

Benjamin Schloss – Abstract

## **The Way We Conceptualize Politics: A Computational-Behavioral Study on the Democratic and Republican Semantic Spaces**

This poster presents computational analyses on the semantics of abstract political nouns by training a semantic space model on transcribed political debates and comparing it to behavioral data for the same nouns. Namely, we use multidimensional scaling, cosine similarity metrics and nearest neighbor analyses to understand how the same political concepts may have subtly or largely different meanings when used by Republicans and Democrats. We analyze both single words and phrases in order to understand which sets of concepts show the most agreement between parties and which concepts best divide the two parties. Additionally, we compare semantic vectors for current political candidates to the party general semantic vectors in order to understand how current candidates relate to their respective party's traditional understanding of highly debated topics. Finally, we compare the distances in the multidimensional scaling to real participants' organization of the same political concepts in a behavioral study where participants were asked to sort words in a 2D box such that more similar words are closer together and words with different meanings are farther apart. The distance matrices for the subject's 2D concept maps and for the party specific multidimensional scaling are compared and related to voting behavior.