How to turn Facebook into a weaponised Al propaganda machine

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Social media can influence how you vote Jaap Arriens/NurPhoto/Getty

Could Facebook really tip the balance in an election? Over the past year firms like AggregateIQ and Cambridge Analytica have been credited with using AI-targeted ads on social media to help swing the Brexit referendum and the US presidential election respectively. But a lack of evidence meant we have never known whether the technology exists to make this possible.

Now the first study detailing the process from start to finish is finally shedding some light. "This is the first time that I've seen all the dots connected," says Joanna Bryson, an artificial intelligence researcher at the University of Bath, UK.

At the heart of the debate is psychographic targeting – the directing of political campaigns at people via social media based on their personality and political interests, with the aid of vast amount of data filtered by artificial intelligence.

Though Facebook doesn't explicitly provide the tools to target people based on political opinions, the new study shows how the platform can be exploited. Using combinations of people's interests, demographics, and survey data it's possible to direct campaigns at individuals based on their agreement with ideas and policies. This could have a big impact on the success of campaigns.

"The weaponised, artificially intelligent propaganda machine is effective. You don't need to move people's political dials by much to influence an election, just a couple of percentage points to the left or right," says Chris Sumner at the Online Privacy Foundation, who is presenting the work this week at DEF CON in Las Vegas.

Checks and balances

No one yet knows how much this can permanently change people's views. But Sumner's study clearly reveals a form of political campaigning with no checks and balances.

To get to grips with the complex issue of psychographic targeting online, Sumner and his colleagues created four experiments.

In the first, they looked at what divides people. High up on the list was the statement: "with regards to internet privacy: if you've done nothing wrong, you have nothing to fear". During the Brexit referendum they surveyed more than 5000 people and found that Leave voters were significantly more likely to agree with the statement, and Remain voters more likely to disagree.

Next, by administering various personality tests to a different group they found traits that correlate with how likely you are to agree with that statement on internet privacy. This was converted into an "authoritarianism" score: if you scored high you were more likely to agree with the statement. Then, using a tool called PreferenceTool, built by researchers at the University of Cambridge, they were able to reverse engineer what sort of Facebook interests and demographics people with those personalities were most likely to have.

Just 38 per cent of a random selection of people on Facebook agreed with the privacy statement but this shot up to 61 per cent when the tool was used to target people deemed more likely to agree, and down to 25 per cent for those who they deemed more likely to disagree. In other words, they were able to demonstrate that it is possible to target people on Facebook based on a political opinion.

Ad campaigns

Finally, the team created four different Facebook ad campaigns tailored to the personalities they had identified, using both pro and anti-surveillance messages. For example, the anti-surveillance ad aimed at people with high levels of authoritarianism read: "They fought for your freedom. Don't give it away! Say no to mass surveillance,"

with a backdrop of the D-day landings. In contrast, the version for people with low levels of authoritarianism said: "Do you really have nothing to fear if you have nothing to hide? Say no to state surveillance," alongside an image of Anne Frank.

Overall they found that the tailored ads resonated best with the target groups. For example, the pro-surveillance, high-authoritarianism advert had 20 times as many likes and shares from the high-authoritarianism group versus the low one.

Though the picture is becoming clearer, we should be careful not to equate a short-term decision to share or like a post, with long-term political views, says <u>Andreas Jungherr</u> at the University of Konstanz, Germany. "Social media is impacting political opinions. But the hype makes it hard to tell exactly how much," he says.

However, maybe changing political opinions doesn't have to be the end game. Perhaps the goal is simply to dissuade or encourage people from voting. "We know it's really easy to convince people *not* to go to the polls," says Bryson. "Prime at the right time and you can have a big effect. It's not necessarily about changing opinions."

Facebook allows targeted advertising so long as a company's use of external data adheres to the law.

Greater transparency is the aim for the future. The Information Commissioner in the UK, Elizabeth Denham, is midway through an investigation into the use of targeted advertising by political campaigns and is due to publish her findings later this year. The Green Party in Germany has started making all of its social media adverts available online for anyone to see. This may encourage others to follow.

But a better approach might be to create new institutions to audit the algorithms used for political targeting. "It's absolutely fundamental to democracy that there is more transparency," says Bryson.

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