Good afternoon – It is an honor to return before this Senate Committee to discuss my work. As I mentioned during my testimony on April 10, 2019, I'm a professor of sociology at James Madison University and for the last decade I've conducted international and domestic research on the effect of technology on society. My most recent research is an in-depth study of how everyday Republican voters validate truth in the contemporary news and internet environment.

In my testimony today, I will argue the following:

- First Studies that claim Google is biased against conservatism are flawed because they ignore user input the terms people search for which is an essential component of how search algorithms function.
- Second Conservative media organizations understand how search engine optimization works and are able to game the system.
- Third Contrary to the belief that YouTube is the new "public square" it is a privately held company.

## Our words matter

Google, including its video streaming platform YouTube, is one of the primary ways people around the world seek out news and information. It is one of the most powerful companies in the world, and it plays a critical role in how people learn about political candidates. Because the inner workings of how Google operates are proprietary, we can't definitively know how Google models the entire internet to match users to relevant information. Yet, parts of the process are not magic. Google has a series of algorithms that shape who gets what information. The word algorithm may sound complicated, but this can be understood as a set of instructions given to a computer. Google's algorithms read metadata — which means tagging content to make it machine readable. Google transforms our input (key words) into an output (directions, videos, news, restaurants that the company believes is the most relevant match). In an effort to best match our search terms (queries), Google also stores data on users, paying attention to the words we search, how long we stay on different pages, and the hyperlinks we choose to click on. The company is constantly comparing and contrasting users' habits and, in doing so, determining which sources count as authoritative. The likelihood that a source is returned is based on the search history of others who make similar queries.

One of the central concerns raised by conservative pundits and Republican representatives is that Google's authoritative results paint conservatives negatively and liberal interests favorably. Scholars such as Robert Epstein argue that Google returns more liberal leaning content and that these results have the capacity to sway elections. His findings are based on a controlled experiment with Independent voters where the queries they searched were predetermined by the researcher. My research also confirms that Google has a great deal of power because people overwhelmingly trust the service as a neutral purveyor of information. Where Epstein and I differ is that my work shows that the phrases we begin with are encoded with biases before they hit the browser. As users, we go to Google to search for more information about subjects we want to know more about. Yet, the starting point for how users approach Google is fundamentally different depending on one's ideological position. What my research demonstrates, is that conservatives already have a deep distrust in mainstream news, and thus go to search engines to

"self-investigate" or "do their own research" about current events they are interested in. People I interviewed said they also use the search engine to "fact check" stories they have heard in the news.

For example, in the Fall of 2017, Trump called on the NFL to fire players who knelt during the national anthem, tweeting on September 24<sup>th</sup> it was hurting ratings. At the time, if one were to use Google to fact check President Trump, and query "NFL Ratings Down" all of the top returns supported President Trump's claims. However, if someone wanted to challenge President Trump's claim and searched "NFL ratings Up" the phrase returned entirely different headlines, which claimed that NFL ratings were up despite anthem protests.

In short, there is no such thing as a neutral Google search. Different epistemological frameworks shape what we will search for, how, and why. Therefore, experimental studies of search-engine bias that determine in advance which search terms users enter are founded on a methodological error that undermines how internet search is practiced in the lives of everyday Americans.

The point of view from which an individual sees the world shapes the kinds of key words they chose when searching on a browser. These ideological fissures create multiple internets fueled by confirmation bias. We shape our own reality, because we "teach" Google what we want to see and what we consider to be a credible source of information. And those lessons are then fed back to us based on searches using the same paradigm. For example, when I search on Google for more information about PragerU's claims that its content is suppressed, I receive only conservative news about the subject or links back to PragerU videos. On YouTube the top returns for the phrase "PragerU censorship" are a series of conservative videos confirming the threat is real.

## The System is Gameable

My findings also indicate that the process of matching keywords to content can be gamed. For decades marketers have relied on "search engine optimization" to try and maximize the likelihood that Google will return content that highlights their cause or company. I found that conservative production companies have an acute understanding of how search engine optimization works, and they are using it to maximize the exposure of their content. For example, when I Googled "AOC" on July 9<sup>th</sup>, the top stories were from Fox News and the New York Post, despite the fact that "AOC" is the Twitter handle for the liberal, Democrat Representative Ocasio-Cortez. This matching is not accidental. By partnering with a data scientist, I have been able obtain the metadata that various channels use to make their content searchable on YouTube. Fox News is 6.7 times more likely to use "AOC" as a search engine optimization tag than MSNBC, thereby increasingly the likelihood that searching for the phrase will link audiences to conservative news coverage of a Democratic representative.

While this kind of tagging is important for elevating content, it can also lead to more dangerous algorithmic connections. Myself and other researchers have noted that because of the way in

which content is tagged, as well as guests on various shows, it can create a network of extremism. Professor Zeynep Tufekci found that as she watched videos of Donald Trump's rallies on YouTube the "autoplay" feature began streaming content featuring white supremacist rants and Holocaust deniers. YouTube has a vested interest in keeping people on the site for as long as possible. To do so, it provides its audiences with more extreme versions of what they have previously watched. Much like our inability to avoid looking at a train wreck, YouTube feeds audiences content they can't stop watching. This recommendation system may seem like a harmless method for capturing attention, but it has ominous consequences when it comes to political content.

In addition to YouTube having a vested interest in commodifying its content, users who create videos for the platform also want to profit. As a way of maximizing exposure, conservative producers readily cross-promote content and ideas. This is an excellent strategy on a site like YouTube, because if someone watches Video A or, actively likes, comments, or shares the video, YouTube will read those signals as 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 user will likely to be encouraged to watch Video B once they watch Video A. Feeding algorithmic connections on its own is not nefarious, but because conservative channels also regularly host far-right thinkers and provide them a platform to validate their ideas, YouTube will subsequently suggest their content. In this way, YouTube is a social media network of content creators, who they feature on their videos, and users who interact with that content. This is why media channels like *PragerU* - who aim to strategically distance themselves from extremism - end up as "related channels" to outspoken white supremacists and anti-feminists.

## Social Media is not the Public Square

We live in a country designed to protect our freedom of speech. It is one of the fundamental rights designed by our forefathers and is crucial for allowing Americans to express their opinions without fear of punishment or censorship. This fundamental right protects citizens who want to express ideas that are widely accepted and also those that are not popular. However, privately held corporations like Facebook, Google, and Twitter are not the "new public square" – they are more properly understood as sophisticated advertising firms designed to profit from the data we provide to them. Using these private corporations, PragerU and other conservative content creators have created mass followings promoting their world view. As of just last week, PragerU has over two million two-hundred thousand subscribers to their YouTube channel. Only a few hours after uploading a new YouTube video yesterday they had over fifteen thousand views and 2.6K likes. When you Google PragerU the top returns are their website, their Twitter account, their YouTube channel, and their Wikipedia page. Those interested in knowing more and learning from PragerU have ample access to do so.

In reviewing the claims of censorship made by a variety of conservative content creators as well as those who served as witnesses at the last Senate Hearing on this subject, the accusations are mostly anecdotes or general grievances about audience reach and monetization. Despite this

being considered an issue of "free speech" what many are taking issue with is their ability to amplify and profit from their messaging. While those who testified *feel* like their content is being suppressed, the fact remains that their content is still available. Users largely demine what kind of content they receive because Google is designed to serve the interest of its users. YouTube is not programed to feed users content that challenges their ideas or give creators what they want that the expense of users' interests. If some conservative content has been removed or demonetized, it is because it violated a private company's terms of service. These terms of service are not written to exclude or disenfranchise conservatives. These policies were created in the interest of safeguarding members of protected groups and are designed to reduce content on the site meant to incite hatred, harassment, discrimination, and violence.

## Conclusion

In sum, what we get from Google depends primarily on what we search and what content is served. As my research demonstrates time and again, not only does conservatism thrive online – depending on what you search, it might be the only perspective returned. In many contexts, conservative media are the Goliaths. They are well-funded companies with large production budgets and effective digital marketing teams. This is why when you search for liberal phrases like "gender identity" or "social justice" the top returns on YouTube are conservative content creators. Click on those videos, and YouTube doesn't try to sneak in liberal ideas or steer the audience left, it auto plays a steady stream of videos that further support conservative perspectives.

Simply put, if content is readily available, it is not being suppressed. What Conservatives who are claiming censorship are really talking about is not the Constitutional right to free speech, but a grievance against a free-market economy. The right for everyone to speak their ideas does not guarantee the right to captivate a large audience nor the right to profit from them. Given how often searching for and engaging with conservative content can lead audiences to online extremism, what this committee and this panel might want to focus their attention on is how metadata and guests can create algorithmic links to hateful speech, white nationalism, and disinformation.

Thank you.