PostPartisan • Opinion

# The anti-vaccine movement shows why Facebook is broken

By Robert Gebelhoff January 9 at 8:00 AM

Mark Zuckerberg is stepping into the new year with an apology tour. The Facebook chief executive spent a good portion of 2017 warding off lawmakers and investigators trying to figure out how much of a role his company played in Russia's interference in the 2016 election. So naturally, Zuckerberg felt the need to announce his New Year's resolution last week: Fix Facebook.

The problem is, Zuckerberg can't fix Facebook. By its very nature, the social-media network may be doomed to cause further damage to the American political system — no matter how much it tinkers with its algorithms or changes the way foreign governments place ads on its site. In the end, the problem lies with Facebook's users.

We can imagine Facebook as an endless labyrinth of tunnels and caverns connecting its billions of users. Most of those tunnels are benign, allowing people to share news, birthday wishes and videos of corgi puppies. But there are some tunnels, deep in the darkest parts of the site, where users subsist on misinformation feeding into their worst biases. And there's no topic that illustrates this better than vaccines.

**ADVERTISING** 

#### **ADVERTISING**

Naomi Smith, a sociologist at the Federation University Australia, spent a year observing Facebook users who share, like and comment on thoroughly debunked conspiracy theories on the safety of vaccines. In <u>a recent study</u> analyzing hundreds of thousands of anti-vaxxer comments, she and colleague Tim Graham illustrated just how dangerous this digital world has become.

Facebook didn't create the anti-vaccine movement. But according to Smith and Graham's research, anti-vaxxers on Facebook exist in what sociologists call a "small world" network. Such users cluster themselves into cliques, the members of which share connections with one another. This simplifies the movement of ideas immensely. In the real world, anti-vaccine networks are sparse, and finding similarly minded people takes a lot of effort. But Facebook can connect any two anti-vaxxers in just one or two steps.

The result is a highly self-reinforcing network that moves information quickly and efficiently. If one page somehow shuts down or loses its influence, others in the network quickly pick up the slack.

Facebook's anti-vaccine network is also more sophisticated than a group of people simply positing the debunked belief that vaccines cause autism. The pages usually do not identity as "anti-vaccine," but instead as "pro-safe vaccines" or in favor of "vaccine choice." The authors of the study argue that the online network provides anti-vaxxers with a sense of support, offering firsthand anecdotes of harmful vaccines — despite a dearth of scientific evidence — and tapping into the fears of parents, especially mothers. The study found that some 70 percent of activity from the anti-vaccine movement on Facebook over a three-year period came from women.

The study also shows the power of a sense of structural oppression. One of the recurring themes in the network is that government and media are willfully downplaying or covering up the effects of vaccines. Users often compare vaccine use to the Holocaust.

"For [users], it's more real and more true than information than official sources," Smith said. "What we see in our day-to-day lives seems more real than what's actually going on."

Smith said her research can easily be translated to other special interest topics online, especially politics. Even the limited public data that Facebook provides could give us troves of information on how people are interacting and building their own political silos during election cycles.

We can't be sure the extent to which this is the fault of Facebook's algorithms or the fault of how people organize themselves; to answer that would require a lot more data than Facebook would ever divulge. But what we do know is that anti-vaxxers on Facebook often participate across several pages in the network, suggesting a level of willful activity from users that Zuckerberg just can't change.

The frustrating reality is that we simply don't have the tools we need to break open our echo chambers. Nor would it be right to expect Facebook to actively try to moderate people's opinions.

So what should be done? At the very least, Facebook should keep data open for social researchers to look through. And political scientists should take up the challenge to analyze that massive trove of information. To address the epidemic of misinformation, lawmakers and the media need to think creatively to promote real information to consumers. Anti-vaxxers tend to accept personal testimony, so Smith suggests that the key is talking to them on their own terms — translating hard facts into lived experience.

But, really, the heart of the problem is human nature. We seek out information that affirms our beliefs — even if those beliefs are bunk. No algorithm could ever change that. We need to come to terms with the fact that social media makes getting bad information easy.

#### Read more:

Lucy Bernholz: Facebook, show us your secret recipe

Wael Ghonim and Jake Rashbass: It's time to end the secrecy and opacity of social media

Quinta Jurecic: Facebook, Twitter and Google put our ugliness on the market

The Post's View: Facebook should share those Russian ads with the public

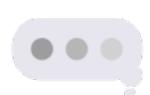
Jason Kint: The Russia ad story isn't just about Facebook. It's about Google, too.

**38** Comments

#### Sign in to join the conversation

#### **Read These Comments:**

Subscribe to our weekly newsletter dedicated to the best conversations and comments on The Washington Post.



Sign me up

**Comments** 

My profile



The conversation here is moderated according to The Post's discussion guidelines. Please <u>read the rules</u> before joining the discussion.

**Looking for your comment history?** Your recent comments are available under the My Profile tab directly above this message. Comments submitted to our previous system can be found here.

Send feedback about the comments section <u>here.</u>

### All Comments (50)

Viewing Options ▼



# dakyakker67 30 seconds ago

One thought on combating this sort of thing; Perhaps improvements to the educational system in the US, to include an emphasis on the teaching and refining of critical thinking skills more, might be helpful.

Improving thinking skills would help to overcome inherent human tendencies and reduce the impact of misinformation.

Like 

Reply ← Link 

Report 

Report



#### macionio 2 minutes ago

The secret to Facebook is the erosion of trust. We trust people - individuals that we interact with socially - much more than we do corporations, scientists, or governments. Facebook takes advantage of that, filling our social spheres with countless bots and paid marketers pretending to be individuals.



## tunkefer 5 minutes ago

Before social media, movements such as anti-vax could be monetized but only by a few people who became leaders of these movements, usually after years of participation and activism. Now, such movements can potentially be monetized by just about anyone from the comfort of their own home.

How much of a factor is this in the creation of the bogus information bubbles the author describes?

Like 

1 Reply 

Link 

Report 

Report 

1



## chet\_brewer 2 minutes ago

certainly the right wing websites have been a treasure trove for the internet leadership. I am bombarded with spam for vitality, virility, emergency rations, and weapons everytime I log onto one of the crazy right wing echo chambers. I suspect some of the left wing sites are similar, but have no knowledge of it at this point

Like Reply Link Report ►



# macionio 1 minute ago

The anti-vax movement was around for decades before the rise of social media. It was monetized not by celebrity leaders, but by the fraudsters who were selling the alternative medicines the anti-vaxxers used instead. Every bogus medicine huckster was making bank off the movement, and still are.

Like Reply Link Report ►



# pied bagpiper 6 minutes ago

Two thoughts:

One: if you want to goto public school, you should be required to have a vaccine. And private

schools should have the right to require all attendees to have vaccines, if they so choose to require it. Same goes for restaurant/bar workers or anyone working in the food industry.

Two: Parents of kids who do not get vaccines seem to me to be counting on the "herd" to have vaccines. If, say, polio starts to make a comeback, those who chose not to get their kids vaccinated against Polio are willingly taking the risk of their kid getting the disease.

My kids are all grown and healthy, but had this come up 15-20 years ago, I would have the same thoughts I wrote about above.

Like **16**3 Reply ← Link ⇔ Report ►



## mountfort6400 8 minutes ago

This is the wrong place to focus. The issues surround culture and education. Facebook is trivial.



## chet\_brewer 41 seconds ago

an echo chamber will overcome education any day, reinforcing an individuals prejudices is a great way to build a movement, look at trumps nomination and election

Like Reply Link Report ▶



#### middlekid 13 minutes ago

I can hear my mother's voice saying, more than a 1/2 century ago, "Is this something to say?...keep it to yourself, forget about it" whenever I voiced some mean or negative thought. Some of the time her admonishments worked, and the remaining times, I told one or two BFFs (and may be they told one or two BFFs) and that was that. Later, my parents would also suggest I tone down or forget unfounded scientific-sounding but dubious pronouncements saying something like, "You're an educated person, stop saying that (without proof)", or, "Go ask your teacher if that is true" or "Little knowledge is dangerous". I was just an average kid and now I am an average adult, and none of my upbringing made me a particularly good person, but, it did make me much less of a contagious virus of meanness, fakery and posturing than if I'd had social media to spout off on, oh so easily. Like the discovery of the power packed into an atom, social media can do a lot of good, but, its use has leaned more toward atom bomb-like applications than nuclear medicine. And, it's in each of our hands.

Like 2 Reply Link Report ►



mljr



Children die because of anti-vaxxers, so they should be treated as the public health problem that they are.

Like 16 4 Reply ← Link ⊕ Report ▶



#### macionio 14 minutes ago

You forget the most important part: this isn't something that organically arises, it's deliberately created by a vast industry of cranks and crackpots who post fake "firsthand" stories and deliberately false or misleading "information". This powerful ecosystem is sustained by people's beliefs and the info-bubble nature of Facebook, but it originates from clever fraudsters, scammers, and unscrupulous marketers who are actively feeding that bubble for the sake of their own profit.

Like 1 Reply Link Report ■



#### someguysarerude 10 minutes ago

Trump shows the power of the lie with every breath since he started his campaign.

Like 1 Reply ← Link ⇔ Report ►



## dontthinktwice 1 minute ago

His history with lying goes much farther back than that. It is one of the pillars of his existence.

Like Reply Link Report ▶



# **spunkydawg2** 17 minutes ago

Of course YOU would say all this, you're part of the "deep state" that has a vested interest in controlling me and my children, indeed the entire world. You might fool all these other WaPo zombie readers, but you're not fooling me.

Like Reply Link Report ▶



# **someguysarerude** 10 minutes ago

You're joking, right?

Like 62 Reply Link Report ■



# pied bagpiper 2 minutes ago

Ah ves, the Deep State. Right up there with the Illuminati.

You can do whatever you want with your children, but that does not mean your kids should be allowed to attend public school or private school that require vaccinations. Nor work in the food industry.

I believe the Republican tax plan has some verbage about helping out those that home school. Please consider that as an option, for the sake of the rest of the "herd".

Like 

2 Reply 

Link 

Report 

Report 

■



## andrea landry 16 minutes ago

This is why a trillion dollar social media industry has to cut into its glutinous profits, prove that patriotism and our national security is top priority, and hire more human editors instead of relying on algorithms, new and old. Thank you for an excellent article.

Thankfully our respectable free press will continue to monitor and report that FB, Twitter, and Google still contain Russian account trolls as well as other racist, bigoted, neo-fascist and white supremacy ads, fake news, ads promoting hate and dividing Americans as well as political propaganda out there. These warning reminders prior to elections has to continue as a public service to all voters. As the quote goes, 'to be forewarned, is to be forearmed'.

Putin's accounts also incited violence and civil unrest. Homeland Security does not appear to be safeguarding our national security against Putin despite his cyber attacks against our democracy and his invasion into our election system and power plants.

Trump considers Putin a friend who helped get him elected. Let's hope Homeland Security believes its own U.S. intelligence community reports, and not Trump propaganda. Putin is no friend to American democracy or the American people. He is a constant threat greater than any other as he already attacked America and is imbedded within our cyber space still.

Like 

1 Reply 

Link 

Report 

Report 

■



# oldguy2 5 minutes ago

I think you mean gluttonous, not glutinous.

Like Reply Link Report ■