



A Different Story: How Conservative Narratives Diverge Between Twitter and Parler

ECIR - Text2Story, April 2021

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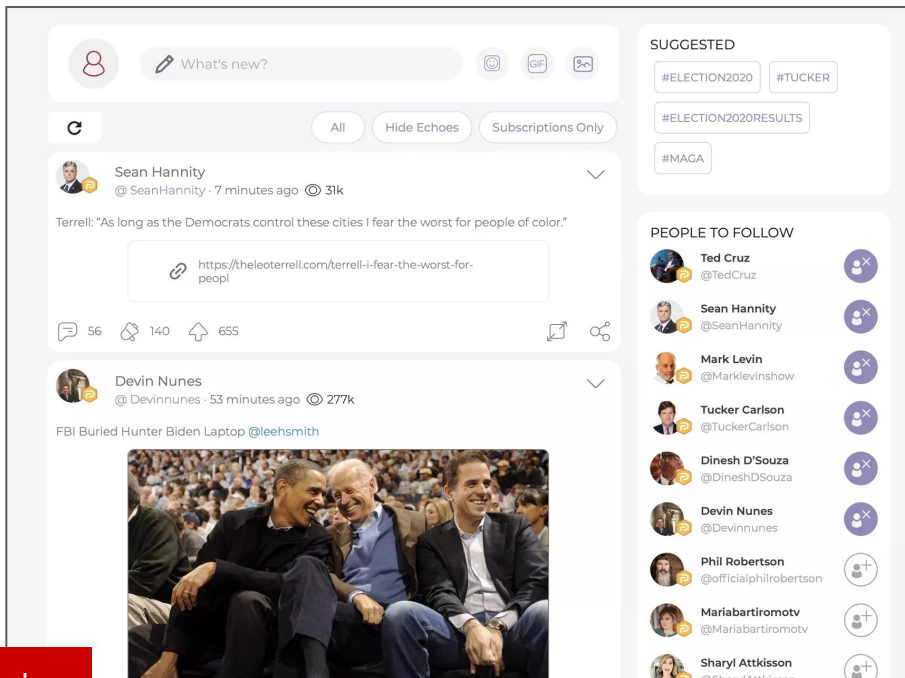
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Introduction

- **Storming of the Capitol:** January 6th, 2021
insurrectionists break into the US Capitol to “stop the steal” of the presidential election.
- **A chaotic information landscape:** Election conspiracies mingled with pandemic misinformation, a secondary infodemic
- **Parler as insurrection incubator:** Facebook and Twitter began to moderate misinformation, Parler grew in popularity as an unfettered platform for speech.



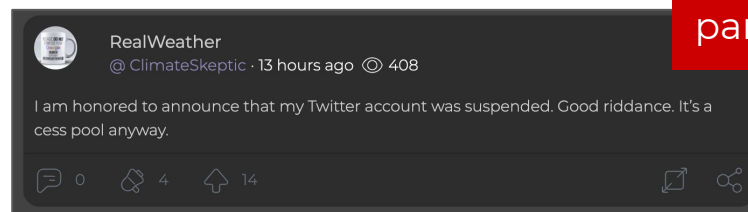
What is Parler?



Parler



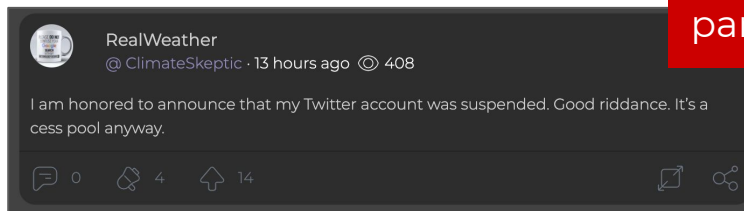
tweet



parley

What is Parler?

- **Similarities and differences to Twitter:**
 - **Tweets vs. Parleys**
 - **Timelines of posts**
 - **Retweets vs. Echoes**
- Parler started in 2018 as “free speech” platform.
- 10 million users following the US presidential election (Washington Post).
- Banned from App store and AWS hosting
- Now back online as of February 2021.





Overview

Research Question: In what ways do narratives diverge on Twitter versus Parler for conservative public figures?

1. Is the content from conservative public figures more or less biased on Twitter or Parler?
2. What websites are commonly shared and which of these sites are the most influential? Does this change by platform?
3. Within the sample group of conservative public figures, how similar or divergent are the topics across platforms?



Overview

Sample Population: Public political figures that maintain accounts on both Parler and Twitter. Sample skews US politically right and hypernationalist.

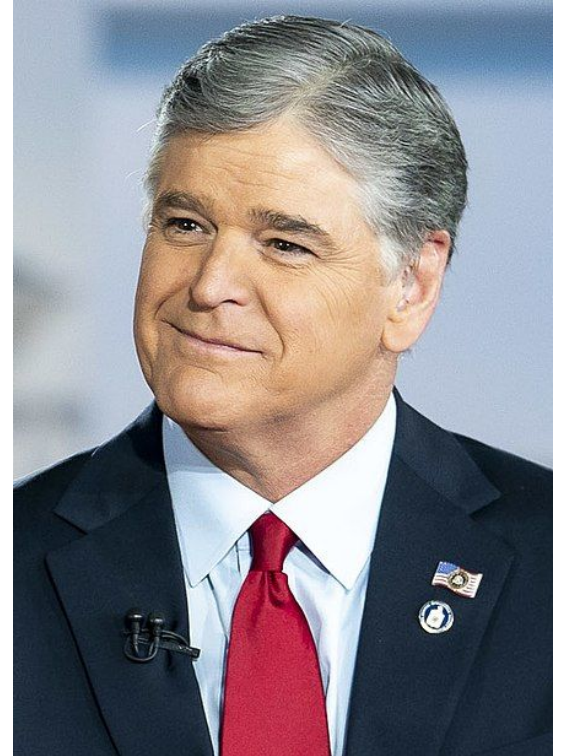
01 **Distribution of
media bias scores**

02 **Citation networks,
pagerank influence**

03 **Topics, Latent
Dirichlet Allocation**

Data collection of Twitter & Parler Posts

- **Twitter**
 - API - Timeline collection
 - All posts since user joined the platform
 - 28,754 tweets
- **Parler:**
 - Selenium scraper
 - 1,860 parleys
- **Timeline:** All posts until December 22, 2020
- **Data challenges:**
 - Active moderation during data collection - AWS shuts down Parler



Public figure Sean Hannity, source Wikipedia

Data Collection - Media Bias Ratings



Media Bias / Fact Check

- **Media Bias / Fact Check:**
(<https://mediabiasfactcheck.com/>)

- Extracted URLs shared in posts
- Domain matching to news sites
- Compute the bias:
 - [extreme left, left, left-center, center, right-center, right, extreme right]: from -10 to 10
- **US political ratings system** -
 - Deeply divided two-party system with in-group variation
- Used to compute Iffiness Index (<https://csmr.umich.edu/>)

The 2017 political typology: Anchored by Core Conservatives, Solid Liberals

Typology groups as a percentage of ... (%)

	General public	Registered voters	Politically engaged
Core Conservatives	13	15	20
Country First Consers	6	7	6
Market Skeptic Reps	12	12	10
New Era Enterprisers	11	11	9
Bystanders	8		
Devout and Diverse	9	9	6
Disaffected Democrats	14	14	11
Opportunity Democrats	12	13	13
Solid Liberals	16	19	25

Source: Survey conducted June 8-18 and June 27-July 9, 2017.

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3.1 Is Shared Content More Biased on Twitter or Parler?

- The distribution of media bias scores skews more right for Parler than Twitter
- This indicates that on average, websites shared on Parler are more extreme-right in their political leanings.
- This aligns with the current characterization of Parler as a haven for more far-right speech.

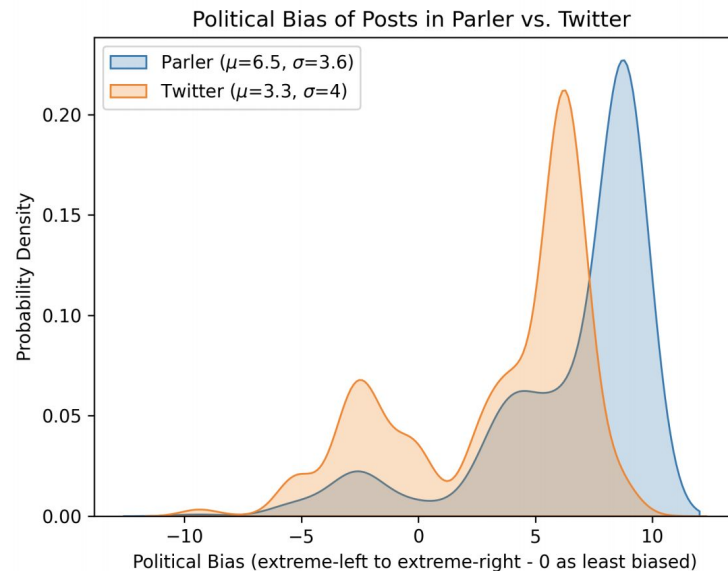
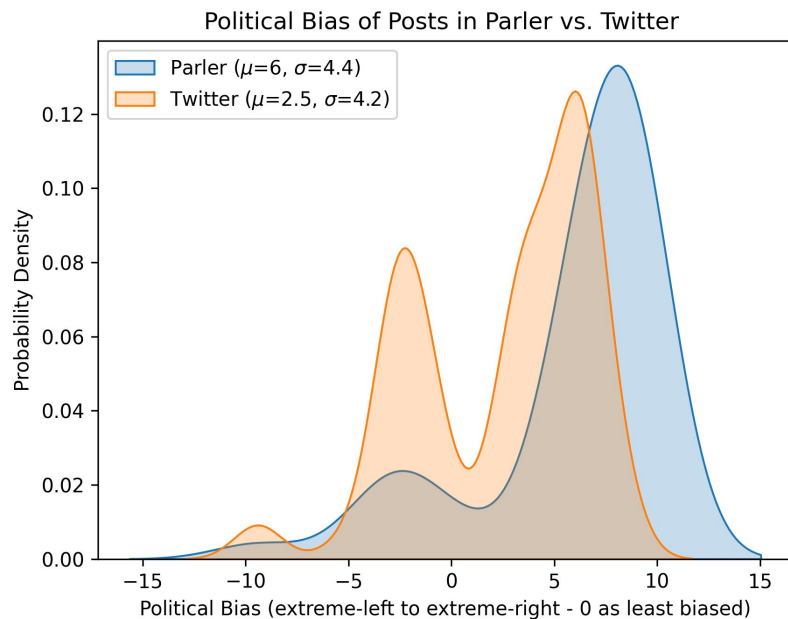


Figure 1: The political bias of posts in Parler vs. Twitter.

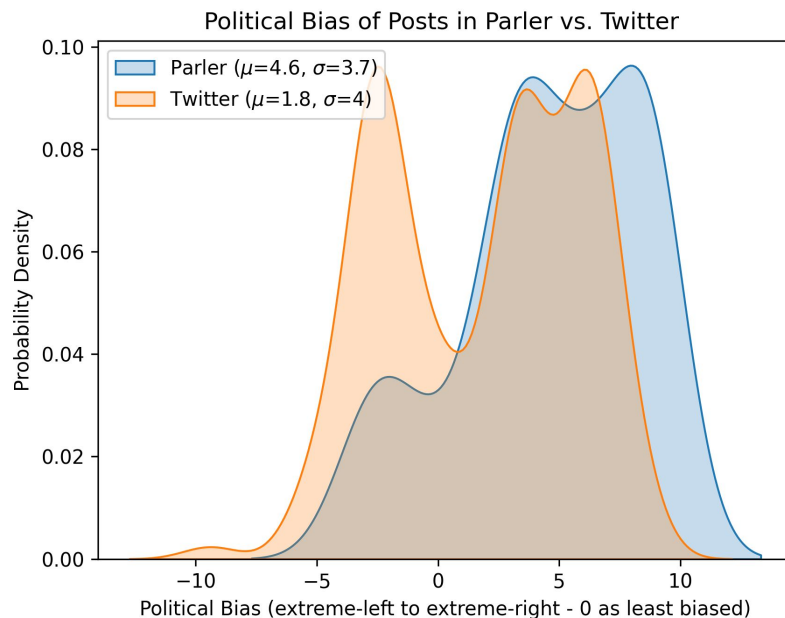
3.1 Is Shared Content More Biased on Twitter or Parler?

- The characterization, however, does not hold true for every political public figure.
- **Sen. Ted Cruz**
 - **Bi-modal on Twitter, leans right**
 - **Moves more extreme right on Parler**



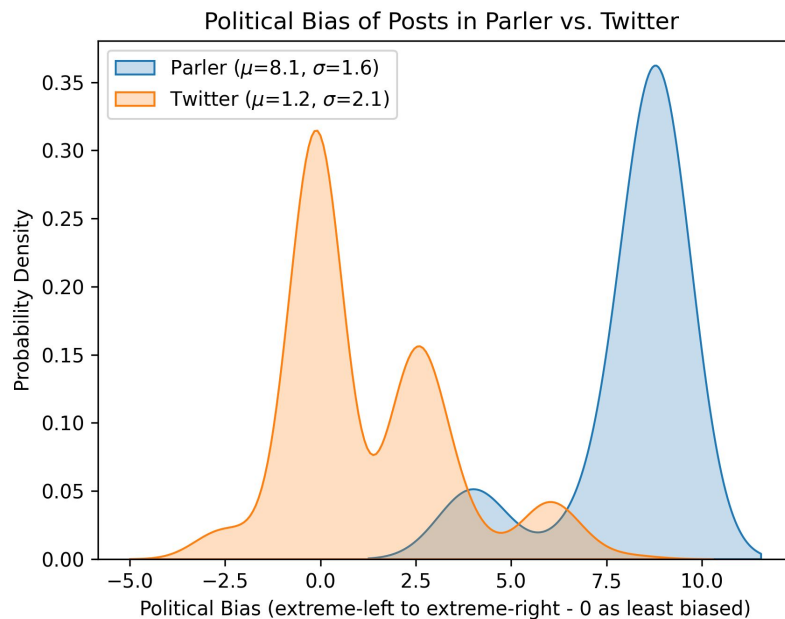
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- The characterization, however, does not hold true for every political public figure.
- **Rand Paul**
 - **Bi-modal on Twitter**
 - **Right to extreme-right on Parler**



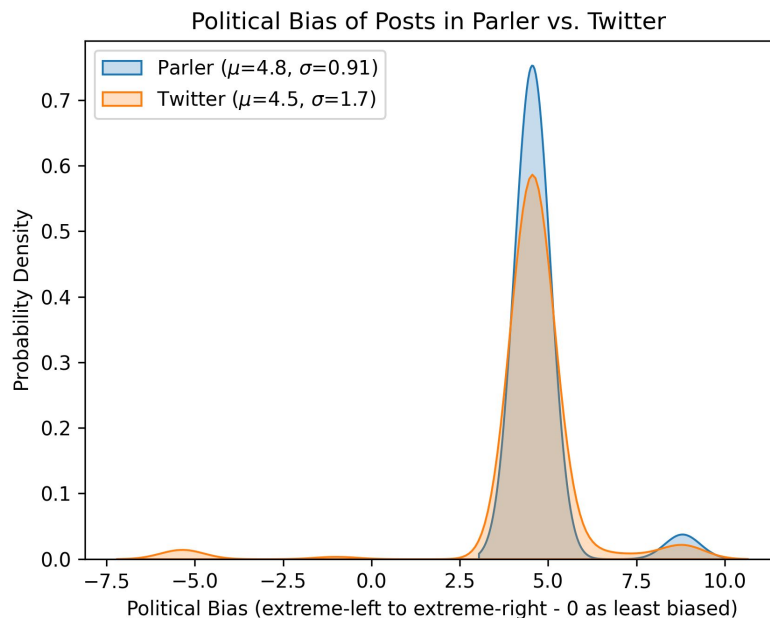
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- The characterization, however, does not hold true for every political public figure.
- **Gov. Kristi Noem -**
 - **Politically center on Twitter**
 - **Extreme right on Parler**



3.1 Is Shared Content More Biased on Twitter or Parler?

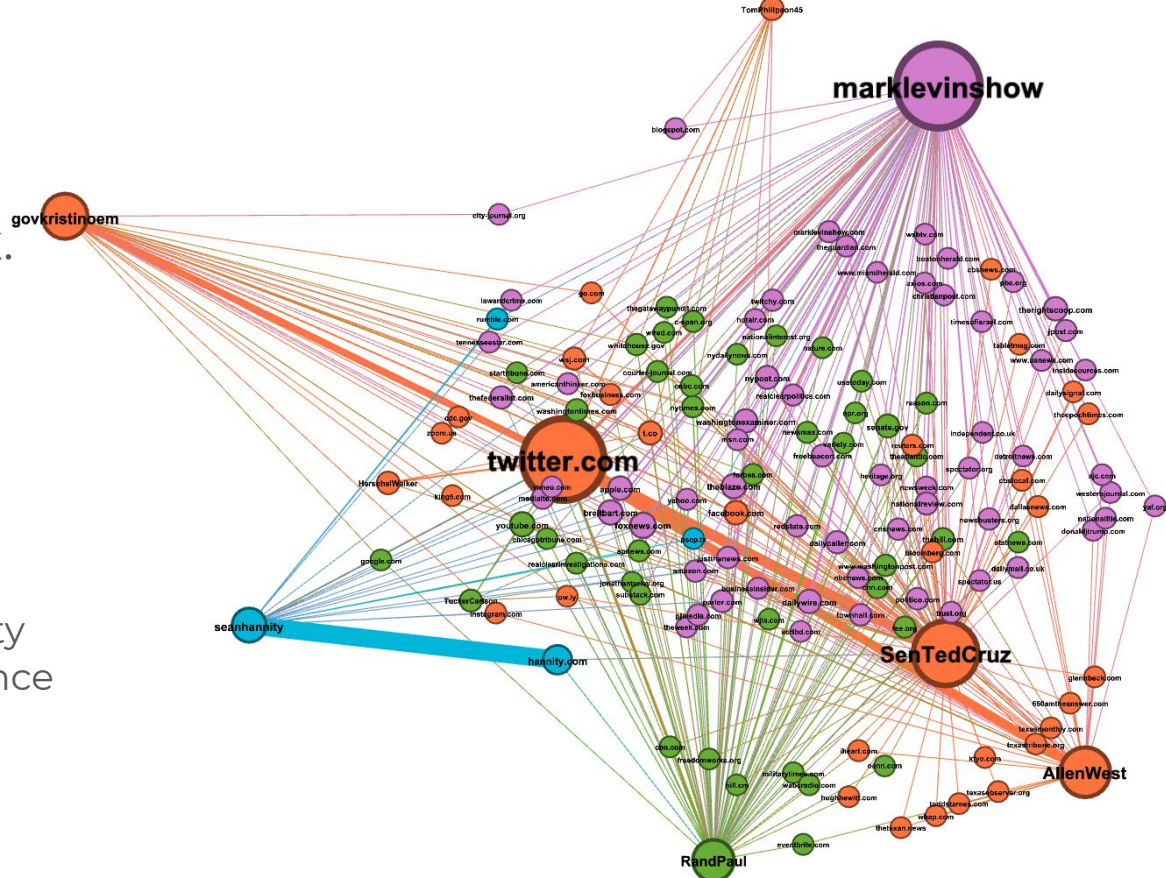
- The characterization, however, does not hold true for every political public figure.
- **Sean Hannity**
 - **No change**
 - **Only shared his own website**



3.2 What Sources Are Influential on Twitter vs. on Parler?

- Citation graphs generated by python networkx.

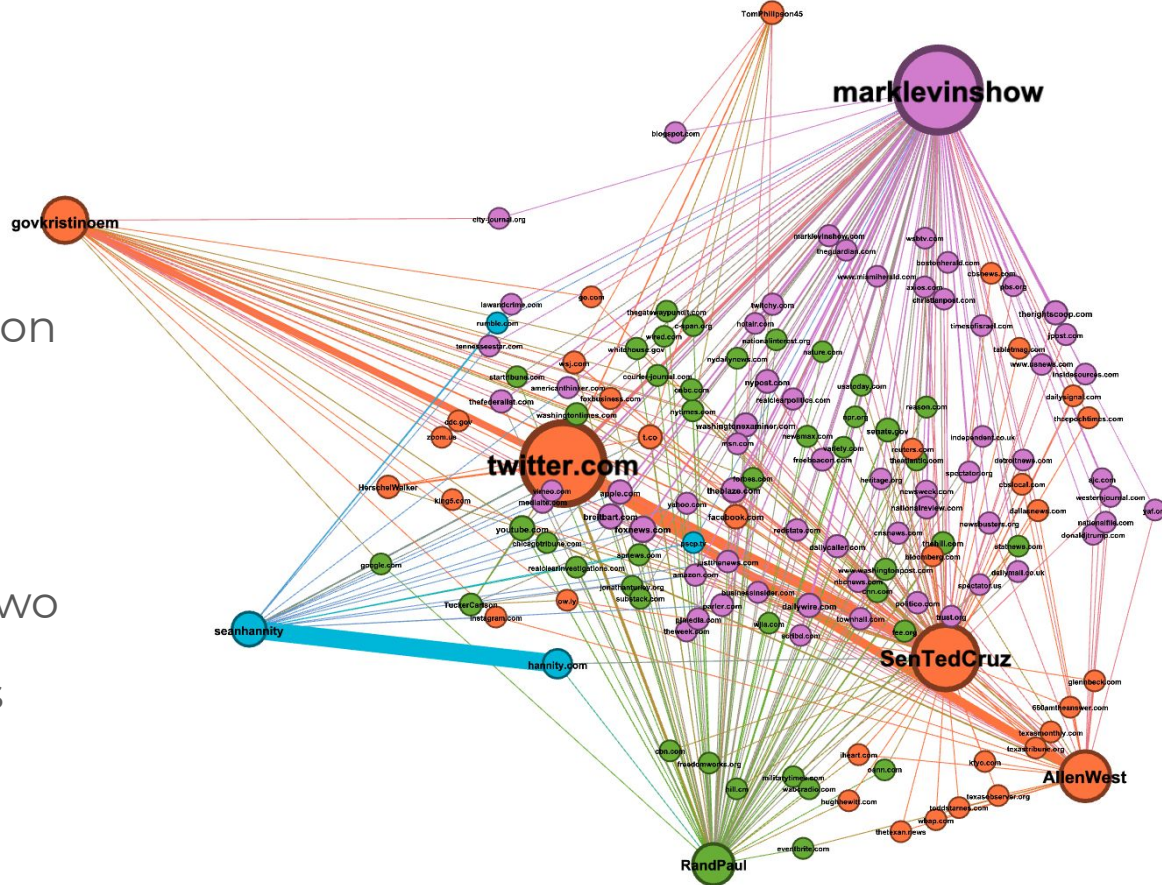
- **Twitter Graph**
 - 643 nodes
 - 899 edges
 - Degree > 1
 - Color = community
 - Node size = influence



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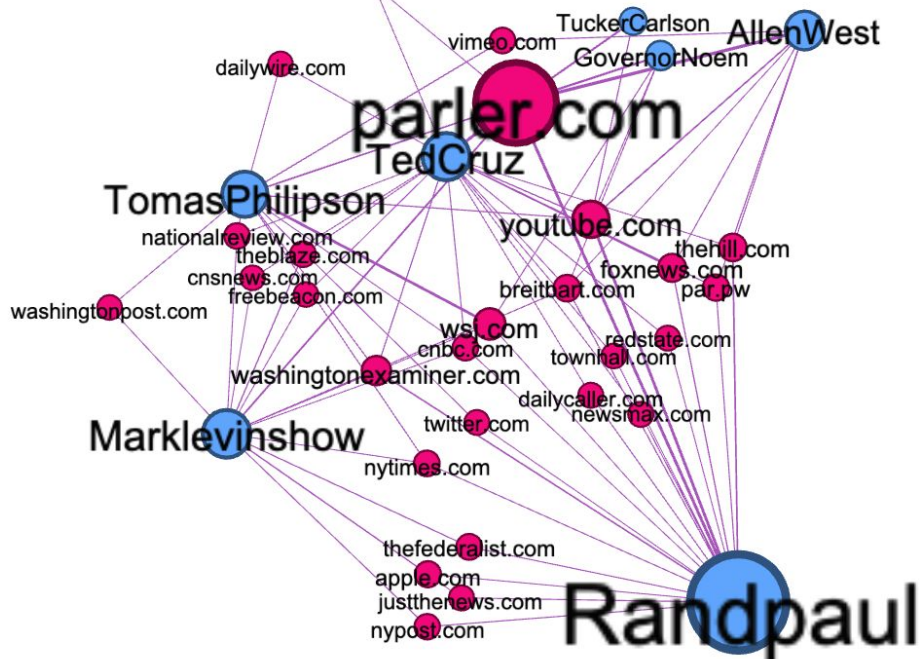
Twitter Graph

- Community clustering using Girvan–Newman community detection algorithm
- Four distinct communities with graph sizes 534, 63, 42, and 4.
- Analyzing the top two communities the average media bias to be **3.07** and **1.16**, respectively



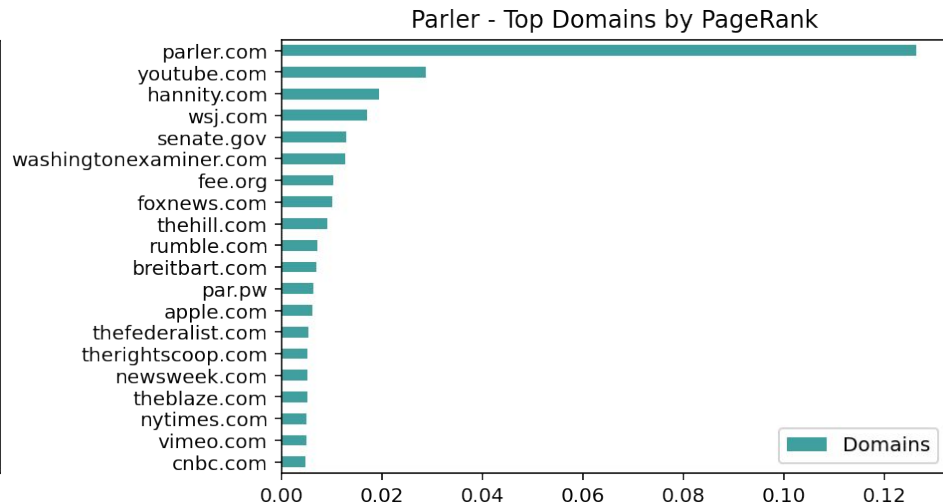
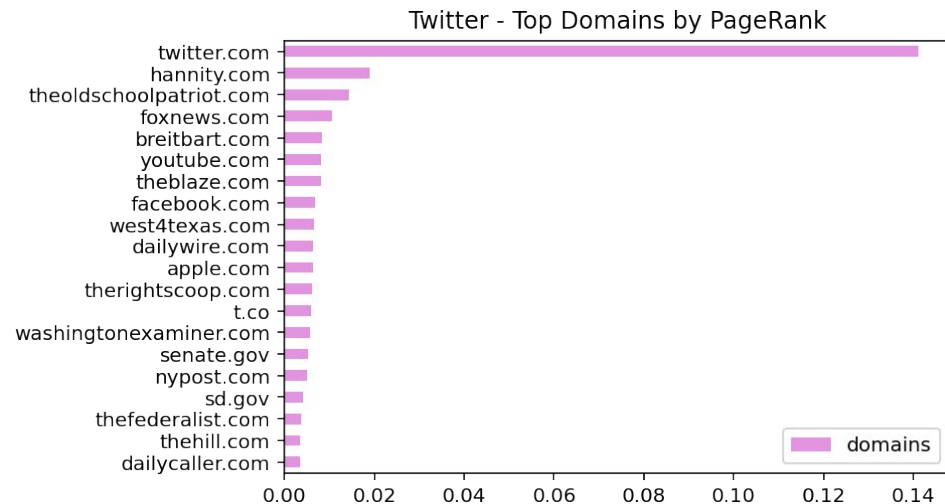
Sean Hannity hannity.com

3.2 What Sources Are Influential on Twitter vs. on Parler?



- **Parler Graph**
 - 125 nodes
 - 168 edges
 - Degree > 1
 - Color = source or user
 - Node size = influence
- **PageRank** influence based on incoming connections to a node with respect to edge weight.

3.2 What Sources Are Influential on Twitter vs. on Parler?



- The most commonly shared links and influential sources on **Parler** include both politically right and politically left sources.
- No left-leaning sources were in the top twenty most influential sources on **Twitter**.

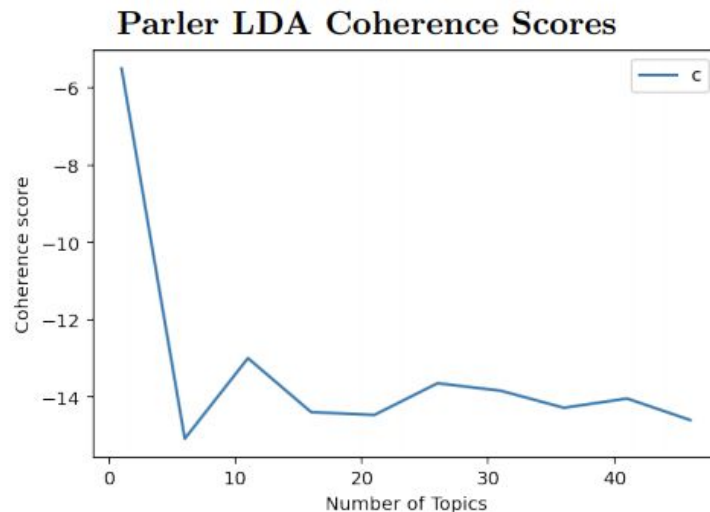
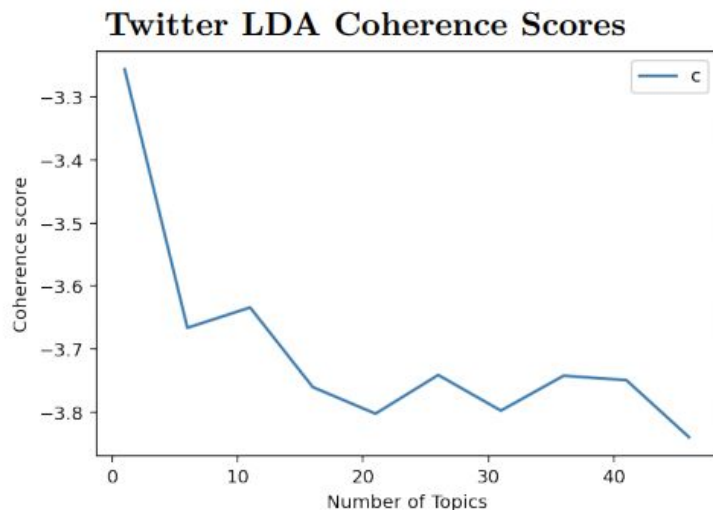
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Interpretations

- Because Twitter has variety of political communities, conservative public figures on Twitter may feel compelled to evangelize conservative content at a higher rate.
- Another interpretation is that liberal content is less likely to receive engagement on Parler.



3.3 Do Topics Diverge by Social Platform?



- Latent Dirichlet Allocation topic models to characterize content of posts.
- Models were generated using python packages NLTK and Gensim.
- Coherence scores for both Twitter and Parler topics peaked around ten topics

3.3 Do Topics Diverge by Social Platform?

Election - 0	Election - 1	Policing - 2	Election - 3	Hunter Biden - 4
south_dakota	election	police	biden	georgia
one	trump	report	say	cuomo
state	tonight	mayor	trump	election
facebook	join	thanksgiving	pennsylvania	fraud
shutdown	sentedcruz	city	attack	hunter_biden
Democrats - 5	Voting - 6	Voting - 7	Democrats - 8	Conspiracy - 9
joe_biden	democrat	voter	state	lie
medium	supreme_court	nyc	people	voting
democrat	election	medium	texas	reporter
say	vote	judge	aoc	say
president	senate	democrat_party	pelosi	justice

- The topic model for Twitter demonstrated a wider range of subjects than Parler's model.
- Twitter topics include Covid-19, the election, accusations of censorship, and foreign policy .
- **Topic 4** on Twitter mentions Hunter Biden more explicitly.

3.3 Do Topics Diverge by Social Platform?

Hunter Biden - 0	Conspiracy - 1	Election - 2	Election - 3	Covid - 4
find_mail	year	special_session	heals_truth	win_stay
heal_never	doubter_shock	counting_vote	stop_president	together_trump2020
ballot_prison	people_trust	else_go	job_unless	covid
investigation_people	smackdown_many	expose_call	democrat_republican	american
usb_handoff	block_lay	henhouse_wonder	story_america	new
Parler - 5	Economy - 6	Election - 7	Supreme Court - 8	Trump - 9
school	government	stood_stage	democracy_america	faith
one	america_great	attention_gop	need_leader	trump2020_keep
parler	economy	president_spoken	local_judge	time
state	covid	senator_representative	spit_constitution	join
end	obama	rally_benefit	scotus_step	government

- Parler corpus was smaller than Twitter's.
- More focused on the election conspiracies.
- **Topic 0** focused on Hunter Biden with "usb_handoff" and "pull suitcase", both details of the NYPost story

3.3 Do Topics Diverge by Social Platform?



- Though **Topic 4** from Parler and **Topic 0** from Twitter were both related to Hunter Biden, they were strongly decorrelated at a **.98 index** (Jaccard distance).
- This decorrelation of across platform topics may indicate that though users on Twitter post about Hunter Biden, the conversation diverges radically on Parler.



Conclusion

- **Conservative political figures share content on Parler that leans extreme right**
 - Aligns with current characterizations of the platform as a haven for conservative right groups.
- **However, liberal sources are more likely to be ranked as influential on Parler than on Twitter.**
- **Our topic model analysis indicates that moderation may be one driver of divergent behavior.**

Future Work

- **Further questions**

- Are users more likely to share left-leaning content on Twitter because of the diversity of political communities on Twitter or is it because right-leaning content tends to be moderated?
- Does Parler content lean extreme-right because the platform is unmoderated, or more because such content drives user engagement?

- **Implications for Internet speech**

- Future segregation of social media platforms such as Gab, Voat, Parler, and others which may reinforce echo-chambers.
- Policy questions surrounding U.S. Section 230 and E.U. GDPR: how to regulate content?
- Effects of Cancel Culture and Big Tech consolidation (hosting and content moderation).

Thank you, Grazie, Gracias!

Questions and comments?

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