



Can populisms of politicians be estimated by analyzing speech data from Twitter?

With the re-surge of (right-wing) populism amongst countries on a global scale, the question of causes, and a deeper understanding of pathways demands preoccupation. This study proposes to estimate individual populism levels of politicians (and, in consequence, by party) by processing Twitter messages (tweets). Scholars are struggling to define populisms due to its varieties, but narratives of the „pure people“ and „threats from outside“ prevail. In addition, low-complexity and anti-pluralistic solutions to complex societal problems continue to provide wide-spread currency (Berbuir, Lewandowsky, & Siri, 2015).

In the present work, populism is defined by referring to Poppers (pre-)theory of the open society, as antidote to the tribal society, or „horde“ (Popper, 1972). Advocates of the tribal-type society advocate for strong hierarchical leaders, strict rules, accepting (as opposed to discussing) „truths“, adopt narratives of „blood and soil“, and „we against them“, cherish heroic traits and behavior. In sum, such tendencies may be interpreted as complexity-reducing, even anti-rational, intra-group cohesive. According to Popper, tribal societies have a totalitarian core, going back to Plato as spiritus rector.

Operationalization

Populisms is operationalized by eight indicators. Their median give the total populism score per person.

Indicator
word shortness
ratio of negative/positive words
proportion of negative words
proportion of emotional words
negative emotion score
overall emotion score
proportion of CAPITAL letters
ratio of adjectives to adverbs

Discussion

- Indicators were chosen with some degree of subjectivity
- More/different analyses warranted
- Statistical uncertainty not covered
- Was the sample representative for German politician chatter?
- Association with external criteria is still unknown

Bibliography
Berbuir, N., Lewandowsky, M., & Siri, J. (2014). The AfD and its Sympathisers: Finally a Right-Wing Populist Movement in Germany? *German Politics*, 24(2), 154–178. <https://doi.org/10.1080/09644008.2014.982546>
Popper, K. (1972). *Die Offene Gesellschaft und ihre Feinde*. Bern: Francke UTB.

Data and data aggregation

- 400k ($4 \cdot 10^5$) tweets from German politicians
- 32k tweets from Donald Trump
- Yielding approx. $6.3 \cdot 10^6$ words
- 200 politicians from list *German Politicians* (Deutsche Welle)
- 8 political parties: AfD, CDU, CSU, FDP, Grüne, Linke, SPD, (fraktionslos), Trump/GOP
- Data were collected in August 2017

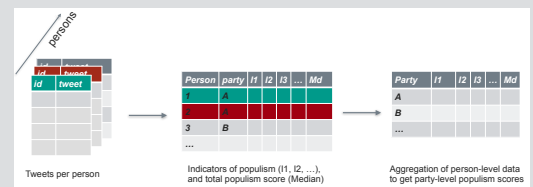


Figure 1. Eight Populism indicator scores (z-values) are computed from tweets data per person. Person-level data is further aggregated to party-level data.

Results: AfD and Linke* show highest score, overall*

*within German parties. However, Trump's score is by far the largest.

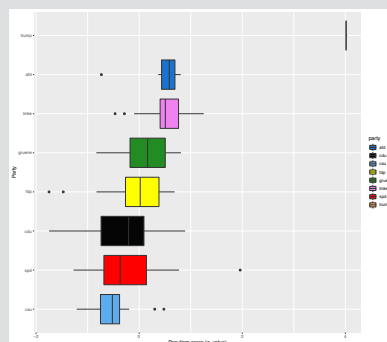


Figure 2. German party scores are led by AfD and The Linke

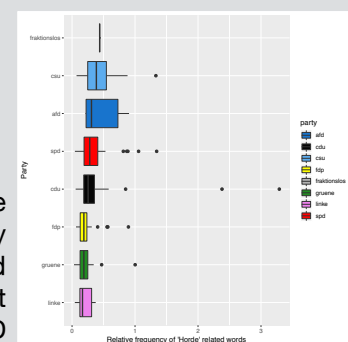


Figure 3. The relative frequency of ‚horde‘ related words* is highest for AfD

Figure 4. Populism indicator scores (z-values) for each party. Some parties show similar patterns such as CSU, CDU and SPD.

