Disproportionality in media representations of campaign negativity

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Abstract

This study explores mediated representations of parties' campaign interactions in multi-party systems. Actors in multi-party systems can engage with different actors on multiple issues. One crucial aspect of such engagement is the element of negativity – voicing criticisms of other actors' actions and policy proposals. This contribution argues that media systematically exaggerate patterns of negativity based on patterns of issue ownership, such that attacks originating from or targeting issue owners are more likely to be covered. We analyze a broad sample of news content from the 2013 Austrian national election campaign with Generalized Exponential Random Graph Models to capture the complexities of mediated campaign negativity in a multi-party system while simultaneously controlling for non-mediated campaign negativity. The results show that issue owners are more likely to be featured as attackers and targets in owned policy domains, suggesting a violation of the normative ideal of a fair representation of campaign interactions.

Keywords: *News coverage; electoral campaigns; social networks; negativity; negative campaigning; issue ownership*

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Electoral campaigns offer parties the opportunity to promote their policy platforms to the public, while simultaneously scrutinizing their opponents' proposals. Mutual criticism provides an interactive element to campaigns that serves to inform the public of the available alternatives and their shortcomings (Kahn and Kenney, 2000; Mayer, 1996). However, in order to impact electoral decisions, attacks need to be covered by the media: As the mass media continue to play a pivotal role in informing voters about politics, their function entails an enormous potential to shape electoral decisions (Banducci and Karp, 2003; Dalton, Beck and Huckfeldt, 1998; Eberl, Boomgaarden and Wagner, Forthcoming; McLeod, Glynn and McDonald, 1983). Given the significance of mass media as gatekeepers of campaign information, it is important to understand what factors influence mediated representations of campaign interactions, and more specifically, how the media prioritize which campaign interactions to highlight.

Among the determinants of media coverage of parties, previous scholarship has emphasized that mediated party representations are conditioned by parties' issue reputations (Hayes, 2008; Petrocik, Benoit and Hansen, 2003; van der Brug and Berkhout, 2015). Issue owners – parties associated with an issue area (Petrocik, 1996; Walgrave, Lefevere and Tresch, 2012) – are disproportionately featured in coverage of owned issues due to journalistic perceptions of news value and narrative constraints (Petrocik, Benoit and Hansen, 2003). For each individual news item, it is reasonable for journalists to seek out testimony from parties with a reputational surplus. However, when issue coverage continuously highlights the position of issue owners, individual journalistic choices can cause disproportionality in aggregate party representations.

This study argues that not only do news values shape the disproportionate association of parties and issues, but that they have more widespread implications for the mediated representation of *campaign communication.* Focusing on campaign interactions and attack patterns in multi-party systems, we propose that news media tend to disproportionately feature attacks that are voiced by issue owners as well as attacks that target issue owners. This is to say that beside the well-known media attention to conflict and negativity (Hansen and Pedersen, 2008; Lee, 2010; Semetko and Valkenburg, 2000), we suggest that media tend to over-emphasize negativity for specific party-issue links. Showing that campaign interactions

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are distorted by patterns of issue ownership would be cause for concern from a normative point of view: If specific points of view are systematically marginalized by the media, readers, viewers, and ultimately voters do not have access to the full range of perspectives on an issue and will therefore need to evaluate competitors on a systematically limited subset of perspectives.

The present study makes three contributions to the literature on negative campaigning. One, it ties into a broader effort to understand negative campaigning in multi-party systems (De Nooy and Kleinnijenhuis, 2013; Elmelund-Præstekær, 2008, 2011; Hansen and Pedersen, 2008; Walter, 2014*b*). Compared to the US case, campaign negativity in a multi-party environment is fairly complex as neither the selection of targets nor the effect of campaign negativity are obvious (Ridout and Walter, 2015). This complexity is mirrored by analytical challenges. Capturing interaction patterns between multiple actors calls for network models, which have only recently begun to inform analyses of multiparty campaign communication and campaign negativity in particular (De Nooy and Kleinnijenhuis, 2013; Song, Nyhuis and Boomgaarden, Forthcoming). Two, the study links campaign negativity and issue ownership, two concepts that have rarely been integrated in a comprehensive analytical framework (for a notable exception see Elmelund-Præstekær, 2011). An integrated perspective on the content of campaign communication allows assessing systematic distortions in the coverage of negative campaign interactions driven by processes of news selection. Three, a unique dataset of party interactions in the media and press releases during the 2013 Austrian national election permit a differentiation between actual attack patterns and mediated representations thereof.

1 Negative campaigning in multi-party systems

A fundamental characteristic of electoral campaigns is the opportunity it provides to political actors to voice policy proposals, allowing voters to decide between different visions for the future of the country Adams (2001); Jones and McDermott (2004). At the same time, political actors get to criticize the proposals and records of their opponents, highlighting shortcomings of competitors' policies and differences between their respective platforms. In this sense, critique and attack – *negative campaigning* – serve important democratic functions

by educating voters and informing electoral decisions (Arceneaux, 2006; Kahn and Kenney, 2000). Given the significance of campaign interactions and attacks more specifically, it is not surprising that the subject of campaign negativity has generated pronounced scholarly interest (Lau and Rovner, 2009).

Originating in the US context, scholars have tended to emphasize the potentially detrimental effects of excessive campaign negativity (Ansolabehere and Iyengar, 1995; Lau and Pomper, 2001). More recently, scholars have begun to assess campaign negativity in European multi-party contexts (Elmelund-Præstekær, 2008, 2010; Hansen and Pedersen, 2008; Walter, 2014*b*) with a generally less pessimistic stance. For instance, in a comparative analysis of negative campaign patterns in three European countries across 23 parliamentary elections, Walter (2014*b*) shows that most attacks are issue-based, emphasizing the potential benefits of critical campaign interactions for voter learning. A different perspective on campaign negativity might result from multi-party systems promoting less negative campaigns overall. In their analysis of the 1996 electoral reform in New Zealand, Ridout and Walter (2015) suggest that campaign attacks are more likely to backfire in a multi-party system, as decreased support for the target of an attack need not translate into support for the attacker. Moreover, too much hostility might undermine coalition potentials in post-electoral bargaining. Empirically, the authors find that moving toward a proportional electoral system has indeed engendered less negative campaigns.

Apart from political system aspects, campaign negativity also differs by forum. The bulk of research on campaign negativity has focused on advertisements and other communication channels under the direct control of party organizations – both in the US (Cheng and Riffe, 2008; Lovejoy, Cheng and Riffe, 2010; Sides and Grossmann, 2010) and in Europe (Dolezal, Ennser-Jedenastik and Müller, 2016, Forthcoming; Elmelund-Præstekær, 2008; Hansen and Pedersen, 2008; Schweitzer, 2010; Walter, 2013; Walter and van der Brug, 2013; Walter, van der Brug and van Praag, 2014). Attacks in these forums are potentially fiercer than attacks in channels that are less directly controlled, such as campaign coverage in the media. Indeed, the few cross-platform studies of campaign negativity have suggested that channels which allow non-mediated interactions between competitors are more prone to campaign negativity (Elmelund-Præstekær, 2010; Walter and Vliegenthart, 2010).

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In contrast to most prior analyses of campaign negativity, this study focuses on attack patterns in media coverage (but see De Nooy and Kleinnijenhuis, 2013; Song, Nyhuis and Boomgaarden, Forthcoming), as the media remain the principal source for campaign-related voter learning. However, while mediated attack patterns are potentially less corrosive than negativity in direct party communication, mass media might systematically misrepresent party interactions in their coverage, highlighting a different set of normative challenges. The driving factors for such misrepresentations are laid out in the following section.

2 News values, issue ownership, and disproportionality in mediated party representations

Agenda setting research has found a substantial overlap between party and media agendas (Hopmann et al., 2012; Petrocik, Benoit and Hansen, 2003; Semetko et al., 1991; Walgrave and Van Aelst, 2006). Scholars have concluded that "political parties are quite successful in shaping the media agenda during election campaigns, while the media have limited or no power to influence the issue agendas of the political parties" (Hopmann et al., 2012, 175). Yet, a lack of autonomy does not entail that the media cover parties to an equal extent. Especially in European multi-party contexts, parties differ in terms of their capacity to get their messages covered (e.g., Brandenburg, 2006; Hopmann et al., 2012; van Praag and van der Eijk, 1998). As parties and politicians diverge regarding their newsworthiness (Harcup and O'Neill, 2001), media coverage of parties should be systematically governed by differences in *news value.* While the components of news values or news selection criteria are notoriously hard to pin down, there is a fairly broad consensus that stories on elite conflict – the quintessential aspect of negative campaigning – are newsworthy (Galtung and Ruge, 1965; Hansen and Pedersen, 2008; Harcup and O'Neill, 2001; Lee, 2010; Semetko and Valkenburg, 2000; van der Pas and Vliegenthart, 2016). Therefore, parties should be more successful in receiving coverage when their interactions allow a conflict frame.

Beyond the news value of conflict, coverage of attacks between parties may also be due to journalistic norms of balance. To achieve a balanced reporting on a topic, media

coverage tends to systematically link competing views (Hopmann et al., 2012; Tuchman, 1972). Therefore, although conflict and negativity are frequently criticized (e.g., Lau and Rovner, 2009), there is a clear pedagogical element to attack interactions. Hayes (2010) argues that

> candidates who engage on the same issue will highlight their differences [. . .]. When candidates stake out diverging positions on the same issue, the resulting conflict lends itself to the narrative storytelling that is the cornerstone of political journalism [. . .]. Being able to pit candidates' statements against one another increases the news value of campaign discourse, making it more likely that a candidate's message will be reported. (Hayes, 2010, 596)

This is to say that not only do candidates have an incentive to engage in attack interactions as they are more likely to be covered by the news media (cf. Hansen and Pedersen, 2008), but that attacks highlight crucial differences between party platforms and are thus sought by journalists, such that negative campaign interactions and media coverage thereof can enhance voter learning (Ansolabehere and Iyengar, 1995; Meffert et al., 2006; Patterson and McClure, 1976).

The potential upside of attack interactions in media coverage notwithstanding, there is a possible downside – the potential of *misrepresentation* (Dalton et al., 1998; Hayes, 2010; Ridout and Mellen, 2007). In their seminal study on media reporting of campaign events, Petrocik, Benoit and Hansen (2003) provide evidence that media do not accurately represent the topical emphasis of candidates' campaign speeches, but disproportionately feature specific party-issue links. The study finds that candidates are more likely to be portrayed with issues that their respective parties own, regardless of the actual content of their campaigns. The authors speculate that such an over-emphasis in the linkage of parties and issues is driven by preconceptions of candidates' policy stances among journalists, leading to selective information gathering. This empirical regularity is echoed by van der Brug and Berkhout (2015) who find that issue ownership is systematically linked with more media coverage. Moreover, Hayes (2008) shows that candidates are displayed more favorably in the coverage of owned issues.

We argue that this effect is evident also in the coverage of campaign *interactions*. We expect that attacks by issue owners have a greater probability of being featured in the media

as much as attacks that target issue owners are more likely to receive coverage. Such over-emphasis by and toward issue owners might well be due to perceptual biases of journalists as Petrocik, Benoit and Hansen (2003) have suggested: It is not implausible that – much like ordinary citizens – journalists are susceptible to parties' issue reputations in processing politically relevant information. In this view, journalistic selections of attack statements would be grounded in their expectations of how political discourse ordinarily plays out (Hayes, 2008), making their perceptions of typical party issues a fundamental factor in shaping their decision to select attacks featuring issue owners.

Yet, the observation of disproportionate attack patterns in the media are well explicable by rational news selection criteria. As parties voice countless attacks during an election campaign, editorial judgments are necessary to select a subset of attacks to be featured (Shoemaker et al., 2001; Shoemaker and Reese, 1991). On a case-by-case basis, it is entirely reasonable for journalists to select attacks that feature issue owners as they carry greater news value and are more aligned with journalistic narrative and audience expectations. Consequently, we expect attacks both *targeted at* and *voiced by* issue owners to be more newsworthy, as issue owners are either criticized on their home turf or level a critique at an opponent with more attributed expertise.

While reasonable at the level of individual stories, this news selection mode runs the risk of unintended disproportionality at the aggregate level, such that media coverage of campaign interactions does not reflect actual campaign interactions, leading us to expect that the *media disproportionately feature attacks targeting issue owners as well as attacks originating from issue owners.* Hence, while parties do indeed attack one another in an attempt to make voters aware of the policy alternatives at stake, the mediated representation of such behavior may be considerably distorted due to – conscious or unconscious – journalistic selection processes. Understanding the systematics of such distortions is important since they have important implications regarding the information that is made available to voters over the course of the election campaign.

There are several important determinants of negative campaigning in multi-party environments that need to be accounted for as potentially confounding factors. The most important is parties' *incumbency* status as opposition parties are more likely to voice criti-

cisms of governing parties (De Nooy and Kleinnijenhuis, 2013; Elmelund-Præstekær, 2010; Hansen and Pedersen, 2008). This finding clearly reflects the nature of political competition as governing parties can engage more easily in record claiming (Sellers, 1998), whereas opposition parties have more evident targets for policy-based criticisms. In a similar vein, the extant literature suggests that *large parties* are more likely to be the target of negative campaigning than small parties (De Nooy and Kleinnijenhuis, 2013; Walter, 2014*a*).

A further aspect related to dynamics of governance is attack patterns among coalition partners. Elmelund-Præstekær (2008) finds that potential or actual coalition partners in Denmark are less likely to attack one another. However, due to the specific historical context of the 2013 Austrian election campaign, this pattern is unlikely to be observed in the present study, where the incumbent government was composed of the two largest parties in the party system. As both were aiming to take over the position of prime minister in the subsequent government, they are likely to offer differing programmatic visions and, consequently, criticize each other's policy proposals.[1] Finally, we control for *ideological proximity*. However, the direction of the effect of ideological proximity on negative campaigning is not clear. While Walter (2014*a*) argues that proximate parties are more likely to attack one another due to competition for the same subset of the electorate, De Nooy and Kleinnijenhuis (2013) find that policy agreement predicts inter-party support relationships.

3 Methods and data

3.1 Data

To investigate the theoretical propositions, this study employs data that were collected during the 2013 Austrian national election campaign under the auspices of the Austrian National Election Study. The data offer a unique perspective on patterns of disproportionality in media representations of negative campaigning. Austria's political landscape during the 2013 electoral campaign was characterized by two catch-all parties – SPÖ and ÖVP – who formed the incumbent coalition at the time of the election. Furthermore, the party system

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[1] See Dolezal and Zeglovits (2014) for background information on the Austrian federal election of 2013.

consisted of two mid-sized parties – the left-wing liberal GRÜNE and the right-wing FPÖ. The latter had previously split, and the split-off BZÖ was also running in 2013, along with two new party system entries – NEOS and STRONACH. Overall, the Austrian party system can be considered a rather typical case of a Western European multi-party system. The Austrian media landscape is defined by a comparatively strong standing of print media that are split between national high-quality and tabloid papers, as well as several regional papers (Stark and Magin, 2009), which should be reflected in the empirical analysis. With regard to negative campaigning, party competition in Austria is characterized by a fair amount of hostility (Dolezal, Ennser-Jedenastik and Müller, 2016, Forthcoming).

The data for the analysis come from a manual content analysis of media coverage in the six weeks before the election (Kleinen-von Königslöw et al., 2015). The sample covers eight daily newspapers that were selected to broadly reflect the Austrian print media landscape. The sample contains three quality papers (*Der Standard, Die Presse, Salzburger Nachrichten*), two midrange papers (*Kurier, Kleine Zeitung*) and three tabloids (*Kronen Zeitung, Österreich, Heute*).

All articles were coded at the sentence level to assess whether they contain statements of one actor about another (cf. Koopmans and Statham, 1999; van Atteveldt, 2008). It was coded whether these actor-actor relationships contain an evaluation from the *subject actor* to the *object actor* on a specific issue (cf. Ridout and Franz, 2008). For instance, if a sentence in a news article contains a criticism by Party A about Party B's economic policy, Party A and Party B are coded as subject and object actor, respectively, on the topic of "Economy" with a negative valence. For the subsequent analysis we subset the attacks by policy field, allowing us to investigate patterns of negative campaigning in the different policy domains and relating them to patterns of issue ownership. The issue coding is based on a coding scheme that was specifically devised for the Austrian National Election Study to best reflect the substantive dimensions of Austrian politics (Dolezal et al., 2016). In total, there are a little over 20 broad topical categories in the coding scheme.

For the present contribution, we analyze the topics "Budget", "Economy," "Environment," "Immigration", and "Welfare".[2] The topics were selected using two criteria. First, we chose topics that were covered sufficiently frequently, ensuring a minimum number of attack relations in the networks. Specifically, we selected topics that contained at least thirty attack relations. Second, we discarded topics that were dimensionally ambiguous, e.g. news stories that were classified as pertaining to "Society" or "Ideology".

In order to assess the propensity of media to *disproportionately* feature issue owners as attackers and targets of attacks, it is necessary to specify a baseline of attacks. We employ party press releases as a baseline for the campaign reality of party interactions. Press releases are a heavily used campaign tool in Austrian politics. It is therefore likely that most attacks voiced by one party on another are made available by party headquarters to the various media outlets – with the explicit expectation that these interactions are featured in the news. Put differently, there are unlikely to be major attack instances that are not reflected in party press releases. Hence, not only do press releases provide a fair image of the campaign landscape as perceived by the parties, but the press releases are even explicitly drafted to influence campaign coverage, such that any deviations are all the more noteworthy.[3]

The Austrian National Election Study has collected all party press releases that were published during the campaign. Press releases are directly controlled by the party organizations (Dolezal, Ennser-Jedenastik and Müller, 2015). In practice, individual candidates can draft press releases that are centrally distributed to the media organizations via party headquarters. Consequently, much like advertisements, attacks in this forum reflect how parties want to be perceived and what opponents they choose to target. To ensure comparability of the two data sources, the press releases were coded using the same coding scheme that was applied to the media data.

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[2]The data comprises about 8,500 print news items with approximately 50,000 actor-actor relations. Of these, roughly 13,500 relations contain a negative evaluation. Coding of the news items was performed by seven native speaking trained coders. The coders achieved inter-coder reliability scores between .74 and .85 (all based on Krippendorff's alpha) for the variables under consideration. Coding was performed at the Department of Communication at the University of Vienna using a web interface. For more details on the data and the coding procedure see Kleinen-von Königslöw et al. (2015).

[3]We select press releases over party manifestos as a baseline for true attacks, as manifestos are much more remote from the events as they unfold over the course of the election campaign. What is more, party manifestos are much less targeted at influencing media coverage, but tend to lay out the party platform without engaging much with political opponents.

Parties continue to be the focal point of political competition in Western Europe (Müller, 2000; Müller and Strøm, 1999). Interactions between individual political actors are fundamentally structured by their party memberships while voters' political perceptions are profoundly shaped by party competition. What is more, the dominant explanations for patterns of negative campaigning reside at the party level, leading us to consider parties as the most obvious unit of analysis. All individual relationships, where both actors possess a party affiliation were aggregated to the level of their respective parties.

3.2 Statistical model

The attack patterns in media reports have a clear network structure, in that all parties can potentially attack all other parties. Moreover, attacks could lead to more and counter-attacks (Lau and Pomper, 2001). The ties between parties in the network are thus not independent as an analysis in an ordinary regression framework would presume. In order to model the non-independence of the data while simultaneously incorporating the expected effects of covariates on the network structure, we rely on the most well-known class of models for inferential network analysis – Exponential Random Graph Models (ERGM; Robins et al., 2007; Wasserman and Pattison, 1996). The ERGM was originally formulated for binary network data and is therefore not directly applicable for the current analysis, where we investigate the frequency of attacks during the election campaign. Since our data has count properties, this should be modeled as networks with Poisson-distributed edges using a valued ERGM (Krivitsky, 2012; Scott, 2016).[4]

3.3 Operationalization of variables

To assess the disproportionality of attacks in mediated campaign communication, we generate party-level networks with the number of attacks for each party dyad that was reported in the news media during the six weeks of the campaign – one for each issue area. The most important control variable is the baseline of actual attacks that is captured from party press

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[4]All models were fitted using version 3.2.2 of the package `ergm.count` and version 3.6.0 of the package `ergm` in R.

releases. This indicator is introduced as a tie-level control containing the frequency of issue-specific attacks in the dyads.

Previous scholarship on the link between issue ownership and media reporting has contended that parties with a reputational surplus have a greater likelihood of being featured in issue-specific media coverage (Petrocik, Benoit and Hansen, 2003; van der Brug and Berkhout, 2015). As we are interested in the specific propensity of issue owners to be disproportionately featured in mediated attack relations, we aim to disentangle the baseline probability of each party to receive coverage from the more specific visibility in attack interactions as a function of issue ownership. This is done by controlling for individual heterogeneity in our model, which captures the general propensity of actors to interact with other actors.

The central predictor for the analysis is the issue ownership that is assumed to be related both to the number of incoming and outgoing ties. In accordance with common practices, we employ a survey measure of issue ownership. Early contributions on the question of issue ownership have relied on what we would now call the competence dimension of issue ownership (cf. Petrocik, 1996). More recent research has differentiated between a competence and an associative dimension of issue ownership (Lachat, 2014; Walgrave, Lefevere and Tresch, 2012; Walgrave et al., 2016), where the majority of studies tend to argue in favor of the latter for empirical research. Given the available survey evidence, we are restricted to an analysis of the effect of party competence, rather than of the associative dimension of issue ownership on media representations of party interactions. Although unfortunate, both measures are highly related, such that the empirical results are not likely to be strongly dependent on the specific measure.

The evidence stems from a survey that was fielded in the weeks prior to the election. Voters were asked to name the most and second most important problem facing the country and, subsequently, to indicate what party they perceive as most competent for dealing with the issues (Kritzinger et al., 2014).[5] We treat the party as issue owner that was most frequently named as the most competent in dealing with an issue area. The ownership structure is substantively plausible. The Social Democratic SPÖ exhibits a plausible reputational surplus

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[5]The survey was conducted as a face-to-face CAPI interview with a representative sample of voting-age Austrians. The dataset contains 2,822 respondents. For more information on the AUTNES survey component see Kritzinger et al. (2014).

in the areas of welfare and economy. The junior coalition partner, the conservative ÖVP held the ministry of finance in the incumbent coalition and is perceived as most competent in the area of budget. GRÜNE is a green party that owns environmental issues. Likewise, the right-wing populist FPÖ heavily emphasizes immigration policy, which is reflected in public competence perceptions for the party.[6]

For control variables, we include the parties' vote shares in the 2013 election as an indicator of party size. We also model the incumbency status of the parties. Finally, we incorporate parties' ideological position. We use the aggregated party placements based on the pre-election voter survey using an 11-point left-right scale.

It should be noted that our analysis differs with respect to the interpretation of the control variables compared to most previous studies on negative campaigning. Since we control for actual attacks on the basis of party press releases, all other variables should be interpreted as effects *in addition to* the baseline, reflecting an *over-* or *under-emphasis* in the media that cannot be explained by actual attacks.

4 Results

The results from the analysis are presented in Table 1. Each column displays the results from a valued ERGM of the attack networks in the Austrian print media during the 2013 election campaign in one policy area.[7] Considering the descriptive statistics underlying the models first, the number of unique ties in the networks show that about a third of all possible ties are empty,[8] while we observe an average of 188.4 attacks per issue network (SD = 166.27). This

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[6]We rely on evidence that was collected using a two-step procedure, where respondents are first asked to indicate important issues before naming the most competent party, as it provides us with data on all issue areas included in this study. For two of the issues we can validate this approach with more direct measures. Respondents were asked what party they consider to have the best proposals in the areas of immigration and unemployment, where the latter should capture competence in the area of welfare reasonably well. In both cases the most frequently named party is the same as for the indirect measure – FPÖ in case of immigration, and SPÖ in case of welfare.

[7]The coefficients in Table 1 provide the additive effects of the model terms on the basis of the natural log of the expected tie values.

[8]In a network with 6 nodes and no loops, there can be at most 6 * 6 - 6 = 30 *unique* ties, i.e. disregarding the frequency of attacks in each dyad. Empirically, there is an average of 15.00 non-empty ties (SD = 6.48) across all issue networks.

suggests a highly imbalanced distribution of attacks across parties, such that some relations are extremely conflictual, while others show no attacks at all.[9]

TABLE 1: Generalized ERGMs of campaign attacks

State	Budget	Economy	Environment	Immigration	Welfare
Sum	-1.63^*	0.14	-13.78^*	-2.50^*	-1.13^*
	(0.52)	(0.29)	(0.82)	(0.40)	(0.46)
Individual heterogeneity	-0.15^*	-0.13^*	-0.20^*	-0.26^*	-0.19^*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Objective attacks	0.12^*	0.05^*	-0.13	0.42^*	0.00
	(0.03)	(0.01)	(0.23)	(0.18)	(0.02)
Issue owner (Target)	0.95^*	-0.10	3.58^*	2.50^*	0.67^*
	(0.37)	(0.17)	(0.64)	(0.41)	(0.24)
Issue owner (Attacker)	0.58	0.35	5.83^*	0.93^*	0.42
	(0.58)	(0.18)	(0.41)	(0.26)	(0.25)
Incumbent (Target)	1.72^*	1.58^*	3.69^*	1.97^*	1.57^*
	(0.48)	(0.20)	(1.00)	(0.36)	(0.29)
Party size	5.97^*	5.94^*	39.48^*	8.58^*	8.58^*
	(0.18)	(1.28)	(0.68)	(0.11)	(1.94)
Ideological distance	-0.03	0.03	0.69^*	0.05	0.07
	(0.13)	(0.05)	(0.16)	(0.10)	(0.07)
AIC	-1269.18	-1284.75	-202.78	-486.01	-606.93
BIC	-1257.97	-2803.55	-191.57	-474.80	-595.72
Log Likelihood	642.59	1415.38	109.39	251.00	311.47

Note: AIC for null model is defined as zero in valued ERGM. Standard errors in parentheses. $^*\text{p} < 0.05$

Turning to the parameter estimates, the generally strong and negative sum parameters indicate that the networks tend to be rather sparse, such that the expected tie value of two randomly chosen party dyads range from 0.34 (welfare) to close to zero (environment).

The parameters for individual heterogeneity show small, but significant negative effects. While these terms succinctly control for unobserved heterogeneity of actors regarding their overall propensity to interact, the negative signs suggest that parties are quite homogenous in terms of their general presence in the network (leading to lesser variability in the degree distribution) after accounting for all other structural effects and covariates.[10]

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[9]The highly imbalanced distribution of interactions suggests that our reference Poisson distribution may be biased due to overdispersion. We have estimated identical models as the ones presented in the main text with controls for possible overdispersion of the data (presented in Table 2 in the Appendix. The substantive conclusions remain unchanged.

[10]The heterogeneity term represents within-actor covariance among the dyad values summed over for each actor i, such that heterogeneity increases with greater covariance of dyadic value between (i, j) and all other (i, k) values for each i. The negative estimate suggests that a given party's interaction with another party is negatively related to i's interaction with all other parties.

The baseline estimate for the attacks based on the party press releases ("objective attacks") is mostly positive and significantly different from zero, such that actual attacks are systematically related to the number of attacks reported in the media. Overall, every attack instance between two parties in a press release translates to an attack count for the mediated attack network between 1.05 (Economy) and 1.12 (Budget), suggesting that we are able to capture a reasonable baseline from the press releases. This finding is reassuring from a normative point of view, as media coverage tends to reflect actual attack patterns.

Regarding the substantive question of the present analysis, we find, however, that issue owners are frequently over-featured – both as targets and attackers – compared to what would have been expected solely based on parties' press releases. This is particularly true for attacks that target issue owners. Media accounts of negative relations over-feature attacks on the issue owner in the areas of budget, environment, immigration, and welfare. Only for attacks with an economic substance is there no systematic effect of ownership on the likelihood of being over-featured by the print media. The effects are a little less consistent for attacks originating from issue owners. While all coefficients are positively signed in line with expectations, only in the areas of environment and immigration are the effects significantly different from zero. This leads us to conclude that the media are most likely to pick up on attacks on issue owners.

The incumbency status is a strongly significant predictor of being targeted by other actors above and beyond the attacks in press releases. This dynamic nicely reflects the common observation in the literature that opposition parties are more actively engaging in attacks on the government than *vice versa*. Party size is similarly positive and significant in all of the issue-specific networks. However, this effect should not be interpreted substantively, but rather be considered a control variable. Since we aggregate individual attack relations to the level of parties, larger parties are by definition more likely to be part of an attack dyad, irrespective of the target.

Ideological distance is not consistently associated with attack behavior with the exception of the area of environment. One explanation for the mostly non-significant effects of ideological distance on attack patterns might be that our analysis considers negative campaigning in media coverage at the level of issue areas, which might depress the effect of a general left-right dimension, rather than the gap on issue-specific preferences. A second,

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potential explanation for the inconsistent effect of ideology on mediated attack patterns might be the set-up of our models. Since we control for *actual attack behavior,* all other variables provide evidence for a *disproportionate* emphasis of the media which cannot be explained by the baseline. This leads us to conclude that disproportionate media representations of campaign negativity are not driven by ideological considerations.

5 Discussion

Mass media continue to play a vital role in conveying information about electoral campaigns to voters, underlining the need for a fair media representation of campaigns. One aspect of electoral campaigns that helps voters learn are issue-based criticisms between political actors as they serve to highlight differences between the competitors' policy platforms, allowing voters to make electoral choices that are most aligned with their policy preferences (Lau and Redlawsk, 1997). This study has argued that ordinary mechanisms of news selection introduce a systematic bias into mediated representations of campaign interactions. As attacks that feature issue owners – parties with a reputational surplus for certain issues – possess a higher news value, it is reasonable for editorial routines to select news items from the pool of possible attacks that focus on these interactions. Therefore, individually rational behavior yields a non-random sample of the campaign interactions that over-emphasizes certain attack patterns above and beyond their factual prevalence.

By relying on a comprehensive dataset of the print media coverage during the 2013 Austrian national election, we were able to recover the mediated criticisms that were voiced between the party competitors at the level of individual policy issues. We employed Exponential Random Graph Models that enabled us to systematically relate theoretically derived covariates to network structures – in this case, the policy field-specific attack patterns between the different parties. The first and foremost control variable for our models were the *actual attack patterns* as evidenced by party press releases. This control puts us in the unique position to study misrepresentations in negative campaigning, not mere interactions as is common in the literature. Indeed, the empirical results show that the actual attack patterns are systematically and positively related to the mediated attack patterns. This is reassuring in

terms of our modeling strategy, but more fundamentally it is encouraging for the notion of a fair representation of the issue-based campaigning of the competing parties in the media. Yet our results have also clearly shown that the print media were much more likely to run attack stories that featured issue owners – both as targets and as attackers – across different policy areas.

At first glance, one might be inclined to consider this type of disproportionality as little problematic or even beneficial to voters. If voters are more inclined to evaluate parties on dimensions they own, an overemphasis on criticisms targeted at issue owners provides voters with a more comprehensive assessment of the owners' performance in the area for which they can claim a reputational surplus. In much the same way, voters might consider policy-based attacks from issue owners toward other parties as more informative for guiding their electoral decisions. Nevertheless, both arguments should not obscure the fact that the evidence in this study suggests a violation of the normative ideal of a fair representation of the campaign interactions – resulting in a systematic limitation of the perspectives that can guide issue-based vote choices. Importantly, this type of misrepresentation is arguably more problematic than a mere over-representation of issue owners in issue-driven campaign coverage. Whereas the latter might even be considered an important function of the media, the evidence in the present study suggests that media systematically distort public perceptions of campaign *interactions*. Ultimately, this study should prompt editors to be mindful whether individually reasonable news selection criteria might cause disproportionality in aggregate party representations – and whether an uncommon voice is sometimes the way to achieve a more balanced reporting.

Reasonably consistent effects across policy areas notwithstanding, our study is subject to a number of limitations. Despite an extensive data set, we face a distinct data sparsity problem in that several policy areas could not be investigated as there were too few observations. Given that we analyzed a fairly comprehensive sample of the Austrian print media landscape during the election campaign, extending the data collection effort is no potential remedy. There are two additional upshots of this data sparsity problem beyond the inability to study certain policy fields. For one, we studied all news outlets in a common model to achieve a sufficient coverage. Although it is reasonable to assume that the effects of news

values on news selection operate for all outlets, we cannot make any more specific statements on patterns of misrepresentation in the different outlets. What is more, we had to assume that misrepresentation is a stable property across the electoral campaign since we analyzed all incidents of campaign attacks in a single comprehensive model.

Our analysis has focused on mediated campaign negativity in Austria. The theoretical mechanism that was outlined above does not suggest any marginal conditions for the applicability of the theoretical account in other media systems. Future research should therefore attempt to replicate these findings in other systems. In fact, the empirical results presented by Petrocik, Benoit and Hansen (2003) indicate that party misrepresentations on the basis of issue ownership are a more general phenomenon. Nonetheless, there are certain aspects of the results presented in this study that are specific to the Austrian party system – not least the comparatively uncommon situation of a grand coalition between the two largest competitors, which generates some peculiarities that might not be evident in other systems such as a fair amount of hostility between the incumbent coalition partners.

This contribution has considered patterns of negative campaigning in a multi-party system. It was argued that campaign interactions in multi-party systems are systematically different from attack patterns in two-party systems as the choice of target is straightforward. We are therefore left to wonder how our results might translate to a two-party system. While the possible relationships are difficult to distort – party A attacks party B, and *vice versa* –, there is plenty of opportunity for distortions even in a seemingly less complex communication environment. Apart from distorting the level of hostility originating from one actor or the other, one might even observe issue-specific distortions on the basis of issue competence, where the media systematically over-report attacks by one party on the other on an issue that is owned by the target.

While the above discussion gives rise to further investigations of misrepresentations of negative campaigning in the media, and undoubtedly the increasing role of social media will add an additional layer of complexity to such endeavours, we contend that our study has provided an important impetus for studies in this area. While it should not be expected from journalists to just provide copies of what parties communicate during a campaign, journalist and editors, as well as campaign planners need to be aware of possible distortions,

and ultimately the degree to which these distortions happen may be of consequence for campaign outcomes.

Appendix

TABLE 2: Generalized ERGMs of campaign attacks with control for potential overdispersion

State	Budget	Economy	Environment	Immigration	Welfare
Sum (fractional moments)	-1.87^*	-2.63^*	-3.43^*	-2.65^*	-1.61^*
	(0.54)	(0.46)	(0.68)	(0.49)	(0.48)
Individual heterogeneity	-0.10^*	0.52^*	-0.19^*	-0.29^*	-0.01^*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Objective attacks	0.11^*	0.08^*	0.12	0.20	0.02
	(0.03)	(0.01)	(0.15)	(0.21)	(0.01)
Issue owner (Target)	0.68^*	-0.43^*	1.01^*	1.41^*	0.48^*
	(0.32)	(0.18)	(0.36)	(0.33)	(0.23)
Issue owner (Attacker)	0.32	0.15	1.09^*	0.55^*	0.29
	(0.43)	(0.18)	(0.27)	(0.23)	(0.23)
Incumbent (Target)	1.04^*	1.32^*	0.53	1.15^*	1.10^*
	(0.35)	(0.16)	(0.50)	(0.22)	(0.20)
Party size	4.33^*	4.26^*	4.95^*	5.29^*	5.72^*
	(1.27)	(0.93)	(1.76)	(1.34)	(1.11)
Ideological distance	-0.05	0.14^*	0.06	0.04	0.05
	(0.10)	(0.05)	(0.08)	(0.08)	(0.06)
AIC	-1223.68	-2297.93	-264.58	-543.67	-451.60
BIC	-1212.47	-2286.72	-253.37	-532.46	-440.39
Log Likelihood	619.84	1156.96	140.29	279.84	233.80

Note: AIC for null model is defined as zero in valued ERGM. The sum with fractional moments controls for over-/under-dispersion relative the Poisson distribution. Standard errors in parentheses. $^*p < 0.05$

References

Adams, James. 2001. *Party competition and responsible party government: A theory of spatial competition based upon insights from behavioral research.* Ann Arbor: University of Michigan Press.

Ansolabehere, Stephen and Shanto Iyengar. 1995. *Going negative: How political advertisements shrink and polarize the electorate.* New York: Free Press.

Arceneaux, Kevin. 2006. "Do campaigns help voters learn? A cross-national analysis." *British Journal of Political Science* 36(1):159–73.

Banducci, Susan A. and Jeffrey A. Karp. 2003. "How elections change the way citizens view the political system: Campaigns, media effects and electoral outcomes in comparative perspective." *British Journal of Political Science* 33(3):443–67.

Brandenburg, Heinz. 2006. "Party strategy and media bias: A quantitative analysis of the 2005 UK election campaign." *Journal of Elections, Public Opinion & Parties* 16(2):157–78.

Cheng, Hong and Daniel Riffe. 2008. "Attention, perception, and perceived effects: Negative political advertising in a battleground state of the 2004 Presidential election." *Mass Communication & Society* 11(2):177–96.

Dalton, Russell J., Paul A. Beck and Robert Huckfeldt. 1998. "Partisan cues and the media: Information flows in the 1992 Presidential election." *American Political Science Review* 92(1):111–26.

Dalton, Russell J., Paul Allen Beck, Robert Huckfeldt and William Koetzle. 1998. "A test of media-centered agenda setting: Newspaper content and public interests in a Presidential election." *Political Communication* 16(4):463–81.

De Nooy, Wouter and Jan Kleinnijenhuis. 2013. "Polarization in the media during an election campaign: A dynamic network model predicting support and attack among political actors." *Political Communication* 30(1):117–38.

Dolezal, Martin and Eva Zeglovits. 2014. "Almost an earthquake: The Austrian parliamentary election of 2013." *West European Politics* 37(3):644–52.

Dolezal, Martin, Laurenz Ennser-Jedenastik and Wolfgang C. Müller. 2015. When do parties attach their competitors? Negative campaigning in Austria, 2002-2008. In *New perspectives on negative campaigning: Why attack politics matters*, ed. Alessandro Nai and Annemarie Walter. Colchester: ECPR Press pp. 163–79.

Dolezal, Martin, Laurenz Ennser-Jedenastik and Wolfgang C. Müller. 2016. "Negative campaigning and the logic of retaliation in multiparty competition." *International Journal of Press/Politics* 21(2):253–72.

Dolezal, Martin, Laurenz Ennser-Jedenastik and Wolfgang C. Müller. Forthcoming. "Who will attack the competitors? How political parties resolve strategic and collective action dilemmas in negative campaigning." *Party Politics* .

Dolezal, Martin, Laurenz Ennser-Jedenastik, Wolfgang C. Müller and Anna Katharina Winkler. 2016. "Analyzing manifestos in their electoral context: A new approach applied to Austria, 2002-2008." *Political Science Research and Methods* 4(3):644–52.

Eberl, Jakob-Moritz, Hajo G. Boomgaarden and Markus Wagner. Forthcoming. "One bias fits all? Three types of media bias and their effects on party preferences." *Communication Research* .

Elmelund-Præstekær, Christian. 2008. "Negative campaigning in a multiparty system." *Representation* 44(1):27–39.

Elmelund-Præstekær, Christian. 2010. "Beyond American negativity: Toward a general understanding of the determinants of negative campaigning." *European Political Science Review* 2(1):137–55.

Elmelund-Præstekær, Christian. 2011. "Issue ownership as a determinant of negative campaigning." *International Political Science Review* 32(2):209–21.

Galtung, Johan and Mari Holmboe Ruge. 1965. "The structure of foreign news." *Journal of Peace Research* 2(1):64–91.

Hansen, Kasper M. and Rasmus Tue Pedersen. 2008. "Negative campaigning in a multi-party system." *Sandinavian Political Studies* 31(4):408–27.

Harcup, Tony and Deirdre O'Neill. 2001. "What is news? Galtung and Ruge revisisted." *Journalism Studies* 2(2):261–80.

Hayes, Danny. 2008. "Party reputations, journalistic expectations: How issue ownership influences election news." *Political Communication* 25(4):377–400.

Hayes, Danny. 2010. "The dynamics of agenda convergence and the paradox of competitiveness in Presidential campaigns." *Political Research Quarterly* 63(3):594–611.

Hopmann, David N., Christian Elmelund-Præstekær, Erik Albæk, Rens Vliegenthart and Claes H. de Vreese. 2012. "Party media agenda-setting: How parties influence election news coverage." *Party Politics* 18(2):173–91.

Jones, David R. and Monika L. McDermott. 2004. "The responsible party government model in House and Senate elections." *American Journal of Political Science* 48(1):1–12.

Kahn, Kim Fridkin and Patrick J. Kenney. 2000. How negative campaigning enhances knowledge of Senate elections. In *Crowded airwaves: Campaign advertising in elections*, ed. James A. Thurber, Candice J. Nelson and David A. Dulio. Washington, D.C.: Brookings Institution Press pp. 65–95.

Kleinen-von Königslöw, Katharina, Jakob-Moritz Eberl, Martin Haselmayer, Carina Jacobi, Ramona Vonbun, Hajo Boomgaarden and Klaus Schönbach. 2015. "AUTNES manual content analysis of media coverage 2013: Documentation." Vienna: University of Vienna.

Koopmans, Ruud and Paul Statham. 1999. "Political claims analysis: Integrating protest event and political discourse approaches." *Mobilization* 4(2):40–51.

Kritzinger, Sylvia, Eva Zeglovits, Julian Aichholzer, Christian Glantschnigg, Konstantin Glinitzer, David Johann, Kathrin Thomas and Markus Wagner. 2014. "AUTNES Pre- and Post Panel Study 2013." GESIS Data Archive, Cologne. ZA5859 data file version 1.0.0, doi:10:4232/1.11959.

Krivitsky, Pavel N. 2012. "Exponential-family random graph models for valued networks." *Electronic Journal of Statistics* 6:1100–28.

Lachat, Romain. 2014. "Issue ownership and the vote: The effects of associative and competence ownership on issue voting." *Swiss Political Science Review* 20(4):727–40.

Lau, Richard R. and David P. Redlawsk. 1997. "Voting correctly." *American Political Science Review* 91(3):585–98.

Lau, Richard R. and Gerald M. Pomper. 2001. "Negative campaigning by US Senate candidates." *Party Politics* 7(1):69–87.

Lau, Richard R. and Ivy Brown Rovner. 2009. "Negative campaigning." *Annual Review of Political Science* 12:285–306.

Lee, Francis L. F. 2010. "News values and resource allocation as the determinant of election coverage: Analysis of a Hong Kong election." *International Journal of Press/Politics* 15(4):462–81.

Lovejoy, Jennette, Hong Cheng and Daniel Riffe. 2010. "Voters' attention, perceived effects, and voting preferences: Negative political advertising in the 2006 Ohio Governor's election." *Mass Communication & Society* 13(5):487–511.

Mayer, William G. 1996. "In Defense of Negative Campaigning." *Political Science Quarterly* 111(3):437–55.

McLeod, Jack M., Carroll J. Glynn and Daniel G. McDonald. 1983. "Issue and images: The influence of media reliance on voting decisions." *Communication Research* 10(1):37–58.

Meffert, Michael F., Sungeun Chung, Amber J. Joiner, Leah Waks and Jennifer Garst. 2006. "The effects of negativity and motivated information processing during a political campaign." *Journal of Communication* 56(1):27–51.

Müller, Wolfgang C. 2000. "Political parties in parliamentary democracies: Making delegation and accountability work." *European Journal of Political Research* 37(3):309–33.

Müller, Wolfgang C. and Kaare Strøm. 1999. *Policy, office, or votes? How political parties in Western Europe make hard decisions.* Cambridge: Cambridge University Press.

Patterson, Thomas E. and Robert D. McClure. 1976. *The unseeing eye: The myth of television power in national politics.* New York: Putnam.

Petrocik, John R. 1996. "Issue ownership in presidential elections, with a 1980 case study." *American Journal of Political Sciencei* 40(3):825–50.

Petrocik, John R., William L. Benoit and Glenn J. Hansen. 2003. "Issue ownership and presidential campaigning, 1952-2000." *Political Science Quarterly* 118(4):599–626.

Ridout, Travis N. and Annemarie S. Walter. 2015. "Party system change and negative campaigning in New Zealand." *Party Politics* 21(6):982–92.

Ridout, Travis N. and Michael Franz. 2008. "Evaluating measures of campaign tone." *Political Communication* 25(2):158–79.

Ridout, Travis N. and Rob Jr. Mellen. 2007. "Does the media agenda reflect the candidates' agendas?" *International Journal of Press/Politics* 12(2):44–62.

Robins, Garry, Pip Pattison, Yuval Kalish and Dean Lusher. 2007. "An introduction to exponential random graph (p*) models for social networks." *Social Networks* 29(2):173–91.

Schweitzer, Eva Johanna. 2010. "Global patterns of virtual mudslinging? The use of attacks on German party websites in state, national and European parliamentary elections." *German Politics* 19(2):200–21.

Scott, Tyler A. 2016. "Analyzing policy networks using valued exponential random graph models: Do government-sponsored collaborative groups enhance organizational networks?" *Policy Studies Journal* 44(2):215–44.

Sellers, Patrick J. 1998. "Strategy and background in Congressional campaigns." *American Political Science Review* 92(1):159–71.

Semetko, Holli A., Jay G. Blumler, Michael Gurevitch and David H. Weaver. 1991. *The formation of campaign agendas: A comparative analysis of party and media roles in recent American and British elections.* New York: Routledge.

Semetko, Holli A. and Patti M. Valkenburg. 2000. "Framing European politics: A content analysis of press and television news." *Journal of Communication* 50(2):93–109.

Shoemaker, Pamela J., Martin Eichholz, Eunyi Kim and Brenda Wrigley. 2001. "Individual and routine forces in gatekeeping." *Journalism and Mass Communication Quarterly* 78(2):233–46.

Shoemaker, Pamela J. and Stephen D. Reese. 1991. *Mediating the message: Theories of influence on mass media content.* New York: Longman.

Sides, John and Matthew Grossmann. 2010. "Do voters perceive negative campaigns as informative campaigns?" *American Politics Research* 38(3):502–30.

Song, Hyunjin, Dominic Nyhuis and Hajo Boomgaarden. Forthcoming. "A network model of negative campaigning: The structure and determinants of negative campaigning in multi-party systems." *Communication Research* .

Stark, Birgit and Melanie Magin. 2009. *Die österreichische Medienlandschaft im Umbruch.* Wien: Verlag der österreichischen Akademie der Wissenschaften.

Tuchman, Gaye. 1972. "Objectivity as strategic ritual: An examination of newsmen's notions of objectivity." *American Journal of Sociology* 77(4):660–79.

van Atteveldt, Wouter. 2008. *Semantic network analysis: Techniques for extracting, representing, and querying media content.* Charleston: BookSurge.

van der Brug, Wouter and Joost Berkhout. 2015. "The effect of associative issue ownership on parties' presence in the news media." *West European Politics* 38(4):869–87.

van der Pas, Daphne J. and Rens Vliegenthart. 2016. "Do media respond to party conflict? Debates on European integration in British, Dutch and German party manifestos and newspapers, 1987-2006." *Political Studies* 64(2):260–78.

van Praag, Philip and Cees van der Eijk. 1998. "News content and effects in an historic campaign." *Political Communication* 15(2):165–78.

Walgrave, Stefaan, Jonas Lefevere and Anke Tresch. 2012. "The associative dimension of issue ownerships." *Public Opinion Quarterly* 76(4):771–82.

Walgrave, Stefaan, Kirsten van Camp, Jonas Lefevere and Anke Tresch. 2016. "Measuring issue ownership with survey questions: A question wording experiment." *Electoral Studies* 42:290–99.

Walgrave, Stefaan and Peter Van Aelst. 2006. "The contingency of the mass media's political agenda setting power: Toward a preliminary theory." *Journal of Communication* 56(1):88–109.

Walter, Annemarie S. 2013. "Women on the battleground: Does gender condition the use of negative campaigning?" *Journal of Elections, Public Opinion & Parties* 23(2):154–76.

Walter, Annemarie S. 2014*a*. "Choosing the enemy: Attack behaviour in a multi-party system." *Party Politics* 20(3):311–23.

Walter, Annemarie S. 2014*b*. "Negative campaigning in Western Europe: Similar or different?" *Political Studies* 62(S1):42–60.

Walter, Annemarie S. and Rens Vliegenthart. 2010. "Negative campaigning across different communication channels: Different ball games?" *International Journal of Press/Politics* 15(4):441–61.

Walter, Annemarie S. and Wouter van der Brug. 2013. "When the gloves come off: Inter-party variation in negative campaigning in Dutch elections." *Acta Politica* 48(4):367–88.

Walter, Annemarie S., Wouter van der Brug and Philip van Praag. 2014. "When the stakes are high: Party competition and negative campaigning." *Comparative Political Studies* 47(4):550–73.

Wasserman, Stanley and Philippa Pattison. 1996. "Logit models and logistic regression for social networks: I. An introduction to Markov graphs and p*." *Psychometrika* 61(3):401–25.