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Deepening the rift: Negative campaigning fosters affective polarization in multiparty elections

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ABSTRACT

This paper contributes to a growing body of literature on affective polarization by examining the understudied role of party rhetoric on partisan divides in the electorate. Despite a recent growth of research on affective polarization in multiparty systems, no study tests the effect of negative campaigning on affective polarization outside the US. This paper tests whether negative campaigning between parties during electoral campaigns is associated with higher levels of affective polarization. Combining data from the CSES and an expert survey on party rhetoric, we analyze data from sixteen countries (seventeen elections) and eighty-six parties, and present the first large scale analysis of the effect of party rhetoric on affective polarization. Our results show that affective polarization is larger between parties adopting a negative tone. We also show more specifically that affective polarization is higher for individuals whose party attacks or is attacked by the other party. In addition, we find that the positive association between attacks and affective polarization increases with partisan strength.

1. Introduction

Although one of the main roles of political parties is to bring together individuals with similar interests, parties also seem to be (or have become) elements of division, above and beyond what could be normally expected within a competitive environment. In this article, we examine the roots of divisions by looking at the driving role of party rhetoric — and, more specifically, on their use of aggressive rhetoric targeting political opponents. To what extent can a divisive language lead to increased divisions in the public?

The focus of our investigation is, as much research in recent years, on so called “affective polarization”, that is, an individual attitudinal mindset that makes individuals affectively dislike their political opponents. Rooted by dynamics of group belonging and identity, affective polarization makes, quite simply, that a given individual likes citizens who identify with the same party more than citizens who identify with another party. It is generally measured by how much voters like their co-partisans (or own party) compared to how much they like out-partisans (or other parties). This concept has mainly been studied in the context of the United States, where scholars notice that affective polarization has increased since the 60’s (see for example [Carlin and Love, 2013, 2018](#); [Iyengar et al., 2012](#); [Iyengar and Westwood, 2015](#); [Iyengar](#)

[et al., 2019](#)),¹ but recent research also investigates it in multiparty systems (e.g. [Reiljan, 2020](#); [Wagner, 2021](#); [Garzia et al., 2023](#)).

The existing literature has widely investigated the drivers of affective polarization in the public (see for an overview [Iyengar et al., 2019](#)). Yet, a factor that stands out as requiring additional attention is the extent to which exposing citizens to negatively charged party rhetoric enhances their dislike for political opponents. Can negative campaigning foster affective polarization? Only a handful of studies have addressed the question so far. [Iyengar et al. \(2012\)](#) show that affective polarization increases with the number of negative ads ran in a state. [Lau et al. \(2017\)](#) use an experiment to show that negative ads increase affective polarization in the context of high choice media environment. Finally, [Nai and Maier \(2023\)](#) show that when a message is perceived as negative, it will tend to increase affective polarization. Yet, while evocative in their findings, all these studies investigate the effect of negative campaigning in the American context, a context particularly extreme when it comes to both dynamics of attack advertising and ideological conflict. Does this effect also take place outside the US case? Can the effects found in America be generalized across different political systems? We argue that testing the effect of negative campaigning on affective polarization in a different context represents an important contribution to the existing evidence.

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E-mail addresses: d.martin@uni-mannheim.de (D. Martin), a.nai@uva.nl (A. Nai).¹ This explains why affective polarization is sometimes used to refer to the increase of partisan animosity over time (see for example [Lau et al., 2017](#)).<https://doi.org/10.1016/j.electstud.2024.102745>

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Normatively, the question of how party rhetoric impacts affective polarization is likely central to understand the consequences of parties' behavior on democratic stability. It can call attention to possible drawbacks of representative democracy and, pushed to the extreme, to the limits of representative democracy. This is particularly true in a context of increasing media choice environment, and in contexts favorable to the rise of populist parties. Substantively, our article expands the evidence linking party-level aggressiveness towards the out-party (i.e., the extent in which parties decide to attack their rivals during election campaigns) with voter-level antipathy towards voters of that out-party, thus providing evidence of multi-level top-down linkages between who parties attack (negative campaigning) and who voters dislike (affective polarization). While conceptually the two phenomena ought to be closely related, systematic evidence linking them – and in particular, across different political systems – remains to this day elusive.

To do so, we combine election study data from seventeen elections that occurred between 2016 and 2019 with an expert survey measuring party rhetoric during these elections. In doing so, our article is the first large-scale study on the relation between negative campaigning and affective polarization. The expert data allow us to use two different measures of negative campaigning: one measuring the extent to which a party attacks other parties in general (tone), and one measuring the extent to which each party attacks each other party (attacks).

Our approach has several advantages. First, to focus on multiparty systems allows for a different data structure: there are more than one observation per individual,² and so we can control for unobservables at the individual-level using a mixed model.³ Second, in a two-party system, if one party adopts a very negative rhetoric, the tone of the overall campaign will be quite negative too. The two will be correlated, by definition. This is still the case in multiparty systems, but less. One party can be quite negative, but the main tone of the overall campaign still be positive. We will thus be able to better disentangle between the two effects in a multiparty context. Third, the expert data do not only give estimates of parties' negative tone, but also more specific measures on the extent to which each party attacks each other party. We can thus analyze the effect of negative campaigning on affective polarization, and test how the direction of the attacks influences affective polarization among members of the attacking and attacked parties differently. To the best of our knowledge, these questions have not been investigated yet.

We find that affective polarization increases with the negative tone of both the respondent's party and the other party. Moreover, targeted attacks from one party towards another have a significant negative effect on affective polarization between these two parties, both among partisans of the attacked party as well as partisans of the attacking party. Finally, in an additional analysis, we show that the effect of attacks on affective polarization increases with the respondent's partisan identity strength. As we will discuss, this result is consistent with the underlying mechanism of affective polarization, explained by social identity theory.

2. Affective polarization

Scholars have paid a growing attention to the concept of affective polarization, mainly because it has kept increasing since the 60's in the United States. They have tried to explain this phenomenon by understanding its underlying mechanism. Consistent with [Campbell et al. \(1960\)](#) according to whom voters are affectively attached to their

² In a country where the election study includes n parties, we obtain $n-1$ observations per respondent.

³ With only one observation per respondent, we cannot distinguish between the random effect at the individual level and the residual error. The two are confounded.

parties, [Greene \(1999\)](#) suggests that identity theory also applies to political parties. Social identity theory, developed in social psychology, posits that individuals who self-identify with a particular group will have different perceptions, preferences, and behaviors towards in-group members than towards out-group members ([Tajfel, 1974](#); [Tajfel et al., 1971](#); [Billig and Tajfel, 1973](#)). Tailored to party identities, affective polarization is thus a rather normal consequence of party identification, unfolding as a type of emotional prejudice against voters of other parties.

In the literature, scholars mainly focus on explaining variations in affective polarization. An important part of this literature focuses on variations over time, to explain the increase of affective polarization that occurred in the United States. [Levendusky \(2009\)](#) argues that it is due to an increase in party identification. Consistent with this finding, [Iyengar et al. \(2012\)](#) show that partisan strength increases affective polarization. [Abramowitz and Saunders \(2008\)](#) argue that it is because the electorate became ideologically more polarized that affective polarization increased. Another possible explanation is related to the so-called "sorting", that is, when the main policy issues become more correlated, and less crosscutting, fewer issues divide members of a same party, and more issues set the two main parties apart ([Levendusky, 2009](#)). [Lelkes et al. \(2017\)](#) discuss the increasing choice media environment as a possible cause of the increasing gap between parties in the United States. Finally, and importantly, preliminary evidence seems to suggest that negative campaigning can lead to increased affective polarization, but only a few studies test this effect ([Iyengar et al., 2012](#); [Lau et al., 2017](#); [Nai and Maier, 2023](#)).

More recently, scholars have also studied affective polarization in multiparty systems (see for example [Boxell et al., 2020](#); [Carlin and Love, 2018](#); [Gidron et al., 2019](#); [Huddy et al., 2018](#); [Martini and Torcal, 2019](#); [Reiljan, 2020](#); [Westwood et al., 2018](#)). Contrary to the US, affective polarization has not increased over the past decades in Europe; but in comparison with European countries, the level of affective polarization does not seem particularly large in the US ([Reiljan, 2020](#)). These studies also led to additional findings, easier to test in multiparty contexts, or more relevant to European countries. For example, ideological distance between parties increases affective polarization, and animosity is larger between radical right parties and other parties ([Harteveld, 2021](#)). [Wagner \(2021\)](#) proposes an interesting discussion on various measures of affective polarization for multiparty systems.

The multiparty system context is particularly interesting to study affective polarization because although the main differences of perceptions, affect, and behavior occur between the in-group and the out-group according to group identity, and most of the effect comes from in-group love, we also know that individuals do not similarly dislike, misperceive, and discriminate against each out-group equally. Thus, contrarily to a two-groups context, a multi-groups context allows us to look at these differences, and see what individual or group characteristics foster affective polarization. Therefore we will analyze the effect of negative campaigning on partisan divides in multiparty systems.

3. Negative campaigning and affective polarization

Negative campaigning – that is, the use by political actors of any messages explicitly attacking their opponents, be it on matters related to issues (e.g., political matters on which parties disagree, past records, policy proposals, agendas put forwards of the opponents) or character (e.g., the integrity, honesty, or any other personal traits of opponents) – is a major feature of modern electoral communication ([Nai and Walter, 2015](#)). While it has been shown to potentially captivate the attention of voters and thus lead to increased mobilization of segments of the electorate (e.g. [Martin, 2004](#)), it also likely leads to increased political cynicism and a more disgruntled electorate (e.g. [Yoon et al., 2005](#)).

To the best of our knowledge, only three studies analyze how negative campaigning impacts affective polarization. [Iyengar et al. \(2012\)](#) study affective polarization in various US states and find that the number of negative ads increases affective polarization. They also find that the intensity of the race increases affective polarization as election closeness increases. This study thus mainly concerns the general tone of political campaigns and suggests that the more negative the tone of the campaign is, the higher affective polarization. [Lau et al. \(2017\)](#) investigate the effect of negativity on affective polarization, using an experiment. In the context of the 2012 US presidential elections, they either show positive ads from both candidates (Obama and Romney), or negative ads from both candidates, and also vary the level of media choice. They find that negative ads increase affective polarization in the context of high choice media environment. Their results thus show that the tone of the candidates, and the extent of the use of attacks between candidates increase affective polarization. Finally, [Nai and Maier \(2023\)](#) use an experiment to study how attacks from a Republican Candidate towards a Democrat Candidate affect voters preferences. They look at the indirect effect of exposure to political attacks on affective polarization, mediated by perception. Although the results do not allow to conclude to a total (direct and indirect combined) positive effect of exposure to political attacks on affective polarization, they find that voters' perception of negativity plays a mediating role between the message and affective polarization only among Democrats (the ones whose party is targeted).

On the whole, what this preliminary evidence seems to suggest is that when elites engage in political attacks towards their opponents, voters can react by increasingly disliking voters of the political out-group.

These works have thus paved the way for a new research agenda on negative campaigning and affective polarization. Yet, beyond being limited to the American case, they do not provide evidence able to differentiate between the effect of negative campaigning coming from the respondent's own party or the other party. It may be that individuals whose party is the most negative have higher (or lower) levels of affective polarization. It is also possible that the most negative parties generate high levels of affective polarization among supporters of other parties. In other words, an important difference when looking at the effect of negative campaigning on voters' preferences is whether the source or target of the message are the voters' preferred party. All in all, what the literature is still missing is a broader framework linking negative campaigning from elites with increased partisan dislike for opponents in the public (affective polarization), depending on which party goes negative. We propose a first stab at such integrated framework here.

The starting point is simply that voters perceive and use cues present in party communication to make up their mind. Confronted to a complex information environment and wary of experiencing cognitive dissonance, voters have a natural predisposition to heuristically pay attention to their preferred parties to minimize information processing ([Petersen et al., 2013](#)). While the effects of factual non-partisan information should not be discounted ([Boudreau and MacKenzie, 2014](#)), a rather consistent body of research shows that the simplifying appeal of partisan cues is a powerful tool to sway voters' preferences and attitudes (e.g. [Cohen, 2003](#)). Consistent evidence seems to support this intuition, including when it comes to (affective) perceptions of political opponents. For instance, [Nicholson \(2012\)](#) presents experimental evidence showing that out-party cues (but, importantly, not in-party cues) about the two main candidates of the 2008 presidential election in the USA (Obama, McCain) tend to polarize voters.

When it comes to negative campaigning, parties use political attacks in order to decrease voters' sympathy towards the targeted party ([Pinkleton, 1997](#); [Shen and Wu, 2002](#)). In this sense, critiques towards the opponents act as cues that partisan attitudes (and subsequent behaviors) should steer away from the target of the attack. However, evidence also shows that the source of the negative message can lose

voters' sympathy ([Garramone, 1984](#); [Roese and Sande, 1993](#)). In theory thus, the effect could either increase or decrease affective polarization.

Literature in social psychology suggests that motivated reasoning ([Kunda, 1990](#)) leads to selective interpretation ([Ditto et al., 1998](#); [Taber and Lodge, 2006](#); [Taber et al., 2009](#)). Voters are more likely to be convinced by ideologically congruent information — which we have no reason to assume does not happen when exposed to negative messages. With this in mind, voters should be more likely to “believe” negative messages that originate from their own party towards other parties — with the natural consequence that they should normally have more sympathy towards their party and less towards other parties. Also, because partisans are likely to perceive their own party as a more credible source than other parties, and as source credibility is associated with lower backlash and greater persuasion ([Jasperson and Fan, 2002](#)), we expect that exposure to negative campaigning from the preferred party generates more positive feelings for the in-group and more negative feelings for other parties in general, fostering affective polarization. We thus have:

Hypothesis 1a. The more negative the tone of the respondent's party the higher affective polarization is.

But what about negative campaigning from other parties? Motivated reasoning suggests that voters tend to discount messages coming from ideologically incongruent actors. Yet, this does not mean that these messages do not have any effect — but simply that they are less likely to be persuasive. Negative messages from out-parties, even if not directly attacking the in-group, can be perceived as threatening the in-group — which is likely to increase the affect towards the respondent's own party. Furthermore, as negative campaigning is in general rather disliked by the public at large ([Garramone, 1984](#); [Fridkin and Kenney, 2011](#)), we believe that voters tend to particularly dislike parties other than their own when those parties go negative — even if they do not so against their own party. In other terms, negative tone from parties other than the respondent preferred one also can be expected to foster affective polarization, even if for conceptually different reasons. We thus have:

Hypothesis 1b. The more negative the tone of a party, the higher affective polarization towards this party is.

Yet negative campaigning is generally directed towards a party or a group of parties, and we should expect affective polarization between two parties to be impacted particularly when both parties attack each other. As our data include a measure of the extent to which a party attacks each of the other main parties, we can proceed to a more fine-grained test of the association between negative campaigning and affective polarization. A voter is more likely to dislike another party when his own party frequently attacks this party. Similarly, a voter is more likely to dislike another party who frequently attacks his own party. In addition, attacks can also reinforce preferences towards a respondent's own party, by increasing partisans' sympathy when the party attacks or is attacked. Consequently, we will test the following hypotheses:

Hypothesis 2a. The more there are attacks from another party targeting the respondent's party, the higher affective polarization towards this other party.

Hypothesis 2b. The more there are attacks from the respondent's party targeting another party, the higher affective polarization towards this other party.

We now describe the data before testing these hypotheses.

4. Data and methods

The main data used for the analyses come from Module 5 of the CSES (Comparative Study of Election System),⁴ and the Negative Campaigning Comparative Expert Survey (NEGex) (Nai, 2020, 2023), an expert survey measuring party rhetoric, among others. Both surveys are post-election surveys, in that they are gathered in the direct aftermath of the elections they are covering. Table A1 in the Appendix displays when the data collection process has started in each of these surveys. It is important to note that while the expert survey asks questions about party rhetoric during the campaign, the CSES asks respondents to report their level of party sympathy in present tense, that is, after the election. One advantage of the expert survey leveraged in our article is that it does not only measure party negative campaigning in general (that is, how “negative campaign of any given party was”), but also the presence of attacks between specific parties, for each possible dyad of the main parties competing in the election (that is, whether party A attacked party B, and so forth). In other words, the extent to which each party attacks each of the other parties can be estimated. These measures of party rhetoric are based on a systematic expert survey (more than 2000 national and international experts). It covers 84 national legislative elections that took place between June 2016 and March 2020. Among these elections, eighteen are included in Module 5 of the CSES.⁵ This should give us a total of eighteen elections. However, as in most analyses we also control for variables (objective distance between parties, party extremism and single-issue party) that are deduced from the Manifesto Project Main Dataset (CMP) (Volkens et al., 2021), and as Hong Kong is not included in these data, our sample includes sixteen countries and seventeen elections.

4.1. Measuring affective polarization

Our dependent variable is affective polarization, and our main independent variables are the parties’ negative tone, and attacks between parties. Our dependent variable affective polarization is:

$$AP_{ij} = \text{sympathy towards party}_i - \text{sympathy towards party}_j,$$

with $party_i$ being the respondent’s party, and $party_j$ any party with $j \neq i$.

So for example, in a country with five parties (A, B, C, D, E), for a voter who identifies with party C, we have four observations:

Observation	Dyad	Dependent variable
1	Party C; party A	$AP_{\text{party C; party A}}$
2	Party C; party B	$AP_{\text{party C; party B}}$
3	Party C; party D	$AP_{\text{party C; party D}}$
4	Party C; party E	$AP_{\text{party C; party E}}$

For each respondent, we have one observation for each party except the respondent’s favorite party. The distribution of affective polarization is presented in Figure A1 in the Appendix. Throughout this paper, we sometime use “own party” to indicate the party the respondent identifies with ($party_i$), and use “the other party” to indicate $party_j$. Given the nature of our dependent variable, the analyses presented in this paper only concern individuals who identify with a party. Table A2 in the Appendix lists all parties used in the analysis.

⁴ The Comparative Study of Electoral Systems (www.cses.org). CSES MODULE 5 THIRD ADVANCE RELEASE [dataset and documentation]. July 20, 2021 version. doi:10.7804/cses.module5.2021-07-20.

⁵ These elections are Australia 2019, Austria 2017, Canada 2019, Finland 2019, France 2017, Germany 2017, Hong Kong 2016, Hungary 2018, Iceland 2016, Iceland 2017, Italy 2018, Lithuania 2016, Montenegro 2016, New Zealand 2017, Norway 2017, Portugal 2019, Sweden 2018, and United Kingdom 2017.

We measure party identification as follows. In the CSES the respondents are asked: “Do you usually think of yourself as close to any particular party?” and if the answer is negative: “Do you feel yourself a little closer to one of the political parties than the others?” If the respondent answers positively to the first or the second question, we assume that the respondent identifies with a party. To know which party the respondent identifies with, the survey then asks : “Which party do you feel closest to?” This allows us to measure party identification, and determine which party is $party_i$ for each respondent. Based on this measure, 66.61% of the respondents of the CSES identify with a party, 29.20% do not, and 4.19% have a missing value. Our study does not allow to estimate how negative campaigning affects individuals who do not identify with a party as affective polarization only concerns individuals who identify with a party. Our measure however is quite inclusive given its construction.

Our measure of party sympathy is based on the answer to the following question asked in the CSES survey: “I would like to know what you think about each of our political parties. After I read the name of a political party, please rate it on a scale from 0 to 10, where 0 means you strongly dislike that party and 10 means that you strongly like that party. If I come to a party you haven’t heard of or you feel you do not know enough about, just say so. The first party is [PARTY A]”.

Scholars have used several measures of affective polarization, and one measure specific to multiparty systems is the one discussed by Wagner (2021), the “spread of like-dislike scores for each respondent”. As we are mainly interested in how the use of negative campaigning by a party i towards a party j affects affective polarization between these two parties (i.e. AP_{ij} and AP_{ji}), this measure would be of no use here. Indeed, this “spread of like-dislike” measure is an aggregate measure of affective polarization at the individual level and removes all the within level variability, by definition. Variation of affective polarization between individuals can have many confounders, and the multiparty system context gives the opportunity to look at variation within individuals. If a party k attacks a party l , this should only affect AP_{kl} and AP_{lk} , and not $AP_{ij} \forall i \neq \{k, l\}$ and $\forall j \neq \{k, l\}$. In the US case, the number of dyads is one, in multiparty systems, the number of dyads equals $(n - 1) \cdot (n - 2) \cdot \dots \cdot 1$, with n the number of parties. The multiparty context thus offers the opportunity to test the effect of negative campaigning on affective polarization precisely by looking at the within variability, which allows to isolate it from other effects of campaign-specific factors and individual-level factors. This is why we use this measure of affective polarization AP_{ij} .

4.2. Measuring negative campaigning

Our measures of negative campaigning come from an expert survey conducted since 2016 after most national elections worldwide (NEGex). The main independent variables are two measures of negative campaigning. The first is an assessment of how negative the party went in general (which we call “tone”), whereas the second focuses on the specific target that parties addressed their attacks towards. The measure of negative tone in the expert survey is based on the following question: “When considering the electoral campaigns of the following actors during the most recent [election name], would you say that their campaign was exclusively negative, exclusively positive or somewhere in between? Please provide a score between -10 (exclusively negative) and 10 (exclusively positive)”. For each party, it takes the mean across all experts. Negative tone takes negative values if the party mainly uses a positive tone during the electoral campaign, and takes positive values if the party mainly uses a negative tone.⁶ From this measure, we create

⁶ To improve cross-cultural comparability, the expert survey relies on anchoring vignettes and provides raw measures, non-parametric adjustments, as well as parametric adjustments. We use the non-parametric adjustments as the parametric ones rely on more assumptions.

two variables: one variable for the negative tone of $party_i$ (own party negative tone), one for the negative tone of $party_j$ (other party negative tone).

The measures of targeted attacks are based on the following question: “Party X went the most negative against which party?” The expert chooses one party, setting a value of 1 for this party, and 0 for the others. The measure in the expert survey takes the mean of these dichotomous answers across experts, so that attacks measures range between 0 and 1. The value of 1 means that all experts agreed that party X went the most negative against the party in question. We adapt this measure to our data structure and create two variables: the variable *other party targets own party* (high if $party_j$ was the most negative against $party_i$), and the variable *own party targets other party* (high if $party_i$ was the most negative against $party_j$).

The use of experts to measure campaign content might seem unorthodox, and indeed expert surveys are not without drawbacks (Budge, 2000; Mair, 2001; Steenbergen and Marks, 2007). Most notably, doubts have been raised in the past as to whether experts are able to provide “objective” ratings of social phenomena. Evidence suggests that academia tends to skew towards more liberal viewpoints (Maranto and Woessner, 2012); as it cannot be excluded that scholars themselves also engage, to some extent, in motivated reasoning, a question can legitimately be asked as to whether expert surveys result in aggregated ratings that are more critical towards conservative actors (Curini, 2010; Wright and Tomlinson, 2018). Given that campaign negativity remains a matter that is in the eye of the beholder (Sigelman and Kugler, 2003), this critique cannot simply be ignored. Fortunately, as we discuss below, robustness checks that leverage “adjusted” measures of campaign negativity that “filter out” the potential ideological bias of experts (Walter and van der Eijk, 2019) will show consistent results — suggesting that the presence of ideological biases when it comes to how experts assess the campaign of competing parties should not be overestimated.

4.3. Control variables

We control for the main demographic variables *age*, *gender*, and *education* level. We also control for how much the respondent follows politics in the media (*follows politics*) and partisan strength (*party ID strength*). Following the party identification questions (see above), the respondent is asked: “Do you feel very close to this party, somewhat close, or not very close?” (not very close/somewhat close/very close), which allows us to determine strength of party identification. We expect partisan strength to increase affective polarization (Iyengar et al., 2012).

We control for the ideological distance between $party_i$ and $party_j$, and expect affective polarization to increase with the distance (Harteveld, 2021). We use a measure of *objective distance*, the absolute difference between these parties’ positions on the left–right scale, estimated by the Comparative Manifesto Project.⁷ We decide to use this measure and not a measure of perceived distance because affect biases perception (Kunda, 1990). Indeed, voters tend to see parties they like as closer to them than they really are, and parties they dislike as further away from them than they are (Judd et al., 1983; Kinder, 1978). This mechanism is explained by balance theory (Heider, 1958) and cognitive dissonance theory: when perceptions are not consistent with preferences, it leads to cognitive dissonance. Cognitive dissonance causes mental discomfort that individuals can try to reduce by changing their perceptions. As we do not want our measure of distance to be influenced by party sympathy, used to construct the dependent variable, we use a measure of objective distance. We however replicate our results in the Appendix, using the perceived distance between $party_i$

and $party_j$ and considerate these results as a lower bound of the effect of negative campaigning on affective polarization.⁸

In addition, we control for some party-level characteristics: whether the parties are in government, ideologically extreme, and single-issue. These variables are likely to affect party sympathy, and consequently affective polarization. For each of these measures, we have one measure for the respondent’s party ($party_i$), and one measure for the other party ($party_j$). The measures of incumbency (party in government) equals 1 if the party was in government during the campaign, and 0 otherwise. Ideological extremism equals 1 if the party is among the 10% the most to the right or the 10% the most to the left in our sample, based on the manifesto data, and 0 otherwise. The single-issue measure is based on the percentage of the party’s manifesto dedicated to the left–right issues present in the manifesto. A party is considered to be a single-issue party if he dedicated less than a specific share (the mean of shares minus one standard deviation) to the left–right issue (see for example Somer-Topcu, 2015, for a similar approach).

Finally, we control for election-level characteristics: campaign tone, media attention, and race competitiveness. For an easier interpretation of the coefficients, all variables are centered to have a mean equal to zero, and a standard deviation of one, except the dichotomous variables (gender, measures of parties in government, measures of extreme parties, and measures of single issue parties) and partisan strength (that equals either -1 , 0 , or 1).

5. Analysis

We estimate a mixed model with random effects at the individual level, and fixed effects at the election level.⁹ The random effects are nested in the fixed effects. In Model 1 and 2, we test the effect of tone and attacks separately, and only include individual-level control variables. Model 3 includes all variables from Model 1 and 2. Party-level control variables are added in Model 4, and election-level control variables are added in Model 5.

The results show a positive association between negative campaigning and affective polarization. A respondent whose party adopts a negative tone has higher levels of affective polarization than other respondents. Moreover, levels of affective polarization towards parties engaging in negative campaigning are higher. These two results are consistent with *hypotheses 1a* and *1b*. It is worth noting that these associations are found despite the fact that we control for ideological distance and partisan strength. Concerning attacks between parties, the results are quite similar. Affective polarization tends to be higher towards a party who attacks the respondent’s party, and affective polarization also tends to be higher towards a party who is attacked by the respondent’s party. These results are consistent with *hypotheses 2a* and *2b*. The fact that negative tone of “the other” party still has a significant coefficient in Model 3 is interesting, and suggests that even if the respondent’s party is not directly targeted, he/she will have higher levels of affective polarization towards a party adopting a negative tone. To summarize, the results are consistent with our hypotheses, and mean that affective polarization is associated with higher levels of negative campaigning.

Besides these main results, it is worth noting that the main control variables have coefficients consistent with the findings in the literature. In particular, ideological distance between parties on the left–right scale increases affective polarization. The higher the distance

⁸ The main analyses, using a measure of perceived distance between $party_i$ and $party_j$ instead of the objective distance are presented in Table A3 in the Appendix. The main results hold. Of course the effects of negativity and attacks are of smaller magnitude, and is this likely caused by an effect of party rhetoric on perceived party positions.

⁹ Election levels are country levels except for Iceland where elections occurred in 2016 and 2017.

⁷ For Australia and Canada, we had to use the data from the previous elections (respectively 2016 and 2015) due to data availability in the CMP.

Table 1
Explaining affective polarization.

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	4.02*** (0.14)	3.34*** (0.13)	4.24*** (0.13)	4.23*** (0.14)	4.61*** (0.09)
Age	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Gender (female)	0.06 (0.03)	0.08* (0.03)	0.08* (0.03)	0.07* (0.03)	0.07* (0.03)
Education	-0.07*** (0.01)	-0.07*** (0.01)	-0.06*** (0.01)	-0.07*** (0.01)	-0.07*** (0.01)
Follows politics	0.11*** (0.02)	0.12*** (0.02)	0.12*** (0.02)	0.11*** (0.02)	0.11*** (0.02)
Strength of party ID	1.12*** (0.03)	1.12*** (0.03)	1.11*** (0.03)	1.11*** (0.03)	1.11*** (0.03)
Objective distance l-r (cmp)	0.59*** (0.01)	0.55*** (0.01)	0.47*** (0.01)	0.46*** (0.01)	0.46*** (0.01)
Own party negative tone	0.30*** (0.02)		0.25*** (0.02)	0.23*** (0.02)	0.23*** (0.02)
Other party negative tone	0.68*** (0.01)		0.60*** (0.01)	0.57*** (0.01)	0.57*** (0.01)
Own party targets the other		0.26*** (0.01)	0.20*** (0.01)	0.28*** (0.01)	0.28*** (0.01)
Other party targets own party		0.42*** (0.01)	0.40*** (0.01)	0.45*** (0.01)	0.45*** (0.01)
Own party in government				-0.54*** (0.04)	-0.54*** (0.04)
Other party in government				-0.60*** (0.03)	-0.60*** (0.03)
Own party extremism (cmp)				-0.09 (0.06)	-0.09 (0.06)
Other party extremism (cmp)				0.20*** (0.03)	0.20*** (0.03)
Own party single issue				0.73*** (0.08)	0.73*** (0.08)
Other party single issue				1.06*** (0.04)	1.06*** (0.04)
Tone (campaign)					0.24 (0.18)
Media attention (campaign)					0.26 (0.16)
Race competitiveness (campaign)					-0.01 (0.05)
Log Likelihood	-156085.47	-156032.17	-154857.33	-154259.31	-154260.16
Num. obs.	64 844	64 844	64 844	64 844	64 844
Num. groups: election_rgx:id	15 576	15 576	15 576	15 576	15 576
Var: election_rgx:id (Intercept)	2.19	2.21	2.25	2.25	2.25
Var: Residual	5.78	5.75	5.50	5.38	5.38

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; $p < 0.1$.

the higher the affective gap, consistent with [Harteveld \(2021\)](#). Moreover, consistent with the underlying mechanism explaining affective polarization, partisan animosity increases with the strength of party identification (see for example [Iyengar et al., 2012](#)).

An important concern here is the risk of endogeneity: is affective polarization influenced by party rhetoric, or are parties adapting their discourse to their voters' preferences? Of course there is a chance that partisans influence their parties. However, two aspects here are more consistent with an effect of negative campaigning on affective polarization than with an effect of affective polarization on negative campaigning. First, the measures of negative campaigning used here concern parties' behavior *during* the campaign (see the description of the variables above), while affective polarization is based on measures of party sympathy reported *after* the election. Second, while one can easily imagine that parties adapt their discourse to the preferences of their partisans, it is hard to believe that parties will adapt their discourse to the preferences of partisans from other parties. Yet we do find an association between negative campaigning of the other party (negative tone and attacks) and affective polarization. This is consistent with an effect of party rhetoric on affective polarization. Thus, although we need to keep in mind that affective polarization can also impact negative campaigning and that our analysis does not allow to test the direction of causality, we believe that the more plausible explanation

for the association found here is that negative campaigning increases affective polarization.

6. Robustness checks

We also conducted some robustness checks. First, given that experts' ideological stand can also influence the measures of party rhetoric, the expert survey proposes "adjusted" measures of negativity: It is a measure of negative campaigning once the influence of experts' ideological positions has been removed.¹⁰ Table A4 in the Appendix shows the results of the main analyses using this adjusted measure of negative campaigning. The main results hold. Second, we control for the main demographics of the experts sample in each country: share of domestic experts, familiarity of election campaign, ease of questionnaire, left-right ideology, share of women experts, share of PhDs, and number of experts respondents. We do so based on Model 4

¹⁰ It is the residuals of the regression of negative campaigning on the mean ideological position of the experts, run at different levels of party ideology. In other terms, the residuals reflect the estimated negative campaigning net of the difference between the average ideology of the expert sample and the ideological position of the party they are evaluating. This procedure is inspired by the protocols discussed in [Walter and van der Eijk \(2019\)](#).

Table 2
Explaining affective polarization.

	Model 1	Model 2	Model 3	Model 4
Intercept	4.02*** (0.14)	3.32*** (0.13)	4.75*** (0.09)	4.30*** (0.09)
Age	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Gender (female)	0.06 (0.03)	0.08* (0.03)	0.06 (0.03)	0.07* (0.03)
Education	-0.07*** (0.01)	-0.07*** (0.01)	-0.08*** (0.01)	-0.07*** (0.01)
Follows politics	0.11*** (0.02)	0.12*** (0.02)	0.12*** (0.02)	0.11*** (0.02)
Objective distance l-r (cmp)	0.59*** (0.01)	0.55*** (0.01)	0.64*** (0.01)	0.49*** (0.01)
Strength of party ID	1.11*** (0.03)	1.08*** (0.03)	1.11*** (0.03)	1.07*** (0.03)
Own party negative tone	0.31*** (0.02)		0.35*** (0.02)	
Other party negative tone	0.68*** (0.01)		0.72*** (0.01)	
Strength of party ID × own party negative tone	0.12*** (0.03)		0.12*** (0.03)	
Strength of party ID × other party negative tone	-0.00 (0.02)		-0.00 (0.02)	
Own party targets the other		0.27*** (0.01)		0.38*** (0.01)
Other party targets own party		0.41*** (0.01)		0.47*** (0.01)
Strength of party ID × own party targets other party		0.09*** (0.02)		0.09*** (0.02)
Strength of party ID × other party targets own party		0.26*** (0.02)		0.26*** (0.02)
Own party in government			-0.00 (0.04)	-0.65*** (0.04)
Other party in government			-0.13*** (0.03)	-0.84*** (0.03)
Own party extremism (cmp)			-0.23*** (0.06)	-0.08 (0.06)
Other party extremism (cmp)			-0.01 (0.03)	0.35*** (0.03)
Own party single issue			0.58*** (0.08)	0.72*** (0.08)
Other party single issue			0.86*** (0.04)	0.94*** (0.04)
Tone (campaign)			0.08 (0.18)	1.58*** (0.17)
Media attention (campaign)			0.15 (0.16)	-0.41** (0.16)
Race competitiveness (campaign)			-0.32*** (0.05)	0.43*** (0.04)
Log Likelihood	-156081.00	-155864.52	-155811.39	-155073.71
Num. obs.	64844	64844	64844	64844
Num. groups: election_rgx:id	15576	15576	15576	15576
Var: election_rgx:id (Intercept)	2.18	2.21	2.19	2.20
Var: Residual	5.78	5.72	5.72	5.56

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; $p < 0.1$.

of Table 1 as we cannot control for too many election-level variables at the same time, given the low level of degrees of freedom. The results are presented in Table A5 in the Appendix, and the coefficients of interest show a very similar trend than in the main analysis. Third, we applied a jackknife resampling, to verify that the main results are not due to the influence of one specific country. This is an important test given the heterogeneity of the countries in our sample. The main results hold in each of the seventeen cases. Fourth, a very small share of affective polarization measures are negative (see Figure A1 in the Appendix), meaning that some respondents answered that they like the party they identify with less than some other parties. There is a risk that these observations influence the results significantly, through leverage effect, so we ran the main analyses without these observations, and the results are very similar (see Table A6 in the Appendix). Fifth, to ensure that our main results are not driven by small parties only, we estimate the Models of Table 1 on a reduced sample where selected observations are more likely to concern large parties than small ones. The probability of

selection of the dyad equals the vote share of the “other” party. The “own” party is already more likely to be a large party as it is the party the respondent identifies with. The main results hold (see Table A7 in the Appendix). Finally, to ensure that our main results are not driven by partisans of radical right parties, we also conducted the same analysis without respondents who identify with a radical right party (see Table A8 in the Appendix). The main results hold.

7. Additional analysis

Now that we found evidence for our hypotheses, and given that the results in Table 1 suggest that individuals with strong party attachment are more likely to have high levels of affective polarization (consistent with Iyengar et al., 2012), we decide to test whether the association between negative campaigning and affective polarization increases with party identity strength. Indeed, it is plausible that affective polarization of strong partisans is more impacted by negative campaigning, as strong

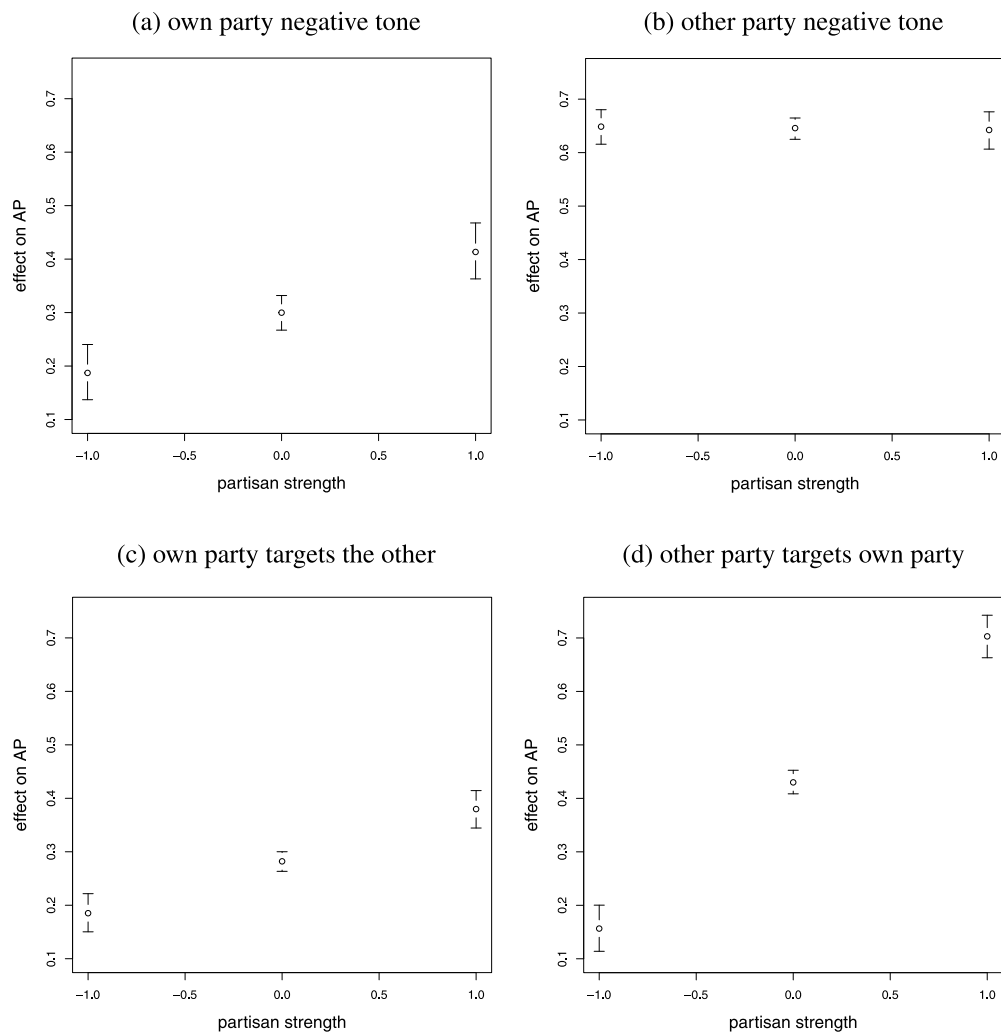


Fig. 1. Marginal Effects of an Increase in.
 Note: These graphs display for each level of partisan strength, the 95% confidence interval of the effect on affective polarization of an increase of one standard deviation of respectively (a) negative tone of own party (b) negative tone of the other party (c) attacks from own party, and (d) attacks towards own party.

partisans listen to their party more (Petersen et al., 2013), and could also be more affected by attacks from other parties than weak partisans. Our data allows us to test this using separate measures of negative campaigning for the respondent’s party as well as the “other” party, and this has never been tested in previous studies.

Table 2 presents the interaction between *party ID strength* and negative tone in Models 1 and 3, and the interaction between *party ID strength* and attacks in Model 2 and 4. The first two models only include individual-level control variables. The last two columns include all control variables displayed in Table 1.

For a more intuitive presentation of the interaction effects, Fig. 1 displays marginal effects of an increase of one standard deviation of negative campaigning (each measure separately) on affective polarization, and at different levels of partisan strength. These effects are estimated based on Models 1 and 2 of Table 2, and all other variables are set to their mean levels except gender, set to 0 (although very similar graphs are obtained if gender is set to 1).

Graph (a) shows that the more voters identify with their party, the more their own party’s negative tone increases their level of affective polarization. However, according to graph (b), the other party’s negative tone does not interact with strength of party identification. So voters with strong party identification will not be more influenced by another party’s negative tone than voters with weak party identification. Graphs (c) and (d) show that attacks between parties

increase affective polarization more among voters with strong party identification. This is true for both types of attacks: the own party targeting the other and vice versa. Thus, there is an interaction for the three types of negative campaigning in which the voter’s own party is directly concerned. This finding is consistent with social identity theory as individuals more attached to the group will also dislike the outgroup the most, and this even more so if there is a conflict between these groups (Tajfel and Turner, 1979). Another possible explanation is that negative campaigning has a stronger effect on affective polarization among individuals with high partisan strength because strong partisans are more exposed to party cues.

8. Discussion

This paper presents the first large scale analysis of the relation between party rhetoric and affective polarization. Combining an expert survey with election studies in seventeen elections that took place between 2016 and 2020, we test the association between negative campaigning and affective polarization, using two measures of negative campaigning: party tone and attacks between parties. The main results are consistent with the literature: affective polarization between two parties is higher when the tone of these parties is more negative, and also when these two parties attack each other more. More importantly, given the data structure of our analysis, we were able to test whether

this association is mainly due to the voter's level of negative campaigning, or whether voter's preferences are influenced by the rhetoric of the other parties too. We find that not only is affective polarization associated with negative campaigning of the voters' party, but also with the other parties' tone and attacks. In an additional analysis, we also show that partisan strength increases the association between negative campaigning and affective polarization. This result is consistent with the underlying mechanism explaining affective polarization, and supports the idea that social identity theory applies to parties.

Before discussing the implications of our findings, the weaknesses of our analysis however need to be mentioned. First, the use of expert surveys to measure campaign content ought to be done carefully. In our case, it is reassuring that robustness checks using "adjusted" variables, which filter out potential ideological bias in experts, yield consistent results. Yet, even beyond the matter of potential ideological biases, expert surveys are unable to provide granular nuances. Most notably, the measures we employ in this article only capture party tone and the presence of targeted attacks, and not more subtle nuances in the content of attacks or their harshness (e.g., the use of political incivility). A second drawback of our analysis is that the data we use only present a snapshot of the election campaign as a whole, and are unable to retrace the dynamics of attacks and rebuttals between competing actors. Campaign negativity is likely to affect public opinions, and public opinions about competing parties are also likely to influence the decision whether or not to go negative on the opponents. This iterative interplay between negativity and public reactions to it (Blackwell, 2013), likely to intervene in the final party preferences used here to measure affective polarization is unfortunately not something that we are able to account for empirically with the data at hand. Nonetheless, we believe that a case can be made that election campaigns are more likely to affect the opinions of the public than the other way around. Certainly, professionalized campaigns do take public opinion into account when designing their communication strategies (Grossmann, 2009), but this is likely only one among multiple competing factors — for instance, the timing of the election and the relative balance of forces in play (Elmelund-Præstekær and Svensson, 2014). Furthermore, the decision to go negative very likely does not only stem from strategic considerations, but is also a function of the party profile and character of candidates involved (e.g. Nai et al., 2022; Nai and Maier, 2020). In this sense, it does not seem unreasonable to assume that parties do adjust their campaign based on the opinion of the public, but the effects of the former on the latter are likely more pronounced.

Our findings imply that parties play an important role for social cohesion and democracy. Of course emotional prejudice between members of different parties is likely to exist because partisans from different parties do not share similar ideological preferences. However, our results show that these partisan gaps can be deepened by party rhetoric. Parties thus have the power to increase animosity between citizens, maybe to an extent that could hamper the stability of democratic regimes, and show the limits of representative democracy. This is particularly true in an age of high choice media environment, and increasing complexity of policy issues.

Much needs to be done in order to increase our understanding of how parties impact affective polarization and, more generally, any consequence of partyism. For example, research based on various identification strategies could help clarify the direction of causation between party rhetoric and voters preferences. Moreover, it would be interesting to see how party rhetoric influences stereotypes and discrimination between parties.

Ethical statement

The authors have no competing interests to declare that are relevant to the content of this article. The data and script files needed to replicate the published results will be made available on request.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

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Appendix A. Supplementary data

Supplementary material related to this article can be found online at <https://doi.org/10.1016/j.electstud.2024.102745>.

References

- Abramowitz, A.I., Saunders, K.L., 2008. Is polarization a myth? *J. Politics* 70 (2), 542–555.
- Billig, M., Tajfel, H., 1973. Social categorization and similarity in intergroup behaviour. *Eur. J. Soc. Psychol.* 3 (1), 27–52.
- Blackwell, M., 2013. A framework for dynamic causal inference in political science. *Am. J. Political Sci.* 57 (2), 504–520.
- Boudreau, C., MacKenzie, S.A., 2014. Informing the electorate? How party cues and policy information affect public opinion about initiatives. *Am. J. Political Sci.* 58 (1), 48–62.
- Boxell, L., Gentzkow, M., Shapiro, J.M., 2020. Cross-Country Trends in Affective Polarization. NBER Working Paper No. w26669, available at: <https://www.nber.org/papers/w26669>.
- Budge, I., 2000. Expert judgements of party policy positions: uses and limitations in political research. *Eur. J. Political Res.* 37 (1), 103–113.
- Campbell, A., Converse, P.E., Miller, W.E., Stokes, D.E., 1960. *The American Voter*. Wiley, New York, NY.
- Carlin, R., Love, G., 2013. The politics of interpersonal trust and reciprocity: An experimental approach. *Political Behav.* 35 (1), 43–63.
- Carlin, R.E., Love, G.J., 2018. Political competition, partisanship and interpersonal trust in electoral democracies. *Br. J. Political Sci.* 48 (1), 115–139.
- Cohen, G.L., 2003. Party over policy: The dominating impact of group influence on political beliefs. *J. Pers. Soc. Psychol.* 85 (5), 808–822.
- Curini, L., 2010. Experts' political preferences and their impact on ideological bias: An unfolding analysis based on a Benoit-Laver expert survey. *Party Politics* 16 (3), 299–321.
- Ditto, P.H., Scepansky, J.A., Munro, G.D., Apanovitch, A.M., Lockhart, L.K., 1998. Motivated sensitivity to preference-inconsistent information. *J. Personal. Soc. Psychol.* 75 (1), 53–69.
- Elmelund-Præstekær, C., Svensson, H.M., 2014. Ebbs and flows of negative campaigning: A longitudinal study of the influence of contextual factors on Danish campaign rhetoric. *Eur. J. Commun.* 29 (2), 230–239.
- Fridkin, K.L., Kenney, P.J., 2011. Variability in citizens' reactions to different types of negative campaigns. *Am. J. Political Sci.* 55 (2), 307–325.
- Garramone, G.M., 1984. Voter responses to negative political ads. *J. Q.* 61 (2), 250–259.
- Garzia, D., Frederico, F., Maye, S., 2023. Affective polarization in comparative and longitudinal perspective. *Public Opin. Q.* 87 (1), 219–231.
- Gidron, N., Adams, J., Horne, W., 2019. Toward a comparative research agenda on affective polarization in mass publics, 29. pp. 30–36, APSA Comparative Politics Newsletter.
- Greene, S., 1999. Understanding party identification: A social identity approach. *Political Psychol.* 20 (2), 393–403.
- Grossmann, M., 2009. Going pro? Political campaign consulting and the professional model. *J. Political Mark.* 8 (2), 81–104.
- Harteveld, E., 2021. Fragmented foes: Affective polarization in the multiparty context of the Netherlands. *Elect. Stud.* 71, 102332.
- Heider, F., 1958. *The Psychology of Interpersonal Relations*. Wiley, New York.
- Huddy, L., Bankert, A., Davies, C., 2018. Expressive versus instrumental partisanship in multiparty European systems. *Political Psychol.* 39 (S1), 173–199.
- Iyengar, S., Lelkes, Y., Levendusky, M., Malhotra, N., Westwood, S.J., 2019. The origins and consequences of affective polarization in the United States. *Annu. Rev. Political Sci.* 22 (1), 129–146.
- Iyengar, S., Sood, G., Lelkes, Y., 2012. Affect, not ideology: A social identity perspective on polarization. *Public Opin. Q.* 76 (3), 405–431.

- Iyengar, S., Westwood, S.J., 2015. Fear and loathing across party lines: New evidence on group polarization. *Am. J. Political Sci.* 59 (3), 690–707.
- Jasperson, A.E., Fan, D.P., 2002. An aggregate examination of the backlash effect in political advertising: The case of the 1996 U.S. senate race in minnesota. *J. Advert.* 31 (1), 1–12.
- Judd, C.M., Kenny, D.A., Krosnick, J.A., 1983. Judging the positions of political candidates: Models of assimilation and contrast. *J. Personal. Soc. Psychol.* 44 (5), 952–963.
- Kinder, D.R., 1978. Political person perception: The asymmetrical influence of sentiment and choice on perceptions of presidential candidates. *J. Personal. Soc. Psychol.* 36 (8), 859–871.
- Kunda, Z., 1990. The case for motivated reasoning. *Psychol. Bull.* 108 (3), 480–498.
- Lau, R.R., Andersen, D.J., Ditonto, T.M., Kleinberg, M.S., Redlawsk, D.P., 2017. Effect of media environment diversity and advertising tone on information search, selective exposure, and affective polarization. *Political Behav.* 39 (1), 231–255.
- Lelkes, Y., Sood, G., Iyengar, S., 2017. The hostile audience: The effect of access to broadband internet on partisan affect. *Am. J. Political Sci.* 61 (1), 5–20.
- Levendusky, M., 2009. *The Partisan Sort: How Liberals Became Democrats and Conservatives Became Republicans*. University of Chicago Press, Chicago.
- Mair, P., 2001. Searching for the position of political actors: A review of approaches and a critical evaluation of expert surveys. In: Laver, M. (Ed.), *Estimating the Policy Positions of Political Actors*. Routledge, London.
- Maranto, R., Woessner, M.C., 2012. Diversifying the academy: How conservative academics can thrive in liberal academia. *PS: Political Sci. Politics* 45, 469–474.
- Martin, P.S., 2004. Inside the black box of negative campaign effects: Three reasons why negative campaigns mobilize. *Political Psychol.* 25 (4), 545–562.
- Martini, S., Torcal, M., 2019. Trust across political conflicts: Evidence from a survey experiment in divided societies. *Party Politics* 25 (2), 126–139.
- Nai, A., 2020. Going negative, worldwide: towards a general understanding of determinants and targets of negative campaigning. *Government and Opposition* 55 (3), 430–455.
- Nai, A., 2023. *The Negative Campaigning Comparative Expert Survey (NEGex), Release 2.0*, University of Amsterdam, <https://doi.org/10.17605/OSF.IO/MEKWG>.
- Nai, A., Maier, J., 2020. Dark necessities? Candidates' aversive personality traits and negative campaigning in the 2018 American midterms. *Electoral Stud.* 68, 102233.
- Nai, A., Maier, J., 2023. Mediatized campaign attacks fuel affective polarization if perceived as negative: Experimental evidence with American voters. *Int. J. Commun.* 17.
- Nai, A., Medeiros, M., Maier, M., Maier, J., 2022. Euroscepticism and the use of negative, uncivil and emotional campaigns in the 2019 European parliament election: A winning combination. *Eur. Union Politics* 23 (1), 21–42.
- Nai, A., Walter, A. (Eds.), 2015. *New Perspectives on Negative Campaigning: Why Attack Politics Matters*. ECPR Press, Colchester.
- Nicholson, S.P., 2012. Polarizing cues. *Am. J. Political Sci.* 56 (1), 52–66.
- Petersen, M.B., Skov, M., Serritzlew, S., Ramsøy, T., 2013. Motivated reasoning and political parties: Evidence for increased processing in the face of party cues. *Political Behav.* 35 (4), 831–854.
- Pinkleton, B., 1997. The effects of negative comparative political advertising on candidate evaluations and advertising evaluations: An exploration. *J. Advert.* 26 (1), 19–29.
- Reiljan, A., 2020. 'Fear and loathing across party lines' (also) in Europe: Affective polarisation in European party systems. *Eur. J. Political Res.* 59 (2), 376–396.
- Roese, N.J., Sande, G.N., 1993. Backlash effects in attack politics. *J. Appl. Soc. Psychol.* 23 (8), 632–653.
- Shen, F., Wu, H.D., 2002. Effects of soft-money issue advertisements on candidate evaluation and voting preference: An exploration. *Mass Commun. Soc.* 5 (4), 395–410.
- Sigelman, L., Kugler, M., 2003. Why is research on the effects of negative campaigning so inconclusive? understanding citizens' perceptions of negativity. *J. Polit.* 65 (1), 142–160.
- Somer-Topcu, Z., 2015. Everything to everyone: The electoral consequences of the broad-appeal strategy in Europe. *Am. J. Political Sci.* 59 (4), 841–854.
- Steenbergen, M.R., Marks, G., 2007. Evaluating expert judgments. *Eur. J. Political Res.* 46 (3), 347–366.
- Taber, C.S., Cann, D., Kucsova, S., 2009. The motivated processing of political arguments. *Political Behav.* 31 (2), 137–155.
- Taber, C.S., Lodge, M., 2006. Motivated skepticism in the evaluation of political beliefs. *Am. J. Political Sci.* 50 (3), 755–769.
- Tajfel, H., 1974. Social identity and intergroup behaviour. *Soc. Sci. Inf.* 13 (2), 65–93.
- Tajfel, H., Billig, M.G., Bundy, R.P., Flament, C., 1971. Social categorization and intergroup behaviour. *Eur. J. Soc. Psychol.* 1 (2), 149–178.
- Tajfel, H., Turner, J.C., 1979. An integrative theory of intergroup conflict. In: Austin, W., Worchel, S. (Eds.), *The Social Psychology of Intergroup Relations*. Brooks/Cole, Monterey, CA, pp. 33–37.
- Volkens, A., Burst, T., Krause, W., Lehmann, P., Matthieß, T., Merz, N., Regel, S., Weßels, B., Zehnter, L., 2021. *The manifesto data collection. Manifesto project (MRG/CMP/MARPOR)*. version 2021a. Wissenschaftszentrum Berlin für Sozialforschung, Berlin.
- Wagner, M., 2021. Affective polarization in multiparty systems. *Elect. Stud.* 69, 102199.
- Walter, A.S., van der Eijk, C., 2019. Measures of campaign negativity: Comparing approaches and eliminating partisan bias. *Int. J. Press/Politics* 24 (3), 363–382.
- Westwood, S.J., Iyengar, S., Walgrave, S., Leonisio, R., Miller, L., Strijbis, O., 2018. The tie that divides: Cross-national evidence of the primacy of partyism. *Eur. J. Political Res.* 57 (2), 333–354.
- Wright, J.D., Tomlinson, M.F., 2018. Personality profiles of Hillary Clinton and Donald Trump: Fooled by your own politics. *Pers. Individ. Differ.* 128, 21–24.
- Yoon, K., Pinkleton, B.E., Ko, W., 2005. Effects of negative political advertising on voting intention: An exploration of the roles of involvement and source credibility in the development of voter cynicism. *J. Mark. Commun.* 11 (2), 95–112.