

Chapter 1

Media Bias and Polarization through the Lens of a Markov Switching Latent Space Network Model

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Abstract

News outlets are now more than ever incentivized to provide their audience with slanted news, while the intrinsic homophilic nature of online social media may exacerbate polarized opinions. Here, we propose a new dynamic latent space model for time-varying online audience-duplication networks, which exploits social media content to conduct inference on media bias and polarization of news outlets. Our model contributes to the literature in several directions: 1) Our model provides a novel measure of media bias that combines information from both network data and text-based indicators; 2) we endow our model with Markov-switching dynamics to capture polarization regimes while maintaining a parsimonious specification; 3) we contribute to the literature on the statistical properties of latent space network models. The proposed model is applied to a set of data on the online activity of national and local news outlets from four European countries in the years 2015 and 2016. We find evidence of a strong positive correlation between our media slant measure and a well-grounded external source of media bias. In addition, we provide insight into the polarization regimes across the four countries considered.
