Good afternoon – I appreciate the time to speak to the subcommittee about my research and how it applies to this hearing. I'm a professor of sociology at James Madison University and for the last decade I've conducted international and domestic research on the interplay between technology and society. My most recent research focuses on how Republican voters validate truth in the contemporary news environment.

In my testimony today, I will argue three things:

- 1. Search engines are primarily shaped by the key words we query.
- 2. Many conservative content creators excel at search engine and social media optimization.
- 3. Conspiracy theories thrive when legitimate content is absent.

Key Words Shape our Results

Google, including its subsidiary YouTube, is the most powerful search engine in the world. Many people turn to Google to seek out information, including political information. Google attempts to scan the entire internet to find web pages and other content in order to provide relevant information for their users. Their system reads in metadata, which are tags written into content to help make it searchable online. When we search for information using Google it relies on an algorithm to make sense of what we are searching. We think of algorithms as magic, but what is happening is very simple. Google transforms our input (key words) into a value (content that best matches what Google believes is the most relevant match – directions, videos, news, etc.).

Accusations that big tech companies silence conservative focus on output, the idea that Google does not return specific kinds of ideological content. My research demonstrates that Google is not censoring content based on ideology. Instead, I find that the results people get are more likely to be shaped by input – the key words we put into the search bar.

Take, for example, two very similar searches surrounding an advertisement paid for by Americans for Prosperity, a conservative political advocacy group funded by the Koch brothers. The ad that repeatedly aired on television and circulated on social media sites like Twitter and Facebook during my study argued that the Democratic candidate in the Virginia Governor's race was incompetent because he had "approved the spending of \$1.4 million in taxpayer money to a fake Chinese company with a false address and a phony website."

If you Googled "Northam fake Chinese company" on January 25, 2018, you were provided with both a conservative take on how Northam was scammed, as well as information from FactCheck.Org assessing the legitimacy of the claims. However, if you focused on the monetary figure repeatedly used in the Republican candidate's ads and rallies and included "\$1.4 million" in the search on the same day, Google returned dramatically different, exclusively conservative content.

The top result was an opinion piece by the Republican Governors Association; the second link was an op-ed by a conservative politician. There was also a link back to Americans for Prosperity, the conservative think tank who paid for the ad, and following that a link to a forum rooted in

conspiracy theory, claiming that the Democratic Party is trying to "break the back of white, middle-class America" by "importing millions of brown people to dilute white votes and remove Christianity from the public square."

This is also true when considering the politically charged issue of Russian Collusion. In May of last year, Google auto filled the search to include the phrase "Delusion." And as of April 6^{th,} when you search for "Russian Collusion Delusion" most of the returns support the conservative perspective that allegations against Trump were unsubstantiated.

If one were inclined to believe the assertion that conservatism is being silenced and search for more info about conservative censorship, you will find that Google does not attempt to repress links connected to key words like "conservative censorship," or "PragerU censorship." Rather, the search engine returns a series of conservative leaning content that affirms the threat is real.

Search Engine and Social Media Optimization

Since the earliest days of Google, marketers have relied on "search engine optimization" to try and maximize the likelihood that Google would return content that highlighted their cause or company. In today's media landscape, organizations and individuals also use these tactics to game the algorithms behind Facebook/Instagram and Twitter's feeds.

As my research demonstrates, conservative production companies also have an acute understanding of how search engine optimization works and they are using it to maximize the exposure of their content. For example, analyzing the metadata of PragerU videos on YouTube, one can see that the company tags just as many of their videos as "democrat" as they do "republican." They tag more of their videos with phrases like "feminism" or the "womens march" than with words like "conservative." This increases the likelihood that their videos will appear when people search for or engage with content that would be typically marked "liberal." For example, a PragerU's video challenging the concept of "social justice" is at the top YouTube result when you search for the phrase "social justice." This video has over 1.1Million views.

On a site like YouTube, if someone watches Video A or, actively likes, comments, or shares the video, YouTube will read those signals as useful input for recommendations and ranking. If the person then watches Video B, YouTube will also take that signal seriously and create a link between Video A and Video B, such that new users will likely to be encouraged to watch Video B once they watch Video A. Of course, there are many features that are used as signals for the algorithm, but conservative content creators also understand that. They know how search engine optimization works and contrary to the claim that their views are being silenced, these tactics actively amplify their content to audiences outside of their ideological frameworks.

Data Voids

When there is limited or no content available on a topic or connected to certain terms, it is easy to coordinate around terms and guarantee that future searches will be directed to content that

includes these terms. This is why conspiracy theorists were able to capitalize on the concept of a "crisis actor." By producing a plethora of insidious content and maximizing search engine optimization, conspiracy theorists filled what's referred to as a "data void," guaranteeing that future searchers would continue to get conspiratorial results.

Data also indicate that conservative content creators latch onto concepts discussed almost exclusively within the right-wing media ecosystem to fill in data voids. Content surrounding these key phrases are first produced online, and then the ideas are driven through talk radio or Fox News. For example, searching on Google or YouTube for information about Nellie Ohr, only returns links or videos from sources like FoxNews, Fox Business, The Daily Caller, and The Washington Examiner. Not a single non-conservative link exists in the first seven hits because only conservative media producers discuss that she is married to former high-ranking Justice Official Bruce Ohr. The search itself exists in an ideological vacuum. This level of sophistication highlights how conservative groups systematically work to optimize their content for search and social media.

Conclusion

As you can see, depending on what you search for, conservatism thrives online. While there are anecdotes that some people or organizations have seen their content removed or minimized – these accusations lack systematic evidence that this was based on some political decision by executives at the top. The content that is produced by conservatives and progressives is different and so are the queries that people espouse those ideals are in searching for. Meanwhile, as some groups are more sophisticated than others at gaming social media and search, companies struggle to respond and this hinders their ability to give users accurate information. From the vantage point my data provides, the greater problem is that we live in parallel internets driven by distinct worldviews. We think of Google as a window into the wider world. It's more like a mirror that reflects our own interests and biases back to us.

To be sure, we must take seriously the fact that YouTube, Facebook, and Twitter play an increasingly important role in how our society gains access to news and information. For the opaqueness of their operational tactics allows uncorroborated conspiracies to hold weight.

Thank you.