Media, Politics & Affect

dr. Mariken A.C.G. van der Velden,
https://orcid.org/0000-0003-0227-9183
Vrije Universiteit Amsterdam

Isabella Rebasso, MSc.
https://orcid.org/0000-0001-5810-6797
University of Amsterdam

Abstract

Ever since the seminal campaign of Lyndon B. Johnson in 1964 where Daisy was introduced, emotions are present in political campaigns and other political processes. Their effect used to be understudied by scholars of political communication, however, until the early 2000's. Scholars have demonstrated ample times that making emotional appeals matters for their electoral strategy. Moreover, it has been shown that specific emotions elicit behavioral effects on citizens. This review shows how emotions are applied by political elites, their effects on citizens as well as how to study these emotional appeals in political communication.

Introduction

One of the key determinants driving democratic elections is how political elites communicate their preferences to citizens (Dahl, 1971; Downs, 1957). Since the seminal work by Lazarsfeld, Berelson, and Gaudet (1944), it is common knowledge that in their communication, politicians aim to appeal to the emotions of citizens. Some might even say that emotions are key to the success of political ads (e.g. see Bakker, Schumacher, & Rooduijn, 2021; Brader, 2005, 2011). In the 1964 campaign of Lyndon B. Johnson versus Barry Goldwater, Johnson's campaign team crafted the advertise- ment, later to be known as *Daisy*, the *Daisy girl* or *Peace, Little Girl*. In this short televised advertisement, a little girl is standing in a meadow with chirping birds, picking the petals of a daisy while counting. When she reaches "nine", she pauses and a male voice is then heard saying "ten", at the start of a missile launch countdown. As the countdown continues, the movie clip zooms into the pupil of the girl's right eye. When the countdown reaches zero, the blackness of the pupil is replaced with a bright flash and thunderous sound of a nuclear explosion, while a voice-over from Johnson states: "These are the stakes! To make a world in which all of God's children can live, or to go into the dark. We must either love each other, or we must die." This is followed by the message "VOTE FOR PRESIDENT JOHNSON ON NOVEMBER 3RD", and adding, "The stakes are too high for you to stay home." This advertisement was only officially aired once in the 1964 campaign. Yet it goes down in history as not only the most controversial, it also is believed to be an important fac- tor in Johnson's landslide victory as well as an important turning point in political and advertising history. Not only because of the level of emotional appeals, but also because it

marked the start of a type of negative campaigning.

Nowadays, emotional appeals are the driving force of the type of advertising that dominates elections (e.g. see Borah, 2016; Chou & Lien, 20132). Emotional appeals "work". They can be powerful tools to mobilize citizens, to motivate or suppress their information seeking behavior and to promote certain attitudes. It is not hard to imagine why political elites might want to elicit distinct emotions to persuade and mobilize the electorate. While scholars initially mainly focused on political advertisement conveying a negative message and its impact on citizens (for overviews of the literature, see Haselmayer, 2019; Lau & Pomper, 2004), the field of political communication built upon knowledge gained in other fields (as shown in other chapters of this volume) to extend the research agenda beyond the content or tone of information. Brader (2005) took stock in this field, and was the first to test the role of emotion in campaign advertisements on democratically desirable behavior.

In this chapter, we will describe the state-of-the-art of emotions in the field of political communication: *how do political elites make use of and appeal to citizens' emotions as well as how do citizens respond to emotional rhetoric*? We will review how scholars after the seminal piece by Brader (2005) have studied the use (see Section When do Political Elites Use Emotions)and effect (see Section What are the Effects of Emotions on Citizens) of emotions in media and politics. We conclude with possible future directions of the field.

When do political elites use emotions?

Aiming for electoral gains, political parties, and politicians – i.e. political actors – toil to convey their message to the public (Dalton, Farrell, & McAllister, 2011). With electoral volatility on the rise (e.g. see Dalton, 2013) – meaning that political parties no longer can

count on a traditional support base – coupled with increased importance of political elites' ideas for voters' decision to cast their ballots (i.e. issue-based voting) (Carmines & Stimson, 1980; Walgrave, Lefevere, & Tresch, 2020), getting media attention is the key. After all, most voters do not meet political actors in real life. They form their judgments on politics and the political actors based on what they read, hear, and see in the media (e.g. Esser & Strömbäck, 2014). Hence, media coverage is detrimental for politicians to reach voters. The large field of agenda-setting (see, for example, Baumgartner & Jones, 1991, 2010; McCombs & Shaw, 1972, 1993) has shown that if political actors get media coverage, the media agenda follows the issues set by parties and politicians rather than vice versa. This in turn is important, because voters' perception of salience of particular issues is an important predictor of their vote choice (Green & Hobolt, 2008). Although political actors can also communicate with citizens directly or via social media, the most effective way to reach a larger audience is via mediated mass communication.

It is not easy to get the journalists' attention: Most messages from parties are ignored by journalists (Meyer, Haselmayer, & Wagner, 2020). Political actors have therefore professionalized their communication strategies (Strömbäck & Van Aelst, 2013) and "bombard" journalists with press releases on a daily basis to steer the media agenda (Van der Velden, Schumacher, & Vis, 2018). Because news media have a so-called carrying capacity as well as they also want to inform and entertain beyond politics, most messages get neglected (Haselmayer, Meyer, & Wagner, 2019; Helfer & Aelst, 2016; Meyer et al., 2020). Yet, some of these messages (according to Meyer et al., 2020, between 15% and 25% of the press releases sent) lead to actual coverage. It is not the case that when parties "throw enough mud, some will stick". Rather, when political actors emphasize particular news values, they are more likely to get media coverage (Haselmayer et al., 2019; Helfer & Aelst,

2016). News values encompass the idea that certain characteristics of a message determine its newsworthiness (for a recent overview, see Harcup & O'neill, 2017). Important news values are conflict, superlatives, and general negativity (Harcup & O'neill, 2017). Hence, speaking about conflict or framing your message such that conflict is emphasized between political actors, as well as general appeals to negativity, or using superlatives to describe an event sensationally, increases your chances to get news coverage, which, in turn, for political actors means a shot at rallying support for their stances, hopefully resulting in electoral gains.

Conducting an experiment with journalists from the Netherlands and Switzerland, Helfer and Aelst (2016) demonstrate that voicing criticism only slightly increases chances of selection. Conflict is everyday business in politics, and therefore does not spark journalists' attention. Popular phrasings as "if it bleeds, it leads", or "no news is good news" actually still hold. A large body of literature shows that, maybe despite the preferences of individual journalists, the tendency for news to be both sensationalist and negative is ingrained in the structure and practice of journalism (Shoemaker, Johnson, & Riccio, 2017). Hence, the tone of media coverage seems to be overwhelmingly and, increasingly, negative, because people are more interested in, or reactive to, negative information (Soroka & McAdams, 2015).

Yet, Soroka and Krupnikov (n.d.) argue that even if the trend seemed to be that negative news prevailed, positive news is likely to regain in popularity. Not only does the preference for negative information vary over time (Soroka, 2016), it also varies between individuals (Soroka, Fournier, & Nir, 2019). Moreover, in an attempt to maintain the uninterested audiences in today's high-choice media environment, the news media are increasingly mixing entertainment and political information (Holbert, 2005; Williams & Carpini, 2011). Tabloid journalism and so-called soft news are often disparaged for

appealing to readers' emotions and favoring the sensational over the socially and politically significant (Birks, 2017). Thus, appealing to a broader aspect of emotions, not only negativity, seems a successful formula to ensure media coverage.

Political actors have therefore adapted their communication strategy to align to news values that get coverage (Strömbäck & Van Aelst, 2013). Yet, they cannot (fully) control how they are covered in the media. For example, media reports tend to be more negative than party communication (Elmelund-Præstekær & Mølgaard-Svensson, 2014; Ridout & Walter, 2015). In a recent study, de Kleer and van der Velden (2021) also show that journalists, especially of traditional newspapers, drive parties' negative appeals: Political parties are more likely to make negative appeals toward other political actors in news articles than they are on their own social media channels. When talking about appealing to negativity, scholars typically investigate political actors' critiques on another candidate (Geer, 2006). This criticism can take on many forms and includes policy-based criticism, such as an opponent's program or past handlings of issues, as well as character-based criticism such as an opponent's qualifications or character traits (Benoit, 2017; Lau & Pomper, 2004).

These studies provide strong macro-level evidence for a structural negativity bias in the media, despite the fact Helfer and Aelst (2016) found that journalists in an experimental setting are not more likely to select conflict-oriented press releases for publication in the newspaper. Haselmayer et al. (2019) in addition demonstrates that "going negative" is especially a useful strategy for rank-and-file politicians – i.e. ordinary members of parliament, parliamentary candidates, party actors at the state and regional levels, heads of intra-party groups (e.g. youth organizations) and members of the European Parliament. For them, they are twice as likely to get covered by the media if they appeal to negativity. Press

releases sent by party elites – i.e. party leaders and ministers – already make it into the news: One out of three campaign messages, with negative messages not being more likely to attain media attention than positive ones (Haselmayer et al., 2019, p. 6). Hence, going negative, especially if a political actor is not a well-known political figure, increases its chances of getting coverage and, by extension, gets exposure to voters. The latter is important to them, as it increases the chances of the politician to get elected – i.e. the ends to which press releases are a means.

Moreover, appealing to negativity has additional benefits for political actors beyond their immediate impact on journalists. At least, many campaign advisors believe that appealing to negativity in general, but negative campaigning specifically, is an effective strategy for winning the elections (Lau & Pomper, 2004; Nai & Walter, 2015). This is why modern political advertisement is overwhelmingly negative in tone when researching US political advertisement (Geer, 2006; Soroka, 2014). At the same time, warnings that these negative political advertisements are undermining democracy persist: "Appeals to emotion instead of reason" are regarded as manipulative and poisonous (for example several contributions in this edited volume, see Kuklinski & Chong, 2001). Conducting a meta-analysis looking at the effects and consequences of negative political campaigns, Lau and Rovner (2009) found that negative campaigning pertaining intended turnout is negative, while the findings on actual turnout were positive. This indicates that at least within the context of the United States, the relationship between going negative and the legitimacy of democracy is inconclusive. A more recent paper suggests that individuals' tolerance for negativity affects whether or not it has detrimental ramifications for democracy (Nai & Maier, 2020).

In addition to an increase in negativity in campaign advertisements, the same pattern

is found for political speeches in the United States, Rhodes and Vayo (2019) showed compelling evidence, for the 1952–2016 period, that negative, fearful, and angry content in candidate statements about their opponents has been increasing over time among presidential candidates. The authors also suggest that fearful and angry rhetoric toward opponents is becoming more directed toward opponents' character flaws rather than their issue stances. This pattern is not found for speeches in the United States outside election times: In State of the Union speeches, politicians use a less negative tone (Kosmidis, Hobolt, Molloy, & Whitefield, 2019). Yet, this pattern is very different in the European context. Rheault, Beelen, Cochrane, and Hirst (2016) show that British politicians overwhelmingly use positive emotions when speaking in the House of Commons. In addition, Crabtree, Golder, Gschwend, and Indriđason (2020) show that in parties' manifestos, incumbent parties and ideologically moderate parties appeal more to positive emotions than opposition and extremist parties do.

These recent studies (e.g. Crabtree et al., 2020; Kosmidis et al., 2019; Pipal et al., Unpublished; Rheault et al., 2016; Ridout & Searles, 2011), thus, steer the focus away from negativity as an emotion and also look at positive appeals by investigating the tone of voice, praises of one's own program, past handlings of issues, or qualifications, or character traits (see also, Lau & Pomper, 2004). This work also demonstrates that political actors use both positive and negative emotions to mobilize, persuade, and engage citizens. Especially when political actors appeal to enthusiasm and pride – a concept that regained interest with the rise of the populist right in Europe (Mudde, 2015) – existing partisan habits are likely to be reinforced. This indicates that you feel stronger connected to the political party you are already affiliated with or feel close to. They are typically employed especially in the beginnings of the campaigns, to get voters engaged in the campaign (Ridout & Searles,

2011).

Instead of putting the media as an explanation for the usage of emotional appeals, Amsalem, Zoizner, Sheafer, Walgrave, and Loewen (2020) suggest that the extent to which politicians make use of emotional appeals is dependent on personality traits. Less agreeable, more extroverted, and emotionally stable politicians are more visible in the media (Amsalem et al., 2020) and, therefore, get more chances to make emotional appeals to voters. In a similar vein, Cichocka, Bilewicz, Jost, Marrouch, and Witkowska (2016) show that the way politicians speak tells something about their personality and ideological preferences. Ridout and Searles (2011) test whether politicians are actually strategically playing on emotions to get the mass-media coverage they need to reach voters. The authors demonstrate that there are some systematic patterns to the use of specific emotional appeals in political campaigns: Leading candidates are more likely to focus on enthusiasm and pride appeals, while trailing candidates would focus on fear appeals (Ridout & Searles, 2011). These findings are in line with the findings of Auter and Fine (2016) on social media platforms, even though social media have changed the way politicians communicate with and relate to their constituencies during election campaigns and routine periods alike (e.g. Bobba, 2019; Bode & Dalrymple, 2016).

What are the effects of emotions on citizens

In the previous section, we established that political elites use emotions to influence voters. But why do politicians, and political elites more broadly, appeal to emotions? The reason might lie in the distinct effects of sentiment and distinct emotions.

The political consequences of emotions in political speech are increasingly better understood, emotions still provoke discussion over their core properties: the universality,

physiological correlates, and the appraisal mechanisms preceding an emotion (Ekman, 2016; Feldman Barrett, 2006). There are several different approaches to defining and categorizing emotions, distinguishing one emotion from another, and ultimately studying emotions. Models of valence distinguish between positive and negative emotions (Forgas, 1995) or approach and aversion emotions (e.g. Harmon-Jones & Allen, 1998). Research has shown that negatively valenced messages capture people's attention (Soroka, 2014; Soroka et al., 2019).

In an influential study, which made a case for moving from studying emotions in their valence (positive versus negative) to studying discrete emotions, Lerner and Keltner (2000) show that fear and anger have distinct effects on risk assessment. People who frequently experience anger assess risks as significantly lower than people who tend to often experience anxiety. Since then, a renewed focus on discrete emotions has revealed a series of their distinct consequences for politics.

Models of discrete emotions look at distinct emotions with unique causes and distinct consequences. Such theories hold that a number of basic emotions were developed over the course of human evolution due to their adaptive properties: Anger helps us punish those who did wrong, disgust protects us from pathogens, and fear sharpens our senses to react to a present threat. According to this view, emotions, such as fear, anger, or enjoyment, differ in their antecedent events, physiology, their expression and in distinct behaviors they provoke (Frijda, 1988; Lerner & Keltner, 2000). When we study distinct effects of different emotions, we usually make use of models of discrete emotions, appraisal theories in particular. They are useful because they offer a clear theory for the causes of emotions and the specific consequences that follow.

The consequences of emotions have been studied in two main ways: integral or

incidental affect (Bodenhausen, Mussweiler, Gabriel, & Moreno, n.d.). Incidental or exogenous affect describes moods and emotions that have been evoked by an unrelated event but are unconsciously misattributed to the present situation and, hence, influence present behavior and judgment. Incidental emotion can be induced by asking participants to recall any life event that made them feel angry, sad, or happy, but that is not necessarily in any way related to the study outcome (see, for instance, Valentino et al., 2008).

Incidental emotions allow us to isolate the causal role of emotions for political judgment. However, as what elicits an emotion is by definition unrelated to the outcome, this approach does not allow us to study the relationship between political communication, experienced emotions, and their consequences. Alternatively, we can also study integral affect (i.e. Bodenhausen et al. n.d.), where we can further distinguish between chronic integral affect and episodic integral affect (see also Perrott & Bodenhausen, 2002). Chronic integral affect arises "in the context of interpersonal interactions involving individuals who are previously acquainted with one another" or "when a novel situation can be categorized into a social group about which the individual has chronic feelings" (Perrott & Bodenhausen, 2002, p.84) and describes more permanent linkages between object and affect, such as stereotypes or general dislike (Bodenhausen et al., n.d.). Episodic integral affect is situationally created through a particular social interaction (Perrott & Bodenhausen, 2002, p.84). While chronic integral affect is rather stable, episodic integral affect can be experimentally manipulated.

Measures of chronic integral affect toward certain issues or political actors are included in large-scale surveys, such as the American National Election Survey or the British Election Study (Wagner, 2014). Such measures are easy to implement within survey research and have provided evidence of which emotion we feel, as well as who this

emotion is directed at is related to certain political attitudes. For instance, Vasilopoulou and Wagner (2017) find that people who feel angry (versus anxious) at the EU (versus their national government) are more likely to wish to leave the EU. For instance, Huddy, Feldman, and Cassese (2007) study the effects of anger following the 9/11 attacks and Iraq war. They show that feeling angry leads people to make more optimistic risk assessments concerning the consequences of the Iraq war for the U.S. economy, future terrorist threats, instability in the Middle East, and decreased help from U.S. allies.

What usually remains unclear, however, is whether chronic integral anger is a cause or a consequence of political behaviors and attitudes. Valentino, Brader, Groenendyk, Gregorowicz, and Hutchings (2011), for instance, argue that the effect of anger and enthusiasm on political participation could run both ways. "It is plausible that what we have deemed the effect of emotions (participation) may actually be their cause. […] Once one commits time, energy, and resources to participating in an election, one might conclude they feel strong emotions about it. A related possibility is that the activities in which one participates may stir up emotions directly" (Valentino et al., 2011). To elude this problem, we can experimentally induce episodic integral emotions by asking respondents to recall aspects of a political event or issue that made them experience a certain emotion. Such an experimental manipulation gives us more causal leverage over the role of anger in specific political situations.

Applying this approach to emotions concerning a real-life event, the 9/11 attacks, Lerner and colleagues (2003) show that experimentally induced anger over the attacks led to more optimistic estimation of future risks related to the event. Feeling anger just after the attacks predicted more optimistic risk assessment even 6–10 weeks later. Valentino et al. (2011) ask respondents to recall an event during a current campaign and find that anger

increases intended political participation.

Using these approaches, what else do we know about the political effects of emotions? A well-documented consequence of anxiety is increased information search (Albertson & Gadarian, 2015). Angry citizens, on the other hand, tend to make more stereotypical judgments and rely on heuristics (e.g. expertise of information) in persuasion situations (1994; 2001). These findings have also found applications in the political realm. Valentino and colleagues (2008) ask respondents to recall events during a current political campaign that made them feel angry, afraid, or enthusiastic and measure subsequent information search. While in all three conditions respondents reported increased interest in the campaign, compared to the control condition, anger in fact suppressed information seeking: Angry respondents both spent less time searching for more information, particularly on candidates' issue stances, and spent less time on each page they visited. Similarly, Parker and Isbell (2010) experimentally induce fear or anger and show that fearful respondents use more systematic processing: They spend more time searching the web than angry respondents and vote for the candidate they agree with most on political issues. Angry respondents vote for a candidate independently of agreement with the candidate on issues.

As outlined by Albertson and Gadarian (2015), the effect of anxiety might be complicated by partisan ties. When seeking out and recalling information, they argue, partisans might be motivated to disregard information that is not in line with their ideological predisposition. They indeed find, after experimentally inducing anxiety over immigration, that partisans seek the same amount of threatening and nonthreatening information related to the issue but Republicans remembered more threatening than nonthreatening information while Democrats did not. This suggests that although

Democrats sought out threatening information to the same extent as Republicans, they disregarded information that was not congruent with their ideology. Moreover, Republicans were more likely to agree with threatening stories if anxiety was induced beforehand than when it wasn't. For Democrats, no such effect was found suggesting that anxiety does not entirely eliminate biased information processing (p. 67–69).

Another well-documented political consequence of emotions is their link with political mobilization (Jasper, 2011). In both a randomized experiment using incidental emotion manipulation and three representative samples, Valentino and colleagues (2011) find that anger related to events during the 2008 presidential campaign, but not anxiety or enthusiasm, significantly boosts political participation. The magnitude of the anger effect was comparable to that of habitual interest in politics. These findings are corroborated by Weber (2013) who studied the effects of emotions evoked by political ads and during a real political campaign. Respondents who were exposed to angry advertisements reported higher intentions to participate in politics and were more likely to believe that their political engagement is effective.

However, the mobilizing potential of anger does not benefit all citizens to the same extent and can, by consequence, increase existing political inequalities. Phoenix (2019) shows that Black Americans are less likely to respond to political threats with anger. Moreover, even when they experience and report anger, it does not translate into political mobilization to the same extent as it does among. The opposite is true for hope and pride, which tend to mobilize Black Americans more than White Americans. So while angry campaigns might mobilize White voters, they might not drive Black voters to the ballot box, or at the least motivate different types of political participation (Banks, White, & McKenzie, 2019).

Finally, Webster (2020) shows that anger negatively affects support for political tolerance, respect for minority opinions, and the rule of law. These findings suggest that anger, in particular, despite some of its positive effects on participation can become a threat to liberal democracies. Anger has been linked to distinct sets of political attitudes, particularly such related to risk assessment and attitudes regarding political out-groups: Huddy and colleagues (2007), in the study discussed earlier, find that those who experienced anger regarding actors related to the Iraq war do not only evaluate the war as less risky but are also more supportive of the war while anxious respondents were less supportive of military action. Lerner and colleagues (2003), after having induced anger and fear, show that those in the anger condition are more supportive of vengeful policies after the 9/11 attacks. Experiencing anger after the attacks is related to increased support to deport foreigners in the United States, who do not hold a valid visa, and decreased support for strengthening ties with the Moslem world. The relationships hold for experimentally induced anger. Similarly, Skitka and colleagues (2004) find anger following the 9/11 attacks leads to lower political tolerance of out-groups (foreigners, Muslims, or Arab Americans) four months later and that this relationship is mediated by moral outrage and out-group derogation. Fear, more so than anger, was associated with in-group enhancement but was unrelated to out-group derogation. This is in line with findings by Banks and Valentino (2012) who show that anger significantly boosts various forms of racial attitudes (symbolic racism, or racist resentment; and old-fashioned racist a belief in biological differences). The effect is even larger than that of disgust, which is more commonly linked to racist attitudes. Moreover, Petersen (2010) showed that anger leads to harsher punitive judgments of criminals. Perceptions of intentionality of criminals moderate the effect of anger on punitive attitudes.

As this section has demonstrated, emotions can be powerful tools to mobilize citizens, motivate or suppress their information-seeking behavior and promote certain attitudes. It is not hard to imagine why political elites might want to elicit distinct emotions to persuade and mobilize the electorate. But how can we assess if and when they do so? In the next section of this chapter, we discuss how scholars have studied emotional appeals in political communication, followed by a discussion of how novel methods have and will further innovate the field in the future.

How to study emotional appeals in political communication

To study emotional appeals, the field of political communication (e.g. see Valentino, Neuner, & Vandenbroek, 2018; Valentino & Vanderbroek, 2014) turns to measuring sentiment (or tone) of communication is a central topic for scholars of communication (Lengauer, Esser, & Berganza, 2012). Emotional appeal is a pervasive concept in political communication. Yet, measuring sentiment – or any of the often co-occurring concepts, such as emotionality, negativity, polarity, subjectivity, tone, or valence – is not straightforward. Sentiment is generally expressed with ambiguous and creative language (Liu, 2012; Pang & Lee, 2008; Wiebe, Wilson, Bruce, Bell, & Martin, 2004). In addition, sentiment analysis in the social sciences suffers from a lack of agreed-upon conceptualization and operationalization (Lengauer et al., 2012).

As witnessed by the number of scholars working with the concept, determining the tone or valence of statements is an important task for analyzing communication. Sentiment is conceptually not trivial: Statements can be positive or negative (or even neutral), depending on your (ideological) perspective and definition of sentiment. Subjective language is also typically more ambiguous and more creative than factual statements, and

even trained expert coders can have serious difficulty agreeing on the sentiment of statements.

Computational approaches to sentiment analysis have the potential to overcome the problems of scalability and reproducibility deep-seated in manual coding (For overviews, see, for example, Van Atteveldt, Welbers, & Van der Velden, 2019). To remedy the costs and logistic difficulties involved with manual coding – the traditional approach in political communication – scholars have increasingly relied upon automated forms of text analysis. The "text-as-data revolution" (Grimmer & Stewart, 2013) has blessed us with many easily available new data sources to test old and new research questions. The fast-growing computational text community has made it possible to use these newly available data sets – a prime example hereof is the R-package Quanteda (Benoit & Nulty, 2017). While these methods can be very cost-efficient, their application is not without pitfalls (Grimmer & Stewart, 2013; Wilkerson & Casas, 2017).

The oldest, and probably most used, method for automatic sentiment analysis is based on a dictionary approach. When applying a dictionary, the researcher explicitly instructs the computer to look for certain words or patterns that are specified in the dictionary and interprets the resulting outcome as a measurement. Currently, there are a multitude of dictionaries that aim to measure sentiment. A recent paper by van Atteveldt, van der Velden, and Boukes (2021), however, demonstrates that the various dictionaries developed to measure sentiment automatically do not correlate well amongst each other either. This poses serious problems for the criterion and construct validity criteria of the automated sentiment measurements.

Automatic sentiment analysis is the general name for tools to automatically classify

the tone of text and is an active subfield of computational linguistics (Liu, 2012; Pang & Lee, 2008; Wiebe et al., 2004). Although there are earlier studies of automatic sentiment analysis, progress was limited until the emergence of large digital corpora of subjective texts, especially online reviews, in the mid-2000s (Mäntylä, Graziotin, & Kuutila, 2018). As reviewed by Liu (2012), the two main current approaches to automatic sentiment analysis are using dictionaries and supervised machine learning. Some words, like "horrible", have an obviously negative valence while other words (such as "fantastic") are strongly positive. Thus, it makes sense to construct a dictionary of such negative and positive terms, and such a lexical approach to sentiment analysis has been used since at least the General Inquirer (Stone, Bayles, Namerwirth, & Ogilvie, 1962), an early tool for dictionary-based automatic text analysis.

The problem with these off-the-shelf dictionaries is that they are developed for, and typically validated on, a specific task and domain and often do not perform well on other tasks. For example, Young and Soroka (2012) found that different dictionaries for measuring sentiment "show stunningly little overlap" (p. 211) and do not correlate well with each other or with expert annotations. Similarly, machine learning models that are optimized for a certain task (such as distinguishing positive film reviews from negative ones) can give misleading results for social science research by identifying spurious patterns in the data that was used to train these algorithms (Thelwall, Buckley, & Paltoglou, 2012). Nevertheless, the current proliferation of available dictionaries and other off-the-shelf tools tends to overshadow the low measurement validity (González-Bailón & Paltoglou, 2015; Soroka, Young, & Balmas, 2015), and in many cases, these tools are not validated before being used on new tasks. On top of these challenges, (semi-)automated tools for non-English languages are rare, hampering comparative research of

communication (Haselmayer & Jenny, 2017).

Conclusion and future of the field

Theories of political communication have in common that they explicitly or implicitly assume a role for affect. Following the recommendation of Bakker et al. (2021), the field is in need of an approach that allows studying the affect as both conscious and unconscious. Keltner and Gross (1999) defined an emotion as "episodic, relatively short-term, biologically based patterns of perception, experience, physiology, action, and communication" (p. 468). Work on emotional responses to politics increasingly takes into account physiology, next to only the conscious experience of emotions (Bakker, Schumacher, Gothreau, & Arceneaux, 2020; Bakker et al., 2021; Soroka, 2019). For example, Bakker, Schumacher, and Homan (2020) show that self-reports of emotions and physiological responses do not always go hand in hand. Studying people's reaction of disgust to party leaders of their own preferred party versus of the leader of an out-group party, they show that some people report feelings of disgust without showing any physiological response, whilst others have a physiological response but not report disgust (Bakker, Schumacher, & Homan 2020). This is a good indication that the conscious and unconscious do not need to occur at the same time. To push the field beyond the state of the art, it is important to disentangling how and when conscious over unconscious reactions of affect are at play – or vice versa.

These approaches that look at both conscious and unconscious reactions of affect not only allow us to pinpoint which emotions matter, but also when they matter, i.e. only when we are aware of them or subconsciously influencing cognition in the background. In parallel, studies of the use of emotions in political communication increasingly take into

account more than just the sentiment and emotionality of words. A growing field understands emotions as multimodal, finding their expression in language, voice, facial expression, gesticulation, and body language. Scaling up such work is made possible by computers getting ever more powerful. We can now analyze static and dynamic images on a large scale in isolation (Aaldering & Vliegenthart, 2016; Boussalis & Coan, 2020; Williams, Casas, & Wilkerson, 2020). We can study emotionality and sentiment in combination with the literal tone of voice (Dietrich, Hayes, & O'Brien, 2019) or facial displays (Boussalis & Coan, 2020).

Finally, more advanced (computational) textual methods, especially when coupled with small-scale analyses, might allow us to take a more fine-grained look at language. Researchers typically face a trade-off between powerful, scalable computational strategies using machine learning approaches, and the theoretical sensitivity offered by small-scale manual analyses. A recent trend is to use the advances in computational text analysis to develop a hybrid approach for the deductive analysis of large-scale textual databases or corpora. Such a Hybrid Content Analysis approach combines the algorithmic extraction of coherent, recurrent patterns with a manual coding of identified patterns (Baden, Kligler-Vilenchik, & Yarchi, 2020).

Research on distinct emotions at the individual level shows us that distinct emotions have very specific political consequences: Anxiety sparks curiosity and information seeking, anger makes us more close-minded but, just like enthusiasm, has largely mobilizing effects. Although our understanding of the consequences of distinct emotions becomes continuously more nuanced (thanks to, for instance, work by Phoenix, 2019), we still struggle to measure discrete emotions on a large scale. This is essential to understanding why certain rhetoric is successful in, for instance, mobilizing voters.

Moreover, although emotions might sometimes be evoked by simple emotional cues, such as emotion words, how emotions emerge is complex, depending on context and more fine-grained evaluations of political events. In light of this, it is perhaps surprising that we have not established a method to detect distinct emotions in text that go beyond dictionary approaches. With the emergence of machine learning methods in the social sciences (e.g. Rheault, 2016), detecting more fine-grained aspects of language has become possible and we will likely see more attempts to measure distinct emotions in speech in the near future.

References

Aaldering, L., & Vliegenthart, R. (2016). Political leaders and the media. Can we measure political leadership images in newspapers using computer- assisted content analysis? *Quality & Quantity*, *50* (5), 1871–1905. https://doi.org/10.1007/s11135-015-0242-9

Albertson, B., & Gadarian, S. K. (2015). *Anxious politics: Democratic citizenship in a threatening world*. Cambridge University Press.

Amsalem, E., Zoizner, A., Sheafer, T., Walgrave, S., & Loewen, P. J. (2020). The effect of politicians' personality on their media visibility. *Communication Re- search*, *47* (7), 1079–1102. https://doi.org/10.1177/0093650218758084

Auter, Z. J., & Fine, J. A. (2016). Negative campaigning in the social media age: Attack advertising on facebook. *Political Behavior* , *38* (4), 999–1020. https://doi.org/10.1007/s11109-016-9346-8

Baden, C., Kligler-Vilenchik, N., & Yarchi, M. (2020). Hybrid content analysis: Toward a strategy for the theory-driven, computer-assisted classification of large text corpora. *Communication Methods and Measures*, *14* (3), 165–183. https://doi.org/10.1080/19312458.2020.1803247

Bakker, B. N., Schumacher, G., Gothreau, C., & Arceneaux, K. (2020). Conservatives and liberals have similar physiological responses to threats. *Nature Human Behaviour* , *4* (6), 613–621. https://doi.org/10.1038/s41562-020-0823-z

Bakker, B. N., Schumacher, G., & Homan, M. D. (2020). Yikes! Are we disgusted by politicians? *Politics and the Life Sciences*, *39* (2), 135–153.

https://doi.org/10.1017/pls.2020.16

Bakker, B. N., Schumacher, G., & Rooduijn, M. (2021). Hot politics? affective responses to political rhetoric. *American Political Science Review*, *115* (1), 150– 164. https://doi.org/10.1017/S0003055420000519

Banks, A. J., & Valentino, N. A. (2012). Emotional Substrates of White Racial Attitudes. *American Journal of Political Science*, *56* (2), 286–297. https://doi.org/10.1111/j.1540-5907.2011.00561.x

Banks, A. J., White, I. K., & McKenzie, B. D. (2019). Black politics: How anger influences the political actions blacks pursue to reduce racial inequality. *Political behavior* , *41* (4), 917–943.

Baumgartner, F. R., & Jones, B. D. (1991). Agenda dynamics and policy subsystems. *The journal of Politics*, *53* (4), 1044–1074. https://doi.org/10.2307/2131866

Baumgartner, F. R., & Jones, B. D. (2010). *Agendas and instability in american politics*. University of Chicago Press.

Benoit, K., & Nulty, P. (2017). quanteda: Quantitative analysis of textual data. *R package version 0.99* , *9* . https://doi.org/10.21105/joss.00774

Benoit, W. L. (2017). The functional theory of political campaign com- munication. *The Oxford Handbook of Political Communication*, 195–207. https://doi.org/10.1093/oxfordhb/9780199793471.013.2

Birks, J. (2017). 'moving life stories tell us just why politics matters': Personal narratives in tabloid anti-austerity campaigns. *Journalism*, *18* (10), 1346–1363. https://doi.org/10.1177/1464884916671159

Bobba, G. (2019). Social media populism: features and 'likeability'of lega nord

communication on facebook. *European Political Science*, *18* (1), 11–23. https://doi.org/10.1057/s41304-017-0141-8

Bode, L., & Dalrymple, K. E. (2016). Politics in 140 characters or less: Campaign communication, network interaction, and political par- ticipation on twitter. *Journal of Political Marketing*, *15* (4), 311–332. https://doi.org/10.1080/15377857.2014.959686

Bodenhausen, G. V., Mussweiler, T., Gabriel, S., & Moreno, K. N. (n.d.). Affective influences on stereotyping and intergroup relations affective influences on stereotyping and intergroup relations. *Handbook of affect and social cognition*.

Borah, P. (2016). Political facebook use: Campaign strategies used in 2008 and 2012 presidential elections. *Journal of Information Technology & Politics*, *13* (4), 326–338. https://doi.org/10.1080/19331681.2016.1163519

Boussalis, C., & Coan, T. G. (2020). Facing the electorate: Computational approaches to the study of nonverbal communication and voter impression formation. *Political Communication*, 1–23. https://doi.org/10.1080/10584609.2020.1784327

Brader, T. (2005). Striking a responsive chord: How political ads motivate and per- suade voters by appealing to emotions. *American Journal of Political Science*, *49* (2), 388–405. https://doi.org/10.1111/j.0092-5853.2005.00130.x

Brader, T. (2011). The political relevance of emotions:"reassessing" revis- ited. *Political Psychology*, *32* (2), 337–346. https://doi.org/10.1111/j.1467-9221.2010.00803.x

Carmines, E. G., & Stimson, J. A. (1980). The two faces of issue voting. *The American Political Science Review*, 78–91. https://doi.org/10.2307/1955648

Cichocka, A., Bilewicz, M., Jost, J. T., Marrouch, N., & Witkowska, M. (2016). On the grammar of politics - or why conservatives prefer nouns. *Political Psychol- ogy*, *37* (6), 799–815.

Crabtree, C., Golder, M., Gschwend, T., & Indriđason, I. H. (2020). It is not only what you say, it is also how you say it: The strategic use of campaign sentiment. *The Journal of Politics*, *82* (3), 1044–1060. https://doi.org/10.1086/707613

Dahl, R. (1971). *Polyarchy*. New Haven, CT: Yale University Press.

Dalton, R. J. (2013). *Citizen politics: Public opinion and political parties in advanced industrial democracies*. Cq Press.

Dalton, R. J., Farrell, D. M., & McAllister, I. (2011). *Political parties and democratic linkage: How parties organize democracy*. Oxford University Press.

de Kleer, D., & van der Velden, M. A. (n.d.). *When the cat's away, the mice will play? how journalistic intervention influences political parties' decision to go negative.* (unpublished)

Dietrich, B. J., Hayes, M., & O'Brien, D. Z. (2019). Pitch perfect: Vocal pitch and the emotional intensity of congressional speech. *American Political Science Review*, *113* (4), 941–962. https://doi.org/10.1017/S0003055419000467

Downs, A. (1957). *An economic theory of democracy*. Harper New York.

Ekman, P. (2016). What Scientists Who Study Emotion Agree About. *Perspectives on Psychological Science*, *11* (1), 31–34. https://doi.org/10.1177/1745691615596992

Elenbaas, M., & De Vreese, C. H. (2008). The effects of strategic news on political cynicism and vote choice among young voters. *Journal of Communication*, *58* (3),

550–567. https://doi.org/10.1111/j.1460-2466.2008.00399.x

Elmelund-Præstekær, C., & Mølgaard-Svensson, H. (2014). Negative and person- alized campaign rhetoric: Party communication and media coverage of danish parliamentary elections 1994-2011. *World political science review*, *10* (2), 365. https://doi.org/10.1515/wpsr-2014-0018

Esser, F., & Strömbäck, J. (2014). *Mediatization of politics: Understanding the transformation of western democracies*. Springer.

Feldman Barrett, L. (2006). Are Emotions Natural Kinds? *Perspectives on Psychological Science*, *1* (1), 28–58. https://doi.org/10.1111/j.1745-6916.2006.00003.x

Forgas, J. P. (1995). Mood and judgment: the affect infusion model (aim). *Psycho- logical bulletin*, *117* (1), 39. https://doi.org/10.1037/0033-2909.117.1.39

Frijda, N. (1988). The Empirical Status of the Laws of Emotion. *Cognition and Emotion*, *6* (6), 467–477. https://doi.org/doi.org/10.1080/02699939208409699

Geer, J. G. (2006). *In defense of negativity : attack ads in presidential campaigns*. University of Chicago Press.

González-Bailón, S., & Paltoglou, G. (2015). Signals of public opinion in online communication: A comparison of methods and data sources. *The ANNALS of the American Academy of Political and Social Science*, *659* (1), 95–107. https://doi.org/10.1177%2F0002716215569192

Green, J., & Hobolt, S. B. (2008). Owning the issue agenda: Party strate- gies and vote choices in british elections. *Electoral Studies*, *27* (3), 460–476. https://doi.org/10.1016/j.electstud.2008.02.003

Grimmer, J., & Stewart, B. M. (2013). Text as data: The promise and pitfalls of automatic

content analysis methods for political texts. *Political Analysis*, *21* (3), 267–297. https://doi.org/10.1093/pan/mps028

Harcup, T., & O'Neill, D. (2017). What is news? news values revisited (again). *Journalism studies*, *18* (12), 1470–1488. https://doi.org/10.1080/1461670X.2016.1150193

Harmon-Jones, E., & Allen, J. J. (1998). Anger and frontal brain activity: EEG asymmetry consistent with approach motivation despite negative affec- tive valence. *Journal of Personality and Social Psychology*, *74* (5), 1310–1316. https://doi.org/10.1037/0022-3514.74.5.1310

Haselmayer, M. (2019). Negative campaigning and its consequences: a review and a look ahead. *French Politics*, *17* (3), 355–372. https://doi.org/10.1057/s41253-019-00084-8

Haselmayer, M., & Jenny, M. (2017). Sentiment analysis of political communication: combining a dictionary approach with crowdcoding. *Quality & quantity*, *51* (6), 2623–2646. https://doi.org/10.1007/s11135-016-0412-4

Haselmayer, M., Meyer, T. M., & Wagner, M. (2019). Fighting for attention: Media coverage of negative campaign messages. *Party Politics*, *25* (3), 412–423. https://doi.org/10.1177/1354068817724174

Helfer, L., & Aelst, P. V. (2016). What makes party messages fit for reporting? an experimental study of journalistic news selection. *Political Communication*, *33* (1), 59–77. https://doi.org/10.1080/10584609.2014.969464

Holbert, R. L. (2005). A typology for the study of entertainment tele- vision and

politics. *American Behavioral Scientist*, *49* (3), 436–453. https://doi.org/10.1177/0002764205279419

Huddy, L., Feldman, S., & Cassese, E. (2007). On the distinct political effects of anx- iety and anger. *The affect effect: Dynamics of emotion in political thinking and behavior* , 202–230. https://doi.org/10.7208/chicago/9780226574431.003.0009

Jasper, J. M. (2011). Emotions and social movements: Twenty years of theory and research. *Annual review of sociology*, *37* , 285–303.

Keltner, D., & Gross, J. J. (1999). Functional accounts of emotions. *Cognition & Emotion*, *13* (5), 467–480. https://doi.org/10.1080/026999399379140

Kosmidis, S., Hobolt, S. B., Molloy, E., & Whitefield, S. (2019). Party compe- tition and emotive rhetoric. *Comparative Political Studies*, *52* (6), 811–837. https://doi.org/10.1177/0010414018797942

Kuklinski, J. H., & Chong, D. (2001). *Citizens and politics: Perspectives from political psychology*. Cambridge University Press.

Lau, R. R., & Pomper, G. M. (2004). *Negative campaigning: An analysis of us senate elections*. Rowman & Littlefield.

Lau, R. R., & Rovner, I. B. (2009). Negative campaigning. *Annual review of political science*, *12*, 285–306. https://doi.org/10.1146/annurev.polisci.10.071905.101448

Lazarsfeld, P. F., Berelson, B., & Gaudet, H. (1944). *The people's choice*. New York: Columbia University Press.

Lengauer, G., Esser, F., & Berganza, R. (2012). Negativity in political news: A review of concepts, operationalizations and key findings. *Journalism*, *13* (2), 179–202.

https://doi.org/h10.1177%2F1464884911427800

Lerner, J. S., Gonzalez, R. M., Small, D. A., & Fischhoff, B. (2003). Effects of fear and anger on perceived risks of terrorism. *Psychological Science*, *14* (2), 144. https://doi.org/10.1111/1467-9280.01433

Lerner, J. S., & Keltner, D. (2000). Beyond valence: Toward a model of emotion- specific influences on judgement and choice. *Cognition and Emotion*, *14* (4), 473–493. https://doi.org/10.1080/026999300402763

Liu, B. (2012). Sentiment analysis and opinion mining. *Synthesis lectures on human language technologies*, *5* (1), 1–167. https://doi.org/10.1162/COLI_r_00186

Mäntylä, M. V., Graziotin, D., & Kuutila, M. (2018). The evolution of sentiment analysis—a review of research topics, venues, and top cited papers. *Computer Science Review*, *27* , 16–32.

Marcus, G. E., Neuman, W. R., & MacKuen, M. (2000). *Affective intelligence and political judgment*. University of Chicago Press.

McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. *Public opinion quarterly*, *36* (2), 176–187. https://doi.org/10.1086/267990

McCombs, M. E., & Shaw, D. L. (1993). The evolution of agenda-setting research: Twenty-five years in the marketplace of ideas. *Journal of communication*, *43* (2), 58–67. https://doi.org/10.1111/j.1460-2466.1993.tb01262.x

Meyer, T. M., Haselmayer, M., & Wagner, M. (2020). Who gets into the papers? Party campaign messages and the media. *British Journal of Political Science*, *50* (1), 281–302. https://doi.org/10.1017/S0007123417000400

Mudde, C. (2015). Populist radical right parties in europe today. *Transformations of*

populism in Europe and the Americas: History and recent tendencies, 295–307. https://doi.org/10.5040/9781474225243.ch-016

Nai, A., & Maier, J. (2020). Is negative campaigning a matter of taste? political attacks, incivility, and the moderating role of individual differences. *American Politics Research*, .https://doi.org/10.1177/1532673X20965548

Nai, A., & Walter, A. S. (2015). How negative campaigning impinges on the political game: A literature overview. *New Perspectives on Negative Campaigning: Why Attack Politics Matters*.

Pang, B., & Lee, L. (2008). Opinion mining and sentiment analysis. *Foundations and Trends in Information Retrieval*, *2* (1–2), 1–135. https://doi.org/10.1561/1500000011

Parker, M. T., & Isbell, L. M. (2010). How I vote depends on how I feel: The differential impact of anger and fear on political information processing. *Psychological Science*, *21* (4), 548–550. https://doi.org/10.1177/0956797610364006

Perrott, D. A., & Bodenhausen, G. V. (2002). The Way You Make Me Feel : Integral Affective Influences on Interpersonal Behavior. *Psychological Inquiry*, *13* (1), 84–86.

Petersen, M. B. (2010). Distinct emotions, distinct domains: Anger, anxiety and perceptions of intentionality. *The Journal of Politics*, *72* (2), 357–365. https://doi.org/10.1017/S002238160999079X

Phoenix, D. L. (2019). *The anger gap: How race shapes emotion in politics*. Cam- bridge University Press.

Pipal, C., Schumacher, G., Bakker, B. N., & van der Velden, M. A. (Unpublished). *Emotional appeals in legislative debate.* (Pre-Registered at https://osf.io/ f5gw6/)

Rheault, L. (2016). Expressions of anxiety in political texts. In *Proceedings of the first workshop on nlp and computational social science* (pp. 92–101).

Rheault, L., Beelen, K., Cochrane, C., & Hirst, G. (2016). Measuring emotion in parliamentary debates with automated textual analysis. *PloS one*, *11* (12), e0168843. https://doi.org/10.1371/journal.pone.0168843

Rhodes, J. H., & Vayo, A. B. (2019). The Historical Presidency: Fear and Loathing in Presidential Candidate Rhetoric, 1952–2016. *Presidential Studies Quarterly*. Retrieved from 10.1111/psq.12512 https://doi.org/10.1111/psq.12512

Ridout, T. N., & Searles, K. (2011). It's my campaign i'll cry if i want to: How and when campaigns use emotional appeals. *Political Psychology*, *32* (3), 439–458. https://doi.org/10.1111/j.1467-9221.2010.00819.x

Ridout, T. N., & Walter, A. S. (2015). How the news media amplify negative messages. In A. Nai & A. S. Walter (Eds.), *New perspectives on negative campaigning: measures, causes and effects*. ECPR Press Studies in European Political Science Wivenhoe Park.

Shoemaker, P. J., Johnson, P. R., & Riccio, J. R. (2017). The gatekeeping of political messages. *The Oxford handbook of political communication*, 347.

Skitka, L. J., Bauman, C. W., & Mullen, E. (2004). Political tolerance and coming to psychological closure following the september 11, 2001, terrorist attacks: An integrative approach. *Personality and Social Psychology Bulletin*, *30* (6), 743– 756. https://doi.org/10.1177/0146167204263968

Soroka, S. N. (2014). *Negativity in democratic politics: Causes and consequences*. Cambridge University Press.

Soroka, S. N. (2016). Gatekeeping and the negativity bias. In *Oxford research encyclopedia of politics.* https://doi.org/10.1093/acrefore/9780190228637.013.43

Soroka, S. N. (2019). Skin conductance in the study of politics and communication. In *Biophysical measurement in experimental social science research* (pp. 85–104). Elsevier. https://doi.org/10.1016/B978-0-12-813092-6.00007-1

Soroka, S. N., Fournier, P., & Nir, L. (2019). Cross-national evidence of a negativity bias in psychophysiological reactions to news. *Pro- ceedings of the National Academy of Sciences*, *116* (38), 18888–18892. https://doi.org/10.1073/pnas.1908369116

Soroka, S. N., & Krupnikov, Y. (n.d.). *The increasing viability of good news*. Cam- bridge University Press.

Soroka, S. N., & McAdams, S. (2015). News, politics, and negativity. *Political Communication*, *32* (1), 1–22. https://doi.org/10.1080/10584609.2014.881942

Soroka, S. N., Young, L., & Balmas, M. (2015). Bad news or mad news? senti- ment scoring of negativity, fear, and anger in news content. *The ANNALS of the American Academy of Political and Social Science*, *659* (1), 108–121. https://doi.org/10.1177%2F0002716215569217

Stone, P. J., Bayles, R. F., Namerwirth, J. Z., & Ogilvie, D. M. (1962). The General Inquirer: A computer system for content analysis and retrieval based on the sentence as a unit of information. *Behavioral Science*, *7* .

Strömbäck, J., & Van Aelst, P. (2013). Why political parties adapt to the media: Exploring the fourth dimension of mediatization. *International Communication Gazette*, *75* (4), 341–358. https://doi.org/10.1177/1748048513482266

Thelwall, M., Buckley, K., & Paltoglou, G. (2012). Sentiment strength detection for the social web. *Journal of the American Society for Information Science and Technology*, *63* (1), 163–173. https://doi.org/10.1002/asi.21662

Tiedens, L. Z., & Linton, S. (2001). Judgment Under Emotional Certainty and Uncertainty: The Effects of Specific Emotions on Information Pro- cessing. *Journal of Personality and Social Psychology*, *81* (6), 973–988. https://doi.org/10.1037/0022-3514.81.6.973

Valentino, N. A., Brader, T., Groenendyk, E. W., Gregorowicz, K., & Hutchings, V. L. (2011). Election night's alright for fighting: The role of emo- tions in political participation. *The Journal of Politics*, *73* (1), 156–170. https://doi.org/10.1017/S0022381610000939

Valentino, N. A., Hutchings, V. L., Banks, A. J., & Davis, A. K. (2008). Is a worried citizen a good citizen? emotions, political information seeking, and learning via the internet. *Political Psychology*, *29* (2), 247–273. https://doi.org/10.1111/j.1467-9221.2008.00625.x

Valentino, N. A., Neuner, F. G., & Vandenbroek, L. M. (2018). The changing norms of racial political rhetoric and the end of racial priming. *The Journal of Politics*, *80* (3), 000–000.

Valentino, N. A., & Vanderbroek, L. M. (2014). Political communication, information processing, and social groups. In *The oxford handbook of political communication.* Oxford University Press.

Van Atteveldt, W., Welbers, K., & Van der Velden, M. A. C. G. (2019). Studying political decision-making with automatic text analysis. In *Oxford research ency- clopedia of*

politics. https://doi.org/10.1093/acrefore/9780190228637.013.957

van Atteveldt, W., van der Velden, M. A., & Boukes, M. (2021). The validity of sentiment analysis: Comparing manual annotation, crowd-coding, dictionary approaches, and machine learning algorithms. *Communication Methods and Measures*, 1–20. https://doi.org/10.1080/19312458.2020.1869198

Van der Velden, M. A., Schumacher, G., & Vis, B. (2018). Living in the past or living in the future? analyzing parties' platform change in between elections, the Netherlands 1997–2014. *Political Communication*, *35* (3), 393–412. https://doi.org/10.1080/10584609.2017.1384771

Vasilopoulou, S., & Wagner, M. (2017). Fear, anger and enthusiasm about the European Union: Effects of emotional reactions on public preferences towards European integration. *European Union Politics*, *18* (3), 382–405. https://doi.org/10.1177/1465116517698048

Wagner, M. (2014). Fear and Anger in Great Britain: Blame Assignment and Emo- tional Reactions to the Financial Crisis. *Political Behavior* , *36* (3), 683–703. https://doi.org/10.1007/s11109-013-9241-5

Walgrave, S., Lefevere, J., & Tresch, A. D. (2020). Position, competence, and commitment: Three dimensions of issue voting. *International Journal of Public Opinion Research*, *32* (1), 165–175. https://doi.org/10.1093/ijpor/edz006

Weber, C. (2013). Emotions, campaigns, and political participation. *Political Re- search Quarterly*, *66* (2), 414–428. https://doi.org/10.1177/1065912912449697

Webster, S. W. (2020). *American rage: How anger shapes our politics*. Cambridge University Press.

Wiebe, J., Wilson, T., Bruce, R. F., Bell, M., & Martin, M. (2004). Learning subjective language. *Computational Linguistics*, *30(3)*, 277–308. https://doi.org/10.1162/0891201041850885

Wilkerson, J., & Casas, A. (2017). Large-scale computerized text analysis in political science: Opportunities and challenges. *Annual Review of Political Science*, *20* , 529–544. https://doi.org/10.1146/annurev-polisci-052615-025542

Williams, B. A., & Carpini, M. X. D. (2011). *After broadcast news: Media regimes, democracy, and the new information environment*. Cambridge University Press.

Williams, N. W., Casas, A., & Wilkerson, J. D. (2020). *Images as data for social science research: An introduction to convolutional neural nets for image classification*. Cambridge University Press. https://doi.org/10.1017/9781108860741

Young, L., & Soroka, S. N. (2012). Affective news: The automated coding of sentiment in political texts. *Political Communication*, *29* (2), 205–231. https://doi.org/10.1080/10584609.2012.671234