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Politicians, Pundits, and Platform Migration: A Comparison of Political Polarization on Parler and Twitter

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Abstract

Parler, a self-proclaimed free speech social media platform founded in 2018, attracted a large influx of new members in 2020 as the result of a highly visible platform migration campaign. Parler usage was linked to the planning of the Jan. 6, 2021 attack on the United States Capitol building, leading to a shutdown of the Parler platform. Parler, which is now back online, offers an important lens through which to examine the broader attempts at platform migration in response to changing content moderation and platform governance policies and their impact on political polarization. We begin by examining the network connections between US Congressional Representatives on both Twitter and Parler. We find that Parler has a homogenous population of users, consisting of a single isolated group, where polarization seems irrelevant, while Twitter demonstrates two clearly polarized groups. We compare how politicians and political pundits use Parler differently. Finally, we examine the evolution of Parler including comparing Parler's own policies before and after the shutdown and reflecting on the future of platforms like Parler and similar platform migration experiments.

Keywords

Social Media, Platform Migration, Platform Governance, Parler, Political Polarization

1. Introduction and Background

As social media grows in political influence around the world, the impact of content moderation and other platform governance decisions grows as well. The stakes are high for controlling the social media narrative and in response to platform governance decisions, there have increasingly been attempts to organize mass migrations away from both mainstream social media and more traditional media platforms.

Social media platforms can create echo chambers by recommending content to users that is similar to other content they have already consumed in order to increase user engagement (Sasahara et al. 2021). The resulting echo chamber effect feeds into a user's confirmation bias, resulting in not only vastly different interpretations of facts, but a completely different set of acknowledged facts (Heshmat 2015). The creation of even more polarized social media platforms with the majority of their user base belonging to one political party can exacerbate these political echo chambers. Rather than an echo chamber being present within a portion of a social media platform, the entirety of the platform can become an echo

chamber. The migration of a group of users with a unified mindset and political view to a more isolated social media platform can serve to intensify political polarization.

The 2020 campaign on the political right in the United States to encourage migration from Twitter to Parler, is one high profile example. There are many others including campaigns to migrate from Facebook to MeWe, from Fox News to OAN, from Instagram to Mastodon, and from WhatsApp to Signal and Telegram (Isaac, 2019). In Jan. 2021, Signal and Telegram downloads surged as users around the world from Iran to India to Brazil were encouraged to migrate away from WhatsApp in response to terms of service changes (Nicas & Isaac, 2021). In most cases, it is growing dissatisfaction with platform governance decisions at major social media platforms like Facebook, Twitter, and Instagram that has led to these efforts to shift to new platforms.

It is worth noting that although some of the most dramatic platform migration efforts have originated on the political right, there are examples of calls for migration from the political left as well. In Dec. 2020, a left-leaning movement called for an exodus from Instagram when it changed their community guidelines (2020) regarding sexual solicitation to be more restrictive. This change led to protests from sex workers, sexual assault advocates, and sex educators who believed their content would be restricted.

In this paper, we are focusing on political polarization on Twitter and Parler. Twitter initially was referred to as "the free speech wing of the free speech party" (Ingram, 2011). However, they also moved to restrict content after observing increasing abuse on their platform (Culliford & Paul, 2020). In May 2020, Twitter introduced a fact checking label primarily on posts about COVID-19 (Roth & Pickles, 2020) given the catastrophic wide spreading COVID related 'Infodemic' (Pandemic & misinformation) on social media (Madraki et al. 2021). They accomplished this through the addition of a "get the facts" tag linking to more information.

One particularly controversial case of content moderation was related to the removal of Donald Trump's accounts. On the night of Jan. 6, Twitter suspended Trump's account temporarily, as Twitter believed Trump's tweets were inciting violence to overturn the election. On Jan. 8, 2021, Twitter (2021) closed Trump's account permanently and purged more than 70,000 Twitter accounts affiliated with QAnon related to the riot (Romm & Dwoskin, 2020). Facebook, YouTube, and other platforms took similar steps to remove Trump's accounts and content (Gold & Fischer 2021). In July 2021, Trump filed a lawsuit against Twitter, Facebook, and YouTube arguing that these platforms violated his First Amendment right in "illegal, unconstitutional censorship" (Segers & Sganga, 2021). Interestingly, Trump has reportedly refused to join Parler because Parler did not agree to block anti-Trump users and thier negative comments (Wolff, 2021).

The content moderation decisions at Twitter, other social media platforms, and even at Fox News were directly related to calls on the political right to move to platforms like MeWe, Parler and OAN that would not remove posts or accounts even in response to misinformation, disinformation and calls for violence. People participating in the Capitol riot, many of them Parler users, uploaded thousands of videos of the event. These videos were archived before the Parler shutdown, and later reviewed and published by Propublica which collectively make up solid proof of the event through the eyes of the witnesses and participants (Groeger et al. 2021). On Jan. 7, 2021, Parler jumped to number one in Apple's AppStore after Twitter and Facebook banned Trump (Shieber, 2020).

However, after the Jan. 6 attack on the United States Capitol, Amazon, Apple, and Google all took steps to shut down Parler (Nicas & Alba, 2021). Google and Apple disabled downloads of the Parler app from their app stores because they believed that Parler failed to regulate appropriate policies to prevent the encouragement of crime, hatred, and violence. Later, Amazon announced that it refuses to host their service due to the violation of Amazon's rules by Parler. Parler has been suing Amazon in federal court since then due to the sudden termination of service. On Feb. 15 2021, after more than a month, Parler found a new Web host and started to revive. SkySilk is a Web infrastructure company based in California now hosting Parler (Allyn & Treisman, 2021). After the comeback, Parler promised to take down some categories of content, and improve its community guidelines (2021).

The old version of the Parler refers to the Parler before its shutdown after Capitol Riots on Jan. 6, 2021. In this paper we are using the term 'Parler' for the new version of Parler after it came back on Feb. 15, 2021.

This dramatic Parler story and its close relationship to the Capitol riot show the importance of studying the relationship between political polarization, platform migration, and the real-world political impacts of platform governance decisions. In this paper, we focus on the role of politicians and political pundits.

We focused our data collection on two categories of users, US Congressional members and a group of right-leaning political pundits inspired loosely by a list in (Lewis, 2018). For both pundits and politicians, we collected user metadata including total followers, total following, and number of posts during our data collection period: July 7, 2021, to Sept. 7, 2021, on both Parler and Twitter.

We determine whether a user is active or not on a platform based on their number of posts during our data collection period. If a user published at least one post, they are deemed active on that platform. One of the downsides of the Parler platform is that, unlike Twitter showing the actual date that a tweet was posted, Parler just gives a rough estimation of the date the parley was posted. Table 1 summarizes the data we collected and analyzed. Appendix 1 includes the full list of

pundits and politicians active on Parler, along with their Twitter and Parler usernames.

Table 1: The summary of our dataset.

Item			Politicians	Pundits
Democrat			273	0
Republican			265	34
Twitter Accounts			538	34
Parler Accounts			109	33
Active (Appendix 1)	Parler	Accounts	20	10

In Section 2, we examine the network connections between US Congressional Representatives on both Twitter and Parler. We find that Parler has a homogenous population of users, consisting of a single isolated group, where polarization seems irrelevant, while Twitter demonstrates two clearly polarized groups. In Section 3, we compare how politicians and political pundits use Parler differently. Finally, in Section 4, we examine the evolution of Parler including comparing Parler's own policies before and after the shutdown and reflect on the future of platforms like Parler and similar platform migration experiments.

2. Political Polarization on Parler vs. Twitter

Comparing the behaviour of users on Parler and Twitter side to side is important to understand the status of migration between platforms about 9 months after Parler's come-back.

We modeled the network of our sampled users by a directed graph where nodes represent users, and they are colored by the registered party (red associated with the Republican party and blue associated with the Democratic party). Directed edges denote the connection between them (i.e., followers and following friends of each user). The size of the nodes is related to the number of tweets/parleys published by each user during our collection period: July 7 - Sept. 7, 2021, i.e., a larger node represents a more active user with more posts. We used a Python package, NetworkX- 2.6.2, to model the networks and generate our results.

We started our network analysis with 117th Congress members. Figure 1 showcases the entire network of politicians on Twitter and Parler. The connection in all networks in this section captions only the interconnections of the users.

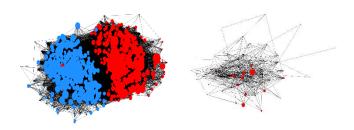


Figure 1: The network of 117th US congressional representatives on Twitter (Left) and on Parler (Right)

The Parler network is obviously sparser because unlike Twitter, only a fraction of these politicians has Parler accounts and a few of them are active on Parler; and they are almost entirely Republican (red).

Given the sheer difference of size of these two networks, it is interesting to compare the Twitter and Parler networks of a sub-sample of users who are present on both platforms, i.e., the politicians with a Twitter account who are also active on Parler (having at least one parley within our data collection period). Figure 2 illustrates this comparison such that both networks consist of the users found in the Appendix 1.

One may initially notice the decreased size of nodes and decreased number of edges. The average number of tweets from these users is 568 while the average number of parleys is 103. Even among politicians active on both platforms, they post on average over 5x more tweets than parleys. The average degree of users in the Twitter network is 20 versus 8 in the Parler network. These statistics show that for even those active on Parler, they post on average more tweets and are more well connected on Twitter.



Figure 2: The Twitter network (Left) and Parler network (right) of active politicians on both Twitter and Parler

There is only one politician in our sample, Representative Devin Nunes, who has consistently continued his boycott of Twitter since Dec. 2020 (Otala et al. 2021). Figure 3 clearly shows this boycott and the lack of boycott by all other active politicians on Parler.

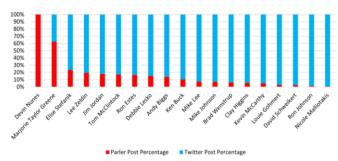


Figure 3: Parler and Twitter post percentages of our current active group of politicians. Only Devin Nunes has fully boycotted Twitter

Next, we analyzed the Twitter network and the Parler network of our sampled pundits who have twitter accounts and are active on Parler (having at least one parley within our data collection period) (Figure 4). Both networks consist of 9 users (details of these users can be found in the Appendix 1).

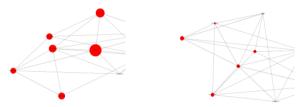


Figure 4: The Twitter network (Left) and Parler network (right) of active pundits on both Twitter and Parler

The comparison of these pundit networks reveals that the average number of tweets from these users is 572 and average number of parleys is 104, similar to politicians. The key difference is the average number of connections of users across networks (number of edges): the users on Twitter have an average of connections of 6.22 while they have an average of 7.11 connections on parler. This slight increase of connectivity on Parler may be negligible given such a small sample size of pundits.

Based on the node size (corresponding to number of tweets or parleys published), this sub-sample of pundits seemingly use Parler less than Twitter despite being far-right conservative. Only one pundit out of our dataset, Mark Levin, has fully boycotted Twitter which he has been doing since Jan. 2021 (Figure 5).

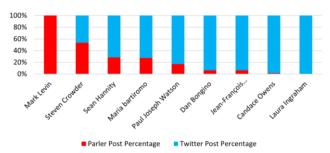


Figure 5: Parler and Twitter post percentages of our active group of pundits. Only Mark Levin has fully boycotted Twitter

The major takeaway in this section is the comparative lack of usage of Parler by even active politicians and pundits. While the messaging of a boycott of the mainstream social media platforms has continued from public Republican representatives, the commitment to fully adopt a new platform seems impractical. Even some of those who have been banned from mainstream social media platforms are not necessarily switching over to Parler.

A secondary takeaway is the role of polarization on these platforms. We canonically define something to be polarized when there is a division into two sharply contrasting groups. That implicitly requires the presence of two groups, which is easily visualized in the Twitter network in Figure 1. However, at no point do two distinct groups appear in the Parler networks in Figures 1, 2, and 4. Then by our own visualizations, Twitter seems a far more politically polarized network than Parler. Parler has a homogenous population of users, consisting of a single isolated group, where polarization seems irrelevant. However, it is not true, given the ultimate lack of presence of an alternative opinion on Parler the entire platform at that point turns into an echo chamber.

3. Behavior of Politicians vs. Pundits on Parler

We compared the behavior of the politicians and pundits along a few dimensions including their popularity (the number of followers), their activity levels (e.g., parleys and tweets) and the level of polarization reflected in their posts.

Figure 6 shows the cumulative number of followers for Democrat and Republican, Senate, and House members during the time surrounding Jan. 6, 2021. The gap in the graph highlights the timing of the Congress switch.

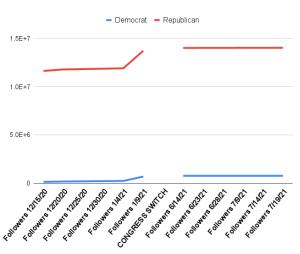


Figure 6: The number of followers of the 116th and 117th Congress members on Parler

Figure 7 compares the average follower counts for each group. Interestingly, the numbers of followers per Republican and Democrat are on par with one another. The pundits have several times the amount of influence on average.

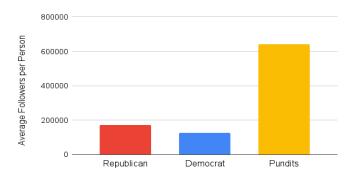


Figure 7: The average number of followers per person in the sample

Overall, 2% of Senators (2 out of 100) and 4.5% of house members (20 out of 441) are considered in our list of active users with at least one parley within July 7 to Sept. 7, 2021; and all but one of these active users were Republicans. 29.4% of well-known Republican pundits (10 out of 34) are active on Parler. We collected the total of 791 parleys posted by politicians and 740 by pundits within the designated data collection timeslot.

To have a better understanding of Parler usage by these politicians and pundits, we also analyzed the content of their parleys. We find that many of our collected parleys contain links to news outlets or some biased websites. About 86%

of the pundits' parleys were linked to a site/news outlet, and 34% of politicians' posts contain a website link.

We identified a set of 12 websites used by both politicians and pundits. We used the 'Media Bias/Fact Checking' (2021) to rank these websites in terms of their radicalization score. The score of an individual site can be from +4 (Extreme Right) to -4 (Extreme Left).

Figure 8 shows the distribution of posts containing links to these websites. The horizontal axis is sorted based on the radicalization score such that the rightest leaning is sorted on the right.

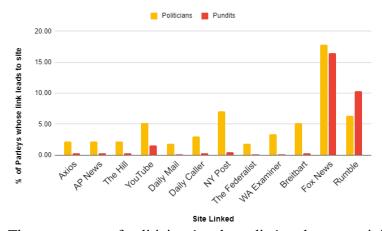


Figure 8: The percentage of politicians' and pundits' parleys containing a link to each website ranked by Media Bias/ Fact Check

Figure 9 shows the density of radical websites in politicians' posts vs. Pundits' posts based on the same radicalism scale. The pundit density is more extreme than the politician density (the average is more than double, based on this scale).

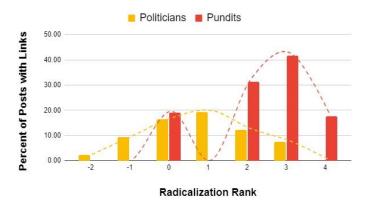


Figure 9: Radicalization density of website links in the collected parleys

4. Classifying and Analyzing Polarized Parleys

Beside radical website links and far-right media outlets in our sample, polarized topics are also frequently observed in politicians' and pundits' posts. Although there is no precise definition/list of "polarized topics" in the literature, we classified posts as polarized posts according to the following guideline: 1) confirmation of unbiased/less-biased sources, e.g., fact-checking websites, google news, BBC, etc.; or, 2) the binary nature of the topics, e.g., pro-vax vs. anti-vax., abortion, etc.; or, 3) matching with the list of well-known/classical polarized topics such as civil rights, gun control, etc. (Tomar, 2021).

The posts that pass through our aforementioned definition of the 'polarized post' filter explicitly contain misinformation, inflammatory statements, inciting of violence, or other objectively negative connotations can all be cited as polarizing factors. This classification is subjective and for transparency purposes, we will provide our full database along with the categorization.

Of our total 2986 processed parleys, we classified 1531 (51.3%) as polarized parleys. On average each pundit in our sample posted almost twice the number of polarized posts as a politician as shown in Figure 10.

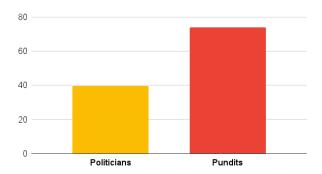


Figure 10: Comparison of the average number of polarized posts produced by active Parler accounts

We identified 7 common topic styles and Figure 11 represents the distribution of the posts in each of these categories. For politicians 89% of parleys and for pundits 85% of parleys fell into at least one of these styles. Criticizing Biden's administration and his performance are the topic of the majority of polarized posts among both politicians and pundits. Moreover, the bars in this figure show that in most categories, politicians have more polarized posts, although the average number of polarized posts by pundits is greater. This means that the topics of politicians' posts are more homogeneous (less variety of topics). Pundits' posts have a wider variety of topics and styles.

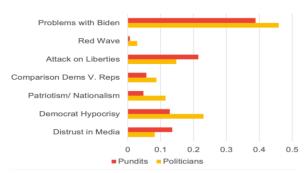


Figure 11: Distribution of the collected parleys by their topic styles

5. Parler Changes and Future Outlook

When Parler came back online around Feb. 15, 2020, after being removed from Apple's and Google's application stores and cut from Amazon's web services, many of its foundations including its interface, guidelines, and leadership had been changed (Otala et al. 2021; Walsh, 2021).

In this section, we begin with a comparison of Parler's user guidelines before and after the platform shutdown. There are two relevant versions of the guidelines (based on timestamps): pre-shutdown (Dec. 2020) and post-shutdown (May 2021). The Dec. 2020 guidelines (2020) heavily supported the idea of free speech with two main rules: no illegal activity and no spam. Slight changes were made to the guidelines (Feb. 2021), such as the word "member" had been changed to "user", perhaps because "member" could connote a sense of belonging to a group while "user" might imply a more distant relationship. Parler also introduced a Guidelines Enforcement document which has a very different tone and seems to us that this document is put together as a response to Parler's role in the Capitol insurrection. The document begins immediately by addressing "the particular risk posed by content that threatens or incites violence" by introducing both automated and human content filtering mechanisms. The Enforcement document more recently (May 2021) addresses stipulations from Apple's application store contract making all trolling content inaccessible on iOS devices.

Badges, a notable feature of Parler prior to shut down, was expanded upon coming back online. Now including a 'Verified User Showing Real Name' badge which can be attached to an account, this is a great addition to the platform since previously Parler was more relaxed about users impersonating others (Otala et al., 2021). This led to a large influx of parody accounts which may still exist. Badges are present on other platforms, such as Twitter's blue check mark, and primarily serve to verify a user's identity. Parler previously had an identity verification process in which users could upload a state-issued ID to obtain a 'Verified Real User badge'. While this badge is still listed as one of Parler's available badges, the

process to upload the state-issued ID cannot be found on the new version of the application.

Prior to the Parler shutdown, there were six types of metadata associated with a given user which could be accessed by visiting that user's profile while logged into the application: number of followers, number of followings, number of comments, number of votes, number of parleys, and number of pieces of media. Those pieces of metadata were hidden when trying to access a given user's Parler profile from a public view (without having logged into a Parler account). This made most web crawling and automated data collection processes difficult if not impossible. Unfortunately, after the resurgence of Parler, they have hidden all except two types of metadata associated with a user: number of followers and number of followings. This means we cannot fully compare every aspect of the usage of Parler by politicians before and after the shutdown.

Another feature added to the new version of Parler is trolling and NSFW (Not Safe for Work) filters as mentioned in the new user guidelines. Some NSFW content is filtered, and some is still present on the application without warning. This only further confirms our previous statements about the immature design of the platform. While conducting manual data collection, the search engine shows some level of malfunction or irregularity since Dec./Jan. 2021, and occasionally requires you to log in and log back in to complete the search.

Looking to the future, Parler is not the only anti-Twitter-and-Facebook platform growing since major networks have boycotted Trump's access. Gettr, a new platform was launched and led by Trump's former spokesman, Jason Miller. Gettr advertised its mission statement as "fighting to cancel culture, promoting common sense, defending free speech, challenging social media monopolies, and creating a true marketplace of ideas" (MCGraw et al., 2021). It is questionable how this statement can justify the enormous racist and hateful contents observed on Gettr which would be filtered immediately on major networks.

Parler and Gettr seem to have similar shared values and organizational missions which makes their comparison relevant to this study.

From a design and application point of view, Gettr and Parler are both kickoff of Twitter. So far, pro-Trump topics have been highly trended on the Gettr posts including hashtages such as #MAGA, #KeepAmericaGreat, #DefendFreedom (Ghaffary, 2021). This also implies that many Gettr users identified themselves as political far right and conservative users. Unfortunately, there are no available statistics on what percentage of Gettr users have been also Parler users. It should be noted that Gettr's number of users is not much yet, and obviously it cannot compare to Parler's numbers at this point.

Yet, Trump has not shown any interest in making a personal account on Gettr which could defeat the purpose of launching such platforms. In May 2021, Trump ran his own platform named as "From the Desk of Donald Trump" to keep in touch

with his supporters. This was a failed effort since it did not have the functionality of a social media platform and seemed more like a blog. Also, the site could attract only a small proportion of his followers. Thus, the platform was shut down in less than a month.

Parler and Gettr are struggling to compete with dominant major platforms who established content moderation policies.

6. Conclusion

In this paper, we have examined the evolution of the Parler platform. We described the changes made following its high-profile shutdown in early 2021. It has not faded away, but gains in follower counts since it came back online have been modest. The new Parler has new community guidelines as well as new features and interfaces.

Despite being one of the most impactful migration attempts, it really has been more the addition of Parler rather than a migration away from Twitter to Parler. Parler is still used much less than Twitter and we only see one true "boycotter" of Twitter in our sample of right-wing politicians and pundits, underscoring that migration away from a successful platform is not easy.

We compare Twitter and Parler usage by both US politicians and by a set of right-leaning pundits. We find that politicians who are most active on Parler are some of the most right-leaning politicians, but most of them (with one notable exception) post actively on Twitter as well. US House members use Parler much more than US Senators. We perform a manual topic analysis, identifying polarized posts and posts in 7 high-level topic styles. We find that pundits post substantially more polarizing content - both in terms of the type of links they forward and in terms of the average number of posts with polarized content per user.

Overall, Parler revived after a massive disruption, but it was forced to change its content moderations policies in substantial ways, and it shows little sign of truly challenging the dominance of Twitter. Given that it represents one of the most dramatic attempts at platform migration, it seems that Parler and networks like it will put little dent in the dominant social media platform direction of increased content moderation. After acquisition by Elon Musk, Twitter itself has drastically reduced its own content moderation activity. Comparing the network graphs of Parler and Twitter, we see that the Twitter network is highly polarized, while the Parler network is not. This is primarily because the democratic or left leaning "pole" from Twitter is almost completely absent on Parler.

In future work, we are focusing on strategies for controlling misinformation, especially amplification of misinformation, such as allowing users to post content but algorithmically limiting the degree to which it is amplified in the feeds of other users who do not actively seek out such content. We hypothesize that content

moderation policies that allow users to post what they want but reduce amplification of extreme views or misinformation could be more useful for keeping political discourse in a shared digital space.

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Appendix 1: List of Active Pundits and Politicians on Parler

This section presents the list of active pundits and politicians on both Twitter and Parler in our sample. The following notation are used in the table: Group: House (H), Senate (S), Pundit (P); and Party: Republican (R), Democrat (D)). Our full dataset will be publicly available.

Name	Group	Party	Twitter Handle	Parler Handle
Andy Biggs	Н	R	RepAndyBiggsAZ	RepAndyBiggs
Ken Buck	Н	R	RepKenBuck	RepKenBuck
Ron Estes	Н	R	RepRonEstes	RepRonEstes
Louie Gohmert	Н	R	replouiegohmert	RepLouieGohmert
Marjorie Taylor Greene	Н	R	RepMTG	realmarjoriegreene
Clay Higgins	Н	R	RepClayHiggins	CongressmanClayHiggins
Mike Johnson	Н	R	RepMikeJohnson	RepDustyJohnson
Jim Jordan	Н	R	Jim_Jordan	JimJordan
Debbie Lesko	Н	R	RepDLesko	Repdlesko
Nicole Malliotakis	Н	R	NMalliotakis	NMalliotakis
Kevin McCarthy	Н	R	GOPLeader	RepKevinMcCarthy
Tom McClintock	Н	R	RepMcClintock	RepMcClintock
Devin Nunes	Н	R	DevinNunes	Devinnunes
David Schweikert	Н	R	RepDavid	RepDavid
Elise Stefanik	Н	R	EliseStefanik	EliseStefanik
Brad Wenstrup	Н	R	RepBradWenstrup	RepBradWenstrup
Lee Zeldin	Н	R	RepLeeZeldin	RepLeeZeldin
Ron Johnson	S	R	SenRonJohnson	SenRonJohnson
Mike Lee	S	R	SenMikeLee	SenMikeLee
Maria Bartiromo	P	R	MariaBartiromo	Mariabartiromotv
Dan Bongino	P	R	dbongino	Dbongino
Steven Crowder	P	R	scrowder	StevenCrowder
Jean-François Gariépy	P	R	JFGariepy	JFGariepy
Sean Hannity	P	R	seanhannity	SeanHannity
Laura Ingraham	P	R	IngrahamAngle	LauraIngraham
Mark Levin	P	R	marklevinshow	Marklevinshow
Candace Owens	P	R	RealCandaceO	Candace
Paul Joseph Watson	P	R	PrisonPlanet	PJW