



Hon. Charles Grassley
Chairman
Committee on the Judiciary
United States Senate
Washington, DC

Dear Chairman Grassley:

I was honored to offer testimony in your May 16, 2018 hearing regarding Cambridge Analytica. This letter responds to the follow-up questions transmitted to me by your office on May 23, 2018. Below, I have copied your questions and I offer my responses.

- 1. Can you explain why, based on your research, it would be extremely difficult to build a psychographic profile of a voter off of the Facebook data?*
- A. There are two limitations in building a psychographic profile of voters from Facebook data. The first limitation involves the relationship between available Facebook data (e.g. “likes”) and personality traits (i.e. they probably are not highly correlated). The second limitation involves the relationship between personality traits and politically-relevant attitudes and behaviors (i.e. they probably are not highly correlated). My research has shown that commercial data has not been particularly useful to estimate a psychological disposition of persuadability. Persuadability is a complex process and even detailed commercial data is not highly informative of it. Personality traits like neuroticism or extroversion are likely to be difficult to estimate with commercial data as well. Facebook “likes” of entertainers, TV shows, and so forth, are unlikely to bear a strong relationship to personality traits. And the inaccurate estimates of personality traits are unlikely to bear strong relationships to political dispositions (e.g. persuadability, candidate support) above and beyond what offline data already reveals about voters. These are my best guesses based on available research, though as I said at the hearing, more details and data from Facebook could help us get better answers.

Importantly, one thing I would reiterate from the hearing is that the effectiveness and accuracy of Cambridge Analytica’s profiling is likely to be something that is known by individuals like Mr. Christopher Wylie, who testified before your committee. Mr. Wylie was the director of research at his firm. While Mr. Wylie has used strong language about how his firm “weaponized” data, he has provided no specific information, such as results from validation studies or experiments measuring effectiveness of the firm’s strategies. As the director of research of Cambridge Analytica, Mr. Wylie would be the most likely person to have such evidence. The fact that no such evidence of the firm’s effectiveness has been provided publicly makes me skeptical of his strong claims.

2. *It seems like there are significant technical challenges to successfully microtarget voters. A group would need to presumably gather or gain access to correct information about a person, and subsequently use it to deduce things like behaviors and personality traits in order to successfully target an individual. How likely is it based on your research that deductions can be correctly drawn so that individuals are correctly targeted for purposes of persuasion? What percentage of individuals do you imagine are incorrectly targeted? For those individuals who are mistargeted, what is the likely consequence of that mistargeting on the candidate?*

- A. Depending on the data that campaign organizations use, microtargeting can result in varying degrees of mistargeting. If a campaign wants to target voters of a certain age cohort, gender, or geographic area, this typically involves little or no mistargeting because those traits are publicly listed about registered voters. Mistargeting comes into play when campaigns lack accurate records and must estimate traits and dispositions. My research has shown that when campaigns estimate racial identity (e.g. whether a voter is Black or Hispanic), they end up getting the prediction wrong about a quarter of the time or more. Experimental research suggests voters negatively evaluate the candidate who mistargets them based on an identity like race, religion, or support for gun rights. Extrapolating to Facebook, there ought to be more mistargeting on traits that are more nuanced than those that are more concrete. If one were to target Christians based on individuals who liked a Christian group on Facebook, this is likely to have a low rate of mistargets. If one were to target extroverted people based on individuals who liked the TV show “Jersey Shore,” I suspect this would generate a higher rate of false positives. The negative effects of mistargeting for the candidate are likely to depend on the nature of ad itself and on the sensitivity of the trait being targeted.
3. *If the technical errors of microtargeting were able to be resolved, and voters were able to be correctly targeted each time, do you believe microtargeting would actually persuade voters to change their views and react accordingly, or have you found in your research that voters generally respond more to ambiguous messages?*

- A. This is still an area about which researchers are learning. On the one hand, there is a long history of campaigns seeking to make personal connections and understand their voters better. Individual-level data helps politicians better understand their constituents and communicate with them in ways to which constituents will respond positively. This suggests that microtargeting, as a general campaign tactic, ought to help campaigns connect with and persuade voters. On the other hand, my research suggests that voters react more positively to campaigns that are broad and inclusive in their messages and that don’t pander to different groups in different ways. Though these ideas are in tension, they may both be true: microtargeting helps campaigns connect with voters on the things voters care about, but voters generally favor messages that are ambiguous and painted in broad strokes rather than specifically tailored to their identities.
4. *How persuadable are voters, in other words, how likely is it that a voter would react significantly and change or update his or her beliefs and views in response to a targeted message?*

- A. The research on this question ought to be divided into what we know about Presidential contests versus other contests. In Presidential contests, most American voters have predictable and clear preferences for their preferred party’s nominee. In addition,

presidential races are covered extensively in the press and discussed among voters themselves. In that environment, research has suggested it is very hard for a campaign ad to change a voter's mind. In lower-tiered races, research suggests that voters are more easily moved because voters might not have as much of a basis for their vote as in the Presidential contest. This is particularly true in primaries and in non-partisan elections, where voters don't see a Democrat facing a Republican and thus lack the most powerful cue or brand that could guide their choice.

5. *There are claims that Cambridge Analytica helped Trump win the 2016 election by microtargeting voters through Facebook data. The key voter groups that supported Trump in the 2016 election according to Pew Research were conservative, older, white, males with less than a college education. Pew Research also estimates that only 44% of that group uses Facebook. How do these numbers impact the likelihood that these voters would have been persuaded by any efforts on the part of Cambridge Analytica?*
 - A. Donald Trump's success among older white voters can be attributed to many factors, and Cambridge Analytica is probably not high on the list of these factors. The Trump campaign, from its press conferences to its rallies, was covered extensively by the media. President Trump's celebrity status, crude behavior, racism, sexism, persistent lying, policy ineptitude, and disrespect for the Constitution was, apparently, a compelling news story. The news media benefited from covering this spectacle. Republican Party leaders failed to counter Mr. Trump's narrative in the press with a strong defense of their own party's core principles. The older voters who supported Mr. Trump tend to have high rates of news consumption. Without a counternarrative from Republican leaders in Congress, particularly from leaders in the United States Senate, the news coverage likely influenced these voters' choices in the primary and general elections. As I said in the hearing, older white rural men have low participation rates in Facebook compared to other demographic groups. Though Facebook and Cambridge Analytica has not revealed details about the effectiveness of ad targeting by the Trump campaign and by affiliated groups, my best guess is that Facebook ads are very low on the list of reasons why Donald Trump won the election. Much higher on the list is the failure of Senate Republicans to convey to voters that Donald Trump lacks the core values and leadership traits befitting a leader of his party and country.
6. *One of the main alleged concerns with the Cambridge Analytica scandal was that the company planted fake news to influence the behaviors of American voters. 67% of Americans get news through social media. 45% of U.S. adults get news from Facebook specifically according to a recent survey, but a mere 5% of online Americans say they have "a lot" of trust in the information they gain from Facebook. With that in mind, if there was an effort to target voters in the 2016 election via fake news targeting Facebook users, how effective do you believe that tactic would be?*
 - A. I am most hesitant to answer this question because news spreads on Facebook not mainly via targeting but by sharing. I would encourage you to contact experts on media, social networks, and fake news to answer this question. My personal view is one of great concern about Facebook's model of news-sharing. Without editors and leaders acting as intermediaries, I worry about individuals who get their news based on what their high-school friends or aunts and uncles find compelling. That is why I articulated my dismay about Facebook, a company that misunderstands its civic responsibility as a conduit of political news and information.

7. *A national election, like an American presidential election involves a lot of data. Voters are inundated with information and data. Does your research support the idea that some additional piece of information would deeply impact a voter, or is it more likely that that piece of information would get lost in the overabundance of information?*

- A. One the one hand, Presidential elections in recent years, including in 2016, have been close contests. In close contests, there is legitimate interest in particular phenomena that could affect the election outcome. For instance, there has been some evidence to suggest that FBI Director Comey's comments on the Clinton email investigation (and subsequent press coverage) might have affected the outcome. While a microtargeted campaign advertisement is unlikely to affect the outcome, it is possible that a targeted piece of information that is shared through social networks and covered in the press might affect the outcome in a particular area in a close election.

I hope I have been able to satisfactorily answer your questions. Please feel free to contact me if I can be of help, particularly in connecting you with other researchers have done specific work on some of the questions you have asked.

Respectfully,

A handwritten signature in black ink, appearing to read "Eitan D. Hersh".

Eitan D. Hersh
Associate Professor
Tufts University