Polarization but Not Populism Strengthens the Association Between Presidential Election Results and Emotions*

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Abstract

We investigate whether election results are associated with emotional reactions among voters across democracies and under what conditions these responses are more intense. Building on recent work in comparative politics, we theorize that emotional intensity is stronger after elections involving populist candidates and highly polarized parties. We test these expectations with a big-data analysis of emotional reactions on parties' Facebook posts during 29 presidential elections in 26 democracies. The results show that ideological polarization of political parties might intensify emotional reactions, but there is no clear relationship with the presence of populist candidates.

Keywords: Election, Emotion, Ideological Polarization, Populism

Word Count: 9,104

*We thank Jim Adams, Randy Stevenson, and Nina Wiesehomeier for their helpful comments. Previous versions of this paper were presented at the 2021 APSA and 2022 MPSA meetings. Funding for this project was provided by the National Science Foundation (2215008), the Carnegie Corporation of New York (G-23-60440), and the Weidenbaum Center on the Economy, Government, and Public Policy.

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Introduction

Emotions are powerful drivers of political behavior (Bakker, Schumacher and Rooduijn 2021; Gadarian and Brader 2023; Marcus, Neuman and MacKuen 2000; Webster and Albertson 2022). Extensive studies have shown that various discrete emotions can have different implications for how voters behave. For example, anger can increase political participation (Valentino, Wayne and Oceno 2018; Valentino et al. 2011; *cf.* Phillips and Plutzer 2023), lower trust in government (Webster 2020), and encourage people to discard information inconsistent with their prior beliefs (Suhay and Erisen 2018; Weeks 2015). Fear and anxiety can increase information seeking and make voters more open to persuasion (Brader 2005; Clifford and Jerit 2018), although this process may be biased (Albertson and Gadarian 2015). Enthusiasm, in turn, can spur various forms of political involvement (Heiss 2021; Marcus and MacKuen 1993), while too much enthusiasm can pose a danger to democracy by making voters reluctant to listen to alternative viewpoints (Gadarian and Brader 2023; Poe 2022).[1]

If emotions play such an important role in determining voter behavior, discovering how political forces — including salient political events, like elections — trigger more or less intense emotions becomes a critical task (Vasilopoulos et al. 2019; Wayne 2023). However, despite the emerging consensus that emotions matter in politics, there is little comparative research on how voters *respond* emotionally to political events beyond rare and dramatic incidents like terrorist attacks (Vasilopoulos et al. 2019). Elections, in particular, loom large as a potential source of emotions, since they occur regularly and are the central focus of political activity in most democracies. As we discuss below, previous research has also documented a winner-loser gap in voter reactions to election outcomes (Anderson and Tverdova 2001; Anderson and Mendes 2006), which some scholars have posited may be related to emotional responses to election victories or losses (c.f. Kinari et al. 2019; Pierce, Rogers and Snyder 2016). Yet, there is limited empirical evidence on how voters emotionally respond to election outcomes. Only a handful of case studies directly address this question, and there

[1]For a meta-analysis on these discrete emotions, see Funck and Lau (2023).

are virtually no cross-national studies because it is difficult to trace the dynamics of party supporters' emotions during election periods (Gidron, Adams and Horne 2020; Heiss 2021).

In this article, we overcome this limitation by utilizing emotional "reactions" expressed on parties' social media pages and examine cross-nationally how election results predict voter emotions. We then explore why some elections are associated with stronger emotional responses than others. We theorize that two factors may systematically moderate election-induced changes in emotions: populism and ideological polarization. Populism is an emotionally charged rhetorical feature of political discourse that contrasts the pure people with corrupt elites (Inglehart and Norris 2016; Mudde 2009) and can trigger great emotional responses among message receivers (Jost, Maurer and Hassler 2020; Marx 2020; Wirz 2018). Ideological polarization, by contrast, refers to the process in which elites from different parties become more ideologically distinct from one another (Druckman, Peterson and Slothuus 2013). This can raise the stakes of winning elections and influence the extent to which voters dislike out-partisans (Ward and Tavits 2019) – a phenomenon known as affective polarization (Iyengar, Sood and Lelkes 2012; Gidron, Adams and Horne 2020). Although ample evidence suggests that both populism and polarization are tied to strong emotions, how these two factors condition voters' emotional responses to election outcomes remains unresolved.

To test our argument, we adopt a comparative approach and explore voters' emotional responses to 29 presidential elections in 26 countries. We employ a big-data analysis of emotional reactions on social media, which is increasingly used to measure aggregate emotional responses to political events (Eberl et al. 2020; Muraoka et al. 2021; Rathje, Van Bavel and van der Linden 2021). Analyzing two reaction features – Love and Angry – on the Facebook pages of parties of the presidential candidates, we begin by empirically describing how positive and negative emotional responses to an election differ: while the proportion of Love reactions significantly changes after an election for both the winning and losing candidate, there is no significant change in the proportion of Angry reactions. However, when interacting elections with measures of populism and ideological polarization, we find much cleaner

patterns. Specifically, high polarization is associated with strong and systematic changes in the proportions of Love and Angry reactions. In contrast, we find no clear evidence of an association between the presence of a populist party and post-election emotions.

This study makes several novel contributions. To begin, we offer the first large-scale cross-national test of whether and how supporters of winner and loser parties react emotionally to the results of presidential elections. Second, we contribute to the study of populism and polarization – arguably the two most prominent features of contemporary politics (Inglehart and Norris 2016; Iyengar, Sood and Lelkes 2012). While both phenomena are associated with strong emotions, our results show that in the context of presidential elections around the world, ideological polarization may be more consequential than populism in shaping voters' emotional responses to election outcomes. Last, our study provides additional evidence that user reactions on social media can provide insight into aggregate public responses to key political events.

Post-Election Emotions, Populism, and Polarization

Elections can be emotionally charged events, especially for active supporters of winning and losing parties. One well-studied example of this phenomenon is the 2016 US presidential election. Several psychological and clinical studies reported major emotional changes among American voters after the election (Oc, Moore and Bashshur 2018) and suggested that Trump's victory resulted in "post-election stress disorder" among those who voted for the Democratic party (McCarthy and Saks 2019), documenting upsurges in distress symptoms (e.g., anxiety, depression, etc.) (Hoyt et al. 2018). These reactions are important as they may have downstream effects on attitudes toward politics and political institutions. For instance, the literature on the winner-loser gap in voter attitudes demonstrates how supporters of winning and losing parties display different attitudes and behaviors post-election, including institutional trust, satisfaction with democracy, and willingness to participate in politics (Anderson and Mendes 2006; Blais and Gélineau 2007; Esaiasson 2011; Singh, Karakoç and

Blais 2012).

Yet, the period after an election is not always emotionally charged. In fact, the 2016 US presidential election is often seen as exceptional in that regard (e.g., Sances 2019). Hence, many elections may engender a more muted emotional response. What then predicts the magnitude of emotional reactions to election results? Why is the post-election period more emotionally charged in some cases than others?

The literature suggests that two factors may be particularly important in moderating voters' reactions to election outcomes. One is the involvement of a populist party or candidate, and the other is the ideological polarization of the competitors.[2] Arguably, a common theoretical ground that unifies these two factors is that both populism and polarization create a division between "us" and "them" and eventually influence how voters react to election outcomes. But they do this through different mechanisms: populism through the rhetorical portrait of the people vs. the elite while polarization through policy divide and affective partisan identity (Uscinski et al. 2021).

Starting with populism, one important characteristic of populist communication is that it rhetorically creates a division between the people and the elite and, by so doing, stirs up people's emotions (Jost, Maurer and Hassler 2020; Wirz 2018). In this way, it is inherently more emotional than mainstream party rhetoric (Nai 2021; Widmann 2021) and may trigger intense emotional reactions among receivers. Indeed, several experimental studies (Marx 2020; Wirz 2018) find that populist appeals demonstrating politicians' engagement with the people can effectively elicit positive emotions, such as hope and pride. Conversely, populist appeals portraying the elite in a negative light may elicit negative emotions, like anger and fear. One notable study supporting this view is Jost, Maurer and Hassler (2020), which analyzes the populist rhetoric of German political parties on Facebook and finds that posts referring to the ordinary people tend to receive a large number of Love reactions, while posts referencing the elite receive a large number of Angry reactions.

[2]We also examine whether close election outcomes affect voters' reactions and do not find systematic patterns. See Appendix A for more details.

We expect that the division between the people and the elite that populists agitate during the election campaign prepares the ground for voters' intense emotional reactions after elections. This can occur because political conflict that populists emphasize raises the stakes of winning and losing. Specifically, the supporters of populist parties may respond to the defeat of the ruling elite with great enthusiasm, while to the maintenance of the establishment with great anger. By contrast, the supporters of mainstream parties that populists attack may feel relieved with the failure of populists while emotionally threatened and disturbed by the success of populist opponents. Moreover, these emotional patterns would be further reinforced by different ways in which party elites react to early vote-counting results in elections with and without populist involvement. In short, our expectation is:

> H1: Election outcomes are associated with greater emotional responses when at least one party adopts populist rhetoric.

Similarly, ideological polarization may also induce significant post-election emotional responses. Highly polarized elite environments make partisans more likely to believe that opposing parties represent various forms of threats. These are often conceived of as threats to the core of their social identities, something that jeopardizes the positive standing of their in-group (Huddy, Bankert and Davies 2018; Mason 2015). However, they can also encompass more broad policy-based threats because large ideological differences between parties mean that they pursue vastly different policy agendas (Banda and Cluverius 2018; Ward and Tavits 2019).

Succinctly, greater elite polarization may be associated with a more intense emotional response to information that threatens voters' partisan identities and issue stances. Since winning or losing an election provides the most direct signal of status loss and the identity/policy threats posed by out-parties (Ward and Tavits 2019), it is reasonable to expect that elections under highly polarized environments are more likely to induce greater emotional reactions than those without. To the extent that party elites should also perceive the same threats, the rhetoric they employ immediately following polarized elections would

further magnify party supporters' emotional reactions. In sum, our second expectation is:

> H2: Election outcomes are associated with greater emotional responses when the ideological polarization of competing parties is high relative to when it is low.

Research Design

In order to provide a systematic comparison between elections in multiple contexts, we pool data across a large set of presidential races around the world.[3] This allows us to leverage variation in the involvement of populist parties as well as the ideological polarization of competing parties. To assess emotional reactions to elections in these disparate contexts, we adopt a big-data approach and analyze more than 15 million reactions to 6,000+ Facebook posts of political parties before and after elections. This allows us to trace the emotional changes of party supporters over the course of presidential elections and their aftermaths, which is difficult to accomplish using other approaches. For example, the most widely used measure of voters' feelings toward parties – thermometer scales from survey research – only gives a snapshot of voter emotions at the level of country-year (Gidron, Adams and Horne 2020). Likewise, the costs of running original surveys often limit researchers to conduct only a two-wave survey on emotions in pre- and post-election periods in a small number of countries (Heiss 2021).

Facebook reactions and emotions

We rely on the Comparative Party Social Media Dataset (Muraoka et al. 2021), which provides post-level data on the public Facebook pages of parties and electoral coalitions in 79 democracies, collected through Facebook's CrowdTangle API (CrowdTangle Team 2020). Since Facebook's reaction feature was introduced at the end of February 2016, we analyze

[3]We do not focus on parliamentary elections because it is difficult to objectively define clear winners and losers in these elections, see Laver and Schofield (1998); Martin and Vanberg (2011); Strom (1984).

all presidential elections that happened between March 2016 and January 2021. We limit our analysis to the Facebook pages of the winning party and the most competitive losing party (the party that received the second highest share of the vote). This is because winning or losing is often not a direct stake for the rest of the parties/candidates in presidential elections,[4] and there is reason to believe that supporters of these parties may react differently to election outcomes (Rosenstone, Behr and Lazarus 1996).

We initially collected data on all of the direct presidential elections that happened between March 2016 and January 2021. However, our final dataset is restricted to 52 parties in 29 presidential races across 26 countries, including two races in the US and three elections in Bosnia and Herzegovina (for the Bosniak, Croat, and Serb presidents). This reduction occurred because (1) some presidential candidates were independent, (2) some parties did not have a Facebook account, or (3) some parties' ideology or populist scores are not available in the Global Party Survey (GPS) (Norris 2019).[5]

Facebook currently includes seven reactions (Like, Love, Angry, Haha, Wow, Sad, and Care), and in this study we are interested in two of them: Love and Angry. Next to Like, these are the most widely used reactions and they convey a clear emotional connotation about how Facebook users respond to specific pieces of content (Muraoka et al. 2021).[6] Our outcomes are the relative shares of Love and Angry reactions over the sum of all reactions to the post.[7] We rescale these variables to range from 0 to 100.[8]

We conceptualize the proportions of Love and Angry as a measure of the emotional reactions to a party's posts, which reflect not just reactions to the text itself but also to the

[4]To illustrate this point, we compare the vote shares of the first to fourth placed candidates in our data in Appendix B.

[5]See Appendix C for the full list of parties and elections in our main analysis.

[6]This is not the case for the Like response, which is ambiguous, particularly in isolation, because it can denote not just positive emotions, but agreement with the content of the post. Thus, 'liking' a post with an angry message may actually indicate negative emotions. In fact, this ambiguity partly motivated Facebook to add other reactions (Chaykowski 2016).

[7]Note that since "Care" was introduced in March 2020, the way in which we compute the denominator changes before and after that month.

[8]Appendix D shows descriptive statistics of these two outcomes and the other reactions on Facebook in our data.

broader electoral dynamics at play.[9] First, as several studies have shown (Eberl et al. 2020; Muraoka et al. 2021; Rathje, Van Bavel and van der Linden 2021), the intensity of Love and Angry reactions is partly correlated with the messages and sentiment of the post, such as attacking the opponent and claiming electoral fraud. Furthermore, the two reactions reflect not just the content of a post but also users' sentiment toward a party at a given moment. For instance, simple announcements of campaign rallies and posts without explicit sentiments can sometimes garner significant proportions of emotional reactions, some of which may be seen as an expression of cheerleading and emotional support for the party.[10] Even when party posts contain positive emotional appeals, users can leave Angry reactions to express their anger against the posting party at a certain moment. In these instances, emotions expressed on the post could diverge from emotional reactions that parties intend to induce through their rhetoric. Overall, using the proportions of Love and Angry may capture part of the broader emotional status of supporters in the election's aftermath.

To validate our measurement strategy, we ran an original survey with a sample of 2,014 American adults recruited via Respondi.[11] The survey reminded subjects of the 2016 presidential election outcome and asked them to report their emotions with the Positive Negative Affect Schedule - Short Form (PANAS-SF) (Thompson 2007; Watson, Clark and Tellegen 1988), a widely-used and well-validated measure of emotions (Crawford and Henry 2004). The scale lists five positive emotions and five negative emotions and asks respondents to rate how strongly they feel each emotion on a 1-5 scale, one being the weakest. The ratings are summed and used to create separate scores for positive and negative emotions, each ranging from a minimum of five to a maximum of 25. After reporting their emotions, the subjects were asked to choose one of seven Facebook reactions (Like, Love, Care, Haha, Wow, Sad, Angry) that best describes their feelings.

[9] See Muraoka et al. (2021) for more discussions about this measurement and its potential limitations.

[10] For example, the Republican Party's posts that received the highest proportions of Love during the 2020 election were announcements of Trump's visits (see https://www.facebook.com/GOP/posts/10158314873020090 and https://www.facebook.com/GOP/posts/10158331488460090).

[11] See Appendix E for more information on the survey.

Figure 1: The Association between Positive and Negative Emotions and Subsequent Reaction Choices

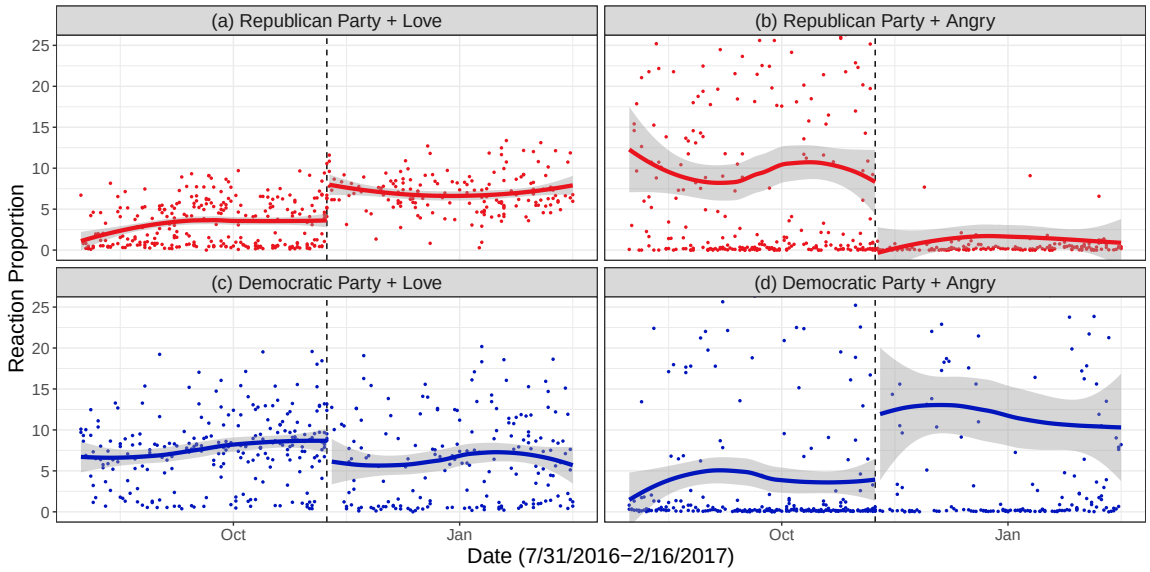
Note: The figure shows the association between positive and negative emotions reported by survey respondents and their choice of reactions used by Facebook that best described their feelings. The y-axis represents the PANAS score. The x-axis represents the reaction chosen by the subject. The dots indicate the average PANAS score and the lines indicate 95% confidence intervals.

Figure 1 displays the mean PANAS scores for positive and negative emotions, separated by the subject's choice of reaction. It is clear that Love and Angry stand out as indicators of positive and negative emotions, respectively. On average, subjects who chose Love report feeling more positive ($\mu = 21.03$) than those who chose different reactions. On the other hand, subjects who chose Angry report feeling more negative ($\mu = 16.74$) than others. Furthermore, the average difference between positive and negative emotions is largest for people who chose Love and Angry, meaning that among the seven reactions, Love and Angry are the least ambiguous indicators of strong emotional reactions.[12]

To further demonstrate the validity of this approach, we trace the emotional shifts of American voters around the 2016 election on the Facebook pages of the two parties. In Figure 2, the x-axis indicates ± 100 days of the election, and the y-axis is the relative share of the Love or Angry reactions over all other reactions on the Facebook post. Solid lines show overtime changes in the proportions of the Love and Angry reactions estimated with

[12] An important limitation of relying on Facebook's emotional reactions is that we cannot analyze the differential effects of sub-categories of positive and negative emotions (e.g., anger vs. fear).

Figure 2: Emotional Reactions on the Facebook Pages of the Republican Party and the Democratic Party around the 2016 US Presidential Election



Note: The figure compares the proportions of Love and Angry on the Facebook pages of the Republican Party and Democratic Party 100 days before and after the 2016 presidential election. Solid lines indicate fitted Loess curves estimated with a span of 1.2, and shaded areas show 95% confidence intervals. Vertical dashed lines indicate the election day (November 8th, 2016).

separate Loess regressions for the pre- and post-election periods.

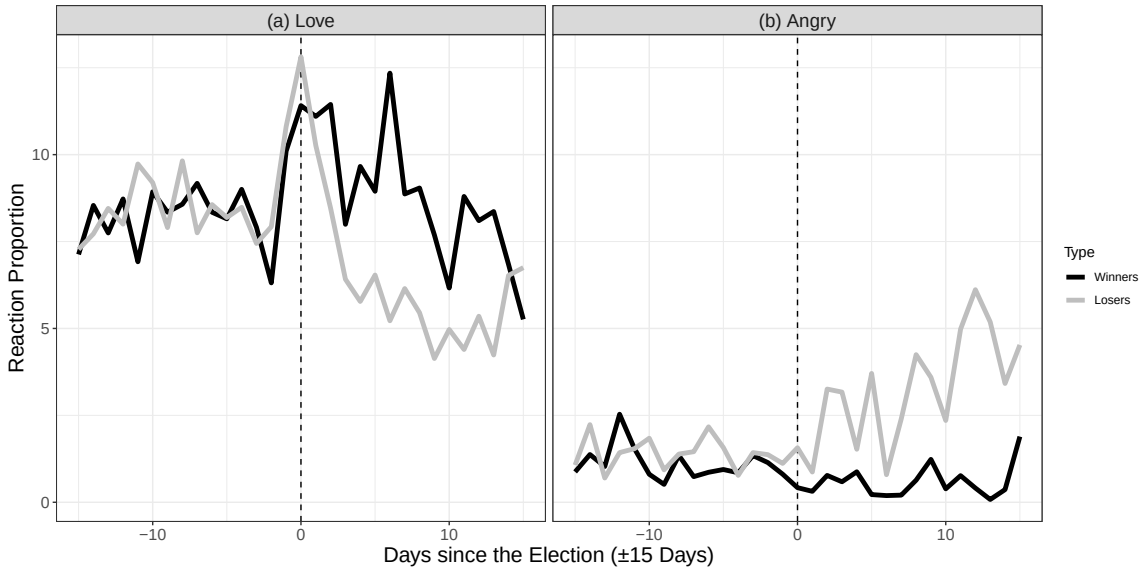
Figure 2 reveals a clear contrast in how emotional reactions on the two parties' Facebook pages evolved during the election. The top two panels show that there was a significant increase (decrease) in the proportion of the Love (Angry) reactions on the Republican Party's Facebook page right after the election. By contrast, the bottom panels show that the opposite was the case for the Democratic Party's page. In particular, there was a decrease in the proportion of the Love reactions, which was accompanied by an acute increase in the proportion of the Angry reactions.

Extending this to our full dataset, Figure 3 compares overtime changes in the proportions of Love and Angry reactions on the Facebook pages of winner and loser parties 15 days before and after the election.[13] Black lines show the daily averages of Love and Angry proportions pooled across all winner parties, while gray lines indicate those among loser parties. We see that emotional reactions on winners' and losers' Facebook pages are more different (but

[13]In Appendix G, we also compare the average number of posts between election winners and losers.

perhaps not dramatically so) from one another in the post-election period than in the pre-election period. Indeed, in line with what we observed in the 2016 US presidential election in Figure 2, there are contrasting patterns in how elections shape emotional responses to winners and losers. The left panel shows that there is an increase (decrease) in the proportion of Love among winner (loser) parties immediately after the election. By contrast, the right panel shows that the proportion of Angry on losers' pages tends to deviate from that of winners' pages after the election. Overall, both figures give face validity to the empirical approach we employ.[14]

Figure 3: The Daily Averages of Emotional Reactions on Parties' Facebook Pages 15 Days before and after the Presidential Election



Note: The figure shows the day-by-day averages of Love and Angry proportions on parties' Facebook pages 15 days before and after the election. Black lines indicate winners and gray lines losers. Vertical dashed lines indicate the day of the election.

Populism and polarization

We hypothesized that the within-winner and within-loser variations in post-election emotional reactions can be explained by two factors: whether a populist party is involved in the

[14]In Appendix F, we examine whether, in cross-national comparison, the 2016 US election was an extreme case in terms of emotional reactions and find this not to be the case. We also find that changes in Love and Angry reactions after the 2016 election are very similar in magnitude between the two parties.

presidential race or not and the ideological polarization of two competing parties. To measure the former, we rely on the Global Party Survey (GPS) (Norris 2019), which is an expert survey that covers 1,034 political parties in 163 countries and defines populist rhetoric as "a form of discourse or rhetoric making two core claims, namely that: (i) the only legitimate democratic authority flows directly from the people, and (ii) establishment elites are corrupt, out of touch, and self-serving, betraying the public trust and thwarting the popular will." We treat the party as populist if it scores at least 7.5 on a 0-10 continuous scale of populist discourse (Norris 2019).[15] We create an election-level measure of *Populist Involvement*, which takes the value of 1 if either of the two parties is populist and 0 otherwise. Of the 52 parties in our data, 29 parties are coded as populist. At the election level, 21 out of the 29 races involved at least one populist party.

To measure the ideological polarization of two competing parties, we rely on two ideological measures in the GPS. One is the economic positions of parties, which take values between 0 (Extreme Left/Pro-State) and 10 (Extreme Right/Pro-Market), and the other is the parties' social/cultural positions, which range from 0 (Liberal) to 10 (Conservative). We calculate the Euclidean distance between the two parties on these two ideological dimensions and use it as the measure of ideological polarization. The empirical range of this variable is between 0.75 and 10.45 with a mean of 5.54. Presidential elections with the highest degrees of ideological polarization include Brazil 2018 (10.45), Costa Rica 2018 (8.32), and Uruguay 2019 (8.02), whereas elections with the lowest level of polarization include Paraguay 2018 (0.75), Bosnia and Herzegovina (Serb) 2018 (0.80), and the Philippines 2016 (0.96) (see Appendix H).[16]

[15] The question was: "Parties can also be classified by their current use of POPULIST OR PLURALIST rhetoric. POPULIST language typically challenges the legitimacy of established political institutions and emphasizes that the will of the people should prevail. By contrast, PLURALIST rhetoric rejects these ideas, believing that elected leaders should govern, constrained by minority rights, bargaining and compromise, as well as checks and balances on executive power. Where would you place each party on the following scale?" [0-10].

[16] In Appendix I, we show that our results hold even when we use another dataset to measure populism and polarization.

Modeling emotional change

First, we explore the (unconditional) difference in emotional reactions before and after an election by estimating the following regression:

$$y_{ip} = \alpha_p + \beta E_{ip} + \gamma_p T_{E=0,ip} + \delta_p T_{E=1,ip} + \eta \mathbf{X}'_{ip} + \epsilon_{ip} \tag{1}$$

where y_{ip} is the proportion of Love or Angry on party p's post i, E is a dummy variable indicating the pre-election (coded 0) or post-election period (coded 1), and $T_{E=0}$ and $T_{E=1}$ denote the day elapsed since the election. In the main analysis, we focus on 15 days before and after the election, hence the range of $T_{E=0}$ is between -15 and 0, whereas the range of $T_{E=1}$ is between 1 and 15.[17] Since parties' Facebook pages have different baselines and time trends for emotional reactions, we estimate random intercepts (α_p) and pre- and post-linear time trends (γ_p and δ_p) by party.

Our quantity of interest is the estimate of β, which captures the extent to which emotional reactions on Facebook posts "jump" on the day after the election, independent of election/party differences and pre-/post-election linear trends. Our theoretical argument above anticipates that these jumps will be jointly explained by changes in supporters' reactions to the election and to any significant shift in the content of the posts themselves. We are not treating elections as exogenous events because voters know when an election would take place and can adjust their emotions accordingly. Furthermore, the content of the posts by parties is also endogenous to election outcomes, which in turn could affect how people respond to them. Consequently, we cannot assume that elections trigger truly exogenous shocks to voters' emotions, unlike other unforeseeable events, such as natural disasters and terrorist attacks. For instance, if voters' anticipation of election outcomes lessens the intensity of their emotional reactions post-election, our estimates would be biased downward

[17] Our assumption is that the ± 15 days window allows us to maximize the number of observations. In Appendix J, we validate this assumption. In Appendix K, we show that our findings are robust to the use of alternative time windows.

and more conservative. Overall, the estimates of β reported in this paper do not necessarily capture the causal effects of elections but should be interpreted as descriptive evidence consistent with our theoretical predictions.

Equation 1 includes several party- and election-level controls, denoted by $\mathbf{X}$. First, we include a dummy for the party of the incumbent president as the supporters of incumbent and challenger parties may have different reactions during elections. Second, we control for whether the presidential election occurred concurrently with the parliamentary election. Emotional reactions may vary depending on whether or not the presidential seat is the only position at stake. We also include a dummy indicator for whether the race was a runoff, which may change various aspects of election competitions, including the length of the race and the positions of competing candidates. Then, we add a dummy for semi-presidential systems as an important distinction made in the presidentialism literature (Tavits 2008).[18] Finally, we control for the effective number of candidates to account for the possibility that elections with clear two front-runners are different from other elections in which three or more candidates gain substantive vote shares.[19]

After establishing the unconditional differences, we move to testing how populist involvement and ideological polarization condition post-election changes in emotional responses (H1 and H2). To do so, we add to the original model the variables for populist involvement and ideological polarization as well as their respective interaction terms with post-election:

$$\begin{aligned} y_{ip} =& \alpha_p + \beta E_{ip} + \theta P_{ip} + \iota E_{ip} \times P_{ip} + \kappa I_{ip} + \nu E_{ip} \times I_{ip} \\ &+ \gamma_p T_{E=0,ip} + \delta_p T_{E=1,ip} + \eta \mathbf{X}'_{ip} + \epsilon_{ip} \end{aligned} \tag{2}$$

where P is a dummy indicator of whether either of the top two parties is a populist, and I indicates the ideological distance between the two parties. The direction and statistical significance of the interaction terms (ι and ν) tell us whether and how the two factors

[18] Descriptive statistics are in Appendix L.

[19] To compute this, we only use candidates who obtained more than 1% of the popular votes.

moderate the relationship between election outcomes and voter emotions.

We estimate separate models for winner and loser parties within a Bayesian inferential framework. We implement the estimation process in Stan (Bürkner 2017), using three chains and setting relatively uninformative priors on all parameters.[20] Summaries of the posterior distribution are based on 2,000 iterations from each chain after discarding the first 1,000 as burn-in. Gelman-Rubin $\widehat{R}$ statistics indicate that the models achieve apparent convergence.

Results

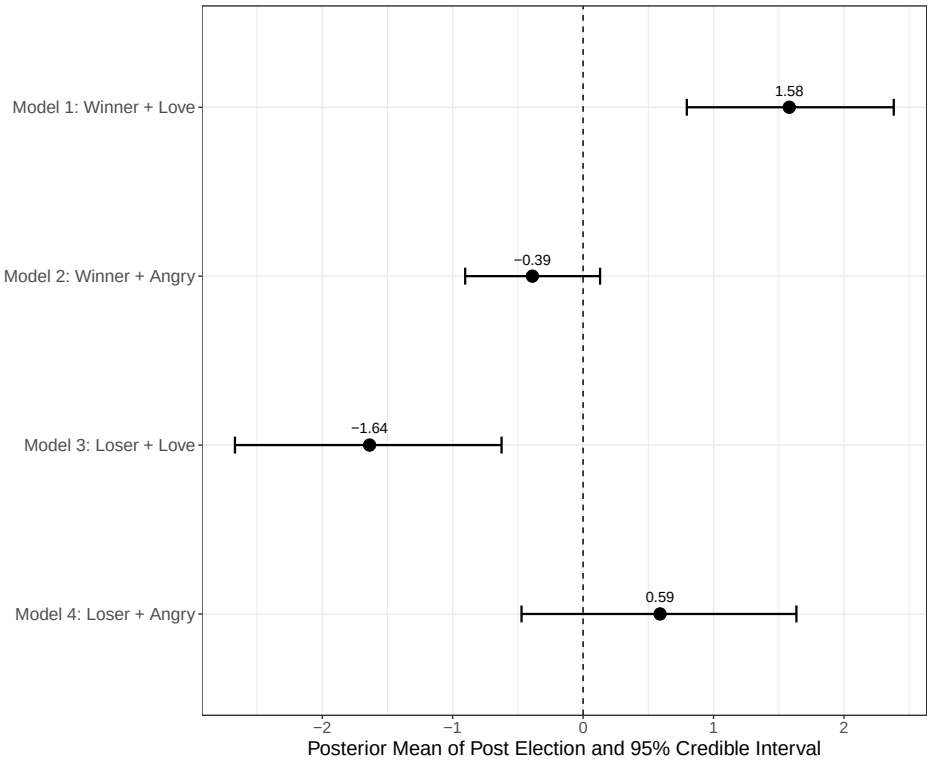
Do reactions change after elections? In Figure 4, models 1 and 2 focus on the proportions of Love and Angry on winner parties' Facebook pages, whereas models 3 and 4 analyze the same reactions on losers' pages (full specifications are in Appendix M, Table M.1). According to model 1 (top row), the posterior estimate of *Post Election* is 1.58 and statistically reliable with a 95% credible interval of [0.80, 2.38]. This means that Love reactions on winner parties' Facebook posts tend to increase by 1.58 percentage points immediately after the election. Given that the average pre-election proportion of Love among winners is 8.52, this difference corresponds to a 19% increase in positive emotions from the pre-election baseline.[21] By contrast, in model 2 (second row), we see that the posterior mean of *Post Election* is -0.39 with a 95% credible interval of $[-0.90, 0.13]$. This means that winners' Facebook pages tend to experience a 0.39 percentage point decrease in the proportion of Angry reactions following the election, although the credible interval includes zero.

Turning to the analysis of loser parties, model 3 (third row) shows that the posterior estimate of *Post Election* is negative and statistically reliable with a 95% credible interval of $[-2.67, -0.63]$. The estimated posterior mean is -1.64, meaning that Love reactions on losers' posts tend to decrease by 1.64 percentage points right after the election. Then, in model 4 (fourth row), we find that the posterior estimate of *Post Election* is not statistically reliable with a 95% credible interval of $[-0.47, 1.64]$, although the posterior mean points to

[20] We summarize the priors in Appendix M.

[21] It is calculated as $(1.58 + 8.52)/8.52 = 1.19$.

Figure 4: Post-Election Emotional Changes on the Facebook Pages of Election Winners and Losers



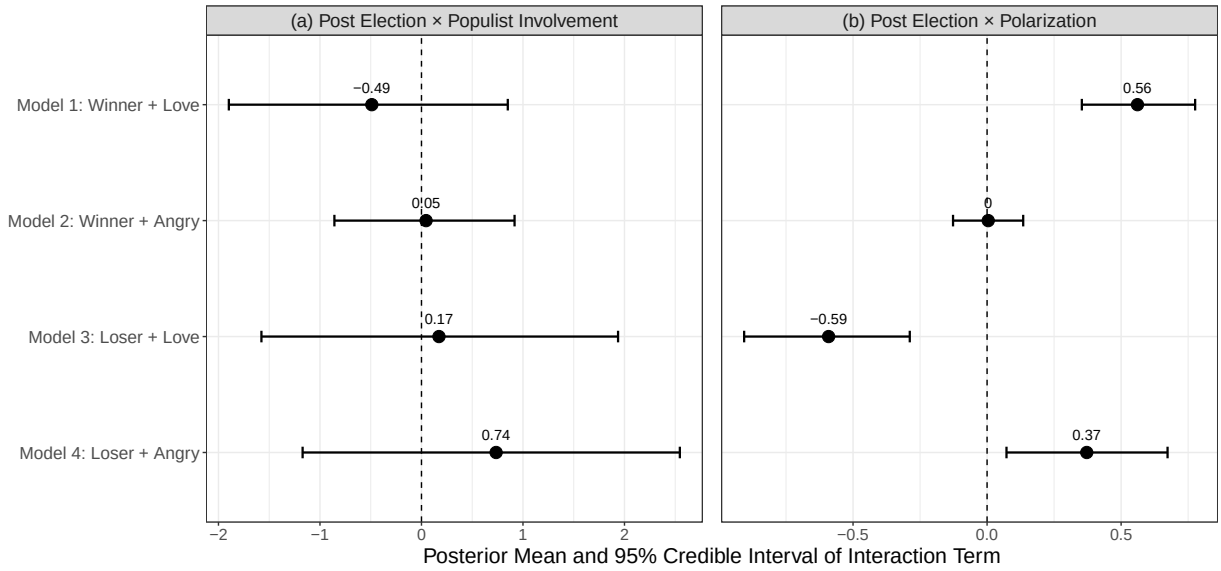
Note: This figure summarizes the posterior estimates of *Post Election* on Love and Angry proportions. $N = 3,587$ in winner models, and $N = 2,735$ in loser models. Horizontal bars indicate 95% credible intervals.

the expected positive sign. In terms of effect size, post-election shifts in emotional reactions are similar in magnitude between winners and losers, both for Love and Angry reactions.

Overall, the results of Figure 4 provide mixed pictures about the average change in voter emotion before and after an election. On the one hand, we observe clear shifts in positive emotions between the pre- and post-election periods among both the supporters of winning and losing parties. On the other hand, we fail to find statistically reliable changes in negative emotions, although the estimated change in Angry reactions points to the correct directions. These findings imply that only looking at the average change in reactions before and after an election glosses over important heterogeneity in how voters respond to different types of elections. We therefore turn to investigating the potential conditional effects.

Do populism and polarization condition the differences in voter emotions before and after

Figure 5: The Posterior Estimates of Post Election × Populist Involvement and Post Election × Polarization



Note: This figure summarizes the interaction terms of *Post Election* × *Populist Involvement* (left panel) and *Post Election* × *Polarization* (right panel). $N = 3,587$ in winner models, and $N = 2,735$ in loser models. Horizontal bars indicate 95% credible intervals.

an election? We present the results of the full interaction models in Appendix M, Table M.2. For easier interpretation, we here summarize the posterior estimates of the two interaction terms in Figure 5. In panel (a), we find that the posterior means of *Post Election* × *Populist Involvement* are not statistically reliable across all the models. This implies that the involvement of a populist party is unlikely to have a systematic influence on how voters respond to election outcomes, for both winning and losing parties, offering no support for H1.[22]

Turning to panel (b) of Figure 5, we summarize the posterior estimates of *Post Election* × *Polarization*. The directions of these estimates are largely consistent with our expectations in H2, and three of these estimates are statistically reliable. Specifically, according to the first and third rows, greater ideological polarization is associated with a greater increase

[22]In Appendix N, we show that alternative ways to measure populism do not change the results. These include (1) using alternative cutoffs for coding populist parties; (2) using the average or difference of populist scores between the two competing parties; (3) adding interactions between post-election and populism at the level of the party, as opposed to the election; and (4) testing for the possibility that the moderating roles of populism themselves are conditioned by another institutional factor, namely the quality of democracy (Rohrschneider 2002).

(decrease) in the proportion of Love (Angry) on winner (loser) parties' Facebook pages after the election. Further, the last row shows that a greater ideological polarization is correlated with a greater increase in Angry reactions among the supporters of losing parties right after the election. In short, ideological polarization seems to systematically condition the ways in which voters respond to election outcomes, which lends empirical support for H2.[23]

Crucially, ideological polarization does not only show more systematic moderating effects than populist involvement, but also its substantive effect size is much greater than that of populism. Indeed, according to the three models that return statistically reliable interaction effects between *Post Election* and *Polarization*, one standard deviation increase in ideological polarization (around 2.6-2.8) is sufficient to trigger much greater shifts in post-election emotions than switching from an election without a populist party to an election with one.

To take a closer look at the moderating roles of ideological polarization, Figure 6 plots the marginal effects[24] of *Post Election* on emotional reactions conditional on ideological polarization.[25] First, panel (a) shows that the marginal effect of elections on the proportion of Love among winner parties is not statistically discernible from 0 when the ideological polarization of the competing parties is 0. Only when polarization becomes greater than 3 do the supporters of winning parties react to election results with increases in Love reactions in a statically discernible manner. Next, panel (b) shows that the marginal effect of elections on Angry reactions on winners' Facebook pages is not statistically reliable for the entire range of polarization.

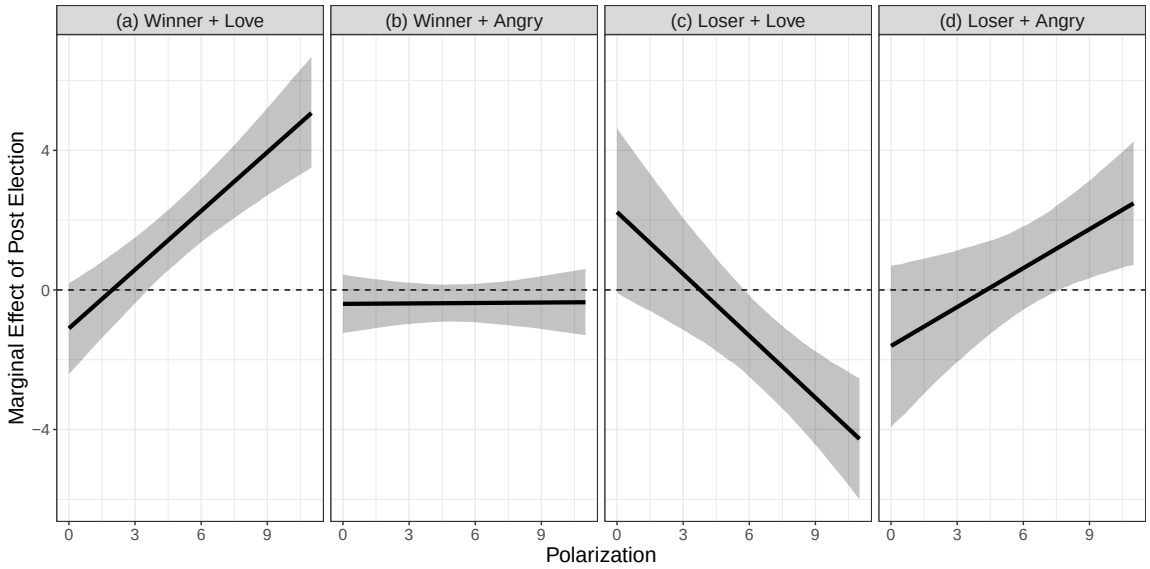
In panel (c) of Figure 6, we see that when ideological polarization is low, elections are not discernibly related to the proportion of Love reactions on losers' Facebook pages. But as ideological polarization increases, the marginal effect of elections becomes negative and

[23] In Appendix O, we disentangle the moderating roles of polarization in the economic and social dimensions and find that both types of polarization are equally important to explain the intensity of post-election emotions.

[24] We denote these plots as "marginal effects" due to convention, but note that the causal effect of the election outcome on reactions is not identified in this study due to the correlation between election outcomes and changes in post content.

[25] We set the range of polarization to 0 and 11, which is roughly the range covered in our data. We also set *Populist Involvement* = 1, which is the modal value in the data.

Figure 6: The Marginal Effects of Post Election Conditional on Polarization



Note: This figure shows the marginal effects of *Post Election* on the proportions of Love and Angry on the Facebook pages of winners and losers conditional on the ideological polarization of the winner and loser parties. Shaded areas indicate 95% credible intervals.

statistically reliable, and its effect size grows in magnitude. Finally, panel (d) shows that when polarization is low, elections do not seem to have any statistically reliable effect on the ways in which the supporters of losing parties respond to election outcomes with Angry reactions. It is only when ideological polarization is greater than around 8 that election outcomes have a substantive effect on the Angry reactions on loser parties' posts.

Note that comparing the four panels of Figure 6, the moderating effects of polarization tend to be stronger for Love than for Angry. One might argue that this result makes post-election emotions less concerning, because wide-spread negative emotions are generally believed to have more serious consequences on political climate and democratic stability than positive emotions. However, this might not be the case. In fact, as prior work on enthusiasm suggests (Poe 2022), great differences in the positive emotions between the winners and losers can make it more difficult for everyone to listen to the other side and consider alternative perspectives. This would result in further intensifying the already polarized political environment, making the operation of government more difficult, and eventually lowering

people's satisfaction with democracy.[26]

Conclusion

This study explores voters' emotional reactions to election outcomes in a comparative context. We first demonstrate that election outcomes are associated with predictable changes in positive emotions (Love) expressed on the Facebook pages of both winning and losing parties. By contrast, there is more limited evidence on post-election changes in negative emotions (Angry) even though they still point to expected directions. Interestingly, we observe that the magnitude of post-election emotional shifts is similar between winners and losers. We further find that ideological polarization systematically explains variation in emotional reactions among the supporters of winners and losers, while populism fails to do the same reliably. The conditional effects of polarization are much greater for the positive emotions than the negative ones.

The theoretical contributions of this study are straightforward. Our findings suggest that while both populism and ideological polarization facilitate political conflict between "us" and "them," in the cross-national context, the latter is more strongly associated with strong emotional reactions to election results. This may occur because polarization leads to great policy differences and identity threats, while populism only rhetorically emphasizes the division between the people and the elite. As a result, polarization may magnify the perceived consequences of elections (Ward and Tavits 2019), and therefore emotional responses, more than populism.

This illuminates an important limit of how far populism can influence voters' emotions and political attitudes. While studies show that populist messages can change people's emotions (Marx 2020; Wirz 2018), what our results suggest is that populist rhetoric itself may not be sufficient to determine voters' reactions to the broader electoral dynamics, including

[26]In Appendix P, we show that our findings are robust to excluding parties with somewhat extreme post-election emotional changes. In Appendix Q, we further test models that include three-way interactions between *Post Election*, *Populist Involvement*, and *Polarization*. We do not find any significant evidence that the effects of populism and polarization reinforce each other.

winning and losing. By extension, this implies that populism may not have clear downstream impacts on voters' institutional trust and satisfaction with democracy after elections.[27] If so, one can be more optimistic about the concern that the involvement of populists in elections deteriorates the quality of democracy. By contrast, our results for ideological polarization corroborate prior studies that warn about the negative consequences of polarization on various democratic attitudes (Ezrow and Xezonakis 2011; McCarty, Poole and Rosenthal 2006).

Our study comes with some empirical limitations. First, although we model emotional changes on the next day of the election, election results might not have been called by that day, at least in some cases. Second, since individuals can add reactions to posts anytime after they are posted, it could be the case that some people leave their reactions on pre-election posts after they learn election outcomes. To the extent this kind of behavior occurs, pre-election emotional reactions may be contaminated by election results. These two problems are most likely to lead to the underestimation of post-election changes in emotional reactions. Also, it is important to reiterate that our measures capture part of the broader emotional status and cannot fully identify the substantive direction of the emotional reactions (e.g. whether they are directed to the content of the posts or the posting party.)

Next, some studies point out that the demographic profiles of Facebook users are different from those of the average voter (Moretto et al. 2022). Although we lack direct evidence to suggest that the same problem applies to party supporters, we acknowledge the possibility that those who leave reactions on parties' Facebook pages may be different from typical party supporters. This means that there could be a trade-off between our ability to trace party supporters' emotions over the course of the election and the extent to which their emotions are representative of all party supporters.

Moreover, the meta-data associated with Facebook posts do not allow us to make definitive statements about mechanisms. For example, we do not test how much of our findings are explained by voters' direct responses to election results or by changes in elite rhetoric

[27] In line with this, evidence on how populism shapes satisfaction with democracy is mixed (Fahey, Allen and Alarian 2022; Harteveld et al. 2021).

on social media, which indirectly influence party supporters' reactions (Nai and Maier 2024; Silva, Schürmann and Proksch 2024).[28] That said, we attempt to address this concern by performing the preliminary analysis of post sentiments during the 2016 and 2020 US presidential elections in Appendix R. We find rather weak correlations between post sentiments and voters' reactions and interpret this to mean that changes in elite discourse before and after the election alone cannot explain our empirical findings.

The results of this study also open up various avenues for future research. First, strictly speaking, the conclusions we draw from this study only extend to presidential and semi-presidential democracies. Although this already amounts to a considerable contribution given the vibrant interest in electoral politics of presidential systems among comparativists (Mainwaring and Shugart 1997; Samuels and Shugart 2010; Tavits 2008), future studies should extend the analysis to legislative elections and parliamentary democracies.[29] A key challenge here is to come up with ways to measure winners and losers in parliamentary elections. Second, future research should help substantiate the causal nature of the empirical patterns we find using experimental evidence from multiple contexts. Finally, one important question that we did not address in this study is the role of elite discourse in shaping voter emotions after elections. It is possible that elites respond differently to election results depending on the degrees of ideological polarization, which in turn shapes voters' reactions in the aftermath of elections. This argument is reasonable because various studies show that elites strategically tailor their messages to mobilize certain emotions among voters (Jung 2020; Stapleton and Dawkins 2022), although our analysis in Appendix R indicates that if there is a strong reaction, it is not easily measurable. Fortunately, social media data already provide rich information that allows us to examine how elites respond to election outcomes

[28] In our framework, changes in the content of party posts are post-treatment to election results. This means that controlling for the post content would bias our estimates (Montgomery, Nyhan and Torres 2018). Ultimately, disentangling the direct and indirect "effects" of elections requires a different research design.

[29] In Appendix S, we compare the intensity of emotional reactions during presidential and legislative elections in a subset of the countries analyzed in this study and find that there are some interesting differences in pre-election emotions (but not post-election emotions) by the type of election. We also show that the countries with directly elected presidents that we use in this study are not different from the rest of the electoral democracies in terms of key economic, political, and party system characteristics.

and how it mediates voter reactions. The challenge we face is how to analyze unstructured texts on social media that are written in more than a dozen languages.

In sum, this study advances the understanding of the origins of emotional responses to politics by presenting the first comprehensive cross-national analysis of how supporters of winning and losing parties respond to presidential election outcomes. These results also speak to the moderating role of populism and polarization suggesting that, in the context of presidential elections worldwide, ideological polarization has a more significant impact on voters' emotional reactions than populism. Finally, this research provides additional evidence that social media user reactions can offer insights into public sentiment and collective responses to major political events, opening new avenues of future research in multiple domains.

References

Albertson, Bethany and Shana Kushner Gadarian. 2015. *Anxious Politics: Democratic Citizenship in a Threatening World*. New York: Cambridge University Press.

Anderson, Christopher J and Silvia M Mendes. 2006. "Learning to Lose: Election Outcomes, Democratic Experience and Political Protest Potential." *British Journal of Political Science* 36(1):91–111.

Anderson, Christopher J and Yuliya V Tverdova. 2001. "Winners, losers, and attitudes about government in contemporary democracies." *International political science review* 22(4):321–338.

Bakker, Bert N, Gijs Schumacher and Matthijs Rooduijn. 2021. "Hot Politics? Affective Responses to Political Rhetoric." *American Political Science Review* 115(1):150–164.

Banda, Kevin K and John Cluverius. 2018. "Elite Polarization, Party Extremity, and Affective Polarization." *Electoral Studies* 56:90–101.

Blais, André and François Gélineau. 2007. "Winning, Losing and Satisfaction with Democracy." *Political Studies* 55(2):425–441.

Brader, Ted. 2005. "Striking a Responsive Chord: How Political Ads Motivate and Persuade Voters by Appealing to Emotions." *American Journal of Political Science* 49(2):388–405.

Bürkner, Paul-Christian. 2017. "`brms`: An R Package for Bayesian Multilevel Models Using Stan." *Journal of Statistical Software* 80:1–28.

Chaykowski, Kathleen. 2016. "Facebook No Longer Just Has a 'Like' Button, Thanks To Global Launch Of Emoji 'Reactions'." *Forbes* .
URL: *https://www.forbes.com/sites/kathleenchaykowski/2016/02/24/facebook-no-longer-just-has-a-like-button-thanks-to-global-launch-of-emoji-reactions/?sh=30d497c692d6*

Clifford, Scott and Jennifer Jerit. 2018. "Disgust, Anxiety, and Political Learning in the Face of Threat." *American Journal of Political Science* 62(2):266–279.

Crawford, John R and Julie D Henry. 2004. "The Positive and Negative Affect Schedule (PANAS): Construct Validity, Measurement Properties and Normative Data in a Large Non-Clinical Sample." *British Journal of Clinical Psychology* 43(3):245–265.

CrowdTangle Team. 2020. CrowdTangle. Facebook, Menlo Park, California, United States. List ID: `GlobalPartyList`.

Druckman, James N, Erik Peterson and Rune Slothuus. 2013. "How Elite Partisan Polarization Affects Public Opinion Formation." *American Political Science Review* 107(1):57–79.

Eberl, Jakob Moritz, Petro Tolochko, Pablo Jost, Tobias Heidenreich and Hajo G Boomgaarden. 2020. "What's in a Post? How Sentiment and Issue Salience Affect Users' Emotional Reactions on Facebook." *Journal of Information Technology & Politics* 17(1):48–65.

Esaiasson, Peter. 2011. "Electoral Losers Revisited–How Citizens React to Defeat at the Ballot Box." *Electoral Studies* 30(1):102–113.

Ezrow, Lawrence and Georgios Xezonakis. 2011. "Citizen Satisfaction with Democracy and Parties' Policy Offerings." *Comparative Political Studies* 44(9):1152–1178.

Fahey, James J, Trevor J Allen and Hannah M Alarian. 2022. "When Populists Win: How Right-Wing Populism Affects Democratic Satisfaction in the UK and Germany." *Electoral Studies* 77:102469.

Funck, Amy S and Richard R Lau. 2023. "A Meta-Analytic Assessment of the Effects of Emotions on Political Information Search and Decision-Making." *American Journal of Political Science* .

Gadarian, Shana Kushner and Ted Brader. 2023. Emotion and Political Psychology. In *The*

Oxford Handbook of Political Psychology, ed. Leonie Huddy, David O. Sears, Jack S. Levy, and Jennifer Jerit. Oxford University Press pp. 191–247.

Gidron, Noam, James Adams and Will Horne. 2020. *American Affective Polarization in Comparative Perspective*. New York: Cambridge University Press.

Harteveld, Eelco, Andrej Kokkonen, Jonas Linde and Stefan Dahlberg. 2021. "A Tough Trade-Off? The Asymmetrical Impact of Populist Radical Right Inclusion on Satisfaction with Democracy and Government." *European Political Science Review* 13(1):113–133.

Heiss, Raffael. 2021. "The Affective Foundation of Political Opinion Expression on Social Media: A Panel Analysis." *International Journal of Public Opinion Research* 33(1):57–75.

Hoyt, Lindsay T, Katharine H Zeiders, Natasha Chaku, Russell B Toomey and Rajni L Nair. 2018. "Young Adults' Psychological and Physiological Reactions to the 2016 US Presidential Election." *Psychoneuroendocrinology* 92:162–169.

Huddy, Leonie, Alexa Bankert and Caitlin Davies. 2018. "Expressive versus Instrumental Partisanship in Multiparty European Systems." *Political Psychology* 39(1):173–199.

Inglehart, Ronald F and Pippa Norris. 2016. "Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash.".

Iyengar, Shanto, Gaurav Sood and Yphtach Lelkes. 2012. "Affect, not Ideology: A Social Identity Perspective on Polarization." *Public Opinion Quarterly* 76(3):405–431.

Jost, Pablo, Marcus Maurer and Joerg Hassler. 2020. "Populism Fuels Love and Anger: The Impact of Message Features on Users' Reactions on Facebook." *International Journal of Communication* 14:2081–2102.

Jung, Jae-Hee. 2020. "The Mobilizing Effect of Parties' Moral Rhetoric." *American Journal of Political Science* 64(2):341–355.

Kinari, Yusuke, Fumio Ohtake, Miles Kimball, Shoko Morimoto and Yoshiro Tsutsui. 2019. "Happiness before and after an Election: An Analysis based on a Daily Survey around Japan's 2009 Election." *Japan and the World Economy* 49:187–194.

Laver, Michael and Norman Schofield. 1998. *Multiparty Government: The Politics of Coalition in Europe*. Ann Arbor, MI: University of Michigan Press.

Mainwaring, Scott and Matthew Soberg Shugart. 1997. *Presidentialism and Democracy in Latin America*. New York: Cambridge University Press.

Marcus, George E and Michael B MacKuen. 1993. "Anxiety, Enthusiasm, and the Vote: The Emotional Underpinnings of Learning and Involvement during Presidential Campaigns." *American Political Science Review* 87(3):672–685.

Marcus, George E, W Russell Neuman and Michael MacKuen. 2000. *Affective Intelligence and Political Judgment*. Chicago, IL: University of Chicago Press.

Martin, Lanny W and Georg Vanberg. 2011. *Parliaments and Coalitions: The Role of Legislative Institutions in Multiparty Governance*. New York: Oxford University Press.

Marx, Paul. 2020. "Anti-Elite Politics and Emotional Reactions to Socio-Economic Problems: Experimental Evidence on 'Pocketbook Anger' from France, Germany, and the United States." *The British Journal of Sociology* 71(4):608–624.

Mason, Lilliana. 2015. "'I Disrespectfully Agree': The Differential Effects of Partisan Sorting on Social and Issue Polarization." *American Journal of Political Science* 59(1):128–145.

McCarthy, Kevin S and Joshua V Saks. 2019. "Postelection Stress: Symptoms, Relationships, and Counseling Service Utilization in Clients before and after the 2016 US National Election." *Journal of Counseling Psychology* 66(6):726–735.

McCarty, Nolan, Keith T Poole and Howard Rosenthal. 2006. *Polarized America: The Dance of Ideology and Unequal Riches*. Cambridge, MA: MIT Press.

Montgomery, Jacob M, Brendan Nyhan and Michelle Torres. 2018. "How Conditioning on Posttreatment Variables Can Ruin Your Experiment and What to Do about It." *American Journal of Political Science* 62(3):760–775.

Moretto, Marcio, Pablo Ortellado, Gabriel Kessler, Gabriel Vommaro, Juan Carlos Rodriguez-Raga, Juan Pablo Luna, Eduarth Heinen, Laura Fernanda Cely and Sergio Toro. 2022. "People Are More Engaged on Facebook as They Get Older, Especially in Politics: Evidence from Users in 46 Countries." *Journal of Quantitative Description: Digital Media* 2:1–20.

Mudde, Cas. 2009. *Populist Radical Right Parties in Europe*. Cambridge: Cambridge University Press.

Muraoka, Taishi, Jacob Montgomery, Christopher Lucas and Margit Tavits. 2021. "Love and Anger in Global Party Politics: Facebook Reactions to Political Party Posts in 79 Democracies." *Journal of Quantitative Description: Digital Media* 1:1–38.

Nai, Alessandro. 2021. "Fear and Loathing in Populist Campaigns? Comparing the Communication Style of Populists and Non-Populists in Elections Worldwide." *Journal of Political Marketing* 20(2):219–250.

Nai, Alessandro and Jürgen Maier. 2024. "The Wrath of Candidates. Drivers of Fear and Enthusiasm Appeals in Election Campaigns across the Globe." *Journal of Political Marketing* 23(1):74–91.

Norris, Pippa. 2019. The Global Party Survey, 2019. V1.0. https://www.GlobalPartySurvey.org.

Oc, Burak, Celia Moore and Michael R Bashshur. 2018. "When the Tables Are Turned: The Effects of the 2016 US Presidential Election on In-Group Favoritism and Out-Group Hostility." *Plos One* 13(5):1–16.

Phillips, Joseph and Eric Plutzer. 2023. "Reassessing the Effects of Emotions on Turnout." *The Journal of Politics* 85(3):1094–1106.

Pierce, Lamar, Todd Rogers and Jason A Snyder. 2016. "Losing Hurts: The Happiness Impact of Partisan Electoral Loss." *Journal of Experimental Political Science* 3(1):44–59.

Poe, Andrew. 2022. *Political Enthusiasm: Partisan Feeling and Democracy's Enchantments*. Manchester, UK: Manchester University Press.

Rathje, Steve, Jay J Van Bavel and Sander van der Linden. 2021. "Out-Group Animosity Drives Engagement on Social Media." *Proceedings of the National Academy of Sciences* 118(26):1–9.

Rohrschneider, Robert. 2002. "The Democracy Deficit and Mass Support for an EU-Wide Government." *American Journal of Political Science* 46(2):463–475.

Rosenstone, Steven J, Roy L Behr and Edward H Lazarus. 1996. *Third Parties in America: Citizen Response to Major Party Failure*. Princeton, NJ: Princeton University Press.

Samuels, David J and Matthew S Shugart. 2010. *Presidents, Parties, and Prime Ministers: How the Separation of Powers Affects Party Organization and Behavior*. New York: Cambridge University Press.

Sances, Michael W. 2019. "How Unusual Was 2016? Flipping Counties, Flipping Voters, and the Education–Party Correlation since 1952." *Perspectives on Politics* 17(3):666–678.

Silva, Bruno Castanho, Lennart Schürmann and Sven-Oliver Proksch. 2024. "Modulation of Democracy: Partisan Communication During and After Election Campaigns." *British Journal of Political Science* 54(2):339–354.

Singh, Shane, Ekrem Karakoç and André Blais. 2012. "Differentiating Winners: How Elections Affect Satisfaction with Democracy." *Electoral Studies* 31(1):201–211.

Stapleton, Carey E and Ryan Dawkins. 2022. "Catching My Anger: How Political Elites Create Angrier Citizens." *Political Research Quarterly* 75(3):754–765.

Strom, Kaare. 1984. "Minority Governments in Parliamentary Democracies: The Rationality of Nonwinning Cabinet Solutions." *Comparative Political Studies* 17(2):199–227.

Suhay, Elizabeth and Cengiz Erisen. 2018. "The Role of Anger in the Biased Assimilation of Political Information." *Political Psychology* 39(4):793–810.

Tavits, Margit. 2008. *Presidents with Prime Ministers: Do Direct Elections Matter?* Oxford, UK: Oxford University Press.

Thompson, Edmund R. 2007. "Development and Validation of an Internationally Reliable Short-Form of the Positive and Negative Affect Schedule (PANAS)." *Journal of Cross-Cultural Psychology* 38(2):227–242.

Uscinski, Joseph E, Adam M Enders, Michelle I Seelig, Casey A Klofstad, John R Funchion, Caleb Everett, Stefan Wuchty, Kamal Premaratne and Manohar N Murthi. 2021. "American Politics in Two Dimensions: Partisan and Ideological Identities versus Anti-Establishment Orientations." *American Journal of Political Science* 65(4):877–895.

Valentino, Nicholas A, Carly Wayne and Marzia Oceno. 2018. "Mobilizing Sexism: The Interaction of Emotion and Gender Attitudes in the 2016 US Presidential Election." *Public Opinion Quarterly* 82(S1):799–821.

Valentino, Nicholas A, Ted Brader, Eric W Groenendyk, Krysha Gregorowicz and Vincent L Hutchings. 2011. "Election Night's Alright for Fighting: The Role of Emotions in Political Participation." *The Journal of Politics* 73(1):156–170.

Vasilopoulos, Pavlos, George E Marcus, Nicholas A Valentino and Martial Foucault. 2019. "Fear, Anger, and Voting for the Far Right: Evidence from the November 13, 2015 Paris Terror Attacks." *Political Psychology* 40(4):679–704.

Ward, Dalston G and Margit Tavits. 2019. "How Partisan Affect Shapes Citizens' Perception of the Political World." *Electoral Studies* 60:102045.

Watson, David, Lee Anna Clark and Auke Tellegen. 1988. "Development and Validation of Brief Measures of Positive and Negative Affect: the PANAS Scales." *Journal of Personality and Social Psychology* 54(6):1063.

Wayne, Carly. 2023. "Terrified or Enraged? Emotional Micro-Foundations of Public Counterterror Attitudes." *International Organization* 77(4):824–847.

Webster, Steven W. 2020. *American Rage: How Anger Shapes Our Politics*. New York: Cambridge University Press.

Webster, Steven W and Bethany Albertson. 2022. "Emotion and Politics: Noncognitive Psychological Biases in Public Opinion." *Annual Review of Political Science* 25:401–418.

Weeks, Brian E. 2015. "Emotions, Partisanship, and Misperceptions: How Anger and Anxiety Moderate the Effect of Partisan Bias on Susceptibility to Political Misinformation." *Journal of Communication* 65(4):699–719.

Widmann, Tobias. 2021. "How Emotional Are Populists Really? Factors Explaining Emotional Appeals in the Communication of Political Parties." *Political Psychology* 42(1):163–181.

Wirz, Dominique. 2018. "Persuasion through Emotion? An Experimental Test of the Emotion-Eliciting Nature of Populist Eommunication." *International Journal of Communication* 12:1114–1138.