The Technological Elite Are Now in Control

Robert Epstein, Ph.D.

Invited lecture presented at Hillsdale College, Hillsdale, Michigan, November 9, 2020

A few days before President John F. Kennedy's inauguration in January 1961, President Dwight D. Eisenhower delivered one of the most remarkable and memorable farewell addresses in American history. He didn't summarize his accomplishments; he didn't offer platitudes about the greatness of the American people and the bright future that awaits us. Instead, he *warned* us. He warned us about invisible forces that were taking shape in our country and that threatened to undermine democracy – to turn our great experiment – government by the people – into an illusion.

His warning about what he viewed as the rise of a "military-industrial complex" – a potentially dangerous collaboration between our military leaders and the leaders of the vast industries that build our weapons – has been echoed many times over the decades. Because Eisenhower led Allied forces in World War II, his warning about the potential such a collaboration had for influencing the decisions of our elected officials was unnerving. We have safeguards in place to limit that influence – mandatory bidding procedures, for example, for large government contracts. But are those safeguards adequate? Could profit motives have driven some of the more questionable military actions our country has initiated in recent decades – our invasion of Iraq, for example?

Eisenhower's speech also contained a warning that has been almost entirely overlooked, but it's the one that should concern us most, especially given some of the questions that were raised about the outcome of the 2020 presidential election. Nearly 60 years ago – long before the microcomputer and the internet were invented – nearly four decades before Google was founded – Eisenhower warned about the rise of a "technological elite" that could control public policy without people knowing.

We had to be vigilant, he said, or these new forces would undermine our system of government, placing the real power into the hands of a small group of invisible executives who are not accountable to the American public.

I'm sorry to report that the American people have *not* been vigilant and that Eisenhower's disturbing vision of the future has come true – and on a scale that he never could have imagined.

Let me tell you how I know this – and why a prominent Washington, DC attorney recently told me I should go into hiding. She's not the first person to have told me this, by the way.

Experimental Research Shows the Power

I've been conducting randomized, controlled experiments for nearly 8 years now that show beyond any doubt the immense power that Google and other tech companies – I like to call them "Google-and-the-Gang" – have to shift attitudes, opinions, beliefs, purchases, and votes without people knowing and without leaving a paper trail for authorities to trace. I've had to name the manipulation techniques I've discovered because they're truly new – made possible by the ubiquitous internet, the self-destructive ways in which tech companies have bamboozled us into interacting with their software, and the rise of monopolies far larger and more powerful than any that have ever existed on this planet.

Almost all of these techniques make use of "ephemeral" content – fleeting content like search results, newsfeeds, and search suggestions that appear before our eyes, impact our thinking and behavior, and then disappear, leaving no trace. You can't go back in time and see what search results people were shown – at least not normally (more about that below). My experiments allow me to understand and quantify the impact that ephemeral content has on users, and the results are often astonishing. In the first experiment I conducted on what is now called "SEME" – the Search Engine Manipulation Effect – I predicted that search results that were biased to favor one candidate could shift the voting preferences of undecided voters by 2 or 3 percent. In that experiment, in which real registered voters were randomly assigned to groups in which search results favored one candidate or the other, the actual shift we got was 48% – and that was after just one search. Imagine what happens if you're showing people biased search results multiple times a day, day after day, for weeks or even months just prior to an election. Does repeated exposure to different research results that have the same bias increase the shift in opinions and votes? Most definitely.

In those early experiments, I also learned that it's possible – easy, in fact – to mask the bias in search results so that almost no one can see it, and yet the experiments still shifted undecided voters in whatever direction I chose. In the first nationwide experiment I conducted on SEME, with more than 2,000 participants in all 50 states, I could look separately at the small group of people who were able to detect the bias in the search results we had shown them. More bad news here: The opinions and voting preferences of these perceptive people shifted even *farther* in the direction of the bias, presumably because of the irrational trust people put in algorithmic output. If the content is coming from a computer algorithm – especially a sophisticated algorithm written by an outstanding company with a super-cool name – it must be impartial and unbiased, yes? We can *see* the human hand in news reports and campaign ads, but the human hand is invisible in computer output, even though *people* wrote the computer algorithms and, at a company like Google, even though people *modify* those algorithms frequently.

SEME was the first of about a dozen new forms of influence I've been studying over the years. They have names like SSE (the Search Suggestion Effect), ABE (the Answer Bot Effect), YME (the YouTube Manipulation Effect), DDE (the Differential Demographics Effect), OME (the Opinion Matching Effect), TME (the Targeted Messaging Effect), and so on. Each produces substantial changes in people's opinions and voting preferences without their awareness. What happens when billions of people around the world are being impacted, not just by SEME, but by multiple manipulations day after day that promote the same causes or candidates? You guessed it: The numbers go up.

And what happens when you know a great deal about your users so that you can customize your manipulations to match people's interests – like which political party they favor or which news sources they trust? Right again: The numbers go up more. Google and Facebook pride themselves on sending you personalized content based on what they know about you. If you have been using Google for more than a decade, they probably have the equivalent of *three million pages of information* about you. If that number sounds impossibly high, bear in mind that they're collecting information about you over more than 200 different platforms, not just on Gmail, YouTube, the Google search engine, and Android phones. If you wear a Fitbit fitness tracker, for example, you might be sending physiological data about yourself to Google 24 hours a day; Google announced in November 2019 that it was buying the company (at this writing, the purchase is still pending but likely to go through). If you have a Nest smart thermostat in your home, Google is either listening to everything you do, watching everything you do, or

both. They installed microphones and then cameras into the thermostat after they bought the company a few years ago.

And if you ever visit websites that use Google Maps (which millions of websites do) or that use Google Analytics to track traffic to their websites (tens of millions of websites do), Google can legally track everything you do on those websites. You agreed to that when you unknowingly agreed to their Terms of Service, which says, among other disturbing things, that Google can track you whenever you're using a Google product, even if you don't *know* you are. Oh, and you agreed to their Terms of Service whenever you first *used* a Google product – that's right, even if you didn't *know* you were using a Google product.

Getting a creepy feeling yet? If so, I'm doing my job.

But it's one thing to run experiments that demonstrate the *power* that tech companies have to alter thinking and behavior. How do we know that Google-and-the-Gang actually wield the powers of influence they have?

Whistleblowers and Leaks Suggest the Power Is Being Used

When I first starting doing research on new forms of online influence, I could only speculate about how these were being used. Those days are long gone. Now, when a Google executive, including Sundar Pichai, Google's current CEO, lies under oath while testifying before Congress, I can spot every lie – each time marveling at the arrogance I'm witnessing.

Let's start with those all-important ephemera I mentioned earlier. In 2018, in emails leaked from Google to the *Wall Street Journal*, Google employees (called "Googlers" – isn't that cute?) are discussing how they can use "ephemeral experiences" to change people's views about Trump's travel ban. Yes, employees at Google, and, no doubt, at Facebook and Twitter too, know full well about the power that ephemeral content has to change thinking and behavior, and they use that power deliberately and systematically.

Let's shift over to blacklists – a simple, practical tool that programmers use to demote or suppress content. In 2016, I published an extensive article in *U.S. News & World Report* called "[The New Censorship]()," which described nine of Google's blacklists. I had never seen them, but I knew as a programmer that these lists must exist. Without them, the company couldn't instantly demote or remove a website from their search results, for example – a daily practice at Google. Without a blacklist, Google couldn't easily ban certain words from its search suggestions, which they do regularly. Their biggest blacklist, I explained, contains millions of entries: web addresses they don't want people to visit, either because they contain malware or because they just seem "spammy."

What, you say? Google blocks access to websites? Yes, indeed – to millions of them, and they can block access to your website or your business's website any time they choose. Even a rogue employee at Google can do it. On January 31st, 2009, Google blocked access to virtually the entire internet for 40 minutes. *The Guardian* reported this, and Google didn't deny it. If you want to know why Googlers – those little rascals – blocked the entire internet at the particular time they chose, read my article in *U.S. News & World Report*.

Just before I testified before a U.S. Senate committee on July 16, 2019, Karan Bhatia, Google's Vice President for Government Affairs, testified, and, yes, he was under oath. When Senator Josh Hawley asked him whether Google had any blacklists, Bhatia replied, "No, Senator, we do not."

I knew that was a lie, but what proof did I have? Fortunately, less than two months later, on August 14th, 2019, Zach Vorhies, who had been a senior software engineer at Google for more than 8 years, walked out of the company with 950 pages of incriminating documents. Two of those documents were labeled – and if this isn't arrogance, I don't know what is – *blacklists*. Seriously. Where's all that Google creativity we hear about? Who in today's politically correct business environment would have the audacity to label blacklists "blacklists"? These lists, by the way, singled out right-wing websites and organizations for demotion or removal from content.

The number of whistleblowers either pushed overboard or jumping ship from Google, Facebook, Twitter, Pinterest, and other tech companies has been growing rapidly in recent years. In 2016, a "content moderator" left Facebook, explaining that he was on a team that manually boosted liberal content and demoted or removed conservative content from Facebook newsfeeds. Tristan Harris was a "design ethicist" at Google who could no longer tolerate the fact that his job was to figure out how to "ethically" manipulate more than a billion people every day. In 2018, Google software engineer Kevin Cernekee was fired after stating publicly that Google would not allow Trump to win a second term. In February, 2019, a Facebook whistleblower leaked 60 pages of documents showing Facebook employees exploring strategies for suppressing right-wing "hate speech"; unfortunately, only liberals at Facebook appeared to be defining what that phrase meant. In June, 2019, 13-year Google veteran Meredith Whittaker testified before Congress about how Google was using artificial intelligence "to monitor, track, and control vulnerable populations."

In July, 2019, Greg Copolla, a senior software engineer at Google for five years, said that Google was "dangerous" and politically biased. What you see in search results is exactly what they want you to see, he said; they have "complete control" over their algorithms. Zach Vorhies' treasure trove not only included blacklists; it also included documents on "algorithmic fairness" – guides for using algorithms to correct what Googlers judge to be social inequities – as well as a manual for the "Twiddler" system, software Google uses to rerank search results. That system, Zach told me, could be used to turn bias in search results on or off "like flipping a light switch."

In October 2019, another former Google software engineer, Guillaume Chaslot, expressed concern that the world is now "governed by secret algorithms that decide on 70 percent of what viewers see on YouTube, and 100% of what they read on Facebook." That 70 percent figure should alarm you because in a video that Vorhies leaked in 2018, Susan Wojcicki, YouTube's CEO, explains to her staff that the company's secret "up-next" algorithm was being revamped to elevate content the company likes and demote content it doesn't. YouTube is part of Google, by the way.

In October 2020, Ritesh Lakhkar, a Google Cloud Technical Program Manager, went public claiming that Google search results are biased to favor Democrats because of "hatred" of President Trump within the company.

I can't resist ending this section without a few bullet points:

- In 2015, Eric Schmidt, then head of Google, offered in writing to head up Clinton's tech campaign in her run for the presidency.

- In 2016, Alphabet, Google's parent company, was Hillary Clinton's largest donor. (Disclosure: I supported Clinton in this election. I am not a conservative.)
- That same year, Schmidt bankrolled a highly secretive company called The Groundwork, the sole purpose of which was to use high-level tech to make sure Clinton won in 2016. (Schmidt failed, of course. He got her the popular vote, but he was sloppy about controlling votes in the swing states.)
- Stephanie Hannon, Hillary Clinton's Chief Technology Officer, was a former Google executive. So was Megan Smith, President Obama's Chief Technology Officer.
- 96 percent of donations from Google employees go to Democrats.
- More than 90 percent of all donations from all Silicon Valley tech companies go to Democrats.
- "The Selfish Ledger," an 8-minute video that leaked from Google in May, 2018, explains how the company's algorithms can be used to reengineer humanity according to "company values." This video, which was never meant to be seen outside Google, is so startling that I transcribed it (the transcript is [here](#)).
- "The Good Censor," a briefing that leaked from Google in October 2018, says Google must accept its role as "moderator in chief" of the world – deciding what content billions of people can and can *not* see. I wonder whether the rest of the world – the world outside Google – might want to weigh in on that.
- In September, 2018, a truly extraordinary video leaked from Google: It showed an hour-long all-hands meeting that took place at company headquarters just days after Trump's win in 2016. The company's distraught founders and top executives were on stage, and they made it clear that Google would *not* allow Trump to be reelected. As Ruth Porat, the company's Chief Financial Officer, put it, "Our values are strong. We will fight to protect them, and we will use the great strength and resources and reach we have to continue to advance really important values."

"*The great strength and resources and reach*," said Ms. Porat.

If you're still not convinced that Google-and-the-Gang are a threat to democracy and free speech, let me show you how I've actually measured that threat.

Monitoring Systems Prove the Manipulations are Real,
and They Can Also Be Used to Tame Big Tech

Prompted by an August, 2015 phone call I received from the attorney general of Mississippi, in 2016 my team and I set up a Neilsen-type monitoring system to preserve the election-related search results that a diverse group of American voters – 95 field agents in 24 states – were seeing on their screens in the weeks leading up to the 2016 presidential election. We equipped the computers of our field agents with custom software that allowed us, in effect, to look over their shoulders as they conducted election-related searches on Google, Bing, and Yahoo.

Especially notable here is that our field agents were using neutral search terms from a list of 250 we gave them – the kind of terms an undecided voter would use. If you type "Hillary is the devil," you expect to get biased search results, but what do search engines show people when they type neutral search terms such as "Trump health plan" or "Hillary health plan"? Those are the kinds of search results we were capturing.

In 2016, we preserved 13,207 searches – ephemeral experiences that are normally lost forever – along with the 98,044 web pages to which the search results linked. Based on human ratings of the web pages, we were able to calculate the political bias on each search engine, along with the bias in each of the 10 positions on the first page of search results. We found significant pro-Clinton bias in all 10 of those positions on the Google search engine, but no such bias on Bing or Yahoo.

From the years of experimental research I had been conducting, I was able to calculate that if the level of bias we detected on the Google search engine had been present nationwide for several months before Election Day, it would have shifted between 2.6 and 10.4 million votes to Secretary Clinton – this, with no one aware of the manipulation and, except for the data we had collected, without leaving a paper trail.

In 2018, we set up a more ambitious monitoring system to keep an eye on the midterm elections, again finding significant liberal bias. But I'm going to skip ahead to the recent presidential election of 2020.

This year we expanded our monitoring efforts considerably. We recruited a diverse group of 733 registered voters in three key swing states – Arizona, Florida, and North Carolina – and we preserved more than 500,000 ephemeral experiences, among them election-related searches on the Google, Bing, and Yahoo search engines (using only neutral search terms, as usual), along with vote reminders on the home pages of Facebook and Google, thousands of YouTube sequences, and millions of web pages. It will take us months to fully analyze the wealth of data we have preserved, but four findings from our preliminary analyses are striking:

1. There was a significant liberal bias in all 10 search positions on the first page of Google search results but no such bias on Bing or Yahoo. So far, we have measured the bias by looking at the news sources the search engines were using; eventually, we'll measure the bias in other ways, as well.
2. We found this bias in every demographic group we've looked at so far – even in search results going to our conservative field agents. In one report we generated, we found that the liberal bias in search results going to conservatives was larger than the liberal bias in the search results going to liberals.
3. From October 26th to October 29th, 2020, only our liberal field agents received vote reminders on Google's home page. None of our conservative field agents received such reminders. This appears to be a blatant example of politically-targeted messaging, which is almost certainly a violation campaign finance laws. And given that Google's home page is seen more than 500 million times a day in the United States, targeted messaging of this sort is not a small manipulation.
4. We went public about our monitoring on Thursday, October 29th, and I made sure that day that executives at Google would become aware of our findings. That night, *the targeted messaging stopped cold*. From that point forward until the end of Election Day on November 3rd, *all* of our field agents received the vote reminder.

I can't prove this, but I think it's reasonable to conjecture that on October 29th, 2020, my team and I got Google to stop an extremely powerful vote manipulation. At some point, with the help of a subpoena, court discovery proceedings, newly leaked documents, or a new whistleblower, we might find out for sure.

Just a few days ago, Senators Ted Cruz, Ron Johnson, and Mike Lee sent a letter to the CEO of Google accusing him of lying before Congress – a felony – when he recently testified, "We won't do any work, you know, to politically tilt anything one way or the other. It's against our core values." The letter talks at length about preliminary results from my 2020 election monitoring system.

It was after that Senate letter went public that that DC attorney advised me to go into hiding.

I suspect that I still don't know even a fraction of the tricks Google-and-the-Gang were using to shift votes in 2020, but based on what I do know, I believe it would have been relatively easy for them to have shifted 15 million votes. Google's executives were sloppy in 2016, and they swore they would be far more careful moving forward; if I can calculate a vote shift of 15 million votes, I imagine they could easily have shifted more. They know far more about their capabilities than I do, after all.

At this writing, it appears that Joe Biden won the popular vote nationwide by more than 5 million votes and that he got the Electoral College votes he needed because of small win margins (in the tens of thousands) in five swing states.

One doesn't need to be a rocket scientist to realize that without the clandestine help of the Big Tech companies this year, Donald Trump might have won the election by a landslide.

Conclusions

We have not been vigilant. We have been sleeping, and we have also been stupid. We have signed up to use dozens of "free" online surveillance systems as if giving up years of highly personal information couldn't possibly have any negative consequences. I think the best essay I ever wrote on this topic – one that very few people have read, by the way – is one called, "Free Isn't Freedom: How Silicon Valley Tricks Us." It's about what happens over time when we use online surveillance tools. Day after day, we give up small trickles of information in return for small services. Eventually, those trickles accumulate until we have given up an *ocean* of information, while, day after day, we're still just getting those little services. Do you see the imbalance here? Do you see how your relatively innocuous daily online activities make you and your family increasingly vulnerable? When you use "free" online surveillance tools, you are not just surrendering your data, you are also surrendering your *freedom*.

When a con artist is out to get you, he or she first studies you for a while, yes? You and your family members are being *studied* 24 hours a day with the biggest magnifying glass ever invented.

Here are the three weapons that Big Tech assaults us with daily: (1) Round-the-clock surveillance whether we're online or offline. (2) Suppression of content (a.k.a. censorship) that we're sometimes aware of but usually not (you don't know what you don't know, right?). (3) Dozens of new forms of manipulation that are virtually invisible and that leave no paper trail for authorities to trace. These weapons keep me up nights, and if they don't at least trouble you, then Google-and-the-Gang have you exactly where they want you.

The first job of any effective mind control machine is to keep you unaware of its existence, yes?

Have the tech lords already taken over? I believe they have, and not just in the U.S. They currently impact nearly three billion people worldwide every day, and that number will likely exceed four billion by 2022.

I'm discouraged by these developments, but I also believe we can fight. In an [article I published in Bloomberg Businessweek](#) in July, 2019, I proposed a simple, light-touch form of regulation that will permanently end Google's worldwide monopoly on search. The solution is to make the "index" – the database Google uses to generate search results – into a public commons, accessible by all. The content of that database isn't Google's property, after all. It was all stolen – "scraped" is the technical term – from websites around the world, and the internet belongs to everyone, not to Google, no matter what the egotistical fantasies of Google's executives might be.

There is precedent for the public commons plan both in law and in Google's business practices, and the main result of this plan will be to stimulate the creation of thousands of new search platforms, each giving excellent search results and each catering to different audiences – a perfect analogue of the world of news media. Not only will search become competitive again, it will also become *innovative* again, as thousands of search platforms find new and interesting ways to answer people's questions.

And then there is monitoring. To me, this is ultimate solution to the tech problem. Laws and regulations advance like senescent turtles, weaving around slowly, pausing for a while, then weaving around some more. In recent years, we've also been reminded that the laws and regulations put in place by one administration can quickly be removed by the next. Tech, meanwhile, moves at light speed.

Can monitoring keep up with tech? Most definitely, because monitoring *is* tech. It can move as quickly as Google moves – and as quickly as the next Google and the one after that. The monitoring systems I've set up since 2016 aren't *solutions* to the Big Tech dilemma; they're *proofs of concept*. They show that we can do to the tech companies what they do to us: *observe and record their actions, no matter how ephemeral*. And my 2020 project suggests that monitoring systems can also cause these companies to *back off*.

This year we preserved more than 500,000 ephemeral experiences that would otherwise have been lost forever, and it appears that we also got Google to stop an extremely powerful type of vote manipulation four days before Election Day. Now think ahead: Imagine the power of a sophisticated, large-scale monitoring system that is detecting and exposing Big Tech bias, censorship, and manipulations in *real time, 24 hours a day, 365 days a year*. Would these companies even *dare* to try rigging an election? Would they even *dare* to try "reengineering humanity"?

The findings of my 2020 election monitoring project tell me that the world needs large-scale permanent monitoring systems to protect humanity from the dangers posed by emerging technologies. What do those findings tell you?

Robert Epstein is Senior Research Psychologist at the American Institute for Behavioral Research and Technology in Vista, California. A Ph.D. of Harvard University, he has published 15 books on artificial intelligence and other topics, and he is the former editor-in-chief of *Psychology Today* magazine. To learn how to protect your privacy and the privacy of your children, see his essay at https://MyPrivacyTips.com. To support and learn more about his research on online influence, visit https://MyGoogleResearch.com. If you're interested in working as a research intern under Dr. Epstein's supervision, visit the internships page at https://aibrt.org.