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Luminate

D I G I T A L T H R E A T S T O D E M O C R A C Y

This report is part of the Digital Threats to
Democracy research project.

To see the rest of the reports and the
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ISBN: 978-0-473-48026-4

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INTRODUCTION

From the early development of digital media, and in the wake of large scale democratic action, including the Occupy movement and the Arab Spring, there was optimistic academic consensus on the capacity of digital media to increase democratic participation. However, the election of Donald Trump and the Brexit referendum, have shaken the foundations of Western democracies, and turned that optimistic view to significant concerns about the role of digital media in eroding democratic participation. There is now clear evidence of interference by the Russian government in the 2016 US presidential election using digital media strategies, which had the effect of discouraging sections of the public from voting (Persily, 2017). Fake news, filter bubbles, populism, polarisation, hate speech, trolls and bots are firmly embedded into mainstream understanding of digital media. All this is in a context where election turnout and trust in government institutions were already in a general decline in Western nations (Leininger, 2015; OECD, 2017).

Rather than the increasingly widespread adoption of digital media necessarily leading to a pattern of increased participation, diversity of opinion, and the empowerment of marginalised groups, digital media (in particular social media through its algorithmically calculated news feeds), can work to create opinion silos, or “echo chambers”, which can “limit the possibility of understanding differences and increase the likelihood of intolerance and hostility” (Lu & Yu, 2018, p. 3).

In this narrative literature review we sought to describe, from the recent literature, what the nature of the opportunities and threats are to democracy from developments in digital media.

We asked two research questions:

1. What are the specific opportunities digital media presents for improving democratic participation?
2. What are the current threats/barriers that are in place to prevent achieving those opportunities?

In total, 110 documents were reviewed (including journal articles, reports and book chapters), with 69 of those containing evidence to support one or more of the research questions (see reference list).

A non-systematic narrative review was chosen with a view to summarising the themes that have been covered in terms of opportunities and problems (risks and threats). Searches were limited to research published in the last eight years (most are within five).

SPECIFIC OPPORTUNITIES FOR IMPROVING DEMOCRATIC PARTICIPATION THROUGH DIGITAL MEDIA

This section outlines six specific opportunities provided by digital media for improving democratic participation discovered in the literature. These are: the democratisation of information publishing, the broadening of the public sphere, the increasing equality of access to and participation within political processes, increasing transparency and accountability from government and the promotion of democratic values.

2.1

DEMOCRATIZATION OF INFORMATION PUBLISHING

This is the capacity of digital media to enable “anyone to create content and share it with a global audience” (College of St George, 2018, p. 1). As well as being identified in the background paper to a consultation currently being undertaken by the UK organisation St College of St George, this capacity has been noted by the influential sociologist Manuel Castells (2013). Castells termed it “the shift of mass communication to mass self-communication” (p. 23), whereby large media corporations and governments no longer dominate the production of messages and content to the same degree as the majority of the 20th Century. Whereas in the age of mass-communication the ability to generate content was limited by access to costly printing facilities, TV studios etc., in the age of mass self-communication such entry barriers have been reduced to simply owning a laptop or a mobile phone.

This has the potential to improve democratic participation by facilitating dialogue both between governments and citizens (improving institutional trust) and between otherwise divergent groups and individuals in society.

2.2

BROADENING THE PUBLIC SPHERE

Linked to 2.1, digital media has the capacity to widen policy conversations to include “previously marginalized individuals and communities” (College of St George, 2018, p. 1), who formerly would have been excluded from democratic processes. A good example of this is the @IndigenousX Twitter account (explored in more detail in section 4.3), which provides a platform for the articulation of indigenous Australian culture and perspectives, “bringing their views and concerns to a wider audience” (Sweet, Pearson, & Dudgeon, 2013, p. 109) than would have been possible before the widespread adoption of digital media.

In a study of the US context, Auger (2013) found that social media increased the opportunities for NGOs to express their perspectives, meaning a larger “marketplace of ideas” has been able to take shape than previously. Moreover, social media meant that it was easier for non-mainstream ideas to become legitimised, which was linked to the securing of funds for the NGOs’ activities. Further, by analysing 235 NGO social media posts, Auger (2013) found that “rational appeals were the most frequent type of advocacy characteristics used” (p. 373), despite the issue studied being the highly contentious one of gun control in the US, which appears to counter the more recent emphasis on social media filter bubbles (see section 3.2). The study identified 274 different message characteristics from that corpus, assigned by the purpose, content and emphasis of posts from four different NGOs, including the National Right to Life Committee and the National Rifle Association. Only 17% of the “message appearances identified” (p. 373) fitted the study’s definition of propaganda, defined by the four features of reducing complex issues, use of authority figures, emphasis on conflict rather than cooperation and reduction of complex issues to cause and effect.

2.3

INCREASING EQUALITY OF ACCESS TO AND PARTICIPATION WITHIN POLITICAL PROCESSES

Several studies reviewed found that digital media had the potential to increase equality of access to and participation within political processes, in terms of gender, class, race and age.

In a study of the Israeli 2015 parliamentary election, Yarchi and Samuel-Azran (2018) found that Facebook afforded more positive exposure to women politicians than traditional news media. The authors found that “female politicians’ posts generated significantly more user engagement in terms of the number of Likes and Shares in comparison to male politicians” (p.978), creating a supportive communicative environment which boosted their self-esteem.

Two studies (Dubow, 2017; see Government Information Services, 2018, for the New Zealand context) found evidence through interviews with experts that digital media, when incorporated with other good government policies (such as civics education), has the potential to build well-networked, educated and empowered communities, which previously have been economically and socially marginalised by digital divides. Dubow (2017) recommended the development of new digital tools focused on breaking down and summarising civic information, while Government Information Services (2018) recommended tools which allowed different levels of participation, increasing inclusivity across genders, ethnicities and ages.

In terms of race, Jakubowicz et al. (2017) found that, through the examination of several case-studies in the Australian context, digital media can facilitate the formation of both ‘ad-hoc’ and longer-term, group-based online communities focused on fighting racism, which can provide a safe space of belonging for ethnic minority groups. This sense of community encourages engagement and participation in public discourse such as the campaign to change the date of Australia Day, which could be otherwise discouraged by online hate-speech and more mainstream forms of racist discourses (see sections 3.3 and 4.3 for further details).

A survey undertaken by the UK Think Tank Demos (Miller, 2016) found that social media and other digital media forms increased participation and engagement in the British 2015 elections by young people, an age group which is believed to have become increasingly disengaged from political processes. Similar results were derived by Xenos, Vromen, and Loader (2014), who, in a comparative study of Australia, USA and UK, found that social media can “soften traditional patterns of political inequality” (p.152), by encouraging political engagement from 16-29 year olds.

2.4 INCREASING PARTICIPATION AND ENGAGEMENT IN POLITICAL PROCESSES

Numerous studies found links between digital media and increased participation and engagement in political processes in the general population, not only in marginalised groups. This includes engagement in elections, different forms of deliberative democracy, as well as participation in more informal political action such as protests.

In terms of voting, the above mentioned Demos study (Miller, 2016) found “39 per cent of poll respondents who had engaged with political content on social media felt more likely to vote as a direct result” (p. 11). Such positive results can be partly attributed to the capacity of platforms such as Twitter to provide highly interactive, temporary political discussion fora through the hashtag function, which are easy to engage with, and accessible without high degrees of technical or political knowledge. For example, Barack Obama’s 2015 State of the Union address “spurred approximately 2.6 million tweets” (Gayo-Avello, 2015, p. 10) via the #SOTU hashtag.

In terms of participative democracy, a study of the public review of the Icelandic constitution, (Valtysson, 2013) found that the use of Facebook, Twitter, Flickr, and YouTube both increased engagement and facilitated the emergence of “networked publics” which promoted consensual opinion formation, despite lacking formal decision-making authority. In another study on the Iceland context, but in the area of local government, Simon, Bass, Boelman, and Mulgan (2017) found that the Better Reykjavik (idea generation) and Better Neighbourhoods (participatory budgeting) platforms saw 70,000 citizens taking part out of a total city population of just 120,000. The active participation of so many people would be extremely difficult to organise without digital media platforms.

The same research (a set of case studies) also looked at France’s *Parlement et Citoyens*, a “website which brings together representatives and citizens to discuss policy issues and collaboratively draft legislation” (p. 24). This initiative aims to move beyond consultation towards citizens “inform[ing] and shap[ing] legislation which is put before Parliament” (p. 24). Survey evidence from Switzerland (Kern, 2017), which has a high number of binding referendums, is that the availability of such systems of direct democracy increases feelings of having influence over the system, thereby increasing the likelihood of participation in formal democratic processes. Kern (2018), through a combination of quantitative surveys and qualitative, semi-structured interview data from Belgium, also found links between participation in a single referendum (the most common form of direct democracy) and intention to participate in future political protests.

Additionally, in the cases of the Arab Spring, Los Indignados and Occupy movements, Twitter was been found to have played a key role in the organisation of those large-scale protests (Bennett, Segerberg, & Walker, 2014; Papacharissi & de Fatima Oliveira, 2012). Particularly in the case of the Los Indignados movement in Spain (Bennett & Segerberg, 2012), digital media platforms were found to be “taking the role of established political organizations” (p. 742) such as political parties and unions, which were regarded as corrupt.

2.5 INCREASING TRANSPARENCY AND ACCOUNTABILITY FROM GOVERNMENT

A substantial amount of recent research was found on “open government” and “e-government” initiatives, with an influential OECD (2017) report highlighting their importance in rebuilding public trust in democratic institutions and policies. The general consensus is that governments which make data on the transactions of government departments available to their citizens via open government portals, allow citizens to see that taxpayer funds are being spent appropriately and fair decisions being made in a transparent manner, thereby increasing trust (see Kim & Lee, 2012; Nielsen, 2017; Wu, Ma, & Yu, 2017).

Survey research across 36 major cities in China finds that such moves towards transparency are particularly effective when overall trust in government institutions is low (Wu et al., 2017). However, a separate analysis of seven Western open-government portals finds that the “ordinary citizens” perceives terms such as “open government” and “e-government” as vague -- confusion that correlates to large differences in accessibility levels (Lourenço, 2015).

In a large quantitative study of survey data from 36 major cities in China, Wu et al. (2017) found that such moves towards transparency are particularly effective when overall trust in government institutions is low. Perceptions of equality of public service provision is also “substantially strengthened [by open government initiatives] when government trust is low (p. 898). However, Lourenço (2015) noted, through an analysis of seven Western open-government portals from the perspective of the “ordinary citizen”, that terms such as “open government” and “e-government” can be vague, allowing for large differences in levels of accessibility. Hence, if such websites do seek to enable the holding of government to account by the citizenry, they need to do more than merely dump raw data, they need to structure websites and data so that the non-data expert can use them (more on this in section 4.7).

2.6

PROMOTION OF DEMOCRATIC VALUES

The sixth and final opportunity outlined in the literature is the use and regulation of digital media by governments to actively promote democratic values, informed debate, tolerance and respect for other groups. For example, this can be done directly through government funding of public service journalism, as advocated for by the Organization for Security and Co-operation in Europe (OSCE, 2017). A second direct form of promotion can be through the funding of independent statutory organisations such as All Together Now in Australia, which is “focused generally on encouraging the embracement of cultural diversity and the eradication of racism” (Jakubowicz et al., 2017, p. 242). The organisation runs the anti-racism Twitter account @itstopswithme, together with the #itstopswithme hashtag which encourages citizen interactive engagement in campaigning.

Less direct forms are the general educative effects of participating in democratic processes, the scope and breadth of which have been shown in this section to be potentially both widened and enlarged by digital media. Michels (2011) conducted a meta-analysis on the effects of citizen participation in democratic processes, collecting “empirical evidence about effects from 120 cases in different Western countries” (p. 276). Overall findings were that government programs which promote participatory democracy have “a positive effect on the development of knowledge, skills, and virtues [which includes] active participation in public life, trustworthiness, and reciprocity (giving and taking)” (p. 278). This provides support to the OECD’s (2017, p. 118) argument that, together with short-term, functional benefits, there are also intrinsic, long-term benefits to government support for digital media-enabled participatory democracy, and will be discussed in more detail in section 4.

While the literature highlights many opportunities offered by digital media to improving democratic engagement, there are many threats also. The following section covers those revealed by the published literature.

CURRENT THREATS/BARRIERS TO ACHIEVING OPPORTUNITIES

This section will define and outline the emergent threats or barriers to increasing democratic participation through digital media. Seven key threats have been identified from the literature (there is overlap between them), which are linked to the increasing influence of digital media in society (though this is not the only cause). These threats range from issues at the structural and systems level e.g interference by governments, through to threats from individual responses, eg distrust. Together, they threaten to derail the optimistic promise of digital media through the realisation of the specific opportunities outlined in section two.

These threats have been identified as:

1. increasing power of private platforms,
2. foreign government interference in democratic processes,
3. fake news (also known as misinformation and disinformation),
4. filter bubbles (also known as echo chambers),
5. surveillance and data protection,
6. hate speech and trolling, and
7. a growing distrust of or dissatisfaction with democracy.

3.1

INCREASING POWER OF PRIVATE PLATFORMS

Private platforms have increasing power to determine all aspects of our information lives, social interactions, and democratic activities. It underpins and flows back from most of the other threats we discuss.

Sections of the reviewed scholarship highlighted the increasing dominance of an increasingly small number of privately-owned platforms over the internet (see Fuchs, 2014). Google and Facebook dominate the digital advertising market, both in the US and in New Zealand (Myllylahti, 2018; Srnicek, 2017). The two companies “drive 53 percent of [New Zealand] news websites’ traffic” (Myllylahti, 2018, p. 6), but without contributing a corresponding volume of advertising revenue, thereby threatening journalism’s economic foundations, with serious repercussions for the breadth and quality of the public sphere (opportunity 2.2).

Srnicek (2017) highlights a monopolisation tendency “built into the DNA of platforms” such as Google and Facebook, linked to the close correlation between the mining of user-data and the ability of these companies to make profits. Such is the value of data in what Srnicek terms the era of “platform capitalism”, Google and Facebook are rapidly purchasing smaller companies so that they are able to control the extraction, processing and analysis of such data, thereby setting the rules of the game, making it increasingly harder for competitors to enter the market.

Further, it becomes increasingly difficult for companies that offer alternatives to the data-extraction for profit model, such as Loomio (discussed further in Part 2), to survive in this environment (Jackson & Kuehn, 2016). Loomio is a deliberative democracy tool intentionally organised around the principles of open source (user control over source code) and co-operative, democratised ownership and decision-making. However, because it lacks the resources to sustain huge servers or cloud services required for the large amounts of data necessary for the functioning of its platform, it must lease these services from the big platforms. Hence, “it must sacrifice some aspects of control for economic reasons” (p. 424).

At the level of individual personality, our lives are led more and more through these platforms, meaning that they increasingly shape our social worlds. As put by the Internet Governance Forum (IGF, 2015), “increasingly, the operation of these platforms affects individuals’ ability to develop their own personality and engage in a substantial amount of social interactions” (p. 1). Hence, the actions of these companies can impact human rights (see also OSCE, 2017), not only through their control of personal data. Because their algorithms dictate what appears and what does not in the public sphere, their algorithms could be seen as a form of censorship. Complicating this further is that human rights protections are normally applied to national governments, rather than private companies.

3.2

FOREIGN GOVERNMENT INTERFERENCE IN DEMOCRATIC PROCESSES

A recent US intelligence report “claimed with a high degree of confidence” (Ziegler, 2018, p. 567) that “Russian President Vladimir Putin ordered an influence campaign in 2016 aimed at the US presidential election” (Intelligence Community Assessment quoted in Ziegler, 2018, p. 567). This included a deliberate strategy to use social media “to undermine confidence in the election and to magnify stories critical of Hillary Clinton” (Persily, 2017, pp. 70-71). Teams of trolls were employed in order to post negative political advertising stories online (Persily, 2017), and damaging emails were distributed through Wikileaks (Ziegler, 2018). Persily (2017) argues that the negative advertising contributed to decreased turnout and voter disengagement.

As noted by Ziegler (2018), the US has not been the only target of Russia’s military intelligence unit the GRU, with German and French elections also targeted by disinformation campaigns during 2017. Ziegler (2018) argues that such tactics should be placed in the context of a broader strategy of “hybrid warfare”, where Russia seeks to exaggerate already existing tensions and polarisations by encouraging a lack of faith in the electoral system and trust in the idea of liberal democracy.

Recently, security services in New Zealand, has revealed that New Zealand has been the target of attempts to interfere in democracy through a “range of vectors” (Moir, 2019). The threat to free and fair elections, and more general to liberal participatory and inclusive democracy through the manipulation of digital media is a well-established one.

3.3

SURVEILLANCE AND DATA PROTECTION

The 2013 exposé by Edward Snowden and the 2018 Cambridge Analytica revelations have brought the issues of data privacy and surveillance into the public eye. The former revealed that the major internet service providers were sharing the data of their customers with US government agencies such as the NSA. Further, Snowden revealed that this data collection was also being done in the other member countries of the ‘Five Eyes’ (the UK, Australia, Canada and New Zealand) in order for governments to carry out mass surveillance on their citizens (Fuchs & Trottier, 2017).

The Cambridge Analytica revelations highlighted that “Facebook gave unfettered and unauthorized access to personally identifiable information...of more than 87 million unsuspecting Facebook users to the data firm” (Isaak & Hanna, 2018, p. 56). The scandal brought to the surface the underlying mechanics of the attention economy, outlined in section 3.1. Put simply, the consumer of social media is also the product – their personal data is the oil that greases the machine, or as Ghosh and Scott (2018) put it, “behavior tracking and the business of online advertising is central to the market power of global internet platforms” (p. 6).

These revelations are having effects on the perceptions of internet users: surveys in the UK have revealed deep concerns about the such practices (Fuchs & Trottier, 2017), while a recent survey by Internet NZ revealed data security and privacy was one of the top 5 concerns of New Zealand users (InternetNZ, 2017b). In the US, surveys of writers (PEN America, 2013) and investigative journalists (Holcomb, Mitchell, & Purcell, 2015) have revealed a worrying “chilling effect”, similar to the spiral of silence mentioned earlier, which demonstrates significant curtailing effects on the private and public practices

of both professions, which are vital for the sustainment of a healthy public sphere (opportunity 2.2). Evidence from the UK indicates that ongoing surveillance of Muslim communities contributes to feelings of alienation from mainstream society (Blackwood, Hopkins, & Reicher, 2013), thereby having a detrimental effect on opportunity 2.3. In the wake of the Christchurch terror attacks in March 2019, in which 50 muslim New Zealanders were murdered by a white supremacist, surveillance of the muslim New Zealand community by government agencies through digital means is also being highlighted as a key threat to democracy (Human Rights Foundation of Aotearoa New Zealand, 2016).

3.4 FAKE NEWS/ DISINFORMATION

Probably the most famous (or infamous) of the identified threats to democratic participation, due to its links to the current US president, the term “fake news” rapidly went “from being marginal to near ubiquitous” (Farkas & Schou, 2018, p. 304) within news media discourse in the immediate lead up to and the aftermath of the November 2016 election in the US. Linked to this emergence within a highly politicised context, the term has become a tool for the delegitimization of political opponents, signalling a broader “clash of narratives” (Marda & Milan, 2018, p. 3) between conservatism and liberalism in the US.

The phenomenon could also be labelled propaganda, but as this is also a highly loaded term, disinformation is most suited to our purposes here. Disinformation is distinguished from misinformation, with the latter lacking a deliberate intention. The former, by contrast, is defined as “false or misleading information that is deliberately disseminated to deceive a target audience” (College of St George, 2018, p. 2). As well as deliberately misleading content, disinformation can be disingenuous concerning its “origins and affiliations...[often undertaking] concerted efforts to mask these origins” (FireEye, 2018, p. 5). Because it is defined by intent, disinformation can become misinformation when it is unintentionally spread by human interaction online (Vosoughi, Roy, & Aral, 2018).

Ghosh and Scott (2018) offer a yet more precise term in “political disinformation”, defined as “highly targeted political communications that reach millions of people with customized messages that are invisible to the broader public” (p. 3). Ghosh and Scott (2018) thereby link the phenomenon directly to what has been commonly termed the “attention economy”, or “the financial interests that drive the core technologies of the leading internet platforms” (p. 4). Polarising political posts (whether true or not) evoke the strongest emotions, and therefore hold attention, “which in turn generates [advertising] revenue” (p. 4). As has become clear with the recent Cambridge Analytica revelations (Isaak & Hanna, 2018), targeted political advertising is a highly profitable business.

Not only does it hold attention, but political disinformation spreads faster around the internet through likes, shares and retweets. Vosoughi et al. (2018) found that “false political news... [not only] diffused significantly farther, faster, deeper, and more broadly than the truth” (p.1), but also other highly viral types of news such as reports on terrorism. Guo, Rohde, and Wu (2018), found that this had a direct impact on the 2016 election, as “fake news sites...were mainly responsible for spreading negative news about [Hillary] Clinton” (p.14), rather than Donald Trump.

3.5

FILTER BUBBLES/ ECHO CHAMBERS

While filter bubbles and echo chambers are terms which are often used interchangeably, the former tends to refer to a specific technical effect of the attention economy, while the latter has more of a broader social and psychological dimension. The most famous example of a filter bubble is Facebook's news feed, created by a machine-learning algorithm which draws on data created by user networks, likes and comments. The algorithm (and hence the news feed) can also be influenced by and how much companies and organisations are willing to pay to be present there (hence political disinformation requires filter bubbles to be effective, see Ghosh & Scott, 2018). However, the issue is not restricted to Facebook. Political disinformation sites can also take advantage of Google's algorithm, by paying "top billing" to appear high up on searches (Ghosh & Scott, 2018). Hence, central to the profits of the two most powerful internet platforms (Srnicke, 2017), filter bubbles are today so ubiquitous they most often work in the background to our daily lives, shaping the information we receive "imperceptibly and without consent" (College of St George, 2018, p. 5).

Filter bubbles follow a longer-term trajectory within advertising (including political advertising) which has sought to collect data in order to tailor adverts to target groups, however, now they can be targeted to specific individuals (Ghosh & Scott, 2018). This can contribute to the formation of echo chambers, which is the reinforcement of confirmation bias through selective exposure to information (College of St George, 2018; Guo et al., 2018). Hence, the technical and economic drivers of filter bubbles can act to reinforce echo chambers, but the two cannot be reduced to each other, with the latter existing before social media, through for example, the alignment of newspapers to political affiliation (Möller, Trilling, Helberger, & van Es, 2018).

Increasing numbers of automated social media 'bots' have also been linked with the spread of political disinformation and thus the reinforcement of echo chambers (Farkas & Schou, 2018; Persily, 2017). A study of Twitter during the 2016 US election between 16 September and 21 October put the number of active bots at around 400,000, which were "responsible for roughly 3.8 million tweets, about one-fifth of the entire conversation" (Bessi & Ferrara, 2016).

However, the individual user is not without agency, with the majority of false stories on Twitter still being spread, and echo chambers still being reinforced, by humans, rather than bots (Vosoughi et al., 2018). Closely linked to the reinforcement of echo chambers on Twitter is the follow function, whereby users are encouraged to follow other users who confirm similar ideological views to their own, restricting their exposure to ideologically challenging discourse (Guo et al., 2018; Himelboim, McCreery, & Smith, 2013). From a social psychology perspective, echo chambers act as an identity-securing protection from the epistemological and ontological uncertainties created by the vast amounts of (often conflicting) information available online (Lu & Yu, 2018). Linked to this is the decline in trust in the ability of traditional news media to provide reliable information (Knight Foundation, 2018).

While new research is contesting the placement of blame for echo chambers solely at the door of social media (Beam, Hutchens, & Hmielowski, 2018), there is little doubt that filter bubbles have "exacerbated political divisions and polarization" (Deb, Donohue, & Glaisyer, 2017, p. 4). This fracturing effect has negative implications for the mechanisms of liberal democracy, as developing a broad consensus around decisions made in the public good becomes increasingly difficult (OECD, 2017).

3.6

HATE SPEECH AND TROLLING

Linked to the above-mentioned fracturing effect has been the rise of hate speech and trolling. While hate speech obviously predates the internet, trolling is a term linked directly to internet cultures, and until recently, had more playful, less hurtful connotations (Phillips & Milner, 2017). Linked to the hacker breeding ground 4chan, a troll is an anonymous user who deliberately provokes antagonistic reactions for sheer enjoyment, or “the lulz” (Coleman, 2014). Trolling is aided both by the ease of creating anonymous online profiles (Galán-García, de la Puerta, Gómez, Santos, & Bringas, 2014), and by the atomised nature of internet interaction, both of which can exacerbate certain psychological profiles (Jakubowicz, 2017). A study which tallied a personality survey to one on internet use found strong correlations “between trolling and the Dark Tetrad of personality... sadism, psychopathy, and Machiavellianism” (Buckels, Trapnell, & Paulhus, 2014).

Trolling can pose a direct threat to opportunities 2.2 and 2.3 when it becomes systematically targeted towards minority groups in order to deliberately cause emotional distress, i.e. when it becomes hate speech (Alkiviadou, 2018). While not all hate speech is articulated by trolls, remaining anonymous makes individuals more likely to escape prosecution for the more egregious examples (Holschuh, 2013), as complex and time-consuming tracking systems have to be employed to trace the perpetrators (Galán-García et al., 2014). As well as

Racialised hate speech (otherwise known as cyber racism) is specifically targeted towards ethnic minority groups, and has become increasingly coordinated in recent years, through the rise of the “alt-right” (Jakubowicz, 2017). It has become a global phenomenon, affecting “refugees and ethnic minorities in Europe, Muslim Blacks and Jews in the United States, Indigenous Australians” (Jakubowicz et al., 2017, p. v) and others. It can have a direct negative impact on opportunities 2.2, 2.3 and 2.4, by encouraging affected groups to retreat to safe locations “where they focus on building intracommunal bonding” (Jakubowicz et al., 2017, p. xi), rather than engaging with national debates and institutions.

Sexualised hate speech is primarily targeted towards women (together with members of the LGBTIQI community), and is characterised by its specifically misogynistic nature (Edstrom, 2016). It is often directed towards women in the public eye, or those in influential positions, such as journalists, with proponents directing critical attention onto their supposed essential gender characteristics, rather than their work (Edstrom, 2016). Research undertaken by The Guardian newspaper on its comment threads revealed that out of the ten journalists who had attracted the most hateful comments, eight were women, with the other two being black men (Gardiner et al., 2016). This can have a negative impact on efforts towards the broadening of the public sphere, as women journalists are discouraged from writing what they may feel are controversial stories.

More generally, a large survey conducted in Hong Kong (Chen, 2018) found a correlation between strong, vocal disagreements with an individual’s perspectives and a “spiral of silence” which acts to curtail the voicing of contentious opinions by minority groups. Particularly when the polarisation of the public sphere is heightened, fear of social isolation makes it more likely that users “express less disagreeing opinion and exercise more withdrawal behaviors” (p. 3928). The particular ability of trolls and hate speech to fan antagonistic “flames” Ceron and Memoli (2016) rather than promote rational debates, therefore has a direct impact on increasing democratic participation.

3.7

DISTRUST/ DISSATISFACTION WITH DEMOCRACY

This section details a more longer-term, general process which has been ongoing since the 1960s (Ziegler, 2018), but which is intensified by the other threats already outlined in this section. This is increasing distrust and/or dissatisfaction with democratic processes, together with government institutions and politicians. Emblematic of this decline in confidence is a 2016 Pew Research survey which found that trust in the US national government had hit an historic low at 20 percent (Ziegler, 2018). While New Zealanders' trust in their public services was a little higher at 42 percent the last time the data was collected in 2015 (Stats NZ, 2015), a general, widespread decline in levels of trust in government is acknowledged to be a major issue affecting a majority of the wealthier, Western nations (OECD, 2017).

Deb et al. (2017) contend that “that fundamental principles underlying democracy—trust, informed dialogue, a shared sense of reality, mutual consent, and participation—are being put to the test by certain features and attributes of social media” (p. 3). These include the aforementioned “echo chambers”, which, when combined with the “proliferation of partisan media in traditional channels, has exacerbated political divisions and polarization” (p. 4).

Lu and Yu (2018) found, drawing on the World Values Survey 2010-14, that the “decentralized, horizontal, interactive mode of information distribution” (p.3) characterised by the internet, increases intolerance of others (although they also found that participation in public deliberation with others from outside their echo chambers increases tolerance – more on this in section 4). More specifically, Ceron and Memoli (2016), drawing on a Eurobarometer survey which collects data from 27 European countries, found that it is the consumption of online forms of news that include opinions which differ from the attitudes of the consumer, which increase “the likelihood of ‘flames’ [a strong polarising effect] that increase skepticism toward democracy” (p.226).

Hence these findings appear to go against the assumption, embedded within the “optimistic” perspective (see Castells, 2013), that increasing access to varied information and differing opinions automatically facilitates a more open, tolerant and inclusive society.

CONCLUSION

In this narrative literature review we outlined a cross-section of the recent international literature on the key opportunities for the expansion of digital democracy, and the current threats to actualising those opportunities.

The six key opportunities identified were: the democratisation of information publishing, the broadening of the public sphere, the increasing equality of access to and participation within political processes, increasing transparency and accountability from government and the promotion of democratic values.

These opportunities are at risk however from a significant group of threats, all of which are interconnected to the major structural threat posed by the increasing power of private platforms. The other six threats identified are: foreign government interference in democratic processes, surveillance and data protection, fake news (also known as misinformation and disinformation), filter bubbles (also known as echo chambers), hate speech and trolling, and a growing distrust of or dissatisfaction with democracy.

To ensure that the potential of digital media technologies is realised in relation to digital democracy, it is important to understand what the research says works to limit or overcome these threats. This is the focus of part two of this literature review.

REFERENCES

- Alkiviadou, N. (2018). Hate speech on social media networks: towards a regulatory framework? *Information & Communications Technology Law*, 1-17. doi:10.1080/13600834.2018.1494417
- Auger, G. A. (2013). Fostering democracy through social media: Evaluating diametrically opposed nonprofit advocacy organizations' use of Facebook, Twitter, and YouTube. *Public Relations Review*, 39(4), 369-376. doi:https://doi.org/10.1016/j.pubrev.2013.07.013
- Beam, M. A., Hutchens, M. J., & Hmielowski, J. D. (2018). Facebook news and (de) polarization: reinforcing spirals in the 2016 US election. *Information, Communication & Society*, 21(7), 940-958. doi:10.1080/1369118X.2018.1444783
- Bennett, W. L., & Segerberg, A. (2012). The logic of connective action: Digital media and the personalization of contentious politics. *Information, Communication & Society*, 15(5), 739-768. doi:10.1080/1369118X.2012.670661
- Bennett, W. L., Segerberg, A., & Walker, S. (2014). Organization in the crowd: peer production in large-scale networked protests. *Information, Communication & Society*, 17(2), 232-260. doi:10.1080/1369118X.2013.870379
- Bessi, A., & Ferrara, E. (2016). Social bots distort the 2016 US Presidential election online discussion. *First Monday*, 21(11). doi:https://doi.org/10.5210/fm.v21i11.7090
- Blackwood, L., Hopkins, N., & Reicher, S. (2013). Turning the Analytic Gaze on "Us": The Role of Authorities in the Alienation of Minorities. *European Psychologist*, 18(4), 245-252. doi:10.1027/1016-9040/a000151
- Buckels, E. E., Trapnell, P. D., & Paulhus, D. L. (2014). Trolls just want to have fun. *Personality and Individual Differences*, 67, 97-102. doi:https://doi.org/10.1016/j.paid.2014.01.016
- Castells, M. (2013). *Communication power (Second ed.)*. Oxford: Oxford University Press.
- Ceron, A., & Memoli, V. (2016). Flames and Debates: Do Social Media Affect Satisfaction with Democracy? *Social Indicators Research*, 126(1), 225-240. doi:10.1007/s11205-015-0893-x
- Chen, H.-T. (2018). Spiral of silence on social media and the moderating role of disagreement and publicness in the network: Analyzing expressive and withdrawal behaviors. *New media & society*, 20(10), 3917-3936. doi:10.1177/1461444818763384
- Coleman, G. (2014). *Hacker, Hoaxer, Whistleblower, Spy: The Many Faces of Anonymous*. London: Verso.

- College of St George. (2018). *Democracy in a Post-Truth Information Age: Background Paper*. Retrieved from Windsor: <https://www.stgeorghouse.org/wp-content/uploads/2017/10/Background-Paper.pdf>
- Deb, A., Donohue, S., & Glaisyer, T. (2017). Is Social Media a Threat to Democracy? *Omidyar Group*. <https://www.omidyargroup.com/wp-content/uploads/2017/10/Social-Media-and-Democracy-October-5-2017.pdf>.
- Dubow, T. (2017). *Civic Engagement: How Can Digital Technologies Underpin Citizen-Powered Democracy?* Retrieved from https://www.rand.org/pubs/conf_proceedings/CF373.html
- Edstrom, M. (2016). The trolls disappear in the light: Swedish experiences of mediated sexualised hate speech in the aftermath of Behring Breivik. *International Journal for Crime, Justice and Social Democracy*, 5(2), 96-106.
- Farkas, J., & Schou, J. (2018). Fake News as a Floating Signifier: Hegemony, Antagonism and the Politics of Falsehood. *Javnost - The Public*, 25(3), 298-314. doi:10.1080/13183222.2018.1463047
- FireEye. (2018). *Suspected Iranian influence operation: Leveraging inauthentic news sites and social media aimed at U.S., U.K., other audiences*. Retrieved from <https://www.fireeye.com/content/dam/fireeye-www/current-threats/pdfs/rpt-FireEye-Iranian-IO.pdf>
- Fuchs, C. (2014). Social Media and the Public Sphere. *tripleC*, 12(1), 57-101.
- Fuchs, C., & Trottier, D. (2017). Internet surveillance after Snowden: A critical empirical study of computer experts' attitudes on commercial and state surveillance of the Internet and social media post-Edward Snowden. *Journal of Information, Communication and Ethics in Society*, 15(4), 412-444. doi:10.1108/JICES-01-2016-0004
- Galán-García, P., de la Puerta, J. G., Gómez, C. L., Santos, I., & Bringas, P. G. (2014, 2014//). *Supervised Machine Learning for the Detection of Troll Profiles in Twitter Social Network: Application to a Real Case of Cyberbullying*. Paper presented at the International Joint Conference SOCO'13-CISIS'13-ICEUTE'13, Cham.
- Gardiner, B., Mansfield, M., Anderson, I., Holder, J., Louter, D., & Ulmanu, M. (2016). The dark side of Guardian comments. *The Guardian*. Retrieved from <https://www.theguardian.com/technology/2016/apr/12/the-dark-side-of-guardian-comments>
- Gayo-Avello, D. (2015). Social Media, Democracy, and Democratization. *IEEE MultiMedia*, 22(2), 10-16. doi:10.1109/MMUL.2015.47
- Ghosh, D., & Scott, B. (2018). *#digitaldeceit: The Technologies Behind Precision Propaganda on the Internet*. Retrieved from <https://www.newamerica.org/public-interest-technology/policy-papers/digitaldeceit/>
- Government Information Services. (2018). *How digital can support participation in government*. Retrieved from Wellington: <https://www.digital.govt.nz/standards-and-guidance/engagement/online-engagement/research-how-digital-can-support-participation-in-government/>

- Guo, L., Rohde, J. A., & Wu, H. D. (2018). Who is responsible for Twitter's echo chamber problem? Evidence from 2016 U.S. election networks. *Information, Communication & Society*, 1-18. doi:10.1080/1369118X.2018.1499793
- Himelboim, I., McCreery, S., & Smith, M. (2013). Birds of a Feather Tweet Together: Integrating Network and Content Analyses to Examine Cross-Ideology Exposure on Twitter. *Journal of Computer-Mediated Communication*, 18(2), 40-60. doi:10.1111/jcc4.12001
- Holcomb, J., Mitchell, A., & Purcell, K. (2015). Investigative journalists and digital security. *Pew Research Center*. Retrieved from <http://www.journalism.org/2015/02/05/investigative-journalists-and-digital-security>
- Holschuh, J. (2013). #CivilRightsCybertorts: Utilizing Torts to Combat Hate Speech in Online Social Media. *University of Cincinnati Law Review*, 82, 953.
- Human Rights Foundation of Aotearoa New Zealand. (2016). And you think maybe this is not home. *Human Rights Foundation of Aotearoa New Zealand*. Retrieved from <https://humanrightsfoundation.files.wordpress.com/2019/03/and-you-think-maybe-this-is-not-home-final.pdf>
- IGF. (2015). *Recommendations on terms of service and human rights*. Retrieved from <https://www.intgovforum.org/cms/documents/igf-meeting/igf-2016/830-dcpr-2015-output-document-1/file>
- InternetNZ. (2017b). *What kiwis think of the Internet in New Zealand*. Retrieved from <https://internetnz.nz/2017-internet-research>
- Isaak, J., & Hanna, M. J. (2018). User Data Privacy: Facebook, Cambridge Analytica, and Privacy Protection. *Computer* (8), 56. doi:10.1109/MC.2018.3191268
- Jackson, S. K., & Kuehn, K. M. (2016). Open Source, Social Activism and "Necessary Trade-offs" in the Digital Enclosure: A Case Study of Platform Co-operative, Loomio. *org. tripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society*, 14(2), 413-427.
- Jakubowicz, A. (2017). Alt_Right White Lite: trolling, hate speech and cyber racism on social media. *Cosmopolitan Civil Societies: An Interdisciplinary Journal*, 9(3), 41.
- Jakubowicz, A., Dunn, K., Mason, G., Paradies, Y., Bliuc, A.-M., Bahfen, N., Oboler, A., Atie, R., Connelly, K. (2017). *Cyber Racism and Community Resilience: Strategies for Combating Online Race Hate*: Springer, 5-11, 242. doi:10.1007/978-3-319-64388-5
- Kern, A. (2017). The effect of direct democratic participation on citizens' political attitudes in Switzerland: The difference between availability and use. *Politics and Governance*, 5(2), 16-26. doi:<http://dx.doi.org/10.17645/pag.v5i2.820>
- Kern, A. (2018). What happens after a local referendum? The effect of direct democratic decision-making on protest intentions. *Local Government Studies*, 44(2), 183-203. doi:10.1080/03003930.2017.1411809
- Kim, S., & Lee, J. (2012). E-Participation, Transparency, and Trust in Local Government. *Public Administration Review*, 72(6), 819-828. doi:10.1111/j.1540-6210.2012.02593.x

- Nielsen, M. M. (2017). eGovernance frameworks for successful citizen use of online services: A Danish-Japanese comparative analysis. *JeDEM-eJournal of eDemocracy and Open Government*, 9(2), 68-109.
- Knight Foundation. (2018). *American views: trust, media and democracy*. Retrieved from <https://knightfoundation.org/reports/american-views-trust-media-and-democracy>
- Leininger, A. (2015). Direct Democracy in Europe: Potentials and Pitfalls. *Global Policy*, 6(51), 17-27. doi:10.1111/1758-5899.12224
- Lourenço, R. P. (2015). An analysis of open government portals: A perspective of transparency for accountability. *Government Information Quarterly*, 32(3), 323-332. doi:<https://doi.org/10.1016/j.giq.2015.05.006>
- Lu, J., & Yu, X. (2018). Does The internet make us more intolerant? A contextual analysis in 33 countries. *Information, Communication & Society*, 1-15. doi:10.1080/1369118X.2018.1499794
- Marda, V., & Milan, S. (2018). Wisdom of the Crowd: Multistakeholder Perspectives on the Fake News Debate. *Internet Policy Review Series, Annenberg School of Communication*, 3.
- Michels, A. (2011). Innovations in democratic governance: how does citizen participation contribute to a better democracy? *International Review of Administrative Sciences*, 77(2), 275-293. doi:10.1177/0020852311399851
- Miller, C. (2016). *The rise of digital politics*. Retrieved from <https://www.demos.co.uk/project/the-rise-of-digital-politics/>
- Moir, J. (2019). Foreign political interference in NZ from ‘a range of actors’ - spy agency heads. *Radio New Zealand*. Retrieved from <https://www.radionz.co.nz/news/political/386865/foreign-political-interference-in-nz-from-a-range-of-actors-spy-agency-heads>
- Möller, J., Trilling, D., Helberger, N., & van Es, B. (2018). Do not blame it on the algorithm: an empirical assessment of multiple recommender systems and their impact on content diversity. *Information, Communication & Society*, 21(7), 959-977. doi:10.1080/1369118X.2018.1444076
- Myllylahti, M. (2018). *Google, Facebook and New Zealand news media*. Retrieved from Auckland, New Zealand: <https://thepolicyobservatory.aut.ac.nz/publications/google,-facebook-and-new-zealand-news-media>
- OECD. (2017). *Trust and public policy: How better governance can help rebuild public trust*. Paris: OECD Publishing.
- OSCE. (2017). *Joint declaration on freedom of expression and “fake news”, disinformation and propaganda*. Retrieved from <https://www.osce.org/fom/302796>
- Papacharissi, Z., & de Fatima Oliveira, M. (2012). Affective News and Networked Publics: The Rhythms of News Storytelling on #Egypt. *Journal of Communication*, 62(2), 266-282. doi:10.1111/j.1460-2466.2012.01630.x
- PEN America. (2013). *Chilling effects: NSA surveillance drives US writers to self-censor*. New York: PEN American Center.

- Persily, N. (2017). The 2016 US Election: Can democracy survive the internet? *Journal of democracy*, 28(2), 63-76.
- Phillips, W., & Milner, R. M. (2017). *The ambivalent internet: Mischief, oddity, and antagonism online*. Cambridge, UK: Polity.
- Simon, J., Bass, T., Boelman, V., & Mulgan, G. (2017). *Digital democracy: the tools transforming political engagement*. Retrieved from <https://www.nesta.org.uk/report/digital-democracy-the-tools-transforming-political-engagement/>
- Srnicek, N. (2017). *Platform capitalism*: Cambridge, UK: Polity Press.
- Stats NZ. (2015). Trust in government institutions. *New Zealand Government*. Retrieved from http://archive.stats.govt.nz/browse_for_stats/snapshots-of-nz/nz-social-indicators/Home/Trust%20and%20participation%20in%20government/trust-govt-instit.aspx
- Sweet, M., Pearson, L., & Dudgeon, P. (2013). @Indigenousx: A Case Study of Community-Led Innovation in Digital Media. *Media International Australia*, 149(1), 104-111. doi:10.1177/1329878x1314900112
- Valtysson, B. (2013). Democracy in disguise: the use of social media in reviewing the Icelandic Constitution. *Media, Culture & Society*, 36(1), 52-68. doi:10.1177/0163443713507814
- Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *Science*, 359(6380), 1146-1151.
- Wu, W., Ma, L., & Yu, W. (2017). Government Transparency and Perceived Social Equity: Assessing the Moderating Effect of Citizen Trust in China. *Administration & Society*, 49(6), 882-906. doi:10.1177/0095399716685799
- Xenos, M., Vromen, A., & Loader, B. D. (2014). The great equalizer? Patterns of social media use and youth political engagement in three advanced democracies. *Information, Communication & Society*, 17(2), 151-167. doi:10.1080/1369118X.2013.871318
- Yarchi, M., & Samuel-Azran, T. (2018). Women politicians are more engaging: male versus female politicians' ability to generate users' engagement on social media during an election campaign. *Information, Communication & Society*, 21(7), 978-995. doi:10.1080/1369118X.2018.1439985
- Ziegler, C. E. (2018). International dimensions of electoral processes: Russia, the USA, and the 2016 elections. *International Politics*, 55(5), 557-574. doi:10.1057/s41311-017-0113-1

