

# A Comprehensive Analysis of Germany's Political Twittersphere: Topics, Sentiment, and Message Diffusion

This thesis utilizes large, detailed, and long-term Twitter data on German Bundestag politicians and their followers to investigate two phenomena often related to digital media consumption and political polarization: emotions and echo chambers

## 1. Sentiment and Sharing Behaviour

Traditional media and, more recently, social media have been shown to have strong effects on many aspects of human behavior, ranging from individual consumption to political participation and outcomes. It is thus important to understand the factors that make messages more successful in attracting viewership and user engagement, so that social media users turn from consuming to sharing information that others post online. In this context, sentiment has been suggested to be a driving force of information dissemination. However, the existing literature has many shortcomings. To improve upon it, this thesis utilizes a unique dataset of 171,625 tweets by all politicians elected into the German Bundestag in 2017 that were active on the platform from August 2017 to October 2018. Given this, user fixed effects and user specific time-trends can be used in addition to which a high number of new control variables is introduced. The results show that particularly negative sentiment drives sharing behavior, and that these effects are heterogeneous. More specifically, the AfD, a right-wing populist party, profits most from the effect of negative sentiment. In addition, a number of comparative case studies suggest that effects are moderated by the underlying topic, and stronger for more divisive debates.

The results provide strong evidence for the idea that negative campaigning works especially well on social media. However, they also show that some parties can make better use of emotions and sentiment than others. The strong effects found for the AfD, and to a lesser extend for Die Linke, suggest that social networks are well suited for populist communication in the form of emotionality and simplification. Given that social media offers an unfiltered channel for politicians to communicate with their electorate and the effects (social) media has been shown to have on social, economic, and political decisions people make, the advantages of populist communication on social networks can have profound impacts. This has long been suspected, including by populist politicians themselves:

*"The fact that I have such power in terms of numbers with Facebook, Twitter, Instagram, etc., I think it helped me win all of these races where they're spending much more money than I spent."* – Donald Trump, 2016

Given the recent rise in populist movements across the world, this has strong implications for non-populist policy makers. These need to find new ways to gain an advantage in communicating with their electorate online and to counter the success of populist communication generally. Further, the findings suggest that copying populists' style is not a sufficient strategy, as these can make better use of emotions than other politicians. The results also indicate that users should be aware of the power of emotionality on their own decisions. Further, they may also be interpreted in the context of the problems of hate speech and fake news, as both phenomena could profit from the effect of emotionality as well.

## **2. Echo Chambers**

In addition, this thesis also adds to the literature on echo chambers, i.e. the selective exposure of people to political information that verifies their pre-existing beliefs: These have been accused of being responsible for the recent increase in political polarization. To investigate the phenomenon, I utilize detailed information on all 1.78 million unique followers of Bundestag politicians and their 5.4 million connections into the Bundestag, to analyze which parties can be considered to be in an echo chamber. Introducing a new measure for polarization, it is shown that the AfD is most polarizing, given that, when compared to other parties, most of its politicians' followers only or mostly follow the AfD. To take a more specific look at the data, the adjacency table of all 1.78 million followers is drawn upon to group these. As a result, it is shown that the AfD's echo chamber is driven by a small group of 'huge fans' (7 percent of the AfD's followers) that make up 50 to 75 percent of the average AfD politician's followers.

These findings have strong implications for both research and policy. Regarding echo chambers, this paper adds to the literature by suggesting a new measure, which is particularly useful in multi-party systems. The results have several implications: First, in comparison to most of the literature, strong evidence for the existence of an echo chamber is presented. Further, it is shown that even a small group of very active profiles can create the phenomenon. This suggests that the existing literature is well advised not to underestimate the impact of small groups (of people) in this context, given that these can multiply their influence online. Regarding policy implications, politicians should be aware that their followers' reactions and opinions are not representative of their party's followers' opinions. In Germany, this is particularly relevant for AfD politicians. Followers should be aware of this as well, given that these could be subject to herding effects or falsely assume that the number of retweets politicians receive is representative for the party's followers' opinions.