Fake News and Filter Bubbles: America's Spiral of Extremism

Davis Drover

Fake News and Filter Bubbles: America's Spiral of Extremism

Davis Drover

Just two weeks after his inauguration, President Donald Trump declared on Twitter that "any negative polls are fake news," assuring his supporters that opposition to his presidency did not exist. He used the term "fake news," defined as information and news that are presented as true but have no basis in reality, throughout the United States presidential election campaign of 2016. Fake news is usually created for the purpose of misleading readers (Allcott & Gentzkow 214). Satirical news, which differs from fake news in that its intention is not to deceive but to entertain, can often have the same consequences as fake news, as people often share articles on social media without reading them first (Gabielkov et al. 5). Furthermore, the Pew Research Center found that two-thirds of Americans get news from social media at least some of the time, with 20% of Americans doing so often (Shearer and Gottfried 2). Confirmation bias inherent in the process of producing personalized news feeds creates a fragmented reality; if facts cannot be agreed upon, how is compromise possible? Confirmation bias on social media is enforced through algorithms on sites such as Facebook and Twitter and often means that almost everything a user sees on their feed simply reinforces what they already believe to be true, leading them to think almost no one disagrees (Sunstein 3). Moreover, because social media has no borders, it is crucial to consider the harmful effects it has on democracy both within the United States and globally. The implications are grave: extremism and eroding trust in democracy, which causes people to become even more vulnerable to fake news. The recent trend of distrust towards mainstream media as well as echo chambers created by filter bubbles is causing the disappearance of the political centre and is sending the American political system into a spiral of extremism.

American politics have never been more polarizing or partisan, as demonstrated by examining the distribution of political ideologies within the Democratic and Republican parties. Data from the Pew Research Center shows that the American political spectrum has never been more divided since the think tank began surveys in 1994. Twenty-three years ago the median Republican was more conservative than 64% of Democrats, but in 2017 the median Republican was more conservative than 95% of Democrats. Likewise, 97% of Democrats are more to the

left on the political spectrum than the median Republican (Pew Research Center 12). The left wing has moved left while the right wing has moved to the right. A widespread lack of political disagreement is impossible and even dangerous in a country as big as the United States, but too much division stifles progress and debate. A healthy democracy would be one to strike a balance.

Social media is counterproductive to the goal of striking this balance, because social media favours extremism by design; driven by advertising revenue, online platforms quickly turn to increasingly shocking content. Media influences public opinion and thus the more extreme the news is, the more extreme people's views will be. To help unpack how political discussion on social media turns to extremism, the example of sharing food images online as discussed by Robert Kozinets will be examined. Kozinets is a professor at the University of Southern California and expert in the field of netnography, which is the study of social inter-action in online environments. He uses the popularity of sharing images of food on social media as an example to prove how the Internet quickly favours extrem-ism (Kozinets). Social media's competition for clicks, which directly translate to advertising revenue for websites, drives online one-upmanship. This is why "the most popular food porn images depict massive hamburgers that [are] impossible to eat, dripping with bacon grease, gummy worms and sparklers" (Kozinets). Fake news tends to be sensationalist and extreme also because that is what generates clicks and views. The most effective way to go viral is to turn to the extreme, and just as social media creates extremism in pictures of food, it does so in political discussion. The advantage fake news has over real news is that it is not constrained by reality, just as unrealistic food porn is not constrained by what is possible to eat.

Evidence shows that online communities are mostly self-contained and users tend to form groups based on ideologies. The term filter bubble is used to describe the intellectual isolation that results from social media algorithms making assumptions on what users want to see based on browsing history, location, and former click behaviour (Technopedia). Algorithms are not alone in the creation of filter bubbles, however; users who aim to shield themselves from views contrary to their own can also intentionally produce them. A statistic that demonstrates this is the fact that 78% of users in an anonymous Internet activity study were found to get a majority of their news from one publication (Flaxman et al. 313). Furthermore, when researchers in an Association for Psychological Science study estimated the ideological positions of almost four million Twitter users and exam-ined almost 150 million tweets, it was found that "information was exchanged primarily among individuals with similar ideological preferences" (Barberá et al.

1539). This proves that filter bubbles, or echo chambers as they are also called, are indeed real, at least for political news—the researchers did not find the same bubbles for non-political news events like the 2013 Boston Marathon bombing or 2014 Super Bowl (Barberá et al. 1537). Discussion within ideological groups causes a phenomenon called group polarization, which occurs, in part, by individuals adjusting their opinions "in the direction of the dominant position so as to be favourably perceived by those with whom they interact" (Holbrook 757). Accordingly, online political discussion is often polarized with most users unknowingly placing themselves into the "left-wing bubble" or the "right-wing bubble."

Filter bubbles create divergence on the political spectrum and further the divide between the left and the right. Evidence shows that regardless of the type of media consumed, filter bubbles—which are not confined to social media—increase polarization. A 2010 study published in the *Journal of Communication* found that people who were exposed to media that presented perspectives in opposition to their beliefs had lower levels of extremism in their political opinions (Stroud 566). Based on this research, it appears that the media one consumes shapes political beliefs; however, it could also be argued that one's political beliefs determine the media one consumes. In reality, both are likely at play and a sort of feedback loop could be created. This feedback loop can be described as a "spiral of attitudinal reinforcement" (Borgesius et al. 4). This spiral is the mechanism that causes extremism. With the advent of the Internet, it may appear on the surface that people are now choosing what they are exposed to, whereas in an earlier era one would frequently be exposed to news not chosen in advance in mediums such as newspapers and television (Sunstein, qtd. in Holbrook 754). However, online users are, like pre-Internet consumers were, frequently exposed to media they did not choose in advance, only now it is an algorithm that is doing the choosing. Social media gives less choice in media content while giving the illusion of more. Although scholars like Sunstein stress the importance of serendipity in media consumption and argue it promotes individual liberty (#Republic 5), the ability for the Internet to provide personalized content based on user preferences contributes to ideological bubbles (Flaxman et al. 313). Ultimately, both the user selectivity and algorithmic personalization enabled by the Internet has allowed users to consume media that rarely, if ever, challenges their already held beliefs.

If the facts cannot be agreed upon, how can compromise occur? A healthy democracy relies on shared experiences (Sunstein, qtd. in Holbrook 754), exposure to the same information, and general agreement on what is true and what is not. Using this shared reality, people across the political spectrum can take the agreed-

upon facts and come to their own conclusions. Otherwise, as it currently stands, everyone is receiving different information online that confirms their already held beliefs. Two people cannot debate about how to solve a problem if they do not agree on the facts that it rests on. Without shared experiences in a society, people will struggle to understand each other, resulting in a much harder time addressing social issues (Sunstein qtd. in Holbrook 754).

   The filter bubbles that Facebook and other social media websites create for their users continue to exist because they are profitable. Facebook has algorithms in place to increase user participation, and users are more likely to participate on posts they agree with (Holbrook 757). Media has been shown to influence elections and, therefore, fake news masquerading as the truth will too. An analysis of Facebook engagements—comments, shares, and likes—revealed that fake news articles got more attention online than mainstream news between August and November of 2016 (Silverman; Alcott and Gentzkow 212). Mainstream news totalled only 7.3 million engagements, while fake news garnered 8.7 million engagements (Silverman, 2016). Therefore, it can stand to reason that a considerable amount of Facebook's user engagement and, in turn, income is generated from fake news posted on the site.

   Facebook's vested interest in the proliferation of fake news would explain CEO Mark Zuckerberg's attempts to discredit the idea that fake news had any influence in the United States presidential election of 2016. Speaking at a conference two days after the election, Zuckerberg said that "the idea that fake news on Facebook … influenced the election in any way, I think is a pretty crazy idea. Voters make decisions based on their lived experience" (Chafkin and Frier). As indicated by the studies above, Zuckerberg's claims are misleading; in fact, social media and news consumption play a crucial role in shaping political ideas held by voters. Suggesting that news does not influence elections is both naive and irresponsible. Facebook is the largest social media website in the world by far, with 2 billion monthly active users (Constine). This also makes it the largest news network, with greater possible influence than any mainstream news outlet.

   But how much influence does the news have on voting behaviour? Does the media sway voters? Or do voters make decisions solely based on lived experiences? The political and media landscape of Russia in 1999 provides an opportunity to examine the effect of media exposure on voting behaviour. This is because during the 1999 election period, many regions in Russia had access only to government-controlled television (Enikolopov et al. 3253). A study analyzing this parliamentary election found that taking into account all other characteristics, the

presence of the only national television channel independent of the government decreased the aggregate vote for the government party by a margin of 8.9% (Eni-kolopov et al. 3269). The researchers concluded that those who used alternative sources of information for their political news were more difficult to persuade. Thus, it can be reasoned that those who do not use alternative sources of infor-mation—those stuck in a bubble—are easier to persuade. In a political and media landscape characterized by fake news, this susceptibility to persuasion and lack of critical thought about the media one consumes becomes more problematic than ever. Fake news, unconstrained by the limits of reality, is often located at the extreme ends of the political spectrum. Because of the ability of filter bubbles to limit exposure to opposing viewpoints, those who are in them are at high risk for adopting extreme views and being easily persuaded. In this way, filter bubbles, although not the sole cause, contribute to the recent trend of extremism.

       Over time, corrections to falsely held beliefs have no effect on people iso-lated in ideological bubbles. This is called the backfire effect, and it is responsible for reinforcing the extremism that such bubbles create. The backfire effect occurs when people are presented with counter-evidence to their falsely held beliefs and instead of changing their view, the counter-evidence strengthens their misunder-stood world view (Economist Intelligence). This occurs because the human brain processes emotional threats, such as exposure to an opposing view, the same way it does physical threats (Kaplan et al. 8). The brain acts as if exposure to the conflict-ing information is a genuine threat to safety and, accordingly, acts to protect itself. An example that illustrates the backfire effect is the relationship between believing false claims made by a president and supporting that president.

       Specifically, belief in the falsehood that Iraq had weapons of mass destruc-tion before the United States invaded and began the Iraq War in 2003 has been firmly correlated with support for Republican president George W. Bush (Kull et al. 569). A Dartmouth College study found that while liberals who had seen articles correcting the misconception were more likely to disagree with the false claim, conservatives who also saw the corrections were even more convinced Iraq had such weapons (Nyhan and Reifler, 2010). The study also tested misconceptions that liberals were prone to believe, to balance the findings on commitment by con-servatives to a conservative president, but the effect was not as strong. Although this study alone is not sufficient to make a generalized claim, it does suggest that conservatives may be more susceptible to the backfire effect. This can be linked to the rise of Donald Trump as a political leader, where mainstream media's attempts to debunk his numerous lies could have strengthened support amongst followers

and, ultimately, helped get him elected. In contrast to the aforementioned study, an experiment conducted with help from the European Research Council concluded that showing Trump supporters corrections to misleading statements he made actually did reduce misconceptions (Nyhan et al. 1). However, support for Donald Trump was unaffected by these corrections, and Trump supporters considered news articles that reported on a false statement by Donald Trump to be less accurate and fair when accompanied by a correction. In contrast, Clinton supporters considered the same articles to be more accurate with a correction (Nyhan et al. 13). Generally speaking, correcting falsehoods either strengthens supporters' belief in those falsehoods or has no affect on supporters' perceptions.

Trust in the mainstream media is at an all-time low. Gallup Polls stretching back half a century show a steady decline in the percentage of Americans who trust mass media. Seventy-two per cent of Americans had trust in mainstream media in 1976, but by 2016 this has dropped to only 32% (Swift). This distrust has been further exacerbated by Donald Trump's characterization of mainstream media publications as the enemy. In fact, trust in mainstream media amongst Republicans plummeted from 32% to 14% in just one year (Swift), with a vast majority believing that mainstream media publishes a significant amount of fake news (Easley). With less trust in mainstream media, people are turning to partisan Internet sites for their news, and, as discussed prior, shared experiences and exposure to the same information are important for a healthy democracy. Trust in the media is a key part to achieving this.

Weaker democracies, which are characterized by an eroding confidence in the government and institutions like elections (Economist Intelligence 44), lead to greater susceptibility to media persuasion, as seen when comparing an illiberal democracy like Russia to a relatively liberal democracy like the United States (Enikolopov et al. 3269). Illiberal democracies still have freedom of the press and elections—of course not without voter suppression—but the civil rights of the citizens can be taken away at a moment's notice (Milanovik). As mentioned above, the only non-government television channel during the Russian parliamentary elections of 1999 decreased the aggregate vote for the government party by a margin of 8.9% (Enikolopov et al. 3269). A similar study was conducted in the United States. The Fox News effect is the name for the anticipated outcome of the availability of Fox News on Republicans' vote shares in the election of 2000. The study that formulated the term observed that "Republicans gain[ed] 0.4 to 0.7 percentage points in the [9,256] towns which broadcast Fox News" (DellaVigna and Kaplan 2). Partisan media had a significantly higher impact on voting trends in

Russia than the United States during approximately the same period. This supports the hypothesis proposed in Enikolopov et al. that weaker democratic institutions correlate with greater susceptibility to media persuasion. If traditional media can have such a significant impact, it can be deducted that social media will as well. Therefore, the current erosion of trust in democratic institutions, intensified by filter bubbles, increases social media's ability to persuade users and drive political extremism.

      In conclusion, if shared experiences and the ability to empathize and understand one another's opinions are key to a healthy democracy, then democracy is currently suffering. In addition, it is key for the free press to be trusted by citizens to deliver the truth on the actions of government. Ideological bubbles, fake news, and social media are weakening democracy by causing people to shift from the centre to the extremes of the political spectrum. This results in fewer shared experiences, because people on different sides of the spectrum are exposed to drastically different content online. By analyzing media influence in Russia as well as the United States, one can argue that the strength or weakness of democratic institutions has a direct effect on the magnitude of media persuasion. Online filter bubbles erode democracy, which in turn amplifies the magnitude of media persuasion and gives more influence to the already powerful trend of fake news. The influence of fake news will further polarize the masses, further undermine democracy, and the people will be even more susceptible to it. In this way, a positive feedback loop is created, otherwise known as a spiral of extremism. This trend is an out-of-control positive feedback loop and, like a snowball rolling down a hill, will only get bigger before it can be stopped.

Works Cited

Allcott, Hunt, and Matthew Gentzkow. "Social Media and Fake News in the 2016 Election." *Journal of Economic Perspectives* 31, 2, 2017, 211–236.

Barberá, Pablo, John T. Jost, Jonathan Nagler, Joshua A. Tucker, and Richard Bonneau. "Tweeting from Left to Right: Is Online Political Communication More Than an Echo Chamber?" *Association for Psychological Science* 26, 10, 2015, 1531–1542.

Borgesius, Frederik J. Z., Damian Trilling, Judith Möller, Balázs Bodó, Claes H.

de Vreese, and Natali Helberger. "Should We Worry about Filter Bubbles?" *Internet Policy Review* 5, 1, 31 March 2016.

Chafkin, Max, and Sarah Frier. "Mark Zuckerberg's Fake News Problem Isn't Going Away." Bloomberg, 21 September 2017.

Constine, Josh. "Facebook Now Has 2 Billion Monthly Users... and a Responsibility." TechCrunch, 27 June 2017.

DellaVigna, Stefano, and Ethan Kaplan. "The Fox News Effect: Media Bias and Voting." *Quarterly Journal of Economics* 122, 3, 2007, 1187–1234.

Easley, Jonathan. "Poll: Majority Says Mainstream Media Publishes Fake News." *The Hill*, 24 May 2017.

The Economist Intelligence Unit. Democracy Index 2016. The Economist, 2017.

Enikolopov, Ruben, Maria Petrova, and Ekaterina Zhuravskaya. "Media and Political Persuasion: Evidence from Russia." *American Economic Association* 101, 7, 2011, 3254–3285.

Flaxman, Seth, Sharad Goel, and Justin M. Rao. "Filter Bubbles, Echo Chambers, and Online News Consumption." *Public Opinion Quarterly* 80, 2016, 298–320.

Gabielkov, Maksym, Arthi Ramachandran, Augustin Chaintreau, and Arnaud Legout. "Social Clicks: What and Who Gets Read on Twitter?" *ACM SIGMETRICS*, 2016.

Holbrook, Justin. (2001). Republic.com. [Review of the book Republic.com, by Cass R. Sunstein]. *Harvard Journal of Law & Technology* 14, 2, 2001, 754–766.

Kaplan, Jonas T., Sarah I. Gimbel, and Sam Harris. "Neural Correlates of Maintaining One's Political Beliefs in the Face of Counterevidence." *Scientific Reports*, 6, 2016.

Kozinets, Robert. "How Social Media Fires People's Passions — and builds extremist divisions." USC Annenberg, 14 November 2017.

Kull, Steven, Clay Ramsay, and Evan Lewis. "Misperceptions, the Media, and the Iraq War." *Political Science Quarterly* 118, 4, 2003, 569-598.

Larson, Selena. "Facebook Shows You What You Want to See Post-Election." CNN, 9 November 2016.

Milanovic, Branko. "Multi-party Kleptocracies Rather Than Illiberal Democracies." *Global Policy Journal*, 4 August 2017.

Nyhan, Brendan, and Jason Reifler. "When Corrections Fail: The persistence of political misperceptions." *Dartmouth College*, 2010.

Nyhan, Brendan, Ethan Porter, Jason Reifler, and Thomas J. Wood. "Taking Corrections Literally but Not Seriously? The Effects on Information on Factual Beliefs and Candidate Favorability." 29 June 2017.

Pew Research Center. "The Partisan Divide on Political Values Grows Even Wider." 5 October 2017.

Rensin, Emmett. "The Great Satirical-News Scam of 2014." *The New Republic*, 5 June 2014.

Shearer, Elisa, and Gottfried, Jeffrey. "News Use across Social Media Platforms 2017." Pew Research Center, 7 September 2017.

Silverman, Craig. "This Analysis Shows How Viral Fake Election News Stories Outperformed Real News on Facebook." Buzzfeed News, 16 November 2016. Stroud, Natalie J. Polarization and Partisan Selective Exposure. *Journal of Communication* 60, 3, 2010, 556-576.

Sunstein, Cass. *#Republic: Divided Democracy in the Age of Social Media*. Princeton University Press, 2017, Print.

Swift, Art. "Americans' Trust in Mass Media Sinks to New Low." Gallup, 14 September 2016.

Technopedia. "Filter Bubble definition."