### RESEARCH NOTE



# Setting the tone: the diffusion of moral and moralemotional appeals across political and public discourse

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#### Abstract

Whether a topic is seen in a moral or moral-emotional light has significant political implications. Yet, we lack knowledge about the process of moralization: Who defines the way topics are communicated about? Where prior research has investigated the relative power of different actors to place a topic on the agenda or shape opinions, we study who sets the moral and moral-emotional tone of debate. To do so, we zoom in on immigration discourse in Germany and analyze fine-grained social media data from politicians, political parties, newspapers, and members of the public over a period of more than four years. After employing a transformer model to identify moral and moral-emotional appeals, we use structural vector autoregression models to demonstrate the important role of radical-right challengers in shaping public discourse in a negative moral-emotional direction. The results inform theories of moralization and political entrepreneurship.

**Keywords:** moral rhetoric; moral-emotional rhetoric; political discourse; immigration; radical right; computational text analysis

Understanding the relative influence of politicians or the public on one another is a core concern for the study of democratic politics. Research on agenda setting examines whether the political agenda is responsive to public attention to an issue or, alternatively, whether politicians set the topics of public debate (McCombs and Shaw, 1972; Barberá et al., 2019). The literatures on framing effects, cue taking, and representation address whether politicians follow or lead public opinion (Gabel and Scheve, 2007). Yet, the question of who has the power to shape how a topic is talked about once it has become a matter of attention remains unresolved. The language through which a topic is presented crucially shapes how it is perceived with wide-reaching political and social consequences (Lakoff and Johnson, 2003). In this article, we examine moral rhetoric, defined as language that makes absolutist appeals to notions of fundamental right and wrong (Simonsen and Widmann, 2023). When this language is overlaid with emotional references, it is conceptualized as moral-emotional (Brady et al., 2017). Moralized topics are seen as more important and considered to be in greater need of political action (Skitka, 2010; Jung 2020). However, especially in combination with negative emotional appeals, moralization is also associated with high levels of affective polarization and inflated beliefs about intergroup hostility, creating democratic concern (Clifford, 2019; Brady et al., 2023).

Given the significance of moral and moral-emotional language for these outcomes, understanding who wields the power to cast an issue in these terms is critical: Do politicians merely echo the rhetorical style of the public or can they steer the tone of public discourse? In addition, assessing whether certain types of moral appeals are more "contagious" than others is relevant for discerning the strategic incentives and rhetorical dynamics behind its use. Considering the

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particularly detrimental consequences of negative moral-emotional language, we compare the relative ability of positive and negative moral and moral-emotional appeals to diffuse across political and public discourses. Finally, we theorize and test the rhetorical power of challenger parties, since moral-emotional language might be more effectively spread by actors seeking to disrupt established politics and rhetorical norms.

We study these questions in relation to one of the most salient and contentious political topics—immigration—in a country—Germany—seen as a moral leader during our study period. Using fine-grained social media data from Twitter (now X) over a four-year period, we provide insight on day-to-day dynamics of rhetorical diffusion. The results of structural vector autoregression (SVAR) analyses show that politicians have an important role in setting the tone for how the public communicates about immigration. Especially the radical-right challenger party AfD has the power to stir up negative moral-emotional language in public discourse, suggesting that the party's entrepreneurial skill (De Vries and Hobolt, 2020) goes beyond focusing on divisive issues or taking radical positions to disrupt mainstream politics.

## 1. Are politicians able to shape public discourse?

Despite a growing body of work on the usage of moral appeals by political elites (Jung, 2020; Bos and Minihold, 2022; Kraft and Klemmensen, 2023), research has yet to address how societal actors influence one another to moralize. We argue that politicians wield significant rhetorical power to shape public discourse, first, because they occupy leadership roles offering greater weight to politicians' voices than to those of many other (individual) actors in society. Second, despite social media platforms such as Twitter democratizing public expression (Papacharissi, 2004), politicians generally have larger followings, amplifying their rhetorical impact. Third, while many members of the public might not consciously try to affect other people, let alone politicians, the fact that politicians are on a mission to do just that likely makes their language more carefully crafted with rhetorical persuasion in mind (Triadafilopoulos, 1999).

H1: Politicians have greater influence on the rhetorical style of the public than the other way around.

As mentioned, we distinguish between moral and moral-emotional rhetoric. While both make appeals to notions of fundamental right and wrong, the latter overlays these appeals with potent feelings, such as anger, hate, or pride. Within each of these types, we further consider whether the appeals are positive or negative. Prior work suggests that moral-emotional language is more effective in increasing retweets than moral language alone, with mixed evidence for the relative power of positive and negative variants (Brady *et al.*, 2017). As our study examines the diffusion of rhetorical styles, we remain open as to whether H1 applies more strongly to some styles than others.

## 2. Are challenger parties more rhetorically influential than others?

Exploring the rhetorical influence of different party types, we focus on the distinction between mainstream and challenger parties (De Vries and Hobolt, 2020). Challenger parties, defined as political entrepreneurs without government experience, aim to disrupt mainstream parties' dominance, employing a dual strategy consisting of policy- and rhetorical innovation. While policy innovation, particularly from the radical right on immigration, has been studied extensively, less attention has been paid to rhetorical innovation. We extend De Vries and Hobolt's (2020) argument that challenger parties use anti-establishment rhetoric to weaken the competence advantage of established parties by considering how moral appeals can challenge "ordinary" political talk.

Thus, while moral rhetoric is part of standard political vocabulary, used by parties across the board (Jung, 2020), challenger parties may stand out by combining moral rhetoric with emotional

appeals that contribute to "firing up" moral judgments (Garrett, 2019). Because of norms of civility and temperance, mainstream parties are likely to be restrained in their use of strong, especially negative, moral-emotional language (Widmann, 2021). In turn, since this rhetoric will seem out of place when used by mainstream parties, they are unlikely to be successful in gaining resonance with it among the public. These dynamics create an opening for challenger parties to disrupt "ordinary" political talk by provocatively adding emotional weight to moral statements. Considering its potency in drawing boundaries between groups (Brady *et al.*, 2017; 2023), we expect negative moral-emotional rhetoric to be a particularly powerful tool for challenger parties to influence public discourse.

H2: Challenger parties have greater rhetorical influence on the public than mainstream parties. This is especially true for negative moral-emotional appeals.

## 3. Case: German immigration discourse

We investigate the diffusion of moral and moral-emotional appeals in German immigration discourse. Typically considered a highly moralized topic, immigration should allow us to observe the rhetorical phenomenon of interest. At the same time, research demonstrates fluctuations over time regarding parties' use of moral language on immigration, as well as the degree to which the public sees it in a moral light (Simonsen and Bonikowski, 2022; Simonsen and Widmann, 2023). This variation suggests that morality is not a stable characteristic of the issue but something that can be affected by political (or other) dynamics. In Germany, immigration has remained central in political and public debate since 2015/2016 where the country received high numbers of migrants and refugees. During the period of study, national and international media portrayed Germany as a moral leader on the topic in Europe (Deutsche-Welle, 2016), raising questions about the relative rhetorical influence of different actors.

The research period runs from September 2017 until the end of 2021 (covering the 19th legislative period of the German Bundestag). This was a period of continued debate about immigration; however, it does not include the height of the "refugee crisis" of 2015/2016. Earlier periods are excluded as the German radical-right challenger party AfD (*Alternative für Deutschland*) is central to our investigation of H2, and the party did not enter parliament until 2017 (the study's politician population is limited to elected parliamentarians). Although the "refugee crisis" might have provided momentum to moralize the topic, the focus of this study on the succeeding years offers insights into rhetorical dynamics outside of the immediate crisis moment, which arguably characterizes most political and public debate. We believe, therefore, that the results of our study have the potential to generalize to other salient topics.

# 4. Data and topic identification

Data from Twitter allow us to analyze public, media, and political rhetoric through a single source. The high granularity of the data (with daily communication) enables us to closely track rapidly changing temporal rhetorical patterns. Consequently, we can precisely assess the extent to which different actors employ moral rhetoric in response to changes in other actors' rhetorical styles.

Data were collected using the academictwitteR package by Barrie and Ho (2021) and include three samples of societal actors: the political sample (all available accounts of MPs and parties in parliament, 29,073 tweets), a sample of the attentive public (10,634 tweets), and a media sample (13,278 tweets). For more details, see online Appendix A. To examine H2, we split the political sample into two, comparing the radical right challenger AfD to all other parties. With the topic of immigration, AfD is considered a challenger party because it alone represented a disruption of the pro-immigrant policy consensus characterizing German politics at the time (Gessler and

Hunger, 2021). Although the radical-left party *Die Linke* had also never held government power, we group it with the other mainstream parties because of its policy position.

Using a dictionary approach to identify the topic of immigration, we created a keyword list to filter tweets including immigration-related terms (see online Appendix B). After filtering, our study includes a total of 53,019 tweets from 1648 different accounts.

## 5. Computational text analysis

To measure moral and moral-emotional appeals in political text, we use the transformer-based classifier fine-tuned by Simonsen and Widmann (2023). The model can reliably classify moral appeals, emotional appeals, and valence (positive or negative) in up to 100 languages. Online Appendix B provides details on the transformer model and reports performance metrics.

We use this transformer model to classify all immigration tweets in the study. Based on the model classification, we create the variables of interest. These include moral appeals (i.e., tweets that refer to fundamental beliefs about right and wrong without concomitant emotional content), and moral-emotional appeals (i.e., tweets where references to fundamental beliefs about right and wrong are combined with emotional appeals), both of which are subdivided into positive and negative. The distinction between positive and negative variants relates to whether the tweet emphasizes moral virtues (positive) or vices (negative). This means that the valence of a tweet is conceptually and empirically distinct from the emotionality of the tweet, which instead relates to the expression of emotions such as anger, sadness, joy, or pride. Daily proportional scores ranging from 0 to 1 serve as endogenous variables in our SVAR analysis.

# 6. Structural vector autoregression analysis

The vector autoregression (VAR) model analyzes a set of stationary time series where  $\alpha$  represents the constant,  $\beta$  coefficients capture the effects of each rhetorical style  $Y_{i,t}$ , representing the proportion of daily moral(-emotional) appeals for each group i (politicians, public, and media) on day t. We design the VAR model to delineate the autoregressive and endogenous relationships among these variables, formulating each variable  $Y_i$  as a function of its own lags and those of other variables. The main model can be formally expressed as follows:

$$Y_{i,t} = lpha + \sum_{p=1}^{P} oldsymbol{eta}_{p} Y_{i,t-p} + oldsymbol{arepsilon}_{i,t}$$

We use the VARselect function of the vars R package (Pfaff, 2008) to determine the optimal lag structure based on two selection criteria (see online Appendix C). Online Appendix E replicates the analyses with a different lag structure.

After calculating different VAR models, we proceed to fit SVAR models based on the VAR models. In comparison to VAR models (Pfaff, 2008), which account for the endogenous variables solely through their own history, SVAR models enable the explicit modeling of contemporaneous (i.e., same-day) interdependence among the variables, which is crucial in dynamic social media contexts.

Running a model for each rhetorical style, the simple SVAR models (Figure 1, testing H1) include three actor groups: politicians and parties, attentive public, and news media (as a control variable<sup>1</sup>). For the complex SVAR models (Figure 2, testing H2), we split the politics group into two according to their belonging to the radical right challenger party AfD. Following Pickup and Kellstedt (2023), we investigate the balance of our time series equations to ensure valid statistical

<sup>&</sup>lt;sup>1</sup>The structural vector autoregression models incorporate media rhetoric as an endogenous variable, allowing us to control for the impact of the news media on the same and subsequent days.

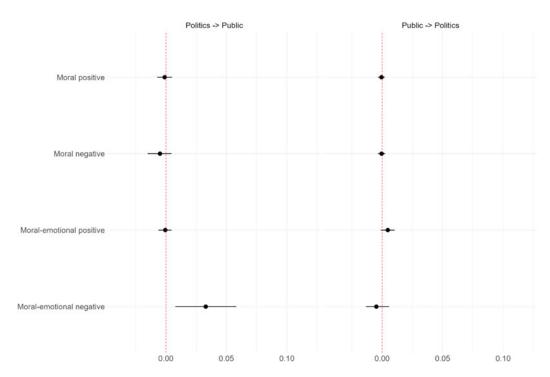


Figure 1. Simple, cumulative IRFs: predicted rhetorical appeals across the public and politics group. IRFs (with 1000 simulation runs) are based on four SVAR models (one for each rhetorical style) with a one-day lag structure, illustrating the predicted, cumulative change over the seven subsequent days in public discourse after a unit shock on day 0 in political discourse (left panel) and in political discourse after a unit shock on day 0 in public discourse (right panel).

inferences. Online Appendix F shows that our models result in a balanced vector autoregression with white noise residuals.

The results of the SVAR models are best expressed using cumulative impulse response functions (IRFs). These cumulative IRFs indicate how a "unit shock," i.e., increase of one standard deviation of the disturbance terms of the different variables by one group predicts the change in rhetorical style of other groups, cumulatively over seven days. We calculate and report orthogonal, cumulative IRFs based on 1000 simulation runs.

#### 7. Results

Figure 1 offers first insights on the diffusion of rhetorical styles between the attentive public and politicians. The figure displays the set of simple SVAR models (one for each rhetorical style), showing the effect of lagged changes in the impulse group predicting subsequent changes in the response group within the first 7 days after the shock. The left panel displays the effect of an increase in political appeals on public appeals and vice versa for the right panel.

Most coefficients are close to zero and statistically insignificant, suggesting that neither the public nor politicians influence one another's rhetorical styles. However, zooming in on negative moral-emotional appeals, we see that H1 is supported. The positive and significant coefficient in the bottom row of the left panel indicates that when politicians increase negative moral-emotional appeals, the attentive public follows suit and increases negative moral-emotional appeals over the next seven days. In terms of effect sizes, an increase of one standard deviation of the disturbance term of negative moral-emotional appeals by politicians (corresponding to an increase of approximately 18 percent of daily negative moral-emotional appeals) leads to an increase of

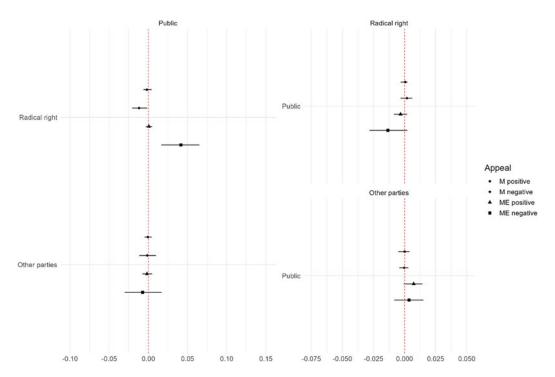


Figure 2. Complex, cumulative IRFs: predicted rhetorical appeals across different actor groups. IRFs (with 1000 simulation runs) are based on four SVAR models (one for each rhetorical style) with a one-day lag-structure, illustrating the predicted, cumulative change over the seven subsequent days in public discourse after a unit shock on day 0 in different parties' discourse (left panel) and in parties' discourse after a unit shock on day 0 in public discourse (right panel), i.e., y-axis denotes the impulse group and the title denotes the response group.

3.4 percent in negative moral-emotional appeals in the public over the following seven days. Put differently, if politicians go from no negative moral-emotional appeals to only negative moral-emotional appeals on day 0, the public increase these appeals by approximately 20 percent over the next seven days. This is a sizable effect, considering that even a small increase in negative moral emotions can carry severe political consequences in the form of affective polarization and inflated beliefs about intergroup hostility (Clifford, 2019; Brady *et al.*, 2023).

Moving to H2, Figure 2 offers a more fine-grained analysis, splitting the politics group into two to examine rhetorical diffusion between the radical-right challenger party and all other parties, on the one hand, and the attentive public on the other. Most coefficients remain close to zero and statistically insignificant. However, the left panel shows a positive and statistically significant coefficient for the effect of the AfD on public discourse when it comes to negative moral-emotional appeals. When the radical right challenger enhances its negative moral-emotional rhetoric, the public tends to follow suit by increasing negative moral-emotional appeals. Substantively, this means that when the AfD increases negative moral-emotional appeals by one standard deviation of the disturbance term (corresponding to approximately 30 percent of daily negative moral-emotional appeals), the corresponding increase in the public's use of this rhetoric is approximately 4 percent over the following week. This finding lends further weight to existing research on the unique potency of moral emotions in social media networks (Brady *et al.*, 2023, 2017), emphasizing in our case the specific potential of negative moral emotions.

Lastly, for negative moral (non-emotional) appeals, we see a small but statistically significant coefficient for the AfD on the public, indicating that when the former increases the level of negative moral appeals, the public responds by decreasing the level of negative moral (non-emotional)

rhetoric in their own immigration discourse. This finding is unexpected as we hypothesized only positive diffusion. However, given the comparatively small effect size and the fact that this finding is not robust to an alternative model specification (see online Appendix E), we hesitate to place much weight on it. We therefore conclude that the results highlight the particularly strong influence of the radical-right challenger when it comes to negative moral-emotional appeals (confirming H2).

Online Appendix G replicates the complex analysis by splitting the politics group into different party families (confirming results from Figure 2) and also illustrates inter-party family effects.

De Vries and Hobolt (2020) argue that it is the combination of policy innovation and rhetorical innovation that makes challenger parties effective in disrupting "politics as usual." In the context of German immigration discourse, our results provide empirical evidence that on top of AfD's anti-immigrant "policy innovation," their negative moral-emotional rhetoric was effective in shaping how the public talked about the issue.

#### 8. Discussion

Setting out to understand the complexities of rhetorical diffusion across political and public discourse, this study's findings contribute to two main lines of research.

First, we extend studies on the use of moral rhetoric in political communication by illuminating the dynamics in who leads and who follows a change in rhetorical style. Results indicate limited influences between politicians and the public. However, the findings regarding negative moral-emotional appeals are consistent and robust. They underscore the pivotal role that politicians play in introducing negative moral-emotional appeals into public discourse on salient and contentious issues such as immigration. The limited impact of positive moral(-emotional) rhetoric on public discourse adds to existing literature on the persuasive power of moral emotions (Brady *et al.*, 2023, 2017).

Second, we contribute to literature on challenger parties (De Vries and Hobolt, 2020) by providing empirical evidence on the capabilities of these parties to engage in "rhetorical innovation." While previous research has focused on their policy innovations, we provide empirical evidence that underscores challenger parties' unique capacity to blend negative moral and emotional language in a manner that significantly influences public discourse.

Our study does not address whether and how public opinion is affected by or affects politics; rather, we examine how a moral-emotional lens on the topic of immigration traveled across discursive fields (political and public). This does not mean that the question of opinion change is not important, but it is a fundamentally different one than the question pursued here (Gabel and Scheve, 2007). For instance, even if the AfD did not succeed in making mainstream political parties or the public take over its policy stance (Gessler and Hunger, 2021), the party might still have influenced the public, or other parties, to talk differently about the issue and attach greater moral and emotional weight to the issue. This is crucial because a moral-emotional lens affects the meaning of the situation, infusing it with a sense of existential, primary importance (Skitka, 2010) and changes how we judge other groups in society (Brady *et al.*, 2023).

We believe that these findings can potentially travel beyond the issue of immigration to other topics that are routinely addressed by radical challenger parties to mobilize support and disrupt established parties' agenda (e.g., gender and climate change). While our study relied on data from Twitter, we do not see any reason to think that the dynamics we identify are confined to this particular social media platform. On platforms where politicians and the public equally have access to express themselves and observe each other, similar dynamics are likely to be at play. As such, this study carries significant implications for the health of contemporary democratic discourse, especially in an era where moral and emotional divides appear to be deepening.

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