

Navigating Pluralism and Credibility: The Shifting Landscape of US News Networks

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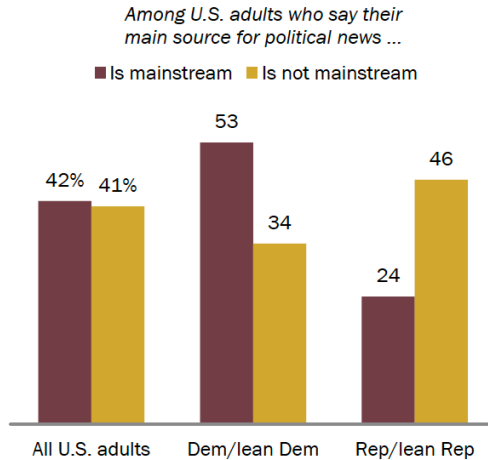


Democrats trust Mainstream / “Old-Guard” News

Republicans prioritize pluralism & Social Media

Republicans who say their main news source is ‘mainstream’ have less trust in it; the opposite is true for Democrats

% of U.S. adults who have a **great deal of trust** in the accuracy of the political news they get from their main news source

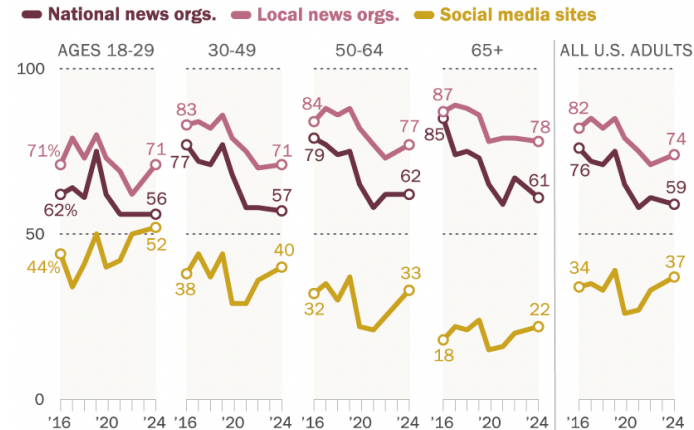


Source: Survey of U.S. adults conducted March 8-14, 2021.

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Adults under 30 nearly as likely to trust information from social media as from national news outlets

% who say they have a **lot of/some trust** in the information that comes from ____, by age



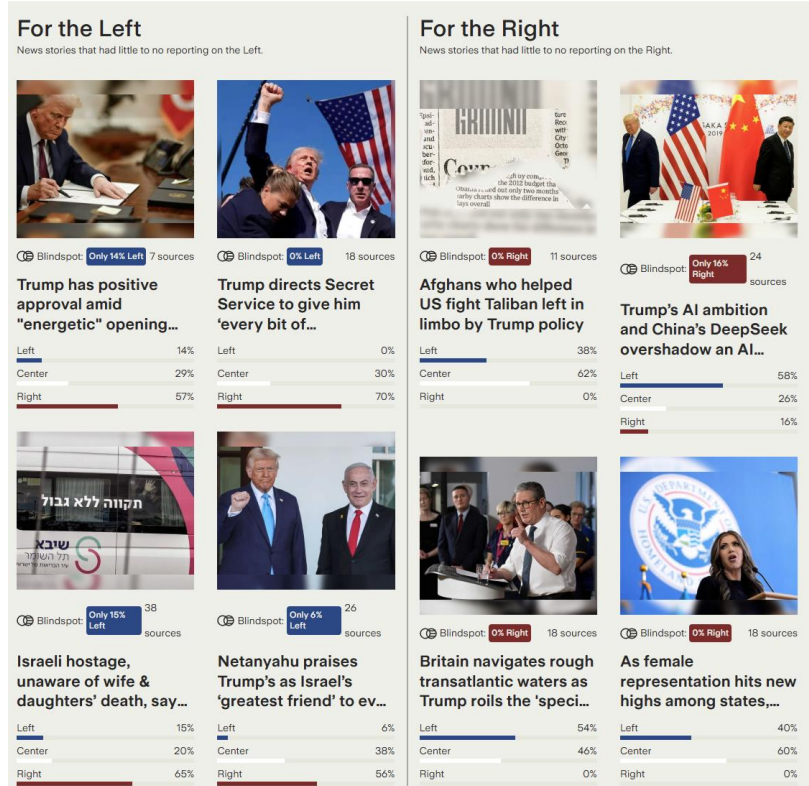
Note: In 2016, trust in information from social media was only asked of and based on internet-using U.S. adults. For the question on trust in the information from social media sites, the examples used have changed over time; for more detail on the specific wording, refer to the Topline.

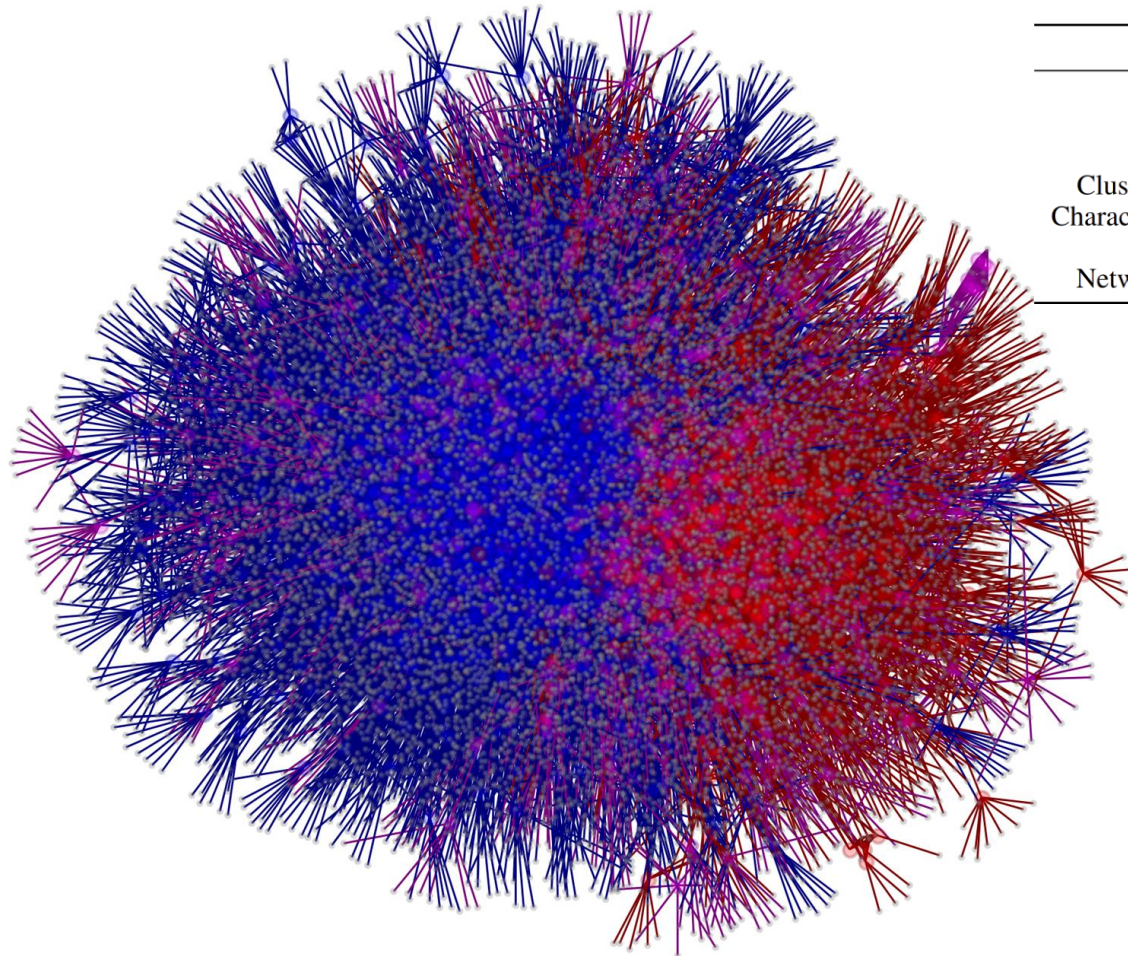
Source: Survey of U.S. adults conducted Sept. 16-22, 2024. For dates of other surveys, refer to the Topline.

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Pluralism and Credibility: Research Questions

- Can a news site have both a high degree of Pluralism *and* Credibility?
- *Or* is there evidence of a tradeoff between the two in news production?
- How can we measure pluralism and trustworthiness values in the news production?
 - *Webgraph* analysis for *contextual* signals in citation networks (CommonCrawl)
 - *Topic* analysis for *content* signals in published articles (GDELT)



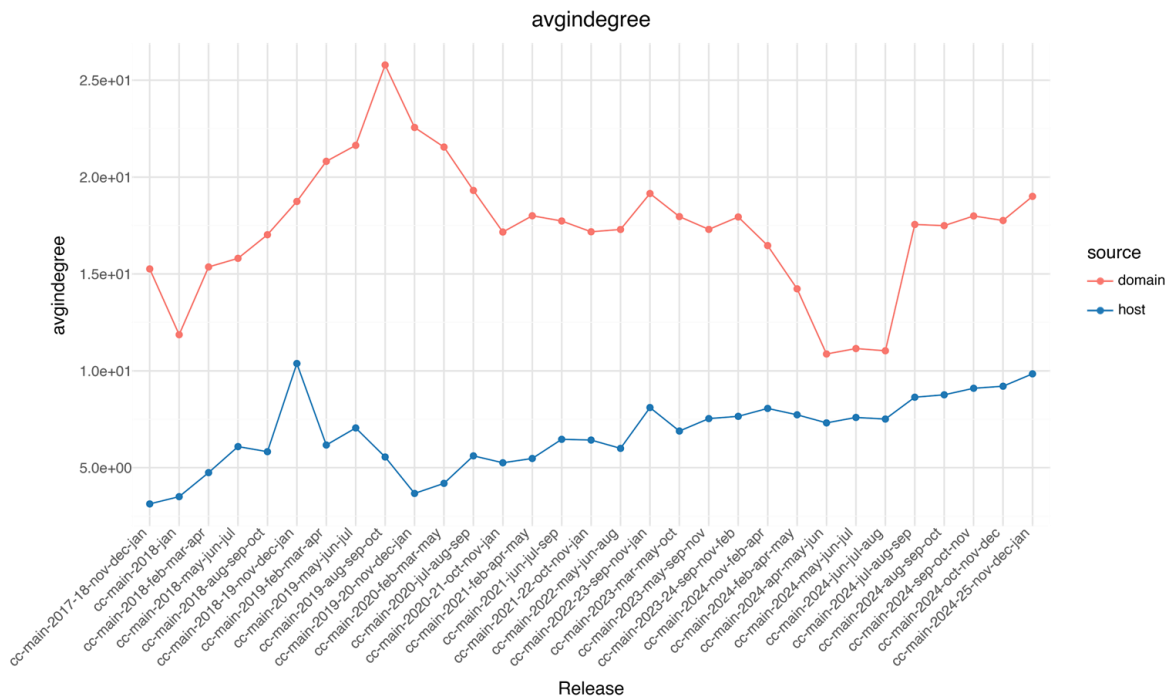


Statistic	Backlinks
Nodes	14959
Edges	32110
Avg Degree	4.29
Clustering Coefficient	0.016
Characteristic Path Length	0.401
Density	1.4e-4
Network Assortativity	-0.104

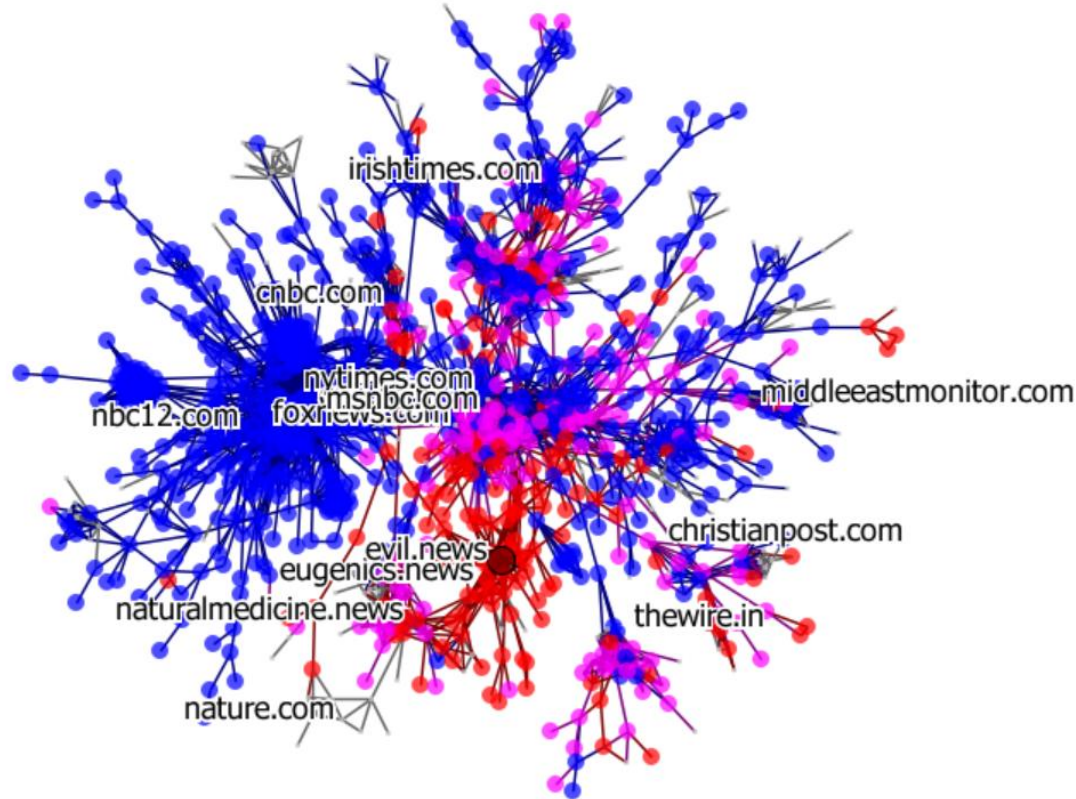
Peter Carragher, Evan M. Williams, Kathleen M. Carley. 2024.
"Detection and Discovery of Misinformation Sources using Attributed Webgraphs" upcoming in ICWSM 2024.

CommonCrawl Webgraphs

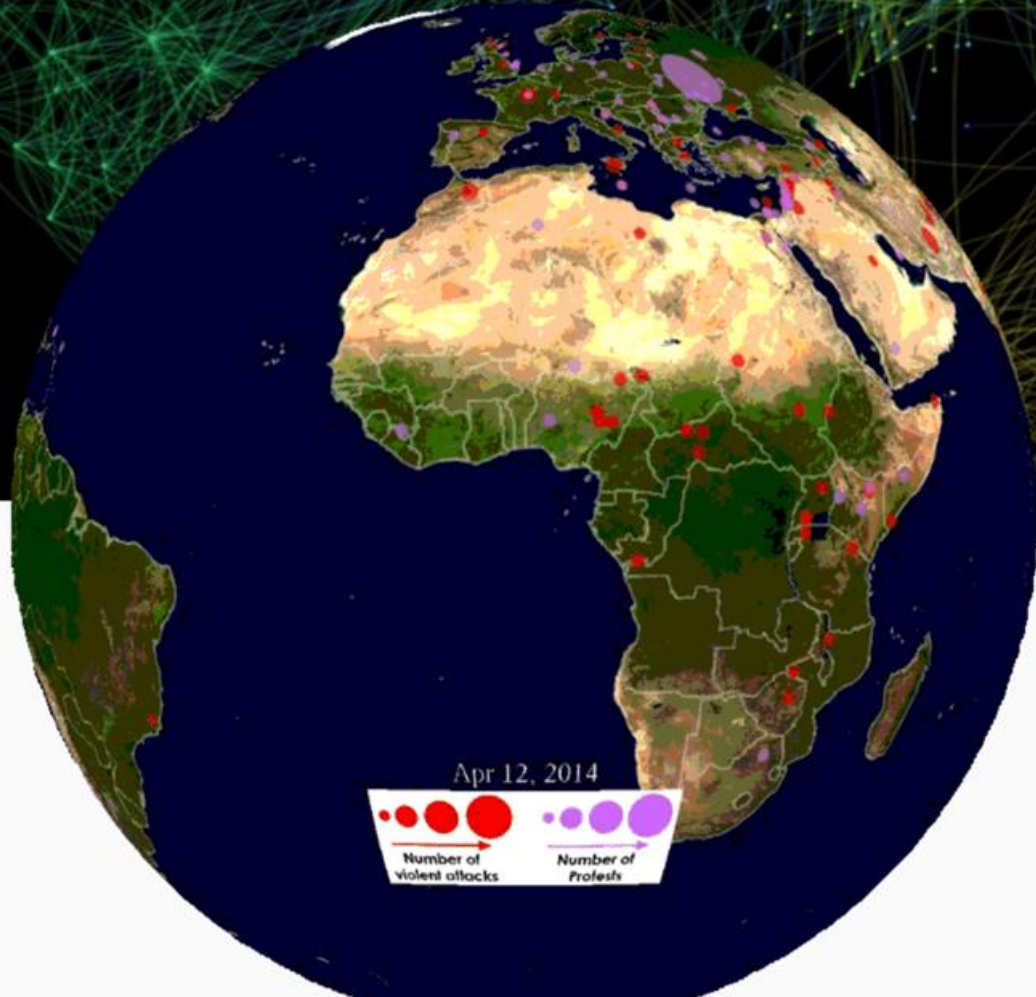
- Published quarterly since Jan'18: ~100mn nodes, ~2bn edges each



Similar assortativity from topic modelling articles scraped from these news sites



Watching Our World Unfold



A Global Database of Society

Supported by [Google Jigsaw](#), the GDELT Project monitors the world's broadcast, print, and web news from nearly every corner of every country in over 100 languages and identifies the people, locations, organizations, themes, sources, emotions, counts, quotes, images and events driving our global society every second of every day, creating a free open platform for computing on the entire world.

“Assortativity” in Transition Matrices

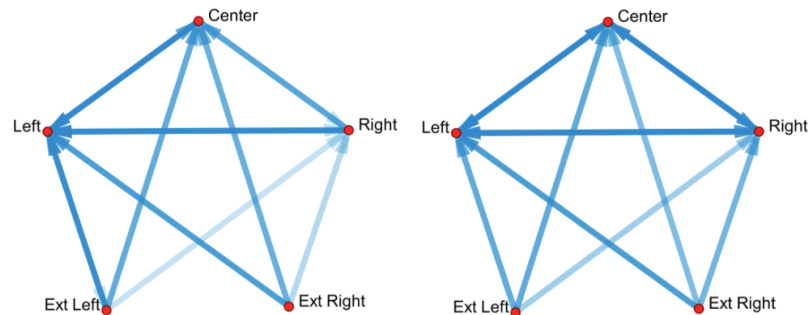
$$\text{GDEL T: } T_{ij} = |\mathcal{E}_i \cap \mathcal{E}_j|$$

CommonCrawl:

$$T_{ij} = \sum_{d_1 \in \mathcal{D}_i} \sum_{d_2 \in \mathcal{D}_j} \mathbf{1}_{\{d_2 \in \mathcal{N}(d_1)\}}$$

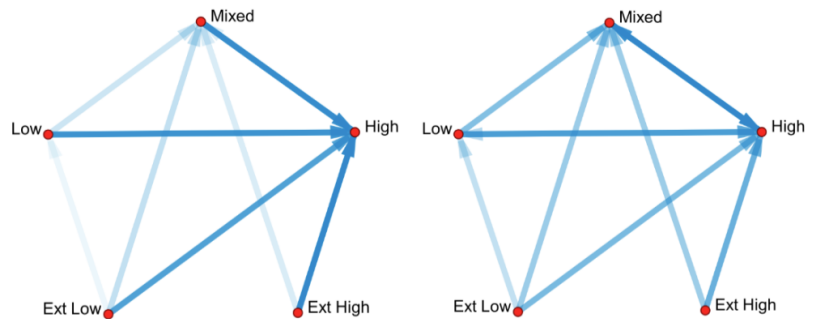
Row-normalize:

$$M_{ij} = \frac{T_{ij}}{\sum_{j'} T_{ij'}}, \quad \forall i : b_i \in \mathcal{B}$$



(a) $M_{\text{CommonCrawl bias}}$

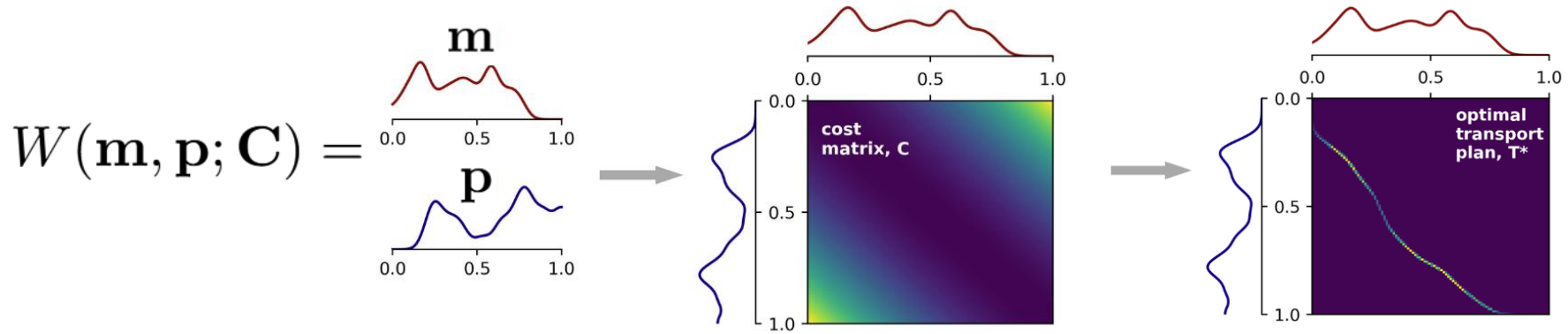
(b) $M_{\text{GDELT bias}}$



(c) $M_{\text{CommonCrawl reliability}}$

(d) $M_{\text{GDELT reliability}}$

Wasserstein Distances between observed transition matrices and 'worst Case'



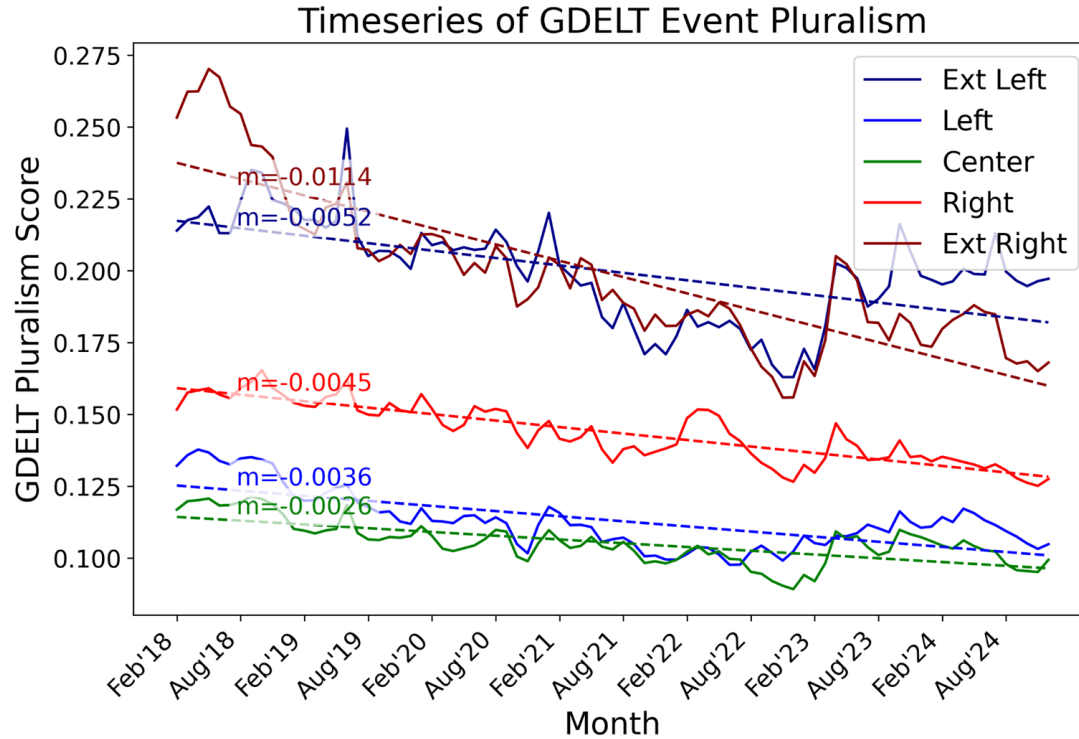
$$W_{\text{credibility}}(b_i) = W(\mathbf{m}_{\text{rel}}^i, \mathbf{p}_{\text{rel}}; \mathbf{C})$$

$$\mathbf{p}_{\text{rel}} = [1, 0, 0, \dots, 0]$$

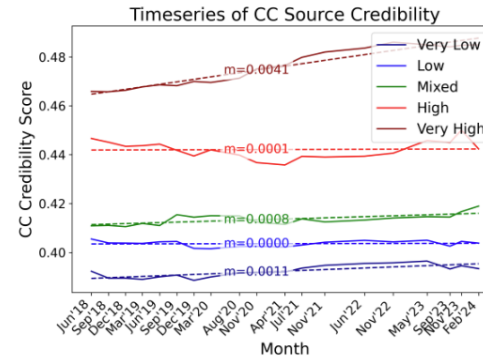
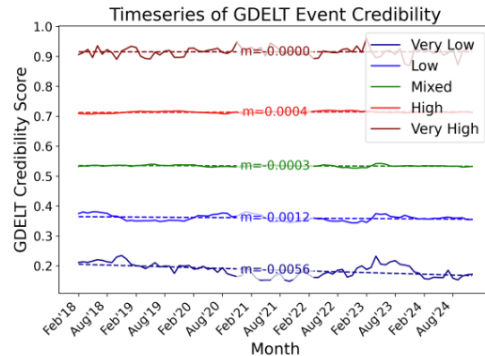
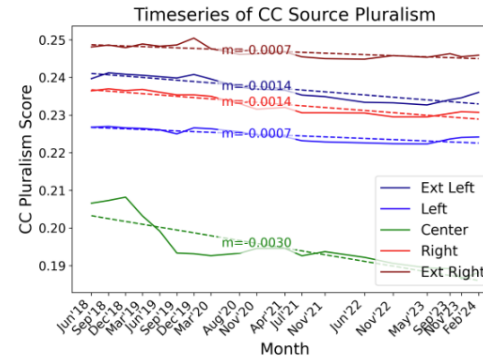
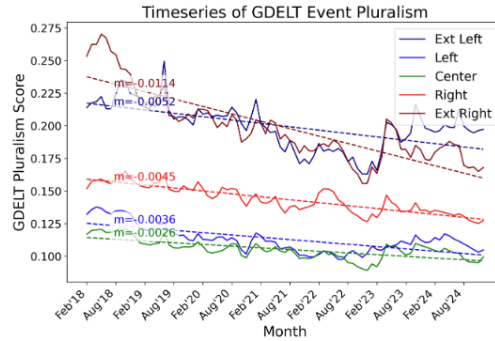
$$W_{\text{pluralism}}(b_i) = W(\mathbf{m}_{\text{bias}}^i, \mathbf{p}_{\text{bias}}; \mathbf{C})$$

$$\mathbf{p}_{\text{bias}}(j)_i = \mathbb{1}_{\{i=j\}}$$

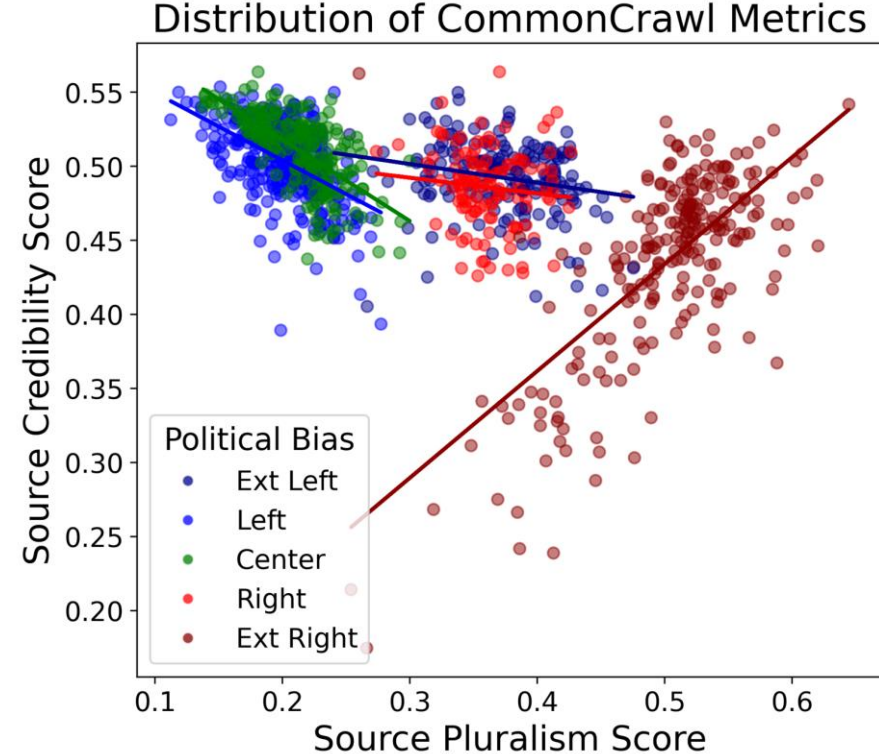
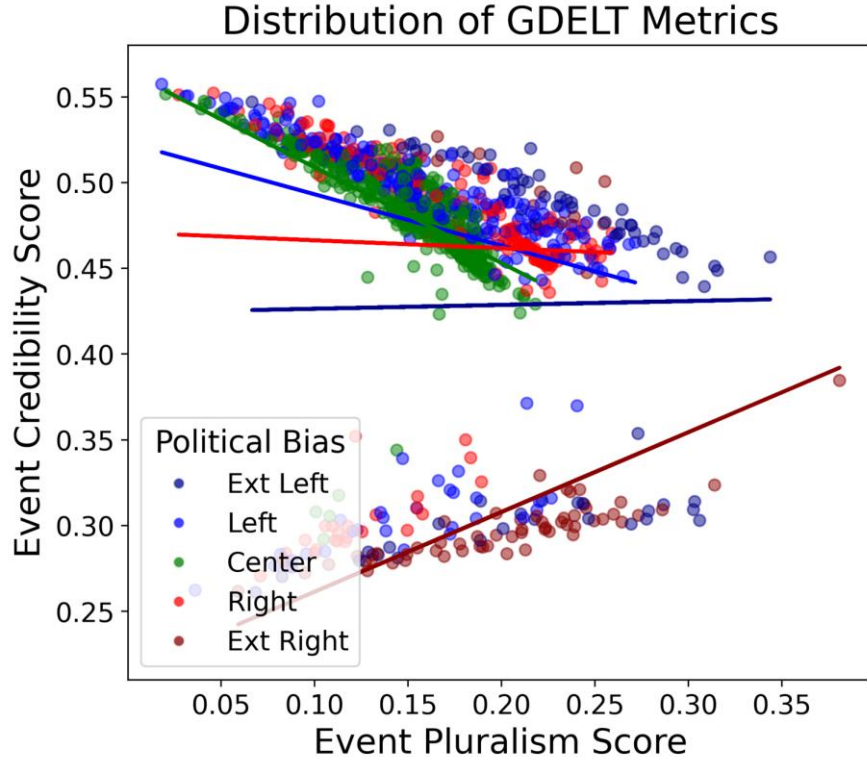
Decreasing pluralism in event coverage (GDELT)



... and in CommonCrawl (binarized → muted)



Complex tradeoff between credibility and pluralism, divided online experiences



Ongoing Work: Acquisitions and Affiliations

DirecTV Sues Nexstar for 'Conspiring' With Mission and White Knight To Raise Retrans Fees

By Daniel Frankel (NextTV) published March 14, 2023

Mission and White Knight stations, which are largely managed by Nexstar, have been blacked out on DirecTV platforms since October

FCC Finds Apparent TV Ownership Violations By Nexstar and Mission

Full Title: Mission Broadcasting, Inc. Licensee of Station WPIX, New York, NY: Nexstar Media Group, Inc., Notice of Apparent Liability for Forfeiture

Document Type: Notice of Apparent Liability For Forfeiture
Bureau(s): Media

Description:
FCC issued a Notice of Apparent Liability for Forfeiture finding that Mission Broadcasting, Inc., and Nexstar Media Group, Inc., apparently violated the Commission's TV ownership rules with regards to station WPIX, New York, NY.

DA/FCC #: FCC-24-34

Document Dates

Released On: Mar 21, 2024
Adopted Date: Mar 20, 2024
Issued On: Mar 21, 2024
Contact: Ty Bream, (202) 418-0644, Ty.Bream@fcc.gov
Media Contact: Office of Media Relations, (202) 418-0500, MediaRelations@fcc.gov

Tags:

Television - Ownership - Multiple Ownership

Files

- Notice of Apparent Liability For Forfeiture: [Pdf](#) [Txt](#)
- Rosenworcel Statement: [Docx](#) [Pdf](#) [Txt](#)

HOME / BUSINESS / NEWS

Nexstar Fined \$1.2M By FCC & Could Lose Control Of CW Flagship WPIX-TV In New York; Company Vows To Fight Ruling "Vigorously"

By Dade Hayes

March 21, 2024 4:15pm

11
COMMENTS



WPIX-TV in New York
Noam Galai/Getty Images

The Federal Communications Commission has determined that local TV giant Nexstar Media Group's takeover of WPIX-TV in New York in 2020 violated federal limits on station ownership.

In a ruling issued Thursday (read it [here](#)), the regulatory agency ordered Mission Broadcasting, Nexstar's partner in WPIX, to sell the station. Failing that, Nexstar could put the station under its umbrella and then shed other stations in its portfolio in order to remain under the ownership cap. The FCC also fined the company \$1.2 million.

Trending on Deadline

1 / Plead Different: Sean "Diddy" Combs Decries "Untenable" Laptop Restrictions Behind Bars



2 / New 'The Rookie' Spinoff In The Works At ABC



3 / Pete Davidson On How Much He Got Paid On 'SNL' As Jason Sudeikis Says "You Don't Really Make Enough Money To Make Big Purchases"



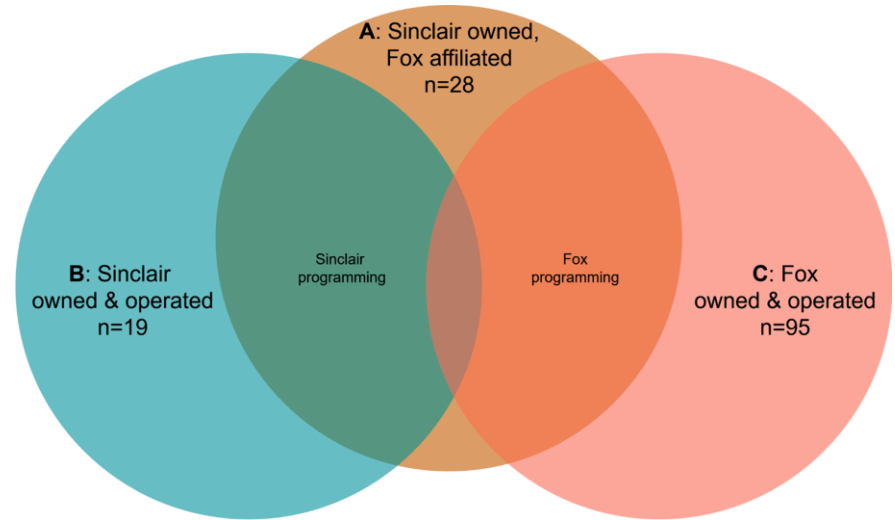
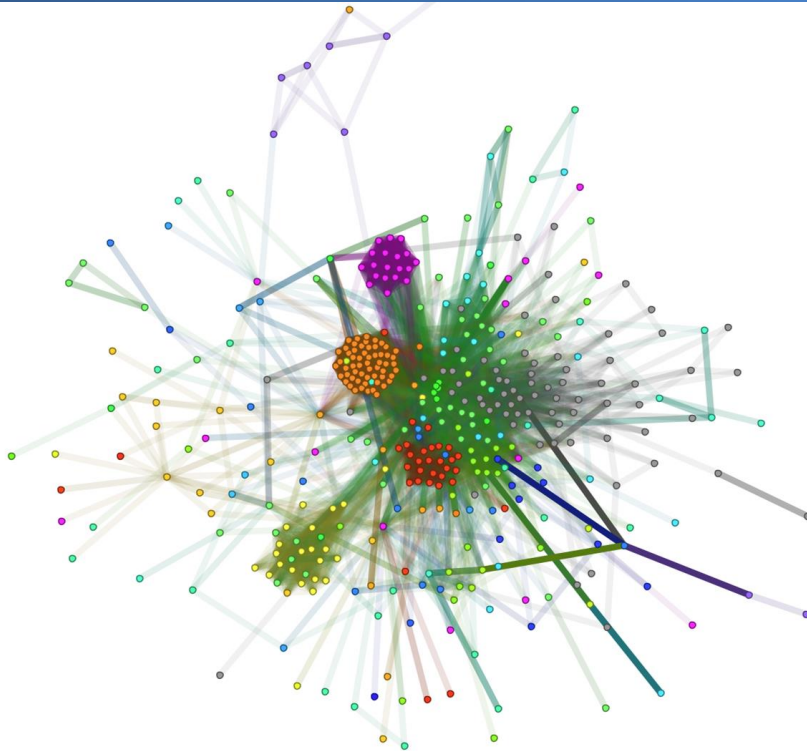
4 / 'Scrubs' Reboot Forges Ahead: Bill Lawrence Set, Talks With Cast Begin For Followup In Works At ABC



5 / Taylor Sheridan's '1923' Sets Season 2 Premiere Date, Unveils First-Look Teasers, Photos



Ongoing Work: Event overlap (links) groups network into different companies (colors)



Data & Resources

- Republicans, young adults now nearly as likely to trust info from social media as from national news outlets (Pew Research, Oct 2024, [link](#))
- GDELT Events: <https://www.gdeltproject.org/>
 - [Google Big Query](#), \$300 free for new accounts
- CommonCrawl Webgraphs: <https://commoncrawl.org/web-graphs>
 - Descriptive statistics: <https://commoncrawl.github.io/cc-webgraph-statistics/>
 - Each Webgraph is ~7gb download, ~70gb once extracted (x50)
 - Scripts for processing / filtering to subgraphs