

How Do Parties Respond to Protest?

The Effect of Protest on Party Agendas After The Fukushima Meltdown

Daniel Bischof⁺

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Abstract

An important mechanism in democracies is the responsiveness of political parties to public opinion. Yet, previous research on political responsiveness of parties pre-eminently views the relation between public opinion polls and party agendas as the key feature of responsiveness. I argue that besides public opinion polls, political protest will affect party position taking. I hypothesize that increased protest leads to polarization of party systems: while parties will increase their attention to the issue at stake during protest, they respond differently to protest contingent on how their ideology relates to protesters' demands. Furthermore, the triumphant effect of protest depends on its support by the public at large. I test my theoretical framework using a new and unique data-set containing rhetorical party positions on nuclear energy – revealed in interviews, press statements, press conferences etc. – of 67 parties across 12 democracies. Traditionally susceptible to responding to protesters' claims, parties of the left understand increased protest as a window of opportunity to shape the policy debate beneficial for their goals, while right wing parties perceive protest as a threat to their ideological position on the usage of nuclear energy. The findings have implications for theories linking politics and policy with public opinion, since protest might in fact be an important resource for parties and their position taking.

1 INTRODUCTION

Does protest matter? This question attracted more interest in sociology (Giugni, McAdam, and Tilly 1999; Amenta, Dunleavy, and Bernstein 1994; Morris 1993; Amenta and Zylan 1991; Burstein 1985; Barkan 1984; Mcadam 1982) than in political science (Gillion 2012; Baumgartner and Mahoney 2005). Research in both disciplines also exceedingly focused on the American case, while comparative

⁺ Department of Politics & International Relations, University of Leicester (UK); db308@le.ac.uk. I am grateful for the funding of my PhD studies by the European Research Council Starting Grant (Grant 284277) within the ResponsiveGov project during which this paper was written.

studies remains scarce (Giugni 2007). On the other hand, political science has been mostly concerned with the relationship between public opinion measured through surveys and political authorities' responsiveness to shifts in the latter (Soroka and Wlezien 2010; Stimson, Mackuen, and Erikson 1995; Wlezien 1995) and neglected the potential influence of collective actions on political responsiveness.

This paper attempts to bridge the gap between both disciplines. I argue that under certain conditions protests influence rhetorical competition between parties – such as politicians' statements to the press, speeches and interviews. First, protest needs to be compelling enough to capture the attention of political parties. However, if protests succeed in penetrating party agendas, parties show divergent reactions to protest depending on how their ideology relates to the issue relevant for protesters. In case of the debate on civil usage of nuclear energy after the Fukushima meltdown, left wing parties were more likely to support protesters' claims and parties of the right more often rejected them. In contrast to previous studies (Giugni 2004; Agnone 2007), I hypothesize that public opinion forestalls the impact of protest: once protesters' claims are at odds with the public at large, so will be most rhetorical positions of parties. Finally, unsurprisingly green parties are more prone to react to protest than other party families. However, being issue owners green parties are more likely to speak out loud against nuclear energy, even if there is no protest present. Thus, green parties understand increasing protest as a window of opportunity to set nuclear energy on top of the political agenda of a party system.

In contrast to previous research the paper not only answers the question *when* parties increase attention to an issue, but also *how* an increase of attention is shaped – namely whether a party supports or rejects protesters' claims. Using the ResponsiveGov data, I run time-series-cross-section models across 67 parties and 24 months in 12 democracies on parties' rhetorical positions on nuclear energy after the accident at the Fukushima nuclear plant and find support for my theoretical framework.

The next section gives an overview of the literature on the influence of protest and party position taking. Section three introduces the theoretical framework of the study and deduces hypotheses which will be tested in section five. Section four describes the analytical strategy of the paper and the second last section presents the results of several regression models. The final section concludes and aims to point out avenues for future research.

2 DOES PROTEST MATTER?

The literature on representatives' responsiveness and congruence to public opinion has been mainly concerned with the relationship between surveys and party position shifts. Since the classical work by Downs (1957) inspired by economic theories, political scientists mainly relied upon a general left-right placement to measure how parties respond to voter preferences measured through surveys (Miller and Stokes 1963; Huber and Powell 1994). Research shows that parties'

responses to shifts in public opinion are mediated by party ideology (Adams et al. 2004), with parties of the left being less responsive to shifts in the public mood (Adams, Haupt, and Stoll 2008). Niche parties – such as green, communist and radical right parties – are also said to respond to particular fractions of the public only and to be unresponsive to the public at large (Meguid 2005; Adams et al. 2006). Furthermore, whether or not we regard political parties and assemblies as a collective potentially changes our conclusions about mechanisms of responsiveness (Weissberg 1978; Hill and Hurley 1999). In this vein, models more often theorize that neither parties nor parliaments are single entities, but should be disentangled into their constituent parts. Yet, less efforts have been undertaken to unravel public opinion. Political science has mostly stressed the importance of the mean voter as the driving force for political as well as social change and thereby ignored the mobilized masses (Burstein 2006).

Using the metaphor of a thermostat, the public has been interpreted as a single unit, screaming “too hot” if it demands less public spending from the government and screaming “too cold” if it senses not enough public spending (Soroka and Wlezien 2010; Bølstad 2012; Wlezien 1995).¹ However, the signals sent by the public come multifaceted and are often contradictory.

The public articulates its preferences not only by answering questions in surveys, but through a range of other actions such as direct interactions with politicians during representatives’ visits of constituencies (Fenno 1977), via letter exchanges with their representatives (Cain, Ferejohn, and Fiorina 1984), in the internet (Adler, Gent, and Overmeyer 1998) or by means of collective actions. The sheer amount of possibilities for the public to share its concerns suggests that representatives face at least some extent of variation in the public mood conditional on which sources they consult. Transferred to the thermostat metaphor, the public measured through surveys might scream “too hot” while the mobilized masses screams “too cold”.

In the set of informational resources, protests have become an ever more important indicator of public mood swings. Since the large scale civil rights and anti-vietnam social movements during the 1960s and 1970s, the anti-nuclear and pacifist protests in the 1980s, people have become increasingly involved in protests, boycotts, strikes and petitions (Inglehart 1977; Barnes et al. 1979). Thus, while protests have become a common tool in the masses’ toolbox to articulate its grievances, the impact of protests remained largely a concern of sociologists (Soule and King 2006; King, Bentele, and Soule 2007; Olzak and Soule 2009) and has so far been neglected by scholarly work on positions of political parties (McAdam and Su 2002: 696).

Regrettably, most of the earlier examinations on whether protests matter proclaim that protests *directly* affect policy decisions. These studies largely disregarded the important role political parties play in democracies (Gamson 1990; Morris 1993; Barkan 1984), especially their central role in the chain of delegation between voters and policy-making (Müller 2000).² In contrast, later studies em-

¹ The “most important issue” survey questions represent the temperature in this metaphor.

² Admittedly more so in parliamentarism than in presidentialism (Strøm 2000).

phasized the relevance of various environmental factors (political opportunity structures) mediating or even forestalling the influence of protest (Kriesi et al. 1992; Amenta, Dunleavy, and Bernstein 1994). Thereby the concept of political opportunity structures has been defined differently across the literature (Meyer 2004: 125-126), encompassing diverging sets of actors such as political parties (Rucht 1996), political institutions (Kitschelt 1986) and resources at protesters' disposal (Andrews 2001).³ Until today though, most research has understood political actors as a facilitator for protests, but has not sought to understand the relationship between parties' policy preferences and protesters' demands directly (Rucht 1996: 185-186).

The literature on protests' influence on policy finds mixed results and suffers from a range of shortcomings (for a detailed overview, see: Amenta et al. 2010; Giugni 1998). First, most studies are single country studies often bound to the US case (Baumgartner and Mahoney 2005). Thus, they leave multi-party systems and institutional diversity untouched (Gillion 2013; Walgrave and Vliegenthart 2012; Amenta, Carruthers, and Zylan 1992; McAdam and Su 2002; King, Bentele, and Soule 2007). Only a few exceptions can be found, which take a comparative perspective across time, countries and diverse issues (Giugni 2004, 2007). Second, the preferred analytical strategy have often been detailed case studies. Thus, methodological diversity is lacking and generalizability an unfeasible goal. Finally, the most crucial limitation is the focus on the impact of protest on policy outcomes – located at the end of the policy cycle. This influence might be the most unlikely influence of protest and even in cases where such an influence could exist, conclusively proving it remains challenging.

However, looking into earlier stages of the policy cycle has been rarely done even though there are several reasons why the agenda setting stage of policies matters for protesters and scholars alike. First, the link between protesters' claims and political parties' agendas decides whether and how protest might affect policy. Located at the beginning of the policy cycle, the agenda setting stage appears to be a crucial waypoint for protesters' success to influence policy (for comparable claims, please see: Soule and King 2006; King, Bentele, and Soule 2007). Protests might explicitly seek to launch the debate about an issue protesters care about in the first place.⁴ Parties can then be understood as the crucial gatekeepers to absorb and to implement protesters' policy claims. Second, establishing a causal link between protest and party agendas seems to be more feasible than showing a longterm impact on policy outcomes which often

³ Thus, while for instance Kitschelt (1986) advocated a narrow understanding of political opportunities by preliminary focusing on the institutional openness for protesters' claims of state structures, Kriesi et al. (1995) also included the alliance structure between new social movements and positions of left parties in their study on social movement mobilization in four Western democracies.

⁴ The influence of protest on parties' policy agendas can be understood as a minimal goal of protests, while affecting policy outcomes is the final aim of it. Effectively, in case the latter goal is reached, a protest's *raison d'être* no longer exists. This means there is no longer a reason to protest, in case we define protesters' goals as being policy influence.

depend on complex veto-player constellations (Tsebelis 2002), economic conditions (Garrett 1998) and a range of other factors.

3 HOW PROTEST MATTERS – PARTIES BETWEEN POLICY & VOTE

My theoretical argument departs from the idea that party ideology shapes how political actors perceive their environment and then react to different impetuses. This leads to parties reacting differently to protest and challengers depending on how their own ideology relates to the claims of the demonstrating masses (Adams et al. 2006; Adams, Haupt, and Stoll 2008; Ezrow 2010).

Today parties are overwhelmed with information about their voters' preferences. They are not only confronted with the classical instrument of public opinion surveys, but also mass mobilization against governmental decisions has increased. The media regularly shares public opinion surveys on salient issues and politicians might be bombarded with information through social media – twitter, facebook etc. Given the richness of information, political actors (a) are rarely capable to pay attention to all potential information (Baumgartner et al. 2009; Jones and Baumgartner 2005) and thus react only to those signals they perceive as legitimate and penetrating enough, (b) might face the task to respond to contradictory information, (c) rely on their parties ideology as a filter to deal with their complex environment. Given that parties have reasons to follow and adapt to what the public wants, otherwise they might compromise their electoral survival (Stimson, Mackuen, and Erikson 1995), the question arises *how* different impulses from the public affect *ideologically diverse* party agendas?

Even though protests are often bound to a certain topic and can present a clear demand for policy change on a given issue (Schumaker 1975: 490), they might be small in size (DeNardo 1985), a single one day event or not be disruptive enough to gain the attention of the media (Smith et al. 2001). Thus, they are often characterized by low penetration capabilities and remain unregarded by most parties. Yet, with increasing mobilization, support and disruption the visibility of protests grows. As a result, parties are more likely to be forced to adapt their agendas in order to sufficiently address demonstrators' claims. While it is true that they lean to pick up issues from public claims which reassure their ideology and therefore their ideology restricts their attention (Walgrave and Nuytemans 2009: 192), under certain circumstances all parties feel the necessity to react to their environment in order to secure their electoral survival irrespective of their ideology. Ignoring protesters in such a scenario could lead to more mobilization on the matter, increase salience on an unfavorable issue, or even lead to shifts in public opinion surveys (Burstein 1979). Therefore, remaining silent on the issue might be more costly than addressing it in the long run.

$H_{1(\text{party attention hypothesis})}$: If the penetration capabilities of protest increase, both left parties and right parties are more likely to increase their attention to the issue at stake.

Depending on the topic and claims protesters will not always be met by open ears, even though they might enjoy a considerable amount of support. Parties might understand protests as a challenge to their ideological position or a window of opportunity to use protests to legitimize their policy positions or to harm their competitors. Thus, when increasing the attention to protesters' grievances, they deliberately choose whether to confront protesters or to support their claims depending on how their own ideology relates to the issue at stake during protests.

Traditionally parties of the left – e.g. social democratic, green and communist parties – enjoy strong ties to trade unions and/or “new social movements” (Hamann, Johnston, and Kelly 2012: 1038-1039; Hamann, Johnston, and Kelly 2013; Kriesi et al. 1995). Green parties emerged from social movements organizations calling for nuclear phase-out and pacifism in the early 1980s. Furthermore, since many protest activities – especially strikes – are organized or supported by unions or new social movements, parties with a left ideology might perceive such protests as representative for their core voters' preferences.⁵ In contrast, right parties are associated with conservatism and thus a tendency to support and underpin the *status quo* instead of pushing for reforms. This should be especially the case for issues they are unsure how to relate to and how their core voters relate to (Rokkan 1970) – such as the “new issue” of nuclear energy. Also christian democratic and right mainstream parties largely neglected issues addressed by new social movements at the beginning of their rise (Meguid 2005, 2007).

Thus, in the case of protest on new issues – such as nuclear energy – parties on the left side of the ideological spectrum are likely to support protesters' claims and understand increasing protest mobilization as a window of opportunity to shape the public debate in favor of their policy interests. In contrast, parties with right ideologies perceive protests on new issues as a challenge to their core ideology. They will also increase attention to the issue but try to argue against protesters' claims. I argue that with increasing penetration capabilities of protest the debate between parties of the left and of the right will polarize, while having only mediocre effects on parties located in the middle of the ideological spectrum.

H₂(party polarization hypothesis): The more left (right) a party's ideology the more likely it is to support (reject) protesters' claims on new issues.

Several scholars have emphasized that the impact of protest on policy and politics depends on favorable environmental circumstances and public opinion has become the major external factor recent studies draw upon (Giugni 2007; Agnone 2007; McAdam and Su 2002; Burstein 1999).⁶ Yet, previous research

⁵ This already suggests a bias of the issues protesters pay attention to. Empirically protest appears to be more often bound to political interests of the left than of the right. Thus, a model containing all thinkable issues in the world, left parties might be in general more likely to support protesters and their claims.

⁶ Earlier studies on protest regularly omitted public opinion measurements from their analyses (Gamson 1990).

stressed the reinforcing capabilities public opinion has on the meaningfulness of protest, calling such effects “the amplification mechanism” (Agnone 2007) or “joint effect of public opinion and protest” (Giugni 2007, 2004). Nevertheless, disagreement to protesters’ claims by the public at large might be the strongest obstacle for the successful impact of protests. Lohmann (1998) even argues policies might be chosen in favor of a well informed protesting minority, because incumbents increase their reelection chances by biasing their policies towards the preferences of the well informed part of the public (Lohmann 1998: 811).

Yet, parties which are motivated preliminary by re-election (Mayhew 1974) or vote maximization (Downs 1957; Strøm 1990) are likely to support the signal, the public at large shared while rejecting protesters’ claims. Notwithstanding protest with high penetration capabilities are more likely to affect parties’ talk, they might still be read as the interests of a noisy minority while the silent masses supports other policy reforms or the *status quo*. Protest then increases the salience parties designate to the issue at stake during protest, but does not lead to increased support by party elites – irrespective of whether the silent masses are less well informed. In order to keep or extend their public support, parties are prone to react to the public at large and will neglect the interests of the demonstrating minority. Thus, I argue once the signal sent by the mobilized protesters and public opinion contradict each other, parties are more likely to represent the interests of the public at large and ignore protesters’ claims. In this vein, protest lead to increased attention by parties to the issue at stake during protest. Yet, political parties will not support the position of the protesters, but of the public at large.

H_{3a}(deflating hypothesis): If the percentage of respondents in public opinion surveys disagreeing with protesters’ claims is large enough, an increase in penetration capabilities of protest will lead to more refusal of protesters’ claims by parties.

Again the deflating effect of public opinion could depend on parties’ ideology. If it is true that parties focus on external information to support their ideology (Walgrave and Nuytemans 2009), then we should expect parties to react favorably to the information source *supporting* their worldview while ignoring other information sources *rejecting* their ideology. Such parties can be understood as pre-eminently driven by policy-seeking goals (Strøm 1990; Müller and Strøm 1999). These parties might be willing to sacrifice short-term popularity gains in order to present a coherent and consistent ideology to voters at election day (Downs 1957: 103-109; Strøm 1990: 573). Voters are then understood to prefer a policy-seeking party to other competitors because their coherent ideology minimizes uncertainty about the party’s future legislative activities. Furthermore, previous research found support for this assumption, especially for the left party families in Europe (Kitschelt 1994; Adams, Haupt, and Stoll 2008).

H_{3b}: The deflating effect of public opinion is constrained by party ideology. The more left (right) a party’s ideology the more likely it

is to support (reject) protests and reject (support) the position of the public at large.

As outlined above green parties emerged from social movements in the 1980s. Green parties, thus, can be understood as “owning” the issue of nuclear energy. They are largely associated with it and perceived as competent by voters on the issue (Walgrave, Lefevere, and Nuytemans 2009; Tresch, Lefevere, and Walgrave 2013). Issue owners attempt to manipulate politics with their rhetoric in a way which is advantageous for their vote-seeking efforts (Riker 1996). To remind voters of their competence on the matter and in order to establish a strong tie between the party brand and the issue of nuclear energy, green parties feel the incentive to constantly talk about the issue in order to demonstrate their ownership or influence on the public debate. Thus, green parties are less likely to react in any kind to protest, since they are already endeavor to push rhetorically for nuclear phase-out policies, irrespective of whether protesters take to the streets.

$H_{4(\text{green party hypothesis})}$: Green parties do not adapt their attention to the nuclear issue with increasing penetration capabilities of protest.

4 DATA & HOW TO MEASURE THE RHETORIC OF PARTIES

4.1 *the ResponsiveGov data*

To analyze whether party agendas rhetorically respond to protesters’ claims, longitudinal data are needed of protest events and parties’ reactions to them, preferably reported on the same ideological scale. The ResponsiveGov data provide such detailed information on protests and the reactions of the political elite to them. The ResponsiveGov project aims to find out “[t]o what extent [...] democratic governments [are] responsive to citizens’ demands and preferences between elections” (Morales 2014: 1). Data collection is thereby based on pre-defined time periods, which are called ‘policy junctures’. Every juncture is bound to a certain policy issue – here nuclear energy after Fukushima. The project collects data by manual coding of the content of a country’s main newswire, legislative and parliamentary databases.

First, coders select the relevant news articles to be coded with an extensive keyword search. Second, coders extract from these newswires any relevant event taking place during a certain policy juncture. Thus, the unit of coding is not a single publication of a newswire, but all events reported within the publication. An event can be a claim, a declaration or an action. A wide range of different types of events, ranging from speeches, acts, parliamentary debates and court rulings etc. to protest events and public opinion polls are coded (for a full list of events, see: Lühiste and Morales 2014). For instance in case of the nuclear energy after Fukushima juncture, in Sweden Mona Sahlin (*the actor*), leader of Socialdemokraterna (*the organization*), gives a speech (*the event*) on the 25.03.2011 and says that nuclear energy should not be pictured as the only solution for Swedish energy needs, but instead green energy should be thought of as a viable

alternative (*the position*). As such the ResponsiveGov data supply a detailed account of which actions parties, protesters and the mobilized public undertake and which positions they reveal on different policy issues across a large quantity of countries.⁷

THE FUKUSHIMA DATA The ResponsiveGov data on the Fukushima accident reports daily data for Belgium, Canada, France, Finland, Germany, Italy, Netherlands, Spain, Sweden, Switzerland, United Kingdom and the US. When the Fukushima accident happened, all of these countries either already were using nuclear energy or the parties in office had plans to phase-in again (Italy). In the case of the Fukushima juncture, the data collection starts on the day of the Fukushima accident (11.03.2011) and ends two years after the accident (31.03.2013). However, in case a government decided to phase-out nuclear energy (Germany, Italy⁸ & Switzerland) *or* in case general elections take place a minimum of half a year after the Fukushima accident (France, Spain & Netherlands), these events mark the end of the coding period. For all twelve countries included in the data collection process any party activity reflecting on nuclear energy reported by a nation's press agency, its parliamentary or legislative database are included in the ResponsiveGov data.

Given that data collection ultimately ends once a government decides to phase-out nuclear energy, protest mobilization can hardly depend on these policy decisions undertaken by governments within the data-set. This provides the advantage that protest mobilization is not endogenous to parties' policy decisions, but pictures protesters' dissatisfaction with the *status quo*.

PARTY SELECTION The visibility of parties' rhetorical positions in the media partly depends on their relevance in Sartori's (1976) sense, parties incumbency status and the time period of observation. Scholars have shown that parties' size and incumbency are favorable factors to obtain attention by the media (Hopmann et al. 2010), with campaign periods representing more balanced coverage by the media across all parties (Harris, Fury, and Lock 2006). Since the ResponsiveGov data mainly relies on manual coding of newswires stemming from national press agencies, the selection of parties included in my study needs to take their capabilities to enter the media agenda into account. Even though this study is not interested in the sheer amount of news coverage per party, the selection of parties has to make sure that a substantial amount of media coverage is guaranteed across all parties. Otherwise the results might be systematically biased by parties' capabilities to penetrate the media agenda. Thus, parties included in this study have been selected to assure that they fulfill Sartori's (1976) ideas of party relevance, as well as coalition and blackmailing potential.

As a general rule parties that managed to secure at least five seats in the national parliament and at least 5% of the national vote share are included in the

⁷ Reliability of coding is high with Krippendorff's Alpha being 0.88

⁸ To be precise in the case of Italy the government withdrew from the plan to re-enter nuclear energy.

analysis (For more details, please see: Bischof, Lühiste, and Morales 2013). Furthermore, parties needed to repeat this success at least once during the period of interest of the ResponsiveGov project (1980-2013).⁹ I also included all governmental parties during their time being in government and parties which helped to stabilize a minority government.¹⁰ This results in 67 parties included in the following analysis (For an overview of these, see: Table 5 on page 36).

4.2 *parties' rhetorical positions*

Since the ResponsiveGov project is interested in governments' responsiveness, all events coded during the Fukushima case are recorded in relation to governments' initial policy positions on a five point scale (For more information on the coding procedure, please see: Lühiste and Morales 2014). However, my analysis does not seek to explain governmental responsiveness, but aims to compare party positions across countries and time. Thus, I had to recode all events to assure comparability across parties (Description of re-codings can be found in the appendix A.1 on page 30). After recoding the ideological position of every actor is captured as either supporting nuclear energy or rejecting nuclear energy.

"Party rhetorics" encompass statements to the media (Interviews), press conferences, any kind of speech made during assemblies or party meetings, public letters which also include tweets, statement/speeches given during rally and campaign events, party resolutions and declarations, parliamentary questions and statements given during hearings. All these activities are assumed to aim at persuading the public, or to share information on a party's position with citizens. However, none of these rhetorical actions are themselves events of substantial policy making. Yet, they might very well reflect on past policy decisions or introduce upcoming ones.

Furthermore, I only included statements undertaken by members of the national party branch and the government. Regional and supranational politics substantially differ from national politics. Therefore party members of regional or supranational branches often deviate from the national party branch. Since this study is not interested in party fragmentation between regional, national and supranational politics, these statements have been excluded from the analysis. Hence, neither statements by regional politicians, nor by members of the European Parliament are included.

As outlined before, all events are ranged into two ideological categories: one outlining support for nuclear energy, the other one rejecting the usage of nuclear energy. This applies for party rhetoric as well. In a first step I *counted* these pro-

⁹ While these rules pertain to most parties included in the following analysis, exceptions have been made in several occasions to guarantee to not ignore country particularities (Please see: Bischof, Lühiste, and Morales 2013). Table 5 on page 36 in the appendix gives an overview of all included parties and reasons for their selection.

¹⁰ A minority government supporter is thereby defined as: "*Party in Support of Government* are those parties that are not represented at the ministerial level but which at the same time support the investiture of that government" (Woldendorp, Keman, and Budge 2000: 15).

and anti-nuclear rhetorical statements per party and month.¹¹ In a second step, all rhetorical activities were then summarized by party and months using the following formula:

$$Rhetorics_{it} = \log(\sum pro\ nuclear_{it} + 0.5) - \log(\sum anti\ nuclear_{it} + 0.5) \quad (1)$$

I subtracted the sum of “*anti nuclear*” rhetoric from the sum of “*pro nuclear*” rhetoric for each party per month – comparable to measurements of parties’ left-right placements.¹² Thus, values greater than zero indicate rhetorical positions favoring nuclear energy, while values below zero indicate positions against the usage of nuclear energy. Just subtracting pro- and anti-nuclear talk results in a highly skewed measurement, with values on the extremes being heavily overrepresented. This might substantially infringe the validity of the results reported in the next section. To address this issue, I use a log transformation to control for skewness – as shown in equation (1).¹³

On top of controlling for skewness, the interpretation of a measurement based on a logged ratio is appealing, since through logging party position change is not defined by the absolute difference between the counts of pro- and anti-nuclear positions but by their *ratio* (Lowe et al. 2011: 130-132). In the measurement outlined in equation 1 the marginal effect of a single rhetoric *decreases* with the amount of statements already made publicly on the issue of nuclear energy.¹⁴

11 *Ex ante* there is no reason to stick to a monthly measurement. One might as well think of a weekly or daily aggregation period. Yet, the smaller the time periods, the more parties will not talk at all about an issue. Thus, it is useful to find mid ranging time intervals which still assure to cover party rhetorics in a detailed fashion without artificially increasing the zeros of the measurement.

12 This means that zeros can have two meanings: Either the party did not talk about nuclear energy at all, or the party is completely divided regarding the nuclear issue. The latter case only occurs ten times out of 1165 possibilities. Running the upcoming regression analysis excluding these ten cases does not change the results substantially. The results are also similar once I run regressions with two separate rhetoric variables – a pro- and an anti-nuclear rhetorics variable. However, my proposed measurement eases interpretation of the regression results and was therefore preferred to the other two outlined options for the following analysis.

13 $\log(0)$ is undefined. Therefore I chose to introduce ‘0.5’ into the equation. This assures that in case a party did not talk at all is not undefined in the measurement but represents the middle of the scale with zero.

14 Certainly several parties remain silent on nuclear energy at different points in time. To estimate whether parties voluntarily remained silent, instead of the media not being willing to report their positions, I run a logistic regression with the dependent variable being ‘1’ in case a party did talk about nuclear energy in a given month and ‘0’ otherwise. Following the previous discussion about party size and incumbency affecting whether or not the media absorb party claims, I included party size (vote-share and seat-share) and incumbency status as covariates (table 3 in the appendix). While more seats are a favorable and significant factor, the effect size is comparably small with the probability of the media reporting the party position increasing by 1 %. Neither vote share nor incumbency are significant factors for the media penetration. In summary, it appears that the selection criteria for parties assure the comparability across parties and countries of the rhetorical position measurement and that the sample does not suffer from a substantial media bias towards larger, governing parties.

4.3 *Measuring the penetration capabilities of protests: going beyond size, frequency & duration*

Data on the penetration capabilities of protest stem also from the ResponsiveGov data. As discussed in the theoretical section, protests come in different size and shapes. Instead of using the raw data as provided by the ResponsiveGov project, I created an index measuring the penetration capability of protest (protest-index) for each country and month.¹⁵

First, the characteristics for each protest are recoded into *eight* binary variables reflecting the relevant characteristics of protest: (1) more than 100 participants; (2) more than 1000 participants; (3) more than 10.000 participants; (4) duration of two or more days; (5) any organizational support; (6) illegal protest; (7) violent protest; (8) one or more participants wounded.¹⁶ Second, the binary variables have been aggregated for each protest event. Thus, each protest event can disperse between 0 and 8. Thereafter, I aggregated the penetration capabilities for all protest events for each country and month. In case the ResponsiveGov data reported any form of counter-mobilization, their capability to penetrate were subtracted from the protest-index. In several instances the media interviewed politicians joining protest events or politicians gave a speech during the protest event. In case a party participated in a protest as an actor, I excluded the protest event due to potential endogeneity issues. However, the results reported in the following section are robust to the inclusion of all protest events. Finally, the protest-index is highly right-skewed. I logged the protest-index to control for its right-skewness.¹⁷

Figure 1(a) reports the distribution of the protest-index for each protest event coded within the ResponsiveGov data. As suggested earlier, most protests have a rather low penetration capability and a maximum of four out of the eight characteristics are fulfilled by three protest events. Two protests in France support the usage of nuclear energy in an effort to secure jobs at a local nuclear power plant. Thus, they are defined as counter-mobilization, while the remaining protest communicate an anti-nuclear position. In summary, two thirds (74 %) of all protest events coded in the ResponsiveGov data managed to obtain at least one of the eight characteristics of penetration capabilities. Figure 1(b) shows the average protest-index for each country for the whole period of observation. The map underpins observations shared in previous studies, describing Germany and Italy amongst the countries which experienced high public pressure by social movements to phase-out nuclear energy (Jahn and Korolczuk 2012; Ramana 2013: 68-

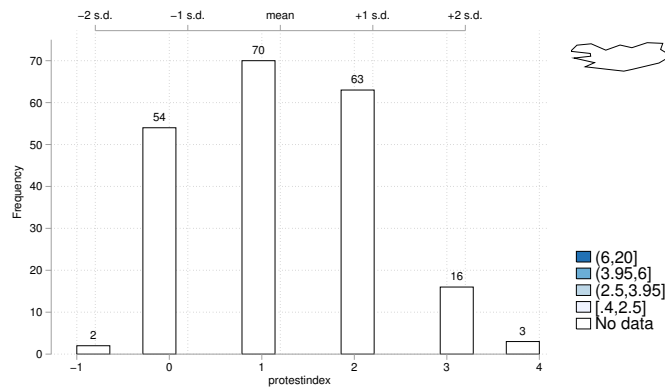
15 Included are protests (including vigils), protest camps, any form of symbolic action, blockades and any form of occupation of land.

16 Using three binary variables to measure protest size, assures that protest size is weighted higher than the remaining characteristics. This decision was made deliberately based on arguments put forward in previous studies, pointing out the pre-eminence of protest size (Lohmann 1993; DeNardo 1985).

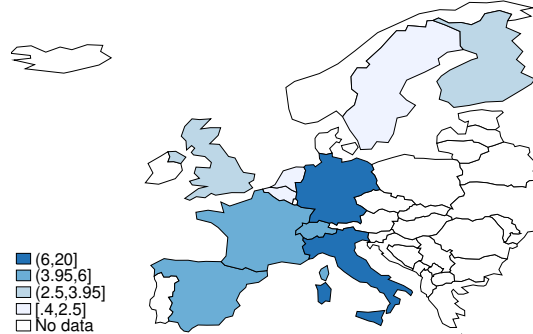
17 To be precise I added 1 as a constant before logging the index: $\text{logged protest-index} = \log(\text{protest-index} + 1)$. This was done to control for the fact that $\log(0)$ is undefined. Logging also makes the results more comprehensible (Gelman 2008).

Figure 1: Distribution of protest-index

(a) Histogram of aggregated characteristics for each protest



(b) Average protest-index per country

*Source:* Author's own.

Note: Figure (a) shows the distribution of characteristics for each protest coded within the ResponsiveGov project. Figure (b) reports average protest-index per country and month. Figure b) omits USA (=1.0) and Canada (=2.2) to assure readability. protest-index is split into quantiles.

69). While France, Spain and Switzerland also experienced significant upheaval against the usage of nuclear energy, the remaining countries were largely spared from large scale protests.

The characteristics measured in the protest-index have been carefully chosen according to the results of previous research on the successful impact of protest. While the inclusion of protest size, duration and organizational support (1-5) appear theoretically straightforward based on arguments found in previous contributions to the field of social movement studies (Walgrave and Vliegenthart 2012; Soule and Olzak 2004; Lohmann 1993; DeNardo 1985), the characteristics of illegality, violence and wounded participants deserve more attention (6-8).¹⁸ Since the work of Gamson (1990), scholars have repeatedly argued that the disruptiveness of protest increases the chance for protesters to be heard and visible to the public, the media and party politics. Recent research on the effect of disruptiveness of protest on party agendas underpins the theoretical arguments put forward by Gamson (McAdam and Su 2002). Wounded people not only signal a certain amount of commitment to the course of the protest – in case protesters resume after the injuries –, but more importantly focus the attention by the media to the event. In case protesters are wounded during a protest in a democracy, questions will be asked how and why such tragic events happen. Examples for increased attention by the media and parties are numerous, e.g. wounded protesters after the shooting of Michael Brown in Ferguson (USA) (Alcindor and

¹⁸ Illegal protest are explicitly framed by the media as such (e.g. lacking a protest permit), occupations or blockades of land/buildings. If it is clear from the source that the protesters initiated the violence, a protest event is categorized as violent.

Bello 2014); harmed protesters by police monitors during the protest against the new railway station in Stuttgart (Germany) (Marquart 2010).

Like most protest event data, the ResponsiveGov data relies on codes originating from the media. Even though media data represents still the gold-standard in protest event coding, cross validation of different data-set shows considerable deviation depending on which media source was employed (Nam 2006). Especially information on participants shows considerable variation. Thus, using binary variables to measure the presence of certain characteristic mitigates potential biases – e.g. the variation of protest duration usually increases with its endurance, but rarely contradicts the fact that a protest lasted longer than a single day.¹⁹

In contrast to previous research using comparable measures (Gillion 2012: 955-956; Gillion 2013), the penetration capability of each component has been tested by means of regressing each component separately with the amount of statements each party published on nuclear energy.²⁰ The results reveal that each component leads to an increase of attention by parties to protest. Thus, the more of the eight characteristics are ticked off, the more likely are protesters to raise the level of attention by parties. These results substantiate the theoretical arguments outlined above and justify the decision to include the eight components into a single aggregated index aiming to measure the penetration capabilities of protest.

4.4 *Party ideology, public opinion & controls*

Parties' left-right position come from the comparative manifesto project (CMP) (Budge et al. 2001; Klingemann et al. 2006; Volkens et al. 2012). While most studies used the rile score coming with the CMP data to estimate parties' left-right positions, I here rely upon Lowe et al.'s (2011) suggestions and use a logit scale to measure parties' ideological left-right placement. Parties' left-right placement runs from -2 to 1.4 with higher values indicating parties with a more right ideological position ($\mu=-.4$; $\sigma=.7$). Given that the CMP has been criticized for showing erroneous left-right placement of parties in several instances (Laver 2001: 66-75; Pelizzo 2003), I cross validated the measurement and results with the most extensive expert survey on parties' left-right placement – the Chapel Hill expert survey (Bakker et al. 2012). Both measurements are highly correlated ($r=.7$) and

¹⁹ In case the ResponsiveGov data reported more than one informational resource for the size of protests, I used the mean across all informational resources to decide whether a protest was bigger than 100 or 1000 participants. Even though there is high variation across the different sources, in all instances the sources agree whether a protest was larger than 100 or 1000 participants.

²⁰ Please notice that is not an indirect selection on the dependent variable. The following analysis tries to link protest with party positions and not the sheer amount of talk. E.g. while parties increase their attention to violent protests, they might still be more likely to reject protesters' claims. Factor analysis is not a suitable option to validate the measurement, since a) the variables are measured as binaries and b) an empirical correlation between each category would not substantiate the index, but rather show that most characteristics go hand in hand with each other.

using the Chapel Hill expert judgements instead of the CMP left-right placement does not change the conclusions to be drawn from the upcoming analysis.²¹ The cmp data have been chosen over the Chapel Hill expert surveys, since the latter only include European countries and, thus, do not cover the whole sample of parties included in the upcoming analysis. Green parties have been measured with a dummy variable, which is '1' in case a party belongs to the green party family and '0' otherwise.

Public opinion is measured by subtracting the percentage of respondents disagreeing with the usage of nuclear energy from the percentage of respondents favoring it. Thus, higher values on the public opinion scale indicate a more pro nuclear public mood. Public opinion polls have been selected to either reflect a respondent's position towards the *status quo* policy of a given country or her/his general opinion on the usage of nuclear energy and come also from the ResponsiveGov data.

Several controls are included in the upcoming analysis. Comparable to other studies, the amount of respondents naming environmental issues as the most important problem/issue in each country has been used to measure the salience of the issue of nuclear energy (Jennings and Wlezien 2011).²² Parties might only respond to issues which are salient, while ignoring protest and public opinion on issues which are not salient. The debate on the usage of nuclear energy after the accident in Fukushima has been mainly framed as an environmental issue by political parties. Thus, using the number of people naming the environment as the most important problem facing the nation should depict the salience of the nuclear issue for the public well. Finally, parties might be prone to be influenced from the *status quo* of a country's reliability on nuclear energy. Thus, instead of calling for reforms they might favor the more convenient current situation which does not force them to replace existing policies. I used the amount of energy produced by nuclear reactors in a given country to measure the *status quo*. The data come from the World Nuclear Association and are available on an annual basis.²³ Finally, I decided to standardize the unlogged variables by subtracting the mean from a given variable and dividing it by its standard deviation. While standardization does not change the substantial results of the regression analysis, it eases comparisons between coefficients. Above all it mitigates multicollinearity issues which potentially linger due to several interaction terms and their constituting base terms being included in the regression analysis (Gelman 2008).

21 For the Swiss Bürgerlich-Demokratische Partei (BDP) and the French Nouveau Centre (NC) the CMP does not provide manifesto codes, since both parties had not yet competed in elections previous to the Fukushima disaster. Therefore, I used the Chapel Hill expert judgements to linearly interpolate their CMP left-right placement. Due to the high correlation of both measurements, the Chapel Hill expert survey appears to be a reliable source for linear interpolation of the two values. Excluding the two parties from the analysis does not change the findings.

22 data stem from the Eurobarometer for European countries; Gallup for the USA; Focus Canada Report for Canada.

23 <http://www.world-nuclear.org/info/Facts-and-Figures/Nuclear-generation-by-country/>, last checked: 07.01.2015.

5 MODELLING SPECIFICATIONS

To test my theoretical arguments, I need to examine if parties rhetorically respond to protests. Thus, I estimate a model in which the rhetorical position measurement is the dependent variable, party characteristics, the protest-index and several controls the independent variables:

$$\begin{aligned}
 RP_{it} = & b_0 + b_1 Party\ lr_{it} + b_2 Protest_{it} + b_3 Party\ lr_{it} * Protest_{it} \\
 & + b_6 Public\ Opinion_{it} + b_7 Public\ Opinion_{it} * Protest_{it} \\
 & + b_8 Party\ lr_{it} * Public\ Opinion_{it} + b_9 Party\ lr_{it} * Public\ Opinion_{it} * Protest_{it} \quad (2) \\
 & + b_{10} Green\ Party_{it} + b_{11} Green\ Party_{it} * Protest_{it} \\
 & + b_{12} \zeta_{it} + \epsilon_{it}
 \end{aligned}$$

With ζ being a vector of controls outlined below. The hypotheses derived in the theoretical section are translated into interaction terms, each indicating the respective moderation effect on protest of party ideology, public opinion, green parties and the joined effect between public opinion and party ideology. I first test each hypothesis in a separate model, before estimating a joined effects model including all interaction terms as outlined in the equation above.

Since the data are time-series-cross-sectional, each party being observed over an average of 17.6 months, the Gauss Markov assumptions of standard OLS regression analysis are violated. Indeed, autocorrelation tests reveal that the null hypothesis of no serial correlation needs to be rejected.²⁴ Further test-statistics show that the error terms are heteroscedastic and stationary.²⁵ I run models with panel-corrected standard errors (PCSE) combined with a Prais-Winsten transformation to address the issues of heteroscedasticity, serial correlation within party_i and contemporaneous correlation (correlation of the errors of party_i and party_j at time *t*) respectively. I opted for these models specifications instead of a lagged dependent variable specification, since the latter tends to absorb a huge amount of the variation of the dependent variable (Achen 2000; Plümper, Troeger, and Manow 2005). However, the results of the models employed are robust to different sub-samples and estimation strategies – e.g. including a lagged dependent variable (Beck and Katz 1995); lagging the core independent variables; using a multi-level model (results of the robustness tests can be found in the appendix in table 4 on page 33). Furthermore, as unobserved heterogeneity potentially infringes the results, I include country fixed effects in my models. This also

²⁴ To be precise a pooled Wooldridge test (Wooldridge 2013) is not significant and thus the null hypothesis of no autocorrelation cannot be rejected. Since H_0 tests for no autocorrelation, not rejecting H_0 does not entitle me to accept H_A . Using Wooldridge tests on a country by country basis discloses that H_0 needs to be rejected for several parties in several countries. Thus, I decided to proceed with caution and to control for a AR-1 autocorrelation structure. The standard errors of these models are also more conservative when compared to models not controlling for autocorrelation. Even though the *p*-values do not extensively differ from each other.

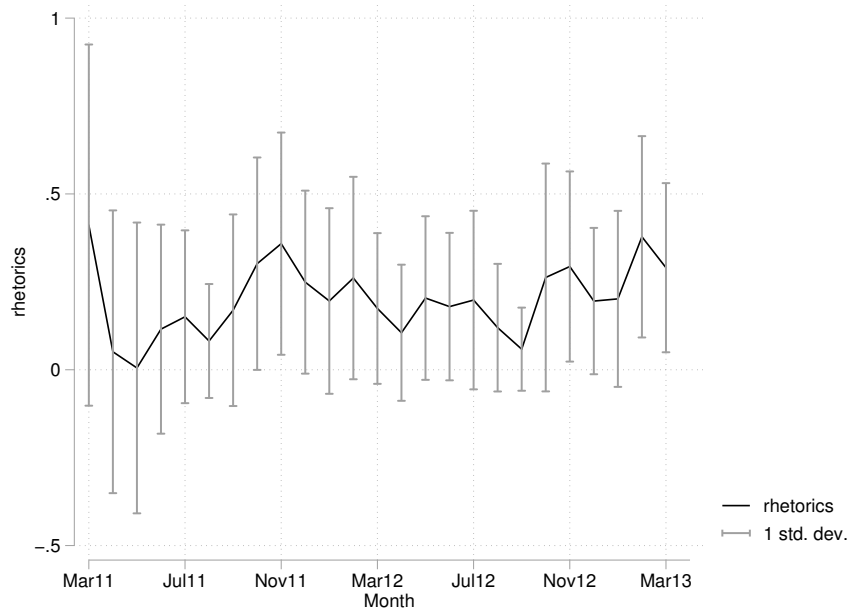
²⁵ Breusch-Pagan and Cook-Weisberg tests for heteroscedasticity were employed and reject the null hypothesis of constant variance. Significant Unit-roots tests (Fisher-type test based on ADF test) reveal that the data are stationary.

helps to address media bias of the dependent variable across countries. Since the study is interested in the effect of protest on party rhetoric, I opted to not lag the independent variables. In the line with previous research I assume a temporally close translation from protest into party talk (Walgrave and Vliegenthart 2012). Yet, again lagging the independent variables does not change the conclusions derived from the upcoming analysis as shown in table 4 on page 33.

6 RESULTS

How do parties adapt their agendas in the light of protest? Figure 2 shows parties' average rhetorical position across the whole period of observation included in the analysis. Recall that positive values indicate a pro-nuclear position,

Figure 2: Rhetorical party position across time



Source: Author's own.

while negative values show an anti-nuclear stance. On average parties communicated pro-nuclear rhetorical positions more often than on anti-nuclear ones. The amount of talk varies across time and finds its pro-nuclear peak directly after the accident at the Fukushima reactor. However, already four weeks after the meltdown at the Daiichi nuclear plant, there is a significant drop of parties' favorable position towards nuclear energy. Thus, there is considerable variation in the rhetorical position measurement across time and parties which is in need of explanation.

Table 1 reports the results of the analysis. Column 1 is a baseline model containing all variables without any interaction. Column 2 adds an interaction term between parties left-right placement and the protest-index, model 3 includes the

interactions between public opinion and the protest-index. Model 4 reports the results for both interactions within a single model. Column 5 gets one step beyond that and tests whether there is an effect of parties ideology on the interaction between public opinion surveys and the protest-index. Columns 7 and 8 report models to test the green party hypothesis.

Column 1 reports a significant, positive effect of the protest-index on parties' rhetorical positions. When facing more protest with higher penetration capabilities, parties are more likely to reject protesters' claims. Thus, parties increase their attention to the issue at stake during protest, but appear to do so in order to elucidate the status quo. Consequently hypothesis one is supported by the data. Furthermore, since parties' left-right position is not significant, their rhetorical positions are not purely driven by their ideology. Public Opinion also shows no significant effect on party rhetoric. This results adds to the mixed findings of previous research on parties' responsiveness to public opinion (Manza and Cook 2001). However, as column 6 reveals, this effect is mainly driven by the low salience of the issue of nuclear energy. Once we take salience into account, parties are more likely to talk pro-nuclear the more this position is supported by the public at large (Lax and Phillips 2009, 2012). Furthermore, unsurprisingly green parties are more likely to talk anti-nuclear than all other party families.

Model 2 adds an interaction term between the protest-index and parties' left-right placement to test the party polarization hypothesis. As suggested in hypothesis two, parties react differently to protest contingent on how their general left-right ideology relates to the issue of nuclear energy. The more left a parties' ideology, the more likely it is to support protesters' claims. In contrast, the more right its ideology is, the more likely it is to reject the demands put forward in protests. Figure 3(a) visualizes this result by plotting the marginal effect of the protest-index conditional on parties' left-right placements and the density function of parties' left-right placement in the background. In the line of hypothesis two, party competition on the nuclear issue polarize with increasing penetration capabilities of protest. Thus, instead of *all* parties reacting in favor of protesters, parties to the right are leaning to underpin the *status quo* when facing increased protest on nuclear energy. Parties perceive protest against nuclear energy either as a window of opportunity (left parties) or a threat (right parties) and then react accordingly. Admittedly, issues of endogeneity might linger: protesters might be motivated and inflamed by parties' rhetorical positions. Yet, in this vein the activities of protesters would depend on right parties' pro-nuclear talk, while the support of left parties would belittle protesters' motivations to take to the streets. Furthermore, running a model with the protest-index as the dependent variable does not find support for such a reading of the results.

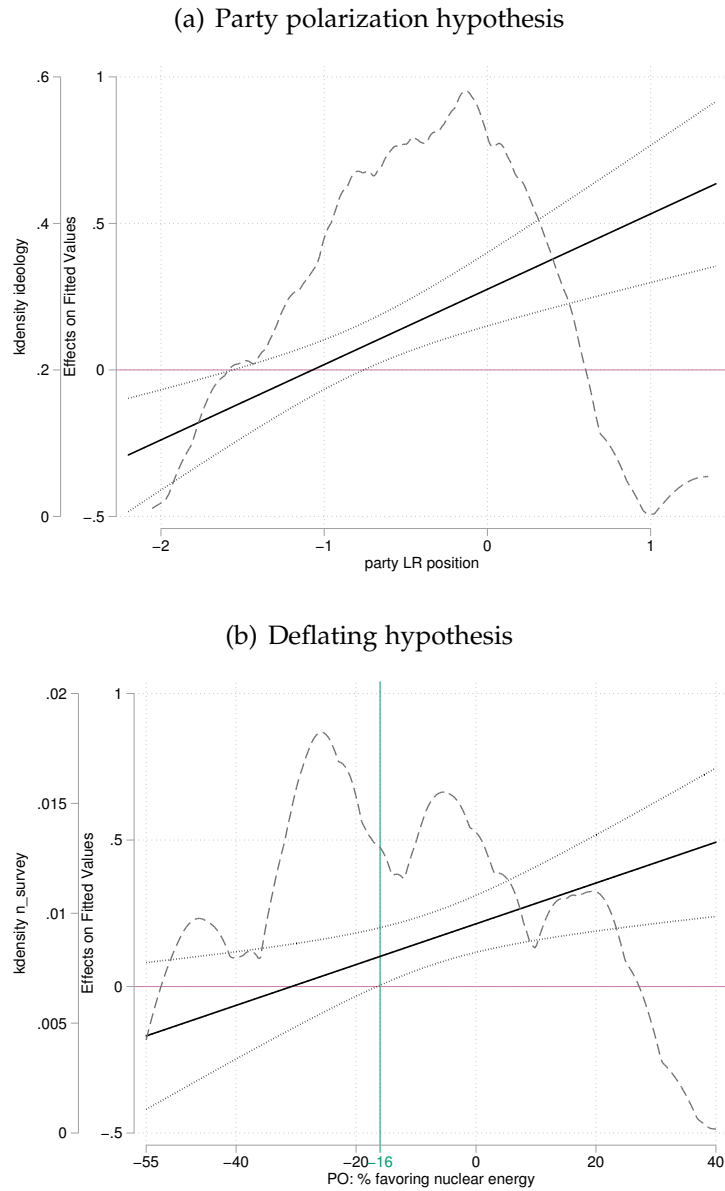
Column 3 tests the deflating effect of public opinion. The theoretical section argued that parties are more likely to support the public at large if protest and public opinion disagree with each other. Figure 3(b) shows that with increasing support for nuclear power in the public, increasing penetration capability of protests results in parties supporting public opinion while rejecting protesters' claims. This effect is significant across the whole range of pro-nuclear public

Table 1: Regression analysis

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	baseline	polarization	deflation	mutual	ideology, protest & PO	PO & salience	green party	green party
ideology	0.138 (0.072)	0.0204 (0.061)	0.142* (0.071)	0.0284 (0.059)	0.0361 (0.059)	0.0218 (0.061)	0.136 (0.072)	0.139 (0.072)
green	-0.894*** (0.108)	-0.898*** (0.106)	-0.890*** (0.106)	-0.896*** (0.104)	-0.890*** (0.103)	-0.897*** (0.106)	-0.589*** (0.113)	-0.591*** (0.115)
protest-index	0.142** (0.045)	0.275*** (0.064)	0.129** (0.047)	0.245*** (0.055)	0.258*** (0.065)	0.275*** (0.065)	0.200*** (0.046)	0.202*** (0.047)
survey	0.0933 (0.122)	0.0735 (0.120)	-0.0496 (0.125)	-0.0551 (0.121)	-0.0252 (0.127)	0.0282 (0.113)	0.0710 (0.120)	0.0974 (0.121)
mip	0.130 (0.164)	0.0879 (0.165)	0.0848 (0.161)	0.0416 (0.170)	0.0679 (0.163)	0.124 (0.170)	0.133 (0.161)	0.133 (0.162)
nuclear share	-1.369 (1.047)	-1.247 (1.033)	-0.954 (0.968)	-0.950 (0.952)	-0.908 (0.971)	-1.484 (1.059)	-1.418 (1.035)	-1.396 (1.037)
ideology X protest-index		0.257*** (0.063)		0.245*** (0.056)	0.236*** (0.061)	0.256*** (0.063)		
survey X protest-index			0.310** (0.113)	0.294** (0.105)	0.199 (0.120)			
ideology X survey					0.0730 (0.077)			
ideology X survey X protest-index					-0.204* (0.080)			
survey X mip						-0.285* (0.140)		
green X protest-index							-0.656*** (0.117)	-0.673*** (0.120)
green X survey							0.290 (0.197)	
constant	0.578 (0.457)	0.573 (0.450)	0.705 (0.428)	0.679 (0.422)	0.692 (0.427)	0.473 (0.463)	0.545 (0.450)	0.545 (0.450)
N	1165	1165	1165	1165	1165	1165	1165	1165
R ²	0.245	0.260	0.257	0.272	0.274	0.261	0.273	0.271

Panel corrected standard errors in parentheses; only significant CFE reported;
all models ar(1) besides model 5 which uses psar(1) because of singularity issues with ar(1).
CFE omitted from analysis.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Figure 3: Marginal effects of significant interaction terms

Source: Author's own.

Note: Solid lines report marginal effects surrounded by the 95 % confidence interval as dotted lines. Dashed lines report density function of the variable plotted on the x-axis.

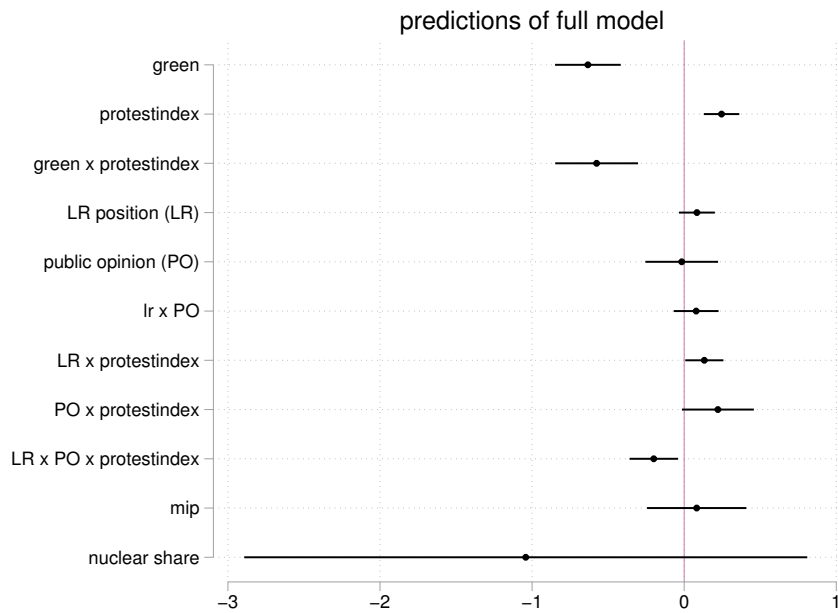
opinion. Intriguingly parties also reject protesters' claims if the public supports protesters' anti-nuclear stance: it takes more than 16 percent of the public at large indicating that they reject the usage of nuclear energy for the deflating effect to become insignificant (the green line in 3(b) marks this threshold). Thus, parties appear to be mainly vote driven. They are not interested in taking chances by supporting a strong, mobilized minority, but rather stick to the position outlined by the silent masses. Simultaneously testing both, the party polarization and deflating hypothesis (column 4) shows that even though the polarization effect of protest takes away power from the coefficient of the deflating effect of public opinion, both effects remain significant.

Models 7 and 8 reject the hypothesis that green parties do not increase their attention to their anti-nuclear position when facing protest. Green parties read protest on nuclear energy as a window opportunity. Until today issues related to the usage of nuclear energy are still at the core of green parties' ideology. The green party variable is highly significant across all models and has a strong negative coefficient. In order to be perceived competent on the nuclear issue green parties continuously remind voters of their anti-nuclear position and extend their anti-nuclear rhetoric with increasing penetration capabilities of protest. This result speaks to previous studies on niche party behavior showing that niche parties are less prone to be responsive to public opinion shifts, but might in fact be more responsive to the interests of their core-voters (Adams et al. 2006; Ezrow 2010). As model 7 shows an interaction term between green parties and public opinion is not significant, while the interaction between green parties and the protest-index is. Thus, the results enhance our knowledge on niche party behavior.

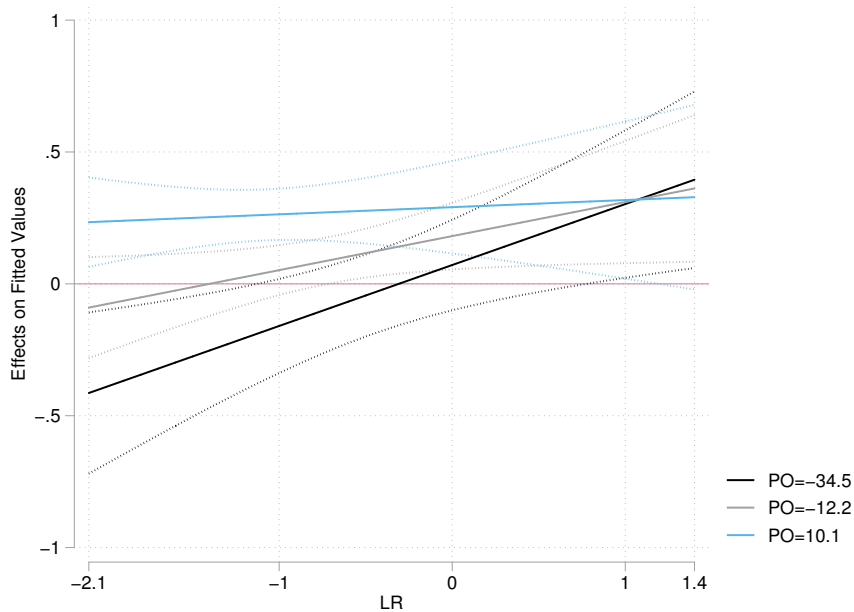
Figure 4 offers a deeper insight into the results of model 5 in table 1 and adds an interaction between green parties and the protest-index. The results support the hypothesis, that the deflating effect of public opinion is moderated by party ideology. Once party ideology is added to the significant interaction between public opinion and the protest-index, parties appear to react differently to public opinion and protest depending on their ideology. Figure 4(b) plots the marginal effect of the interaction between public opinion and the protest-index contingent on parties' left-right ideology. While left parties adapt their position to public opinion and protest, right parties tend not to do so. As can be seen by the slopes of the three lines in figure 4(b), the more public opinion agrees with protesters' anti-nuclear position, the more likely are left parties to talk anti-nuclear. In contrast, parties with a right ideology always talk pro-nuclear, irrespective of the position of public opinion on the matter. Even if 34.5 percent (one standard deviation away from the mean) of the public at large agrees with protesters' anti-nuclear claims, parties with a right ideology ($LR > 0$) talk pro-nuclear, whereas left parties react in favor of protesters already if 12.2 percent (mean) of the public at large supports protesters' claims. Comparing the power of the coefficients reveals that this effect is not negligible (Rainey 2014). Figure 4(a) compares the coefficients of the model – recall that all independent variables have been standardized to ease the comparison. Being a green party has the strongest

Figure 4: Results of full specified model

(a) Coefplot of full specified model



(b) Margins at means effect of interaction between protest-index, public opinion & ideology



Source: Author's own.

Note: subfigure a) reports the coefficients of model (5) on page 19 in table 1 adding an interaction effect between green parties and the protest-index. Spikes mark 95 % confidence interval. Dashed green lines indicate threshold for negligible effects.

subfigure b) shows the marginal effect of the three-way interaction between public opinion (PO), the protest-index and parties' left-right position (LR). The three lines report the effect for mean public opinion (green), plus one (blue) and minus one (black) standard deviation. Dotted lines show the 95 % confidence intervals for each line.

effect on parties to talk anti-nuclear, while the effect of the three way interaction between the protest-index, public opinion and party ideology is considerable smaller. Finally, the *status quo* of a countries' reliability on nuclear energy does not have a significant effect on party rhetoric.

7 CONCLUSION

This paper aimed to bridge the gap between studies focusing on the impact of protest on policies and research linking public opinion and policies. In contrast to previous research, I argued that protest does not have the same effect for all parties. Parties are understood to perceive changes in their environment differently depending on their ideology – with left parties being more responsive to protest, while right parties attempt to debate and underpin the *status quo* in the case of nuclear energy.

The analysis of party rhetoric across twelve countries and two years underlines this theoretical argument. Using a new index to measure the penetration capability of protest, I show that protest indeed has a sufficient influence on rhetorical party competition. However, more research is needed to underline this argument. Especially the mediating effect of protest on public opinion needs to be studied in more detail, as it appears that protest only interacts with the opinion of the public at large if it is at odds with the latter. The study of protest also needs to be expanded to other issues than nuclear energy – e.g. foreign policy and economic issues. Even though nuclear energy has been in the limelight of the public debate across all countries included in the study after the Fukushima accident, other issues soon took over parties' agendas in most countries included in the sample of this study. In this regard the strong effects found in the analysis on party rhetoric are telling and might be promising for other studies to look into the impact of protest on economic and foreign policy issues.

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A appendix

A.1 Re-coding actors' positions

All actor positions within the ResponsiveGov project are coded in relation to governments' initial policy positions. Government positions are coded on a pre-defined five point scale – ranging from 'very progressive' to 'very conservative'. Based on governments' manifestos, coalition agreements or policy documents prior to the Fukushima accident, whether they are favoring nuclear energy or whether they intend to phase-out nuclear energy at a certain point in time, they are then matched into the five point scale to assure comparisons between countries. Progressive positions thereby outline positions against nuclear energy and conservative positions outline positions in favor of nuclear energy.

Coders are then asked to place all actor positions during an event again on a five point scale, ranging from '(-2) an actor's position is radically more progressive' to '(2) an actor's position is radically more conservative' than the government's initial policy position – with '(0) being the same position as the government's initial position'. In the case of Fukushima, statements coded as progressive on the scale thereby are more against nuclear energy than the initial government position, while conservative statements picture more support for nuclear energy than the initial government position. Since this paper is interested in

Table 2: Rules for recodes of rhetorics

Initial government position	statements' original classification	position after recode
-2 (Radically more progressive)	-2	Anti-nuclear
	-1	Anti-nuclear
	0	Anti-nuclear
	1	Anti-nuclear
	2	Pro-nuclear
-1 (slightly more progressive)	-2	Anti-nuclear
	-1	Anti-nuclear
	0	Anti-nuclear
	1	Pro-nuclear
	2	Pro-nuclear
1 (Slightly more conservative)	-2	Anti-nuclear
	-1	Anti-nuclear
	0	Pro-nuclear
	1	Pro-nuclear
	2	Pro-nuclear
2 (Radically more conservative)	-2	Anti-nuclear
	-1	Pro-nuclear
	0	Pro-nuclear
	1	Pro-nuclear
	2	Pro-nuclear

Source: Author's own, based on Lühiste et al. (2014: 12-16).

party positions, the original coding scale does not allow a party based comparison across countries due to varying initial government positions. Events outlining a more progressive position than the government might still be in favor of nuclear energy depending on

the government's initial position in the country. Therefore, I recoded the scale according to the rules outlined in table 2 (see also: Lühiste et al. 2014: 12-16). For example in the case of Italy, the Berlusconi government's position was to re-enter nuclear energy and construct new nuclear plants – which was firstly coded as '(2) *very conservative*'. I then recoded any action by a politician which was classed between '-1' and '2' an activity supporting nuclear energy, while any action classified as '-2' into an activity rejecting the use of nuclear energy. By this procedure all policy positions are then coded as either supporting or rejecting nuclear energy.

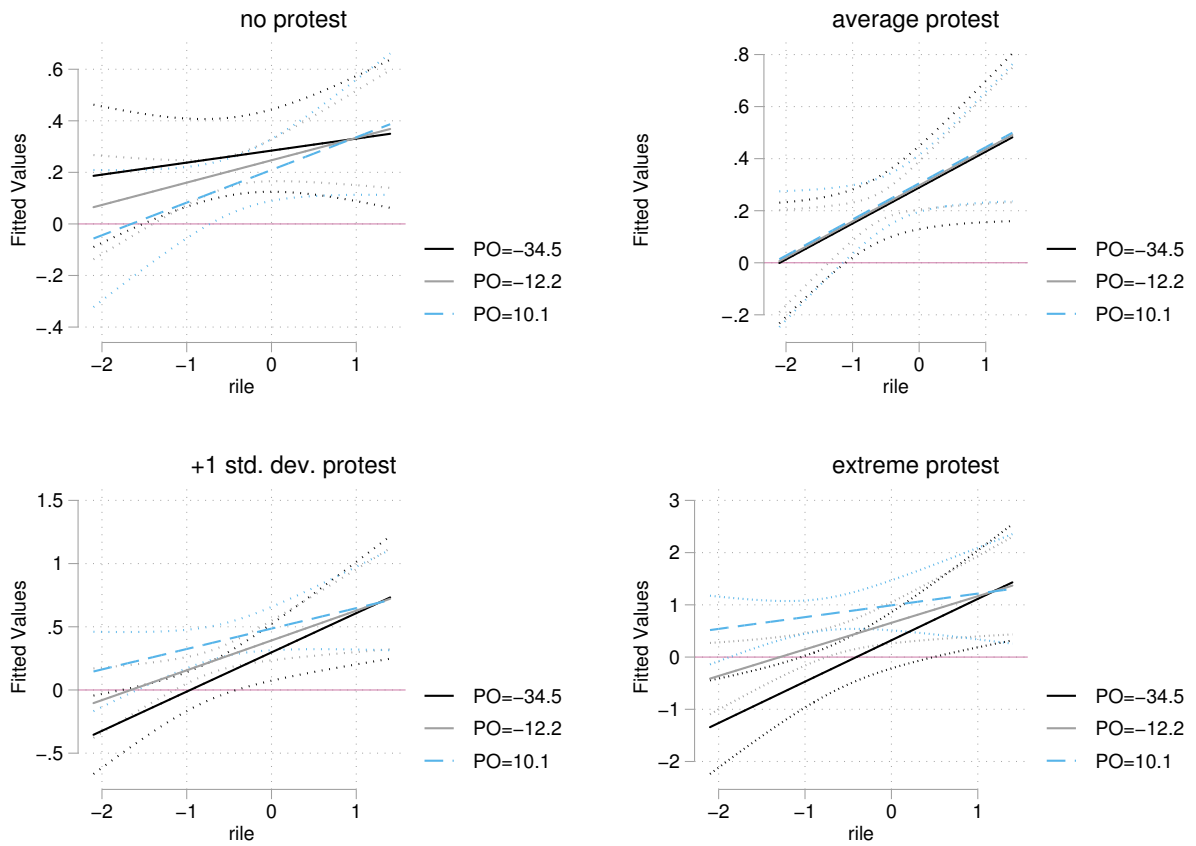
Table 3: Factors favoring party rhetorics on nuclear energy

	(1)
	1=Did party talk about nuclear energy in a given month
seat share	1.011*** (0.002)
vote share	0.986 (0.010)
government party	1.191 (0.167)
constant	0.322*** (0.039)
log likelihood	-681.849
N	1162

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 5: Margins at means for interaction between public opinion, protest-index & party ideology



Source: Author's own.

Note: dotted lines report the 95 % confidence intervals. Public opinion has been held constant on its mean (-12.2), + one standard deviation (10.1) and minus one standard deviation (-34.5). The protest-index has been held constant on its minimum (0), its mean (0.4), the mean plus two standard deviations (1.9) and its extreme value (3.1).

Table 4: Robustness tests

	(1)	(2)	(3)	(4)
ideology	-0.0153 (0.161)	-0.00155 (0.046)		0.0316 (0.062)
protest-index	0.248*** (0.054)	0.112 (0.070)		
ideology X protest-index	0.190** (0.065)	0.100** (0.038)		
lagged protest-index			0.0971 (0.068)	
green	-1.201** (0.371)	-0.460*** (0.091)	-0.900*** (0.119)	-0.902*** (0.110)
survey	0.00934 (0.082)	-0.00586 (0.113)		0.0415 (0.121)
mip	0.0757 (0.156)	0.0431 (0.117)		0.112 (0.180)
survey X mip	-0.263 (0.154)	-0.135 (0.158)		-0.274 (0.144)
lagged mip			0.352* (0.158)	
nucshare	-0.154 (0.499)	-0.544 (0.972)		-1.662 (1.127)
lagged rhetorics		0.463*** (0.074)		
lagged ideology			0.0248 (0.058)	
lagged ideology X lagged protest-index			0.148* (0.060)	
lagged survey			0.0709 (0.092)	
lagged survey X lagged mip			-0.364* (0.148)	
lagged nuc share			-1.508 (1.081)	
protest present				0.180** (0.070)
ideology X protest present				0.274*** (0.083)
constant	0.0220 (0.309)	0.263 (0.410)	0.551 (0.474)	0.356 (0.501)
$\hat{\sigma}_{cpe}$	0.464			
$\hat{\sigma}_p$	0.654			
$\hat{\sigma}_c$	0.876			
log lik.	-1292.025			
N	1165	1098	1098	1165

Model 1 multi-level model with country and party random intercepts and ar(1) correction.

Model 2 PCSE model with lagged dependent variable.

Model 3 PCSE model with ar(1) correction and all IVs lagged.

Model 4 PCSE model with ar(1) correction and protest dummy;
(1=protest Yes) included instead of protest-index.

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5: Parties included in the Fukushima juncture

country	abbreviation	party name	Inclusion criteria		
			5 & 5	gov	right censored
Belgium	CD&V	Christen-Democratisch en Vlaams	x		
	cdH	Centre démocrate humaniste	x		
	Ecolo	Écologistes Confédérés pour l'Organisation de Luttes Originales	x		
	MR	Mouvement Réformateur	x		
	N-VA	Nieuw-Vlaamse Alliantie	x		
	PS	Parti Socialiste	x		
	SP.A	Socialistische Partij Anders	x		
	VB	Vlaams Belang	x		
	VLD Open	Vlaamse Liberalen en Democraten	x		
	BQ	Bloc Québécois	x		
Canada	CP	Conservative Party	x		
	LP	Liberal Party	x		
	NDP	New Democratic Party	x		
	KD	Kristillisdemokraatit		x	
Finland	KESK	Suomen Keskusta	x		19.1% & 39 seats in 2011
	KOK	Kansallinen Kokoomus	x		
	Ps	Perussuomalaiset			
	SDP	Suomen Sosialidemokraattinen Puolue	x		
	SFP	Suomen Ruotsalainen Kansanpuolue		x	
	VAS	Vasemmistoliitto	x		
	VIHR	Vihreä Liitto	x		
	EELV	Europe Écologie-Les Verts	x		
	FN	Front National			
France	MoDem	Mouvement démocrate	x		system relevance
	NC	Nouveau centre		x	
	PCF	Parti communiste français / Front de gauche	x		
	PS	Parti Socialiste	x		

Continued on next page

Table 5 – Continued

country	abbreviation	party name	Inclusion criteria		
			5 & 5	gov	right censored
Germany	UMP	Union pour un mouvement populaire	x		
	CDU/CSU	Christlich Demokratische Union/ Christlich-Soziale Union	x		
	FDP	Freie Demokratische Partei	x		
	Grüne	Die Grünen	x		
	Linke	Die Linke	x		
	SDP	Sozialdemokratische Partei Deutschlands	x		
Italy	LN	Lega Nord	x		
	PD	Partito Democratico	x		
	PDL	Il Popolo della Libertà	x		
	UdC	Unione di Centro	x		
Netherlands	CDA	Christen Democratisch Appèl	x		
	D'66	Democraten 66	x		
	GL	GroenLinks	x		
	PvDA	Partij van de Arbeid	x		
	PVV	Partij voor de Vrijheid	x		
	SP	Socialistische Partij	x		
	VVD	Volkspartij voor Vrijheid en Democratie	x		
Spain	CiU	Convergència i Unió	x		
	IU	Izquierda Unida	x		
	PP	Partido Popular	x		
	PSOE	Partido Socialista Obrero Español	x		
Sweden	C	Centerpartiet	x		
	FP	Folkpartiet liberalerna	x		
	Kd	Kristdemokraterna	x		
	MP	Miljöpartiet de Gröna	x		
	MSP	Moderata samlingspartiet	x		
	SAP	Socialdemokraterna	x		
	SD	Sverigedemokraterna			5,7% & 20 seats in 2011
	V	Vänsterpartiet	x		

Continued on next page

Table 5 – Continued

country	abbreviation	party name	Inclusion criteria			
			5 & 5	gov	gov supporter	right censored
Switzerland	BDP	Bürgerlich-Demokratische Partei Schweiz		x		
	CVP	Christlichdemokratische Volkspartei	x			
	FDP	Freisinnig-Demokratische Partei der Schweiz	x			
	GPS	Grüne Partei der Schweiz	x			
	SVP	Schweizerische Volkspartei	x			
	SPS	Sozialdemokratische Partei der Schweiz	x			
United Kingdom	CON	Conservative and Unionist Party	x			
	LAB	Labour Party	x			
	LIB	Liberal Democrats	x			
United States	DEM	Democratic Party	x			
	REP	Republican Party	x			