The Media as a Dual Mediator of the Political Agenda Setting Effect of Protest.

A Longitudinal Study in Six West-European Countries

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ABSTRACT

The study investigates the impact of media coverage of protest on issue attention in parliament (questions) in six Western-European countries. Integrating several datasets on protest, media and political agendas, we demonstrate that media coverage of protest affects parliamentary agendas: the more media attention protest on an issue receives, the more parliamentary questions on that issue are asked. The relationship, however, is mediated by the issue agenda of mass media more generally, attesting to an indirect rather than a direct effect. Additionally, the effect of media-covered protests on the general media agenda is moderated by the political system and is larger in majoritarian countries than in countries with a consensus democracy. This shows the importance of political opportunity structures for the agenda-setting impact of protest.

INTRODUCTION

Does protest matter? The question is simple but the answer complex. It depends on what kind of effect one is talking about, on the type of protest, and on the precise circumstances in which the protest takes place. Notwithstanding the fact that the effect of protest probably is—at least from a political perspective—its most important aspect, empirical studies that have tackled the matter have reached mixed conclusions (Giugni, McAdam, and Tilly 1999; Uba 2009). To take a step forward, this study deals with one specific type of impact: the political agenda effect of protest. More concretely, we investigate the effect of mass media coverage of protest on parliamentary questions asked by members of parliament. Does coverage
of protest events in the mass media lead to a subsequent increase of attention to the underlying issues on the political agenda?

The number of studies employing an agenda-setting framework to analyze the effect of protest has remained limited (for an overview see AUTHORS 2012). One of the key issues we know particularly little about is the precise mechanism connecting street protest with issue attention by institutional political actors. Mass media coverage is an obvious candidate for playing a mediating role: protest leads to media coverage of protest events which leads to media coverage of issues relating to the protest more widely which leads to politics. But the importance of the mass media in the effect of protest on political issue attention has remained unclear. While mass media are seen as a major forum for public debate and information-sharing and are, theoretically, considered as a crucial factor for conveying movements’ claims (Koopmans 2004; Ferree et al. 2002), it is uncertain to what extent mass media attention indeed acts as a factor mediating the political agenda-setting effect of protest.

Largely from the US, most ‘protest-and-agenda’-studies have found protest (or the presence of social movements) to affect the political agenda. When protest activity relating to an issue increases, political elites start to devote more attention to that issue. Whereas it seems obvious that the impact of protest differs across nations—a vast social movement and protest literature has shown that the political context matters a great deal (see for example: Kriesi et al. 1995)—not a single agenda study has adopted a comparative framework and analyzed the effect of protest across countries. In sum, we do not really know whether the impact of protest on the political agenda is direct or rather mediated by the issue attention of
the mass media, and we lack basic information about the influence of protest cross-nationally.

This paper tackles these two matters. We focus on the intermediary role played by the mass media and we compare outcomes across countries. Our results show that the direct, unmediated effect of media-protest coverage on the political agenda is absent. There is an effect of protest but it is fully mediated by the issue attention of general mass media coverage. The mechanism of influence is as follows: Protest events results in media coverage of those events which leads to increased mass media attention to the underlying issue and this, in turn, affects which issues political elites are addressing in parliament. In other words, the news media play a dual mediating role: (1) the media cover protest events and (2), as a consequence, increase their attention for the underlying issue in their general (non-protest) coverage. Second, for the first time applying an agenda-setting approach to protest outcomes in a comparative design (six countries), we find protest to matter (indirectly, via the media) for the political agenda in most countries. Yet, there are some notable differences across countries depending on their political system. Protest matters less in countries with a so-called ‘consensus’ democracy compared to a ‘majoritarian’ democracy.

**The Issue Attention Effect of Protest**

In a recent study, Walgrave and Vliegenthart (2012) present an overview of extant work implicitly or explicitly drawing on the agenda-setting perspective to assess the impact of protest. They found eleven such studies published from 1978-2010 in
major sociology or political science journals (Burstein and Freudenberg 1978; Costain and Majstorovic 1994; Soule et al. 1999; McAdam and Su 2002; Baumgartner and Mahoney 2005; King et al. 2005; Soule and King 2006; King et al. 2007; Johnson 2008; Olzak and Soule 2009; Johnson et al. 2010). Some of this work holds that protest is especially effective early on in the political cycle (King et al. 2005; Soule and King 2006), others find that protest is a consequence of political attention rather than a cause (Soule et al. 1999), but most of these studies show that protest, or social movement activity more generally, matters somehow for what issues political institutions devote attention to.

Recent years have witnessed a growing interest in attention for issues on policy agendas as a key aspect in studying dynamics in the political process. Attention by political actors is a necessary condition for policy change (Jones and Baumgartner 2005). The process of agenda setting captures the transfer of salience from one policy agenda to another agenda and is key in understanding shifts in attention and, ultimately, policy change. For a social movement to reach its political goals, it is thus a necessary step to be able to exert influence on the agenda of those institutional actors with actual decision power. Agenda setting offers a clear theoretical approach to look at the effectiveness of protest: does an increase in protest activity on a certain issue result in an increase of political attention for the same issue?

The most glaring weakness of the literature on political outcomes of protest more generally and on the agenda effect in particular is its non-comparative nature. In a recent overview of political outcomes studies more globally, Amenta et al. (2010, p. 295) state that there have been very few comparative studies (see also:}
Many studies assessing the political impact of movements or mobilization are case studies with a narrow empirical scope. With just a handful of exceptions (see for example: Linders 2004; Giugni 2004; Giugni and Yamasaki 2009), most studies deal with one case, one movement, one policy field, or even one single decision. In her review of 74 that focus on political outcomes of social movements, Uba (2009) classified virtually all studies under one single policy issue. Only eight of the 74 studies compare across countries. This thwarts the possibility for developing a cumulative body of evidence with robust generalizations about when movements and their activities matter (Giugni 2004; Bosi and Uba 2009). The studies focusing specifically on agenda-setting suffer from the same weakness. Some studies did compare across several US states (see: King, Cornwall, and Dahlin 2005; Soule and King 2006) but none adopted a cross-national perspective and all are US studies. The reason for the absence of cross-national work is the lack of comparable cross-national data (Amenta et al., 2010, p. 295).

An agenda approach to protest impact solves some of the methodological and empirical problems that Amenta and colleagues signal. The major advantage of the agenda approach is that it ‘standardizes’ the measures of the independent (protest) and dependent variables (political agenda). In doing so, the approach solves the cross-national measurement problem. The unit of analyses is the attention to a given issue during a specific time period. In the end, this approach allows for comparisons of the effect of protest (i) across political issues, (ii) over a long period of time, and (iii) across countries.

Regarding the mechanism of influence, many movement scholars claim that mass media are crucial for social movements and protest politics. It has been argued
that media create ‘discursive opportunities’ that are needed to spread the movement word. If a movement and its protest are not covered, it basically does not exist (Koopmans 2004; Koopmans and Olzak 2004). In this spirit, Gamson and Wolfsfeld (1993, p. 116) even state that a protest event “with no media coverage at all is a non-event.” Yet, the crucial question of how the broader issue agenda of mass media relates to protest impact and whether it acts as an intermediary factor has hardly been investigated empirically. To the best of our knowledge, only one study has tackled this question directly (Walgrave and Vliegenthart 2012). To be sure, there is some work, both theoretical and empirical, on other intermediary factors apart from the media. For example, students of social movements have examined the effect of protest on public opinion and so, indirectly, on political elites’ actions (see for example: Terkildsen and Schnell 1997; McAdam and Su 2002; Costain and Majstorovic 1994). And, there is a large body of literature on how the political effects of protest are mediated by political allies in the political system—only when institutional actors see benefit in aiding the protesters is there a political outcome (see the work by Amenta and for example: Amenta, Carruthers, & Zylan, 1992). However, work which systematically scrutinizes the mediating role of mass media is exceedingly rare.

Before formulating concrete hypotheses, we need to address a straightforward question: Why would political elites turn to issues that have been the object of protest in the first place? Our basic assumption is that protest, via its coverage in the media, provides information to elites about problems in society (Burstein 1999; Lohmann 1993). Protest is a signal that (some) people are dissatisfied with a certain state of affairs and/or with an expected change of the
status quo. Protest events that receive at least minimal media attention indicate a level of social concern with a particular cause or issue. In many cases, protest and its coverage in the news media signals that (a segment of) the public demands political elites to act on an issue to solve a problem (policy change). Since politics is the business of solving problems in line with the preferences of the public (Green-Pedersen and Mortensen 2009) politicians and political institutions tend to react to such incoming signals. The particular attractiveness of the protest signal for political elites, and where it differs from media coverage in general, is that it not only hints at the fact that some people are dissatisfied, but also gives an indication about how many people care about the problem and to what extent they care about it. The protest coverage signal has a number of features that make it specifically noticeable for political elites: it is public and accessible, negative, most of the time unambiguous, with a clear evaluative slant, applicable to one’s task, and (for some elites) compatible with existing predispositions. Although there are inherent and documented biases in which protests secure media coverage (Earl, Martin, McCarthy, & Soule, 2004), those protest events which sufficiently disrupt the media agenda to gain attention provide a signal to political elites of the societal importance of issues.

A large literature has showed that protest is a particularly costly way for people to let their voice be heard; protest requires time, effort, resources and skills (see for example in the broader political participation literature: Verba, Schlozman, and Brady 1995; Rosenstone and Hansen 1993). Tilly (2006) says that protest has political impact—in this case: affects the political agenda—when it displays, what he calls, ‘WUNC’. This is an acronym referring to worthiness, unity, numbers and
commitment. The more WUNC, the larger the impact. The more people show up and the more they are committed (and united), the larger the chance that they will take into account their dissatisfaction regarding the issue when voting next time. So ultimately, as also Lohmann (1993) says, protest is about an electoral threat (see also: Burstein 1999; Burstein and Linton 2002; Uba 2009). Building on the general idea that protest and its coverage in the news media forms an informative signal for political elites and that the features of the signal and of the receiver determine whether the signal will be picked up we develop a number of specific hypotheses.

**HYPOTHESES**

The first and most straightforward expectation that follows from the above is that protest coverage in the mass media matters and leads to a subsequent increase of attention for the protest issue by political elites. Quite a number of studies have found protest to have an agenda effect (see for example: Burstein and Freudenberg 1978; McAdam and Su 2002; King, Bentele, and Soule 2007; Johnson et al. 2010; Walgrave and Vliegenthart 2012). Koopmans’ theory of discursive opportunities (2004) emphasizes the importance of news coverage for protest events to exert any type of political influence. Only via the mass media does protest affect elite behavior. The entire interaction between social movements and political elites, says Koopmans, takes place not as real-life encounters but rather through the claims made in the mass media. There is no other way for most elites to get to know about protest than via the media. Since some scholars have claimed that protest matters in particular early on in the policy cycle (Soule and King 2006), we focus here on
parliamentary questions, which can be argued to occur early in the policy process and to be a response by politicians that is not severely limited by institutional constraints (Walgrave and Vliegenthart 2012). Therefore we formulate the following hypothesis:

**H1: News coverage of protest leads to more subsequent parliamentary questioning about the issue underlying the protest.**

Most studies dealing with the political agenda impact of protest did not control for general (non-protest) media coverage, nor did they test the potentially intermediary role of such general media coverage. We hold that at least a part of the issue attention effect of protest coverage is actually generated by increasing media attention to the protest issue more generally. Media coverage of the protest event triggers media attention to the underlying issue, and this media attention has a subsequent effect on the political agenda. That the issue agenda of the news media affects the political agenda is by now a well-established fact (see for example: Vliegenthart et al. 2016; Green-Pedersen and Stubager 2010). That protest may lead to media attention as well (see for example: Smith et al. 2001; Earl et al. 2004; Oliver and Maney 2000). It therefore seems logical to expect that a part of the effect of protest coverage on the political agenda runs via the issue agenda of the mass media more generally. The question is how much of the protest effect is mediated by general news coverage.

Taking Koopmans’ account on the importance of media for protest one step further suggests that full mediation takes place: it is not just the reporting on the protest itself (visibility), but also the fact that it triggers further media attention (resonance in Koopmans’ terms) for the issue at stake that leads protest to affect the
political agenda. There are some rare empirical examples in the literature of total mediation of protest effects, but not regarding the role of the media. Costain and Majstorovic (1994), for example, tested to what extent the number of passed bills regarding women’s issues went up as a consequence of protest events by the women’s movements in the U.S. from 1950 to 1986. The number of protest events has an indirect effect that fully runs via public opinion (Burstein 2003; also McAdam and Su 2002 find an mediating effect of public opinion; see also Uba 2009 for a review of the studies using public opinion as an intermediary variable). Walgrave and Vliegenthart (2012) offer one of the only studies directly testing the media’s intermediary role. They find that, from 1993-2000 in Belgium, mass media coverage only partially mediated the effect of protest on parliament and government. Since the literature is indecisive, we posit that the media agenda mediates the effect of news coverage of protest and do not hypothesize about whether this mediation is partial or full.

H2: The agenda effect of news coverage of protest on parliamentary questioning is mediated by general (non-protest) media coverage.

Our second aim in this study is to explore the role of the political context in which the protest occurs and the effects this context has on the agenda impact of protest. One of the major theories in the field of social movements and protest is the well-known ‘political opportunity structure’ (POS) approach (Kitschelt 1986; Kriesi et al. 1995; Tarrow 1998). Its main tenet is that the way social movements and their actions develop, is affected by the political context in which these actions take place. In countries with a favorable opportunity structure the movement sector is active
and strong, in countries with an unfavorable structure movements are weak and passive. Amenta and colleagues (2010, p. 295) emphasize that what makes protest happen, is not the same as what makes it successful (but see Soule and King 2006, p. 1881). Still, the literature on social movement outcomes abounds with (case) studies showing that the political context, and thus in a broader perspective the entire political system, matters for political outcomes. For 18 of the 54 movements recorded in the studies analyzed in Amenta et al.’s (2010) meta-analysis, the partisan context in which the protest is staged moderates the protest effect. Indeed, quite some scholars have argued that long-standing features of political systems—existing institutions, policies and electoral rules—have an important effect on the success chances of challengers (Amenta et al. 2002; Banaszak, Beckwith, and Rucht 2002).

Since our study only contains six countries, we cannot test a variety of potentially interesting political system features; we are lacking analytical power on the country level. We focus on just one of the key distinctions between different political systems that has been made in the political science literature and that can be argued to have a profound impact on the position of social movements. This distinction is between ‘majoritarian’ democracies on the one hand and ‘consensus’ democracies on the other hand. Arend Lijphart showed in several seminal studies (1984, 1989, 1999) that Western democracies can be classified to belong to one of the two types, with only a limited number of countries having a hybrid form. These two types of democracies follow a clearly distinct rationale, with the majoritarian system based on the notion of effective and accountable government, while the consensus system is centered around the idea of inclusiveness and representativeness. Lijphart’s classification is based on two dimensions that capture
a wide variety of political and electoral system characteristics. The first dimension is what he calls the ‘executive-parties’ one and captures several (related) characteristics that capture the power distribution in the institutional system, such as electoral system (plurality versus proportional representation), concentration of executive power (composition of cabinets, one-party versus multi-party) and the number of parties (de facto two or multiple). The second dimension is the ‘unitary-federal’ one and focuses on the level of decentralization of power and includes characteristics such as centralized versus decentralized government, (strong) bicameralism and the unwritten versus written (and rigid) constitutions. The distinction between majoritarian and consensus democracy is very general and multiple suggestions for expansion or modification have been proposed in the literature. Vatter (2009), for example, suggests a third dimension: ‘top-to-bottom’ democracy, comprising of type of cabinet government and strength of direct democracy. This third dimension results in a further refinement in the classification of countries that have a consensus democracy.

We contend, however, that the Lijphart’s initial distinction between consensus versus majoritarian democracies is a useful one to start our exploration of the moderating effects of political contexts, since it captures the difference between countries with a lot of institutional opportunities to voice a wide range of (also deviating) opinions and claims versus countries with considerably less institutional opportunities to do so. Adding a further refinement among consensus democracies, i.e. by treating Switzerland as a prototypical case of a ‘direct democratic power sharing democracy’ (Vatter 2009: 145), would not substantially alter our argumentation: the larger opportunities to voice opinions and claims are also
present (and arguably even more) in an institutional arrangement with a central place for direct democracy such as in Switzerland (that we already classify as a consensus democracy below) (Kriesi and Wisler 1996).

The position of social movements and consequently also their potential impact on media is inherently different in those two systems, we argue. We expect that the impact of protest (coverage) on the general media agenda is smaller in consensus systems. In those contexts, protest issues are likely to be more adequately represented in parliament, since consensus democracies have a higher number of parties in parliament and government arguably a higher chance that movements’ claims and points of view are shared by and resonate with at least some of the political parties represented in parliament (Kitschelt 1986; Kriesi 2004). They are likely to bring those claims forward and as a consequence reach the mass media before they actually lead to protest. In line with the classical political opportunity structure theory (e.g. Kitschelt 1986), more parties in general and more parties in government in particular make for a more inclusive polity in which more issues gain access to the political agenda. Issues that gain political attention also get media attention (Vliegenthart et al. 2016). So, in such systems also the media agenda can be argued to be more inclusive reacting more responsively to new or marginal issues that gain momentum in society. Protest is less instrumental in shifting the media agenda as the agenda might in many instances already have shifted before the protest came about. In contrast, in more closed political systems with less adequate representation and allies for social movements in parliament, a protest shock might be needed before the media start to include new issues on the agenda; this implies
that the effect of the protest agenda on the media agenda is larger in majoritarian systems. Hence our third hypothesis:

\[ H3: \text{The agenda effect of news coverage of protest on general (non-protest) media coverage is larger in majoritarian democracies compared to consensus democracies.} \]

Figure 1 below summarizes the causal model the study draws upon. It displays the direct effect arrow from media coverage of protest to politics (H1), the mediating arrow of media coverage of protest to general (non-protest) media coverage and of general (non-protest) media coverage to parliamentary questioning (H2), and the moderating arrow from the type of democracy to the mediation path (H3). Our moderated mediation model thus suggests that the type of democracy impacts the first step of the mediation process, i.e. from protest to media.

Figure 1 about here

DATA AND METHODS

The following countries and periods are included in our analyses: the Netherlands (1995-2011), Spain (1996-2011), the United Kingdom (1997-2008), Switzerland (1995-2003) and France (1995-2005). The countries are partly selected because of the availability of data—we mentioned that the absence of comparative work is mainly due to data limitations and for this study we had to rely on a combination of existing data sources as well. Yet, they are all West-European democratic countries with a tradition of protest, free media, elections and accountable government. Moreover, they represent different political systems and vary on the crucial
contextual variable of interest, i.e. the democratic system. Additionally, for Belgium (1999-2010), we have similar data, only our protest data do not stem from a content analysis of media, but directly from police records. Therefore we conduct separate analyses for this country to test in more detail whether it is indeed mainly covered protests that drive the media and political agendas, or whether actual protest (also not covered in the media) does this as well.

We rely on the databases of the Comparative Agendas Project (CAP) to assess the protest (coverage) agenda, mass media and political agendas in the six countries (http://www.comparativeagendas.info/; which also includes links to individual country sites and datasets). As stated before, we look at parliamentary questions. For the Netherlands, we have the written parliamentary questions (roughly 30% random sample), for Belgium oral questions and interpellations, for Spain oral questions, for the UK we use (oral) Prime Minister’s Questions, for Switzerland written questions and for France oral questions. While the role and function of parliamentary questions differs across countries (Wiberg 1995), we selected for each country that type of questions that is as equivalent as possible and that has enough variation. A total number of 62,312 parliamentary questions is included in the analyses.

For the media agenda, we coded front page coverage in national newspapers for all six countries. For the Netherlands, NRC Handelsblad and de Volkskrant (13% sample) were coded, for Belgium De Standaard, for Spain El Pais and El Mundo, for the UK the Times (only Wednesdays are coded) [1], for Switzerland Neue Zürcher Zeitung and for France Le Monde. A total of 157,707 stories is included in the analyses.
All this material is coded according to the major policy categories of the Comparative Agendas Project. In all analyses and for all agendas, we use the relative share of attention devoted to those categories per month. The unit of analysis is thus the proportion of attention devoted to a certain issue on a certain agenda in a given point in time in each of the countries.

To assess the protest agenda and its issue content, we rely on protest event analysis (PEA), a form of quantitative content analysis of media coverage. In doing so, we follow a long-standing tradition in research on social movements and contentious politics (for reviews, see: Koopmans & Rucht, 2002; Hutter, 2014a). PEA aims at describing protest events so as to allow for cross-sectional and longitudinal analyses. Compared to survey data, the other primary source for tracing the development of protest behavior, PEA is far better suited to measure the issues of protest, and this is the key variable of interest in agenda-setting research.

More precisely, we rely on protest event data collected by Kriesi et al. (2012) for all countries except Belgium. These data are an updated and extended version of the data used by Kriesi et al. (1995) to study new social movements in Western Europe. The data itself comes from one national quality newspaper per country; only Monday editions were consulted. [2] This resulted in a dataset of 4,925 protest events in the five countries, involving around 49 million participants. The newspapers covered are The Guardian (UK), Le Monde (France), NRC Handelsblad (Netherlands), El Pais (Spain), and Neue Zürcher Zeitung (Switzerland). The choice for Monday editions was dictated not only by the necessity to reduce the work of collecting a large number of events over a long period of time, but also because the Monday edition covers events during the weekend. Since protest activities tend to
be concentrated on weekends the dataset includes a high proportion of all protest events occurring during the period under study. All events covered in the Monday edition were coded, including those taking place one week before or after the publication date. That is why around twenty-five per cent of all coded events occurred during weekdays.

PEA generally, and Kriesi et al.’s sampling strategy more specifically, has been the objects of criticism in the literature and researchers still disagree on how problematic the selection bias of newspaper data actually is. No one would claim that the events covered in the Monday editions of a national newspaper are a representative sample of all protests taking place in a given country. However, the factors that predict whether news media cover a protest event or not have been empirically assessed. These are event characteristics (mainly size and violence), the type of media outlet, and issue characteristics (mainly media attention cycles)(see: Earl et al., 2004; Ortiz, Myers, Walls, & Diaz, 2005). In general, the studies report the strongest effects for event characteristics. As Rucht and Neidhardt (1998, p. 76) stated, “In the case of very large events, as in cases of violent demonstrations leading to significant damage to property and/or injuries, we can expect a total coverage even when using only one national newspaper.”

Since we cannot totally avoid biases and are rather interested in trends and differences, the present data is based on the idea of making the bias “as systematic as possible” (Koopmans 1995, p. 271). The selected newspapers are comparable. They were chosen with respect to six criteria: continuous publication throughout the research period, daily publication, high quality, comparability with regard to political orientation (none is very conservative or extremely left-wing), coverage of the entire
national territory, and similar selectivity when reporting on protest events. While the cross-national and longitudinal stability in the patterns of selection bias is still a contested topic, recent studies show that the sampling strategy used here scores well in comparison to more encompassing strategies of data collection (see Giugni 2004; McCarthy et al. 2008; Hutter 2014b). Most important, the results show that the national ebbs and flows of protest mobilization in general and of individual issues more specifically are traced accurately with this sampling strategy.

In the protest event analysis data employed in this paper initially 103 protest ‘goals’ were identified. These goals were recoded by the authors to fit the CAP major issue categories. The recoded goals fall only in 17 different CAP categories (16 for Spain and the United Kingdom that excludes immigration as a major category). [3] These 17 categories are used in the analyses and are listed in table 1 below. Comparable to the media and the political data, our media-protest coverage measures gauge the relative share of protest events covered in the media that are devoted to an issue in a given country during a given month.

For Belgium, a separate protest dataset was collected. In this case, data come from police records and are coded directly according to the major CAP categories. These data were thus collected fully independently from media coverage. We use the same 17 categories as for the other countries for Belgium. Additionally, we use a key word search on the full-text newspaper articles in the media dataset to determine whether an article refers to protest activities. We use this selection of newspaper articles to construct an alternative measure for the protest agenda as covered by the media in Belgium, using relative shares of attention to each issue as scores.
To test our hypotheses, we ran two sets of regression models, with media and parliament as dependent variables and each of the other agendas and protest as the independent variables. More precisely, we rely on country-level pooled random-effects time-series models, with months nested in issue categories. We rely on monthly level analyses, because (a) we assume influences take place at relatively short time intervals (within a month) and (b) lower aggregation levels would result in too low values and too many zeros on the main variables. To deal with issue-level heterogeneity (some issues receive structurally more attention than others) and serial correlation, we include a lagged dependent variable in each of our models. [4]

To further account for the fact that observations not only are temporally dependent, but are also nested in panels (country-issue combinations), we use ordinary least squares estimations with panel corrected standard errors (Beck and Katz 1995). To predict newspaper coverage, we use both media-protest and parliamentary questions. For parliamentary questions, we use protest and newspaper coverage. All independent variable are lagged. For the media-protest agenda, we use the average score of the previous month and two months ago. Here, we follow the logic that this type of signals sometimes takes more time to spill-over to other agendas (see Walgrave et al, 2008 for a similar logic). We test one-lag, and two- and three-lag averages, and the models using a two-lag average outperform the others. Note that by using lags, we are likely to miss short-term influences from protest on media and politics that take place within single months, because we cannot be sure about the causal direction. It is not unthinkable, and would actually be in line with previous findings (e.g. Koopmans and Olzak 2004) that protest is also affected by newspaper coverage—and possibly indirectly by parliamentary activity. Additionally, we also
test for reversed causality and explore whether the media-protest agenda is also affected by parliamentary questions and general media coverage. Here, we rely on the notion of **Granger causality**: a variable $x$ Granger-causes a variable $y$ if the prediction of $y$ improves when including past value(s) of $x$ compared to a model that only includes past value(s) of $y$. In regular time series, Granger-causality is most commonly tested in a vector autoregression (VAR) analysis (Vliegenthart, 2014), where effects of both $x$ on $y$ and $y$ on $x$ are tested. In the case of pooled time series analysis, a similar logic can be applied (Hood et al., 2006). Here, we choose to straightforwardly test the effect of the lagged parliamentary questions in a similar manner as the reversed effect is tested and also investigate whether the effect is mediated by media coverage (see below).

For the parliamentary questions, we run the main effects model with and without media coverage as an independent variable to test whether media indeed mediates protest effects.

To test whether effects of protest differ across party systems, we use a dummy variable that distinguishes between countries with a majoritarian system (score 1) on the one hand (France, Spain and the United Kingdom) and countries with a consensus system on the other hand (the Netherlands and Switzerland).

To test mediation, we use a Sobel-test that indicates whether the product of the effect of protest on media and media on parliament is significant. Furthermore, we explore whether the size of the effect the direct effect of protest on politics is reduced when the media is included as an explanatory variable (see Baron and Kenny, 1986). In the online appendix we present an additional analysis, based on bootstrapping procedures, to test the robustness of our findings.
We replicate all analyses including one additional control variable: the legislative agenda. It is likely that the other agendas respond to legislation that is proposed or passed in parliament. The operationalization of the legislative agenda variable is discussed in the online appendix.

Before we show results in the next section, we present descriptive statistics of the variables of interest. Table 1 reports the average share of attention for each issue on all agendas we are interested in here: protest news coverage, media, and parliamentary questions. The total number of observations (N) per issue is the number of months times the countries. Note that we do not have similar numbers of observations in all countries due to different time periods and slightly different groupings of codes. For some issues the average attention is small—see for example the less than one per cent (0.7%) average attention for ‘foreign trade’ on the questions agenda—but for most issues it is above one per cent—with the highest average share for the issue of government operations in the newspapers (14.4%). Also note that the scores in table 1 do not sum up to 1 (or 100 percent), since some issues are left out of consideration, because they are not part of the recoded protest agenda. Furthermore, especially the protest and parliamentary agendas have months that no events are staged or questions are asked, for example due to parliamentary recess. In those months, all issues receive a score of ‘0’, lowering the overall means for those agendas.

Table 1 about here

One of the main claims put forward in this paper is that the media play a dual intermediary role when it comes to the political agenda power of protest. News media cover protest specifically and they cover the issues underlying the protest
more generally. More specific protest coverage leads to more general media coverage of the issues underlying the protest. In order to be able to sort these two effects out, it is important to assess the independence of media coverage of protest and media coverage more generally. First, protest codings have been done independently from the media coding. Second, only a very small portion of the media stories about an issue contain coverage of protest events. Though the data sources are only partly overlapping, we have almost 5,000 protest events and more than 150,000 newspaper articles included in the analysis. Third, the newspapers used for protest and for general coverage differ in many of the countries and much of the media coding is based only on front-page coverage, while the protest coding also uses the other parts of the newspapers. So, the overlap between media stories about protest regarding an issue and coverage of the issue itself is small. Finally, the literature on selection bias indicates that characteristics of a protest event itself (i.e., size and violence) are by far the most important predictors of media coverage and clearly outweigh the effect of external issue attention cycles (e.g., McCarthy et al. 1996, p. 494).

Furthermore, we can use the Belgian data—in which protest was recorded directly from police archives without relying on media accounts—as a comparison to further examine the possible dependence of the protest coverage and the general media coverage measures. We run simple bivariate correlations between protest (coverage) and the two other variables of interest for each country separately. An endogeneity problem would be apparent if the media-protest correlation in Belgium would be much lower than in the other countries. Table 2 presenting the results, shows that this is not the case. There are two countries (Netherlands and UK) where
the media-protest correlation is even lower than in Belgium and the correlation for Belgium is only a bit lower than the average correlation. This finding yields indirect evidence of the fact that we can use general media coverage as an independent intermediary variable in our analyses.

Table 2 about here

**RESULTS**

In order to later tackle the question whether parliamentary questions are affected by media coverage of protest *via* the general media agenda, we first examine to what extent the mass media’s general issue agenda is influenced by protest—this is the first step in our mediation model. Table 3 records the results of the analyses with newspapers’ share of attention for each issue in each month in each of the five countries as the dependent variable.

Table 3 about here

Model 1 suggests that media coverage’s distribution of attention over issues is strongly affected by the media’s own past agenda, meaning that media attention is highly path-dependent. Furthermore, media also react to parliamentary questions asked in the previous months. This is what one can expect. The result of interest in table 3 (model 1) is the coefficient tapping the impact from past protests covered in the media on the general media attention for the protest issue in the current month. The effect is significant. This means that with a one percent increase in news coverage of protests relating to a particular issue, attention to the issue in the general newspaper coverage will increase by .014 per cent in the two following
months. This is not a large effect, but protest news coverage shifts substantially from month to month with sometimes large segments of the protest agenda devoted to just one or two issues. For example, a one standard deviation increase (9.2 per cent) in the news coverage of protests results in a 0.13 per cent increase in the share of general news coverage on the same issue. Furthermore, this effect is above and beyond the effect of the newspaper’s own past attention to the issue, as well as the effects of parliamentary questions. A separate analysis for Belgium largely confirms the findings of this analysis (see online appendix, table A4).

We now examine H1 stating that protest coverage exerts influence on the questions in parliament. Table 4 contains the evidence. Again, we see strong autoregressive components in all analyses; a lot of the variance in issue attention in questions is accounted for by the parliamentary attention to issues in the preceding months. What is left over is to some extent explained by protest coverage. The effect of protest coverage in Model 1 in table 4 is significant. When more protest events covered by the media take place, there is more attention to the underlying issue in the questions MPs ask to the cabinet ministers. A one per cent increase in media-protest attention results in a .013 per cent increase on the parliamentary attention on the same issue. In absolute terms, this effect is comparable to the effect of the protest agenda on the media agenda. In sum, H1 receives support from the data: protest has an effect on what politicians are talking about in parliament.

Table 4 about here

Model 2 in table 5 tests H2 considering the mediating role of general media coverage. Newspapers do affect questions in a significant way. This is entirely in line with what we know from media and political agenda studies; the effect is quite
substantial (.184). When general media coverage is added to the model the effect of protest coverage on questions entirely disappears. In other words, the effect of general media coverage fully wipes out the direct effect of protest coverage. This effect becomes insignificant and even slightly negative (-.004). A formal test for mediation is conducted and this Sobel test indicates that the indirect effect is significant (4.458, p<.001). Knowing from table 3 (model 1) that newspapers’ general issue coverage is partially driven by preceding protest, we have a clear case of full mediation. The entire effect of protest coverage on the political agenda runs via mass media, there is no additional direct effect net of general news coverage. The findings thus give support to H2: the mechanism through which protest coverage has an impact on political elites is by increasing general media attention to the issue at stake. Again, separate analyses for Belgium are in line with those findings (see online appendix, table A5).

We now turn to H3 stating that the size of the effect of protest coverage on media, and this indirectly on parliament, would be dependent on key features of the political context in which it occurs, i.e. the institutional openness as captured by the distinction between consensus and majoritarian systems. The effect of protest coverage on the general media agenda is indeed dependent on the democratic system: in majoritarian democracies, the impact of protest on the media agenda is larger. In table 3 (model 2) the interaction effect of protest coverage and the majoritarian democracy dummy is positive (.012) and significant. Figure 2 plots the predicted values for general newspaper attention affected by protest for majoritarian democracies and consensus democracies. We see that the protest agenda has a larger effect in the context of majoritarianism (steeper line). However,
this effect is small and while the prediction for majoritarian countries falls outside the confidence intervals of the prediction for countries with a consensus democracy for the whole range of values, the difference between the two increases only slowly with higher levels of protest attention. This finding underlines the importance of embedding the protest-agenda linkage in its political context and thus offers tentative support for hypothesis 3, but also indicates that this effect is small.

Another indication of the small size of the effect is limited increase in the explained variance (R squared) when adding the interaction term (from .6840 to .6841).

Figure 2 about here

Also the moderated mediation model that relies on bootstrapping offers support for hypothesis 3 (see online appendix, additional analysis 4). Finally, for the main analyzes, we re-estimated the models per country. While we do not find significant effects for every individual country, the pooled results as presented below are clearly not driven by a single country outlier. In none of the countries do we find significant effects that run in the opposite direction compared to the pooled model. Also, the results with legislation as an additional control variable confirm our findings: adding this variable does not alter the findings in any substantial way (see Tables A6-A9 in the Appendix).

Finally, we also tested the reversed causal chain by looking at the direct and indirect impact of parliamentary questions on protest coverage. The results in table A1 (online appendix) suggest that first, protest is responsive to parliamentary questions: the effect is positive and significant and the model improves when the lagged value of protest is added as an explanatory variable (Chi²=9.33, df=1, p<.01).
Second, also here, full mediation is present: protesters do not directly respond to parliamentary activity, but use the media as their source of information. The direct effect of parliamentary questions (Model 1) is reduced to almost 0 when newspaper coverage is added (Model 2). The indirect effect of parliamentary questions via newspaper coverage (see Model 1, table 3 and Model 2, table A1) is positive and significant (Sobel test =5.089, p<.001).

**CONCLUSION**

Does protest, via its coverage in the media, lead to a subsequent increase of attention to the underlying issue on the political agenda? Based on longitudinal, standardized agenda data in six European countries we can answer the questions we started with in a positive manner. When media coverage of protest relating to an issue goes up, so does the ensuing attention in parliamentary questions. We added to the current understanding of how protest matters by showing that protest’s impact is fully mediated in a dual way by mass media coverage: protest leads to specific media coverage of the protest events, this leads to increasing general media attention to the issue at stake and this media attention, in turn, leads to increased political attention in parliament. We did not find any proof of direct effects of protest on the parliamentary agenda (except for in Belgium). The media are thus a key factor in understanding the agenda setting influence of protest. If a social movement wants to bring about policy change, the first step is to get political attention for its issue (Jones and Baumgartner 2005), for example through staging protest events. This will only happen when the media are ‘on board’ and pick up the
protest by devoting more attention to the specific issue as well. Our results support Koopmans’ (2004) theoretical claims on the importance of mass media for protest to matter. In addition, they are consistent with Giugni’s (2004) findings that social movements have little, if any, direct impact on policy. The protest effect found, is to some extent moderated by system-level features: the indirect effect of protest via media is stronger in majoritarian countries.

This study made a first, and we think an important, step forward in the study of the agenda setting power of protest in a cross-issue, cross-country and longitudinal way. However, it represents only a preliminary step in further exploring the precise contingencies of protest influence on political issue attention. The analyses we presented here were based on pooled data and there are a lot of things going on underneath the very broad and general patterns we found. Coming back to our initial assumption about the informational role of protest, further studies should more carefully disentangle the signals sent by the protestors as well as the receiver’s side. Regarding the protest, we only assessed the frequency of the protest coverage, but protest is sometimes said to be only effective when it is disruptive. The ideological color of the protest—e.g. is it left or right wing?—may matter as well, and so does the concrete issue at stake. We expect there to be differences between issues with some issues more prone to protest effects than others (e.g., valence issues more than positional issues). The sponsors of the protest, the type of social movement organization and its strength, may—in line with resource mobilization theory (McCarthy and Zald 1977)—play a role as well. Regarding the receiver of the protest signal, one of the next steps is to disaggregate to the party level and test whether some parties are more reactive to protest than others—are left-wing
parties more sensitive to trade union protest, for example? Finally, there is much more to say about the six countries that are covered here. To start the discussion, we only took into account their rough classification as consensus or majoritarian democracies, which is a compound measure and captures what we believe is a key mechanism in how political contexts moderate the effects of protest on media, but based on a larger country sample one should disentangle the effects of specific institutional features. Moreover, the countries differ in other regards as well. Apart from general contextual factors emphasized in the POS literature, it may be interesting to pay more attention to the very particular questioning rules that differentiate the six legislatures’ reactions to protest. In sum: we have only scratched the surface, but our findings are promising.
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REFERENCES


**ENDNOTES**

[1] Newspaper coding in the UK was limited due to constraints in resources. Every Wednesday was sampled in order that these were as close as possible to the session of prime minister’s questions for a given week (which since 1997 has taken place at midday on Wednesdays). This ensured that our measure of media attention corresponded to the sampling point for parliamentary questions.

[2] Since El Pais is also published on Sunday, we covered events reported in the Sunday and Monday edition of the newspaper.

[3] To check whether this differential coding affected the findings, we re-analysed the data excluding the issues of immigration and integration, civil rights and liberties, and labor and employment. Results are reported in the online appendix (table A2 and A3) and show that the exclusion of those issues do not alter the substantial results of the analyses.

[4] There are several ways to deal with unit-level heterogeneity. The strictest one would include dummy variables for each country-issue combination, resulting in a fixed-effects model that has removed all issue and country level variance. We chose not to use a fixed effects analysis, since we are substantially interested in cross-national differences. Furthermore, such an approach consumes a lot of degrees of freedom. A lagged dependent variable also accounts for (a large part of)
heterogeneity, since the previous value—which might differ substantially in average level across issues—is taken into account as an explanatory variable.
### Table 1. Descriptive statistics. Share (proportion) of attention for each issue per agenda across countries

<table>
<thead>
<tr>
<th>Issue</th>
<th>N</th>
<th>Protest (coverage)</th>
<th>Newspapers</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macro economics</td>
<td>873</td>
<td>.0253</td>
<td>.0456</td>
<td>.0526</td>
</tr>
<tr>
<td>Civil rights and liberties</td>
<td>873</td>
<td>.1520</td>
<td>.0443</td>
<td>.0281</td>
</tr>
<tr>
<td>Health</td>
<td>873</td>
<td>.0354</td>
<td>.0399</td>
<td>.0777</td>
</tr>
<tr>
<td>Agriculture and fishery</td>
<td>873</td>
<td>.0182</td>
<td>.0127</td>
<td>.0311</td>
</tr>
<tr>
<td>Labor and employment</td>
<td>873</td>
<td>.0490</td>
<td>.0280</td>
<td>.0379</td>
</tr>
<tr>
<td>Education</td>
<td>873</td>
<td>.0316</td>
<td>.0254</td>
<td>.0422</td>
</tr>
<tr>
<td>Environment</td>
<td>873</td>
<td>.0529</td>
<td>.0125</td>
<td>.0301</td>
</tr>
<tr>
<td>Energy</td>
<td>873</td>
<td>.0103</td>
<td>.0109</td>
<td>.0167</td>
</tr>
<tr>
<td>Immigration and integration</td>
<td>548</td>
<td>.0871</td>
<td>.0166</td>
<td>.0313</td>
</tr>
<tr>
<td>Transportation</td>
<td>873</td>
<td>.0448</td>
<td>.0332</td>
<td>.0663</td>
</tr>
<tr>
<td>Law, crime and family</td>
<td>873</td>
<td>.0283</td>
<td>.1143</td>
<td>.0899</td>
</tr>
<tr>
<td>Social welfare</td>
<td>873</td>
<td>.0186</td>
<td>.0081</td>
<td>.0337</td>
</tr>
<tr>
<td>Comm. develop., planning,</td>
<td>873</td>
<td>.0104</td>
<td>.0087</td>
<td>.0228</td>
</tr>
<tr>
<td>Defense</td>
<td>873</td>
<td>.0418</td>
<td>.0684</td>
<td>.0457</td>
</tr>
<tr>
<td>Foreign trade</td>
<td>873</td>
<td>.0133</td>
<td>.0072</td>
<td>.0066</td>
</tr>
<tr>
<td>International affairs and foreign</td>
<td>873</td>
<td>.0644</td>
<td>.0888</td>
<td>.0553</td>
</tr>
<tr>
<td>Government operations</td>
<td>873</td>
<td>.1343</td>
<td>.1443</td>
<td>.0912</td>
</tr>
</tbody>
</table>

*Note.* Immigration and integration are included in civil rights and liberties or labor and employment for Spain and United Kingdom. Scores do not sum up to 1 (or 100 percent), since some issues are left out of consideration, because they are not part of the recoded protest agenda. Furthermore, especially the protest and parliamentary agendas have months that no events are staged or questions are asked, lowering overall means.
### Table 2. Correlation between protest, newspapers and questions across six countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Newspapers</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>.172***</td>
<td>.055***</td>
</tr>
<tr>
<td>Spain (protest coverage)</td>
<td>.374***</td>
<td>.162***</td>
</tr>
<tr>
<td>France (protest coverage)</td>
<td>.172***</td>
<td>-.016</td>
</tr>
<tr>
<td>Switzerland (protest coverage)</td>
<td>.163***</td>
<td>-.012</td>
</tr>
<tr>
<td>Belgium (police)</td>
<td>.097***</td>
<td>.056*</td>
</tr>
<tr>
<td>United Kingdom (protest coverage)</td>
<td>.064**</td>
<td>.103***</td>
</tr>
<tr>
<td>Netherlands (protest coverage)</td>
<td>.017</td>
<td>-.012</td>
</tr>
</tbody>
</table>

Note. *p<.05; ** p<.01; *** p<.001

### Table 3. Predicting general newspaper coverage in five countries

<table>
<thead>
<tr>
<th></th>
<th>Model 1 Main effects</th>
<th>Model 2 Interaction effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspapers (t-1)</td>
<td>.809*** (.013)</td>
<td>.808*** (.013)</td>
</tr>
<tr>
<td>Questions (t-1)</td>
<td>.034*** (.006)</td>
<td>.033*** (.006)</td>
</tr>
<tr>
<td>Protest (coverage) (t-[1-2])</td>
<td>.014*** (.003)</td>
<td>.007+ (.004)</td>
</tr>
<tr>
<td>Majoritarian democracy</td>
<td>.001** (.000)</td>
<td>-.000 (.000)</td>
</tr>
<tr>
<td>Constant</td>
<td>.005*** (.001)</td>
<td>.006*** (.001)</td>
</tr>
<tr>
<td>R squared</td>
<td>.6840</td>
<td>.6841</td>
</tr>
</tbody>
</table>

Note. OLS estimations with panel corrected standard errors; N=12,310 *p<.05; ** p<.01; *** p<.001

### Table 4. Predicting parliamentary questions in five countries

<table>
<thead>
<tr>
<th></th>
<th>Model 1 Main effects without media coverage</th>
<th>Model 2 Main effects with media coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions (t-1)</td>
<td>.363*** (.018)</td>
<td>.319*** (.018)</td>
</tr>
<tr>
<td>Newspaper (t-1)</td>
<td>.184*** (.012)</td>
<td></td>
</tr>
<tr>
<td>Protest (t-[1-2])</td>
<td>.013** (.006)</td>
<td>-.004 (.006)</td>
</tr>
<tr>
<td>Majoritarian democracy</td>
<td>-.006*** (.001)</td>
<td>-.007*** (.001)</td>
</tr>
<tr>
<td>Constant</td>
<td>.032*** (.001)</td>
<td>.027*** (.001)</td>
</tr>
<tr>
<td>R squared</td>
<td>.1385</td>
<td>.1636</td>
</tr>
</tbody>
</table>

Note. OLS estimations with panel corrected standard errors; N=12,310, * p<.05; ** p<.01; *** p<.001
Figure 1. Causal Model

- Protest coverage
- Parliamentary questions
- Media coverage
- Political system (majoritarian versus consensus)

H1: Protest coverage → Parliamentary questions
H2: Media coverage → Parliamentary questions
H2: Media coverage → Protest coverage
H3: Political system → Protest coverage
Figure 2. Effects of protest (coverage) on newspaper attention

Note. All existing values for the protest agenda (range 0-1) are depicted.