somers (VLD)	defense	385
6. Vera Dua (Groen!)	defense	374
Condition: double exposure		
7. Frank Vanhecke (Vlaams Belang) + Bart Somers (VLD)	crime	370
8. Vera Dua (Groen!) + Johan Vande Lanotte (SP.A)	climate	372
9. Frank Vanhecke (Vlaams Belang) + Johan Vande Lanotte (SP.A)	defense	357
10. Bart Somers (VLD) + Jo Vandeurzen (CD&V)	defense	374
11. Jo Vandeurzen (CD&V) + Johan Vande Lanotte (SP.A)	tax	396
12. Vera Dua (Groen!) + Bart Somers (VLD)	family	370

Table 2: issue saliency change (1-5 scale) and significance (T-test) for six issue groups

Issue	Issue type	Wave 1	Wave 2	Wave3	N
Defense	unobtrusive	2.14(1***)(2***)	2.41(1***)	3.28(2***)	1279
Family policy	obtrusive	3.51(3***)	3.60(3***)	3.49	638
Taxes	obtrusive	3.71(4***)	3.89(4***)	3.78	340
Crime	mixed	3.54(5***)(6*)	3.66(5***)	3.47(6*)	660
Pensions	mixed	3.90(7*)	4.00(7*)	3.87	321
Climate	unobtrusive	3.85(8***)	3.91	3.75(8***)	625

Note: Significance scores are based on pair-wise comparisons between the three waves. Figure between brackets refers to pair-wise corresponding figure in one of the other waves.

Table 3: OLS regression estimating issue salience after experimental treatment (wave 2)

	Model I		Model II	
	Bèta (Std. E)	Sign.	Bèta (Std. E)	Sign.
(Constant)		.000		.000
Controls				
Age (years)	,067 (.000)	,000	,058 (.000)	,000
Age * Exposure	-,003 (.001)	,837	,004 (.001)	,762
Sex (0=male; 1=female)	,021 (.012)	,000	,023 (.013)	,000
Sex * Exposure	,008 (.032)	,538	,005 (.032)	,733
Political interest	-,002 (.003)	,738	-,003 (.003)	,596
Political interest * Exposure	-,010 (.008)	,584	-,008 (.008)	,693
Treatment				
Preceding saliency score (0-5)	,640 (.005)	,000	,634 (.005)	,000
Exposure (0=no; 1=yes)	,109 (.093)	,000	,103 (.096)	,001
Preceding saliency score * Exposure	-,062 (.011)	,000	-,060 (.012)	,000
Issue dummies (ref. = defense)				
Dummy tax (0=no; 1=yes)	,178 (.019)	,000	,161 (.020)	,000
Dummy pension (0=no; 1=yes)	,183 (.019)	,000	,184 (.019)	,000
Dummy crime (0=no; 1=yes)	,156 (.019)	,000	,153 (.019)	,000
Dummy environment (0=no; 1=yes)	,189 (.019)	,000	,179 (.020)	,000
Dummy family (0=no; 1=yes)	,150 (.019)	,000	,144 (.019)	,000
Alternative explanations				
Issue sensitivity (0=no; 1=yes)			,039 (.014)	,000
Sensitivity * Exposure			,002 (.035)	,733
Novelty			,015 (.001)	,002
Novelty * Exposure			-,007 (.002)	,143
Adj. R^2		.544		.545
N		25,146		24,301