

**Written Evidence submitted by
Professor Christian Fuchs, University of Westminster, Communication and Media Research
Institute & Westminster Institute for Advanced Studies**

Executive Summary

- This submission provides evidence on four aspects:
 1. What do we know about fake news, fake profiles/accounts, and fake attention on social media?
 2. What are the causes of fake news, political bots and fake social media accounts?
 3. What are the problems and impacts of fake news, political bots and fake accounts?
 4. What can be done against fake news culture?
- This submission gives special attention to the role of online advertising in fake news culture.
- (§§1.1-1.16) Reports, research and analyses suggest that fake news, automated social media bots that post content online and fake online attention, as well as fake profiles play a significant role in political communication on social media.
- (§§2.1-2.6) The proliferation of fake news, political bots and fake accounts on social media has interacting economic, political and ideological causes. There are no technological fixes to the problems associated with fake news.
- (§§3.1-3.5) There are a number of potential problems associated with fake news, political bots and fake accounts that can limit and negatively impact the public sphere: the undermining of human communication's validity claims; threats to democracy; one-dimensional, instrumental, highly polarised and symbolically/communicatively violent politics; spirals of intensifying political aggression and violence.
- (§§4.1-4.12) There is a number of feasible measures that can be taken in order to challenge fake news culture. These include: Outlawing targeted and behavioural political online advertising, the substitution of algorithmic activity by paid human work of fact-checkers and knowledge professionals, the legal requirement to introduce a fake news alert button, providing support to new types of online platforms and new formats that decelerate news and political communication and act as slow media, the advancement of and support for public service Internet platforms, giving the BBC an important role in advancing public service Internet platforms that foster advertising-free political debate that challenges fake news, the introduction of an online advertising tax on all ads targeted at users accessing the Internet in the UK in order to provide a resource base for funding public service and alternative Internet platforms that foster a new culture of political debate.

0. Background

(§0.1) In recent times, there have been public concerns about the impacts that fake social media news, fake social media accounts, fake social media attention, and social media bots have on political communication, the public sphere and election results. In this context, the Digital, Culture, Media and Sport-Select Committee has called for the submission of evidence about fake news.

(§0.2) I am a professor of media and communication studies at the University of Westminster, where I am directing the Westminster Institute for Advanced Studies and the Communication and Media Research Institute. The latter is one of Britain's leading research environments for the analysis of media and communication's role in society. I have over almost twenty years conducted research about how digital media and the Internet impact society, including its public sphere. As part of this research, I have recently written a book about the role of social media in the 2016 US election and Donald Trump's victory. It will be published in February 2018 (Fuchs 2018).

(§0.3) I am drawing on the conclusions of my research in order to provide evidence on fake news to the Committee. The submission engages especially with the question: "Have changes in the selling and placing of advertising encouraged the growth of fake news, for example by making it profitable to use fake news to attract more hits to websites, and thus more income from advertisers?"

(§0.4) The submission provides evidence on four aspects:

1. What do we know about fake news, fake profiles/accounts, and fake attention on social media?
2. What are the causes of fake news, political bots and fake social media accounts?
3. What are the problems and impacts of fake news, political bots and fake accounts?
4. What can be done against fake news culture?

1. What do we know about fake news, fake profiles/accounts, and fake attention on social media?

- (§1.1) Between September and November 2016, at least 3,000 political ads targeting US citizens were posted on Facebook from Russia¹. According to estimations, 126 million US users had seen such content on Facebook alone². There is evidence that already earlier similar ads were run on Facebook³. It is believed that many of these postings and ads were manufactured by the Internet Research Agency, a so-called “troll farm” that creates fake news, fake accounts and fake attention online in order to manufacture the impression that there is huge support for certain politicians, parties or topics⁴. According to a report, the Internet Research Agency posted 80,000 pieces of politically divisive content on Facebook between January 2015 and August 2017⁵. The same report says that also Instagram was affected with more than 120,000 Russia-linked political content items⁶.
- (§1.2) There is evidence that suggests that also on Twitter, Russian accounts tried to influence US politics⁷. According to a report, Twitter in June 2016 offered Russia Today to control 15% of all ads focusing on the US presidential election for US\$ 3 million⁸. According to a report, 2,700 Twitter accounts run by the Russian troll farm Internet Research Agency posted 131,000 political tweets between September and November 2016⁹. The same report says that during the same period, around 36,000 Twitter bots (these are automated accounts) belonging to other Russian organisations or individuals posted 131,000 tweets.
- (§1.3) Google revealed that it is likely that between 2015 and summer 2017, the Russian Internet Research Agency had uploaded more than 1,100 videos with a total of 43 hours of content to YouTube and had bought Google ads¹⁰.
- (§1.4) According to a report, more than 400 fake Twitter accounts believed to be run by the Internet Research Agency posted content about Brexit. “One of the accounts run from the Kremlin-linked operation attempted to stir anti-Islamic sentiment during the Westminster Bridge terror attack in March in a bogus post claiming a Muslim woman ignored victims”¹¹.
- (§1.5) In the 2016 US presidential election, the data analytics company Cambridge Analytica used data about 220 million US citizens to target voters online. Also in the UK’s 2016 EU Referendum on EU membership, targeted advertising played a role. So for example, according to a report the “Vote Leave campaign paid £3.5m to a tiny Canadian company called AggregateIQ, which specialises in targeted Facebook advertising and profiling”¹².
- (§1.6) During the 2017 French presidential election, according to a report 30,000 automated Facebook accounts spreading fake news were suspended and up to a quarter of the political links shared on Twitter contained fake news¹³.

¹ <https://www.nytimes.com/2017/10/01/technology/facebook-russia-ads.html>,

<https://www.nytimes.com/2017/09/06/technology/facebook-russian-political-ads.html>

² <https://www.nytimes.com/2017/10/30/technology/facebook-google-russia.html>

³ <https://www.washingtonpost.com/graphics/2017/business/russian-ads-facebook-targeting>

⁴ <https://www.nytimes.com/2015/06/07/magazine/the-agency.html?mcubz=0>

⁵ <https://www.nytimes.com/2017/10/30/technology/facebook-google-russia.html>

⁶ <https://www.nytimes.com/2017/10/30/technology/facebook-google-russia.html>

⁷ <https://www.nytimes.com/2017/09/27/technology/twitter-russia-election.html?mcubz=0>

⁸ <https://www.buzzfeed.com/alexkantrowitz/twitter-offered-rt-15-of-its-total-share-of-us-elections>

⁹ <https://www.nytimes.com/2017/10/30/technology/facebook-google-russia.html>

¹⁰ <https://www.nytimes.com/2017/10/30/technology/facebook-google-russia.html>

¹¹ <https://www.theguardian.com/world/2017/nov/14/how-400-russia-run-fake-accounts-posted-bogus-brexit-tweets>, see also:

<https://www.theguardian.com/uk-news/2017/nov/14/how-a-russian-troll-soldier-stirred-anger-after-the-westminster-attack>

¹² <https://www.theguardian.com/politics/2017/mar/04/nigel-oakes-cambridge-analytica-what-role-brexit-trump>

- (§1.7) A study documented that 85% of 15 million political tweets took place among politically like-minded users, which shows the existence of online echo chambers and filter bubbles (Barberá 2015).
- (§1.9) The online software tool TwitterAudit estimates that 52% of Donald Trump’s 43 million followers are fake-accounts¹⁴.
- (§1.10) A study estimated that in the 2016 US presidential election, there were three times more fake news stories that supported Trump than Clinton (Allcott and Gentzkow 2017). The 41 fake pro-Clinton stories identified were shared 7.6 million times on social media, the 115 fake pro-Trump stories 30.3 million times, which means that fake news items supporting Trump were four times more visible than those supporting Clinton. The study also conducted a survey with 1,208 participants: 15.3 per cent indicated that they remembered a fake news story they were confronted with in the survey. 7.9 per cent said that at the time of seeing the fake news story that they believed it was true.
- (§1.11) In a survey, in which 3,015 Americans participated, 75 per cent of the presented fake news stories were considered to be very or somewhat accurate (Silverman and Singer-Vine 2016). Republicans were more likely to believe fake news than Democrats.
- (§1.12) In another study, the 20 top-performing false election stories from hoax sites and hyper-partisan blogs generated 8,711,000 shares, reactions, and comments, which was 15% more attention than the 20 best-performing election stories from 19 major news websites achieved (Silverman 2016).
- (§1.13) A study estimates that during the third US presidential election television debate, political bots posted 36.1 per cent of the pro-Trump tweets and 23.5 per cent of the pro-Clinton tweets (Kollanyi, Howard and Woolley 2016). Another study analysed 17 million tweets associated with Trump and Clinton (Woolley and Guilbeault 2017). Bots made up around 10 per cent of the analysed sample of unique user accounts.
- (§1.14) Another study analysed fake news stories collected over 114 days from 70 domains known for spreading fake news (Fourney et al. 2017). It found that social media platforms were the source of 68% of all visits to these stories, which shows that social media is a major medium fostering access to fake news.
- (§1.15) An analysis of 14 million tweets found that super-spreaders of fake news were more likely to be bots than humans and that such bots frequently mentioned usernames who had a large amount of followers in order to attract visibility and attention (Shao et al. 2017).

(§1.16) Taken together, these reports, research and analyses suggest that fake news, automated social media bots that post content online and fake online attention, as well as fake profiles play a significant role in political communication on social media.

2. What are the causes and of fake news, political bots and fake social media accounts?

(§2.1) It is mistaken to assume that fake news has technological causes and exists because of the technological possibilities for creating and spreading digital content that tries to deceive, manipulates reality, and reports invented/fictive stories as facts. Technologies do not determine society and human behaviour, but are rather embedded into society’s contradictions and complexities (Fuchs 2017a). There are therefore no technological fixes to the problems associated with fake news, political bots and fake social media accounts. Solutions need to focus on changing society by legislation, regulation, and media reforms.

(§2.2) The proliferation of fake news, political bots and fake accounts on social media has interacting economic, political and ideological causes:

¹³ <http://www.independent.co.uk/news/world/europe/french-voters-deluge-fake-news-stories-facebook-twitter-russian-influence-days-before-election-a7696506.html>

¹⁴ <https://www.twitteraudit.com>, accessed on November 18, 2017.

- (§2.3) Political causes of fake news: We live in a politically highly polarised world that is shaped by constant political crises, in which the friend/enemy-logic that does not advance engaging with, but harming political opponents, proliferates. Fake news, political bots and fake accounts are political strategies indicative of a highly aggressive and polarised political context, in which political dialogue fails and forms of symbolic, ideological, cultural, structural and direct violence flourish.
- (§2.4) Economic causes: Dominant social media platforms are driven by the logic of algorithms, algorithmic automation, targeted advertising, and big data (Fuchs 2017a). Facebook, Twitter, Google/YouTube achieve profits by selling targeted advertisements that are based on algorithms highly targeted to users' interests and behaviours, engaging in constant big-data generating real-time surveillance of users, the commodification of users' online activities ("digital labour"), and the sale of ad space through algorithmic auctions (Fuchs 2017a). Targeted ad algorithms are blind to ethics, morals, and politics and are programmed to sell ads in order to achieve profits. On the dominant social media platforms, advertisements are not sold by humans, but by algorithms. News presented on newsfeeds, social media profiles and walls are not checked by humans, but published based on algorithmic logic. Given that targeted advertising outsources value-generation to users' digital labour and uses algorithmic automation, it is no surprise that the number of social media companies' employees are relative low: In 2016, Google had 72,053 employees¹⁵, Facebook 17,048¹⁶, and Twitter 3,583¹⁷. Not humans, but algorithms decide which ads are featured and which contents presented on social media. The algorithm does not discern if an ad's content is about detergent or a fake news story aimed at manipulating election results. It is blind to politics and morals because it is programmed to sell ads. As a consequence of algorithmic advertising, Alphabet/Google in 2016 achieved profits of US\$ 19.5 billion¹⁸. Advertising accounted for 87.9% of the search giant's total revenues. Facebook in the same year made profits of US\$ 10.2 billion and advertising accounted for 97.3% of its revenue¹⁹. In 2016, 88.9% of Twitter's revenue stemmed from selling advertisements²⁰. Facebook, Google and Twitter are among the world's largest advertising agencies. According to estimations, Google and Facebook together control more than two thirds of the worldwide online advertising revenues and thereby constitute a duopoly in the online ad market²¹. The monopolistic market structure of social media and the Internet aggravates the fake news problem because single platforms via their (non-transparent, secret) algorithms control vast amounts of users that can be targeted and profiled. (§2.5) The profit logic of algorithmic, targeted advertising and algorithmic automation is the underlying economic factor that has enabled the emergence of fake news, political bots and fake social media accounts.
- (§2.6) Ideological causes: Fake news are an expression of a high degree of instrumental reason in society. Instrumental reason is an ideology that presents and aims at treating humans as things, resources and instruments for advancing particularistic interests. The proliferation of instrumental reason has advanced social inequalities, fears of social decline, new nationalisms; the domination of the public sphere by tabloid media, the logic of advertising, branding and consumer culture, sensationalism, entertainment, and an accelerated and superficial news culture that leaves no time and does not foster adequate spaces for political engagement and political debate (Fuchs 2014, 2017a, 2018). Social media news culture is a culture of acceleration, brevity and superficiality that is prone to fake news. The crisis of the public sphere expresses itself as the combination of the lack of time and space for political debate, the culture and politics of short sound bites, unreal

¹⁵

<http://secfilings.nasdaq.com/filingFrameset.asp?FilingID=11821337&RcvdDate=2/3/2017&CoName=ALPHABET%20INC.&FormType=10-K&View=html>

¹⁶ https://s21.q4cdn.com/399680738/files/doc_financials/annual_reports/FB_AR_2016_FINAL.pdf

¹⁷ <https://investor.twitterinc.com/secfiling.cfm?filingID=1564590-17-2584&CIK=1418091>

¹⁸

<http://secfilings.nasdaq.com/filingFrameset.asp?FilingID=11821337&RcvdDate=2/3/2017&CoName=ALPHABET%20INC.&FormType=10-K&View=html>

¹⁹ https://s21.q4cdn.com/399680738/files/doc_financials/annual_reports/FB_AR_2016_FINAL.pdf

²⁰ <https://investor.twitterinc.com/secfiling.cfm?filingID=1564590-17-2584&CIK=1418091>

²¹ <https://www.emarketer.com/Article/Google-Still-Dominates-World-Search-Ad-Market/1014258>

reality TV, mediated spectacles, unsocial social media, short online attention span, personalized politics instead of issue-based politics; one-dimensional, superficial, tabloid and ‘post-truth’ politics; automated, algorithmic politics; and fragmented publics.

3. What are the problems and impacts of fake news, political bots and fake accounts?

(§3.1) There are a number of potential problems associated with fake news, political bots and fake accounts that can limit and negatively impact the public sphere:

- (§3.2) **The undermining of human communication’s validity claims:** In the age of fake news, humans cannot trust that the news they receive are true; that the sources and producers are known, truthful, sincere and credible; and that political communication follows rightful norms of behaviour and communication. Fake news, political bots and fake social media accounts violate what Jürgen Habermas (1984) calls the validity claims of communication (propositional truth, normative rightness, subjective truthfulness). As a consequence, it has become more difficult to discern what political communications, political communicators and attentions given to political communication are factual or simulated.
- (§3.3) **Threats to democracy:** The logic of algorithms, big data and targeted advertising threatens to undermine democracy. When fake news, political bots and fake accounts proliferate because the profit interests of social media companies tolerate, are blind to and cannot tackle powerful political interests that aim at manipulating political communication in the public sphere, then democracy is in danger.
- (§3.4) **One-dimensional, instrumental, highly polarised and symbolically/communicatively violent politics:** Algorithms do not have feelings, sentiments, affects, morals, and ethics and do not understand meanings. They are not human. They process the syntax of data, but have no semantics and pragmatics. They do not understand jokes, sarcasm, humour, love, care, and empathy. They try to make a complex world one-dimensional and organised in the form of informatics’ if-then-else-logic. The trouble of big data analytics is that it approaches and assesses a contradictory world with statistical and mathematical models that are blind for the complexity and dialectics of society and human behaviour. When algorithms displace human decisions and human behaviour, we end up in a highly instrumental world. Given that algorithms disregards ethics, morals, and sentiments, there is a danger that they are programmed to polarise political communication and foster symbolic and communicative violence.
- (§3.5) **Spirals of intensifying political aggression and violence:** Fake news tends to be sensationalist and can spread at extremely high speed online. Combined with fake news’ often polarising character and the impossibility of fact-checking news in real time, there is a danger that in the age of fake social media news, political communication between political opponents breaks down and that spirals of intensifying political aggression and violence emerge.

4. What can be done against fake news culture?

(§4.1) In discussions about what can be done against fake news culture, one should always bear in mind that the dominant social media companies (Facebook, Twitter, Google, etc.) profit from targeted advertising, algorithms that substitute human behaviour, and big data and that they are therefore likely to come up with very limited suggestions that put the burden on users, suggest technological fixes to political problems that because of the complex interaction of technology and society can never work, or suggest to only intervene after the damage has already been done. Given that fake news poses threats to democracy, superficial measures will not be sufficient to overcome the negative impacts on the public sphere that have emerged.

(§4.2) Twitter has for example recently said that it would no longer accept political ads from Russia Today and Sputnik. Social media companies confronted with fake news often argue that they close fake news accounts when the latter are reported. But given the global, complex and dynamic character of the Internet, fake news sources can easily be geographically and organisationally shifted and be

multiplied (the so-called “Streisand-effect”, see https://en.wikipedia.org/wiki/Streisand_effect). Banning certain organisations from political ads, banning accounts ex-post after fake news have been posted, purely relying on users reporting fake news, etc. are superficial measures that will not overcome the threats to democracy that fake news culture poses.

(§4.3) There is a number of **feasible measures that can be taken in order to challenge fake news culture**:

- (§4.4) Outlawing targeted and behavioural political online advertising in the UK is a legal measure that the House of Commons can introduce. Practically speaking this means that if such a ban is introduced, Facebook, Google, Twitter, etc. are no longer allowed to technically enable that users who access the Internet from UK-based IP addresses are targeted by political ads. Introducing such a measure is only effective if it is accompanied by penalties for violations of the political online ad ban. Such penalties can only be reasonably enforced if legislation does not define the advertising client, but the ad-selling online platform as the offender. Ad clients can be located anywhere in the world, which makes enforcing penalties from the UK difficult. If an online platform does not adequately disable targeted political online advertising and does not properly check whether a targeted online ad offered in the UK is political in nature, then a penalty should be due. In order to be effective, the penalty fare should be set at a significant share of the offending online companies’ worldwide annual revenue. Given that fake news has become a global problem, it is likely that other countries will follow suit once one country starts outlawing targeted and behavioural political online advertising. The UK has the opportunity to become the world’s legal innovator in this respect.
- (§4.5) Substituting algorithmic activity by paid human work of fact-checkers and knowledge professionals can help reducing the dangers to democracy posed by fake news. Fake news is not limited to political online ads, but also appears on social media newsfeeds, profiles, walls, and in other online spaces. Checking the facticity of news and content can only work if it is conducted by humans, not machines or algorithms. Fact-checking is a professional activity organised by independent organisations that are specialised on conducting analyses of the truth, truthfulness, and rightness of claims²². Fact-checking is a complex, time-intensive, highly skilled work conducted by professionals who have a research background. Fact-checking does not work if it is simply crowdsourced, but rather requires adequate funding for sustaining full-time jobs of fact-checkers.
- (§4.6) It makes sense that large social media companies are by law required to either depending on their number of active monthly users directly hire a specific number of fact-checkers or to cooperate with and pay for the services of a specific number of employees of independent, non-profit fact-checking organisations.
- (§4.7) If social media platforms are by law required to introduce a fake news alert button that triggers a fact check when a specified number of users click the button in respect to a specific content item, then progress could be achieved.
- (§4.8) Fake news culture can only be overcome if alternative forms of political online communication are actively fostered. This requires new types of online platforms and new formats that decelerate news and political communication and act as slow media. I have in this context suggested to revive the concept of the political debate format of *After Dark/Club 2* (see Fuchs 2017b for a detailed overview of this suggestion). *After Dark* (see [https://en.wikipedia.org/wiki/After_Dark_\(TV_series\)](https://en.wikipedia.org/wiki/After_Dark_(TV_series))) was an uncensored live discussion programme with open-ended debate broadcast on Channel 4 between 1987 and 1997 and on the BBC in 2003. The format originated in Austria, where the public service broadcaster ORF (Austrian Broadcasting Corporation) broadcast *Club 2* between 1976 and 1995. *Club 2.0* is a concept that updates this format by using social media (Fuchs 2017b). It aims at fostering political debate and providing adequate space and time for such discussions with the help of public service media and social media. Twitter, YouTube and Facebook are manifestations of a fast media

²² See the International Fact-Checking Network Fact-Checkers’ Code of Principles: <https://www.poynter.org/international-fact-checking-network-fact-checkers-code-principles>

culture originating in Silicon Valley. Alternative social media are needed in order to challenge fake news culture.

- (§4.9) In the UK and Europe, there is a long tradition of public service media. There is no UK or European equivalent of Twitter, YouTube and Facebook because in the UK and Europe there are different media traditions that are to a significant degree based on public service media. Regulatory changes that allow public service broadcasters to offer online formats and social media platforms (such as *Club 2.0* and other formats) aimed at advancing political communication and slow media that are advertising-free and adequately funding such activities form a good way of establishing an alternative culture of political communication that weakens fake news culture. Advancing public service Internet platforms is a step towards overcoming fake news culture.
- (§4.10) In the UK, the BBC can play an important role in advancing public service Internet platforms that foster advertising-free political debate that challenges fake news.
- (§4.11) Advancing alternatives to fake news culture requires funding. Fake news is the consequence of a media and political culture that is based on tabloidisation and advertising culture. An alternative logic should therefore be non-profit and advertising-free. Introducing an online advertising tax on all ads targeted at users accessing the Internet in the UK would provide a resource base for funding public service and alternative Internet platforms that foster a new culture of political debate capable of challenging fake news culture. Such an online advertising tax could furthermore fund the strengthening and development of fact-checking as new knowledge profession that actively works against fake news culture.

(§4.12) Fake news is a serious and complex problem that has complex societal causes and threatens to undermine democracy. There are no technological fixes and superficial measures that can overcome fake news culture. Challenging fake news culture requires legal, political, economic and media innovations that foster a culture of slow media, public service Internet platforms, fact checking, and new forms of political engagement and debate.

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