Quantifying Partisan news diet in TV audiences

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• generalization from anecdotes
  ○ insufficient samples

• oversimplified causes
  ○ ignoring evidence for other possibilities
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  ○ insufficient samples

• oversimplified causes
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• data-driven studies
  ○ representative
  ○ large-scale
  ○ holistic
partisan news segregation in television

partisan segregation in television and online news consumption

- empirical investigations of the online media environment

- television as the main source of news!
partisan segregation in desktop & TV news audiences

- desktop users (N ≈ 500,000)
- television users (N ≈ 350,000)
- January 2016 to Dec 2019
of Americans experiencing partisan segregation, the percent that remain segregated for X months
archetypal news consumption behavior

21% American adults hew closest to one of the three most partisan TV archetypes accounting for 64% of all news minutes consumed.

only 6% of web users adhere to the most partisan web archetypes comprising 29% of all online news minutes consumed.
partisan news segregation in television
Americans’ shared reality

- how content is changing over time

TV stations
- cable networks: FNC, CNN, MSNBC
- National networks: ABC, CBS, NBC

date:
- January 2012-Aug 2022

work in progress.
people are LEAVING TV. but they are not leaving polarizing cable news
news categorization
news classification

- multi-label
- various level of class imbalance
- 30 class labels
- 20 million segments

- weakly-supervised
  - keyword-based
  - few-shot learning
  - pretrained mask-language-models
topic over time
the posterior probability that an observer with a neutral prior expects to assign to a speaker’s true party after hearing the speaker utter a single phrase.

\[ \pi(x) = \frac{1}{2} q^P(x) \rho(x) + \frac{1}{2} q^N(x)(1 - \rho(x)) \]

- \( q^P(x_i) \in (0,1)^J \) is the phrase probability
- \( \rho(x) \): the empirical term frequencies for a station

“Measuring polarization in high-dimensional data: Method and application to congressional speech,” Gentzkow et. al, 2016.
polarization dynamic

Gentzkow et al., “Measuring polarization in high-dimensional data: Method and application to congressional speech,” 2016.
Thank you!

- Questions!