

## *Exposure to ideologically diverse news and opinion on Facebook*

- **Eytan Bakshy, Solomon Messing, Lada A. Adamic**
  - o *These guys are all being paid by Facebook*
- **Science, 2015**
- [Original](#)
- [Supplement](#)

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### Major Conclusions:

- “Rather than people browsing only ideologically aligned news sources or opting out of hard news altogether, our work shows that social media expose individuals to at least some ideologically crosscutting viewpoints.”
- “...our work suggests that the power to expose oneself to perspectives from the other side in social media lies first and foremost with individuals.”
- They claim that because people are exposed to some cross-cutting content that the responsibility is entirely on the user to engage with it.
- The devil is really in the supplemental details here
  - o Most of their measurement assumptions I don’t agree with and it brings into question the entire study.

### Intro:

- Social media is increasingly the place where people get their news
- The abundance of information online has removed the information curation process from the newsroom and placed it in the hands of the social networks and algorithms found on social media platforms
- They may expose people to new information, however, there is concern over:
  - o *Echo chambers*: self-selected networks which expose individuals to only information from other like-minded individuals
  - o *Filter bubbles*: when content is selected by algorithms according to a viewer’s previous behaviors
  - o Both of which are devoid of attitude-challenging information
- There is also the potential for social media to bring about the adoption of more extreme attitudes over time – largely as a result of environments like the above
- Empirical attempts to study these questions have been limited by difficulties in measuring news stories’ ideological leanings and measuring exposure
  - o Measuring exposure has been a problem because people have used error-laden approaches, retrospective self-reports, or behavioral data with limited generalizability

### Method:

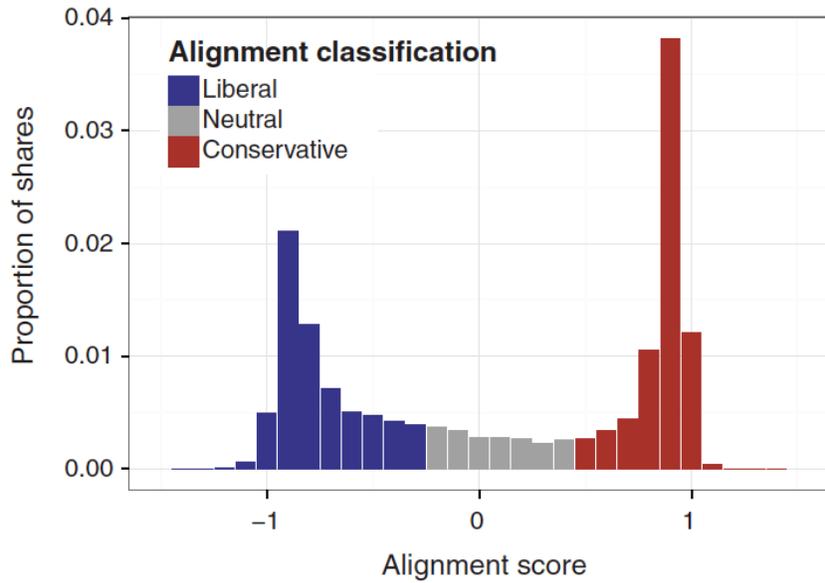
- Instead, these guys use a “large, comprehensive data set from Facebook that allows [them] to:
  - o Compare the ideological diversity of the broad set of news and opinion shared on Facebook with that shared by individuals’ friend networks
  - o Compare this with the subset of stories that appear in individuals’ algorithmically ranked News Feeds, and

- Observe what information individuals choose to consume, given exposure on News Feed.”
- 10.1 million active users – those who self-labeled their political ideology on Facebook
  - This is a tiny, tiny, tiny, portion of very specific and self-selected users on Facebook. There is strong reason to believe that these users would behave differently with respect to political content on Facebook – and this is the **focus of the study**.
- 7 million article links
- 6-month period (July 2014 – January 2015)
- Articles classified as either:
  - “Hard”: news, politics, world affairs, etc. (13% URLs)
  - “Soft”: sports, entertainment, travel, etc. (87% URLs)
- Classification done by training a support vector machine on unigram, bigram, and trigram text features
- The “hard” URLs were further limited (down from the 13%) to a total of 226k which were shared by at least 20 users *who volunteered their ideological affiliation in their profile*
  - Seems fair to think that those who are publicly open about the political affiliation on Facebook might behave differently with respect to political news than those who do not.
- **The ideological alignment of the shared URLs was calculated by averaging the ideological alignment of each user who shared the article.**
  - This is a massive assumption. Why would we assume that people only share articles that align with their political beliefs? Why couldn’t some share an article and say something like, “Look at Brietbart’s shameless reporting – this is obviously false.” The ideological alignment of any article that someone shares ironically, or mockingly, or for any other disingenuous reason will be measured incorrectly.

Results:

Proportion of Shares as a function of their ideological alignment

- They observed substantial polarization among hard content shared by users
  - o The most frequently shared links clearly aligned with largely liberal or conservative populations (Fig. 1)

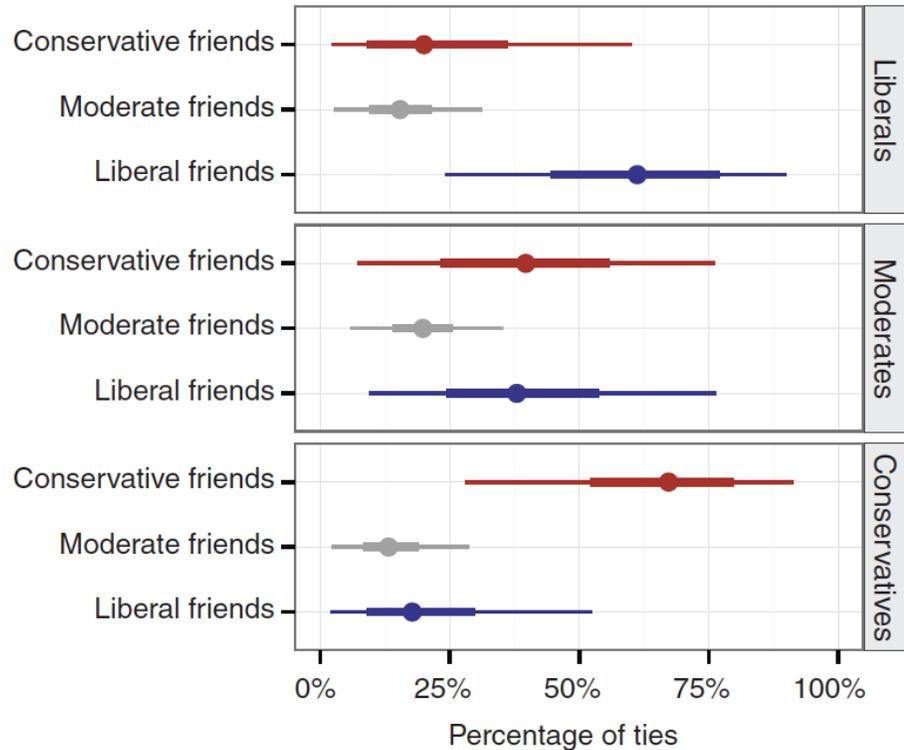


**Fig. 1. Distribution of ideological alignment of content shared on Facebook measured as the average affiliation of sharers weighted by the total number of shares.** Content was delineated as liberal, conservative, or neutral on the basis of the distribution of alignment scores (details are available in the supplementary materials).

## Ideology of Social Ties on Facebook

- Liberals and conservatives both have more social ties who align with their own political ideology

**Fig. 2. Homophily in self-reported ideological affiliation.** Proportion of links to friends of different ideological affiliations for liberal, moderate, and conservative users. Points indicate medians, thick lines indicate interquartile ranges, and thin lines represent 10th to 90th percentile ranges.



- **After ranking** the “risk ratio” comparing the probability of **seeing** cross-cutting content relative to ideologically consistent content is:
  - o 5% for conservatives and
  - o 8% for liberals
- **After adjusting for position within the News Feed** the “risk ratio” comparing the likelihood that an individual clicks on a cross-cutting content relative to consistent content is:
  - o 17% for conservatives and
  - o 6% for liberals
- There is still room for individuals to consume cross-cutting content because **only 7% of “hard” content was clicked on.**

## Cross-cutting content

- I don't care to understand figure A, it seems unnecessary
- Figure B seems misleading, considering the above points which seem to suggest that only 17% and 6% of conservatives and liberal users, respectively, actually click on cross-cutting content.

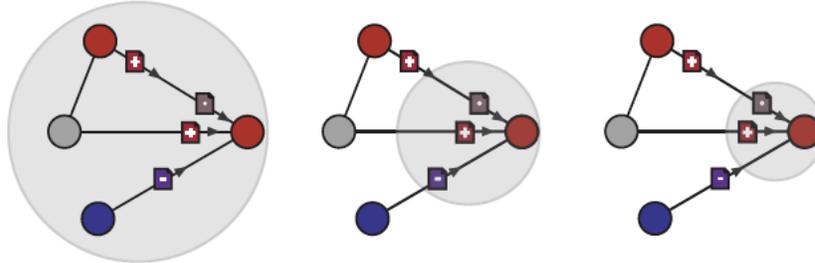
**A**

Stage in media exposure process

Potential from network

Exposed

Selected



Proportion of content that is cross-cutting

1/3

1/2

0/1

**Fig. 3. Cross-cutting content at each stage in the diffusion process.**

(A) Illustration of how algorithmic ranking and individual choice affect the proportion of ideologically cross-cutting content that individuals encounter. Gray circles illustrate the content present at each stage in the media exposure process. Red circles indicate conservatives, and blue circles indicate liberals. (B) Average ideological diversity of content (i) shared by random others (random), (ii) shared by friends (potential from network), (iii) actually appeared in users' News Feeds (exposed), and (iv) users clicked on (selected).

**B**

