Article:
Barrett, B., Dommett, K. and Kreiss, D. (2021) The capricious relationship between technology and democracy: analyzing public policy discussions in the UK and US. Policy & Internet, 13 (4). pp. 522-543. ISSN: 1944-2866

https://doi.org/10.1002/poi3.266

Received: 5 March 2021 | Accepted: 18 August 2021

DOI: 10.1002/poi3.266

RESEARCH ARTICLE

P&I Policy & Internet PSO WILEY

The capricious relationship between technology and democracy: Analyzing public policy discussions in the UK and US

Bridget Barrett[1] | **Katharine Dommett**[2] | **Daniel Kreiss**[1]

[1]Hussman School of Journalism and Media, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

[2]Department of Politics and International Relations, University of Sheffield, Sheffield, UK

Correspondence

Bridget Barrett, Hussman School of Journalism and Media, University of North Carolina at Chapel Hill, CB 3365, Carroll Hall, Chapel Hill, NC 27514, USA.
Email: bridgetbarrett@unc.edu

Abstract

This study provides a comparative survey of policy-making discourse in the United Kingdom and the United States from 2016 to 2020 around digital threats to democracy. Through an inductive coding process, it identifies six core ideals common in these two countries: transparency, accountability, engagement, informed public, social solidarity, and freedom of expression. Reviewing how these ideals are constructed in policy-making documents, we find differences in each country's emphasis, inconsistencies in how some democratic ideals are evoked and promoted, conflicts between different democratic ideals, and disconnects between empirical realities of democracy and policy-making discourse. There is a lack of clarity in what social solidarity, engagement, and freedom of expression mean and how they should be balanced; conceptions of an informed public are deeply fraught, and in tension with other ideals. We argue that policy-making discourse is often out of step with the growing literature which suggests that political conflicts between social groups, right-wing extremism, and anti-democratic actions increasingly taken by elites and parties are at the root of growing democratic crises. This state of policy-making discourse has important implications for attempts to pursue regulation and suggests the need for further reflection by policy-makers on the democratic ideals they are solving for.

KEYWORDS

democracy, public policy, regulation, technology, threat

INTRODUCTION

A capricious relationship exists between digital technology and democracy in public policy discourse. In recent years, and especially in the wake of the 2016 UK European Union Membership referendum and the US presidential election, debate has focused on networked, digital technologies' negative impact on democracies. For example, Persily has argued that the Internet "can be harnessed by demagogues who appeal to the worst impulses of the mob" (2017, p. 71) and Pfetsch has asserted that the Internet reinforces "selective perceptions, feeding filter bubbles and stimulating tribal communication" (Pfetsch, 2018, p. 64). Capturing how many who once saw "liberation technologies" now see something far darker, Larry Diamond argues that though "[o]nce hailed as a great force for human empowerment and liberation, social media—and the various related digital tools that enable people to search for, access, accumulate, and process information—have rapidly come to be regarded as a major threat to democratic stability and human freedom" (2019, p. 20).

In addition to this wide-ranging academic interest in technology's impact on society and democracy over the past few years (Hindman, 2008; Kuehn & Salter, 2020; Margolis & Resnick, 2000; McKay & Tenove, 2020; Moore, 2018; Zuiderveen Borgesius et al., 2018), policymakers have raised significant concerns about the Internet and democracy. Sir Julian King, a European Commissioner, asserted the need for "every member state to assess comprehensively the threat to their democratic processes and institutions, whether from more traditional cyber-attacks or from the manipulation of information" (2018). The International Committee on Disinformation and Fake News also asserted that:

> The world in which the traditional institutions of democratic government operate is changing at an unprecedented pace; it is an urgent and critical priority for legislatures and governments to ensure that the fundamental rights and safeguards of their citizens are not violated or undermined by the unchecked march of technology. (2018)

Recognizing the growing emphasis on technological threats to democracy, in this paper we set out to consider how policymakers understand democratic ideals in digital contexts and the threats to them since 2016. We examine the degree of consensus found within current policy discourse in the United Kingdom and the United States and evaluate this against empirical political science research about threats to democracy. These two countries have been at the forefront of attempts to diagnose technological threats (in particular in the wake of the 2016 Brexit referendum and the US presidential election) and to propose regulatory response (especially within the United Kingdom). Building on Dahlberg's (2011) assertion that there are a "diversity of understandings of digital democracy being deployed within popular commentary, research, policy-making, and practical initiative" (p. 855), we consider whether policymakers share a vision of desirable democratic practice and outline different responses to the threats they perceive technology to pose.

To do so, we inductively review key policy documents and highlight variations in how democratic ideals are articulated which, we argue, will inevitably lead to tensions or inconsistencies when making policy responses. Reviewing references in UK and US policy documents, we find that though in many areas there appears to be consensus about desirable democratic practice, this is not uniform. Indeed, when it comes to particular democratic ideals—such as social solidarity and freedom of expression—we show that policymakers are articulating different conceptions of democracy which have the capacity to contradict if policy responses are simultaneously implemented. Even more, we show how policymakers' stated ideals for digital democracy often uphold utopian standards that depart from the empirical realities that define UK and US democracy today.

We conclude that although policymakers have a desire to pursue regulation that will strengthen democracy and mitigate technological threats, there is a real need in both countries (but especially in the United States) to devote more attention to the conceptualization of democracy. This needs to involve both resolving tensions between idealized values and thinking more concretely about the extent to which technology is responsible for current democratic trends so policy-makers solve for consistent things.

Democracy and technology

Since 2016, there has been a marked shift in research orientations around the relationship between technology and democracy. This has involved a much greater focus on the threats posed by technology and social media to democracy, especially on epistemic grounds (see Jamieson, 2020). It has also meant the erasure of much work focused on the possibilities of social media and technology to further democracy, especially global movements for racial and social justice and equality organized primarily online (e.g., Jackson et al., 2020). In the process, much of the post-2016 field of research on "social media and democracy" (Kreiss, 2021) holds up a vision of democracy characterized by deliberation and rational public debate as both a lost empirical reality and a normative ideal (Mejia et al., 2018). This has led to research and public debate that is increasingly framed by a set of unrealistic democratic ideals and overly focused on technology's effects on democracy. Simultaneously, it ignores the growing empirical evidence of group conflicts over identity, social status, and power lying at the root of contemporary democratic crises in the United Kingdom and the United States (see Gest, 2016).

For example, Freelon and Wells (2020) argue that since 2016 there has been a radical shift towards a more pessimistic account focused on the threats to democracy posed by the Internet and especially social media. Entirely new fields of research inquiry, large-scale funding initiatives, and organizations devoted to the study of mis- and disinformation, polarization, and propaganda launched in the wake of 2016 and have rapidly grown to prominence and come to deeply influence public debate. As Freelon and Wells (2020) argue:

> Our field and media consumers worldwide have in recent years become fascinated and dismayed by a constellation of media genres that includes "fake news," "misinformation," "disinformation," "media manipulation," "coordinated inauthentic behavior," and "propaganda." Indeed, we argue that this constellation is *the* defining political communication topic of our time, given the massive media attention, reams of scholarship, and unprecedented funding opportunities devoted to it. Of course, none of this content is entirely new, but it is newly salient, and the digital age has changed how such messages are created, circulated, and interpreted, as well as their potential effects. The fear that messages of dubious provenance and truth value may subvert the "proper" functioning of democracy (however that is understood) has motivated governments, citizens, and scholars to try to understand and combat the phenomenon.

These scholars capture both the range of concerns about mediated political communication since 2016 and a particular understanding of democracy defined primarily on epistemological grounds that have dominated public discourse. Generally, researchers and public discourse in the United Kingdom and the United States are concerned with social media platforms, which are dominated by Facebook (and Instagram), Google (and YouTube), and Twitter. This does not exhaust the diverse array of digital technologies that

influence political communication and much of social life, but it does capture the general focus of attention among researchers and the public.

Meanwhile, research has generally proceeded from a fundamental normative concern over the mass public's capacity for reasoned public debate, deliberation, and informed choices at the polls. This includes deep worry over the growing public distrust in knowledge-producing institutions such as journalism (Carlson et al., 2021; Guess et al., 2021) and science (see Eyal, 2019); polarization or "sectarianism" that frustrates a "healthy" "marketplace of ideas" and deliberation (Finkel et al., 2020); and broadly disinformation, misinformation, and propaganda that undermines the shared set of facts and trust the public has (for a review, see Kreiss, 2021).

Despite this growing body of work and a long-established tradition of analyzing the relationship between technology and democracy within science and technology studies (Sclove, 1998), there has been surprisingly little scrutiny of the precise democratic ideals that technologies are seen to undermine or the tensions that might arise between them. It is therefore often left unstated why something is problematic and what would be preferred *on democratic grounds*. This ambiguity matters because, as is widely acknowledged in democratic theory, the nature and form of democracy can be conceptualized in a range of different ways (Crick, 2002, p. 7; Sartori, 1987). This suggests that though researchers and policymakers often discuss democracy as a self-evident ideal (Karppinen, 2013, p. 1), they may possess and promote different democratic goals.

In addition, there is a need to examine congruence between the concerns often found in this body of literature on social media and democracy and empirical evidence from other bodies of research that is not as media-centric. In the face of vocal techno-pessimism, a growing body of political science research suggests the many challenges facing democracy do not originate from digital media, but rather reflect wide societal trends such as fundamental political and social differences on important dimensions such as race and ethnicity, class, religion, and morality. Accounting for this matters because "causal stories" (Stone, 1989), or theories of what causes social problems, often lead to particular types of policy interventions. When researchers and policy-makers conceptualize democratic threats in some ways and not others—for example, being concerned with epistemology over and above racial injustice and social inequality—that leads to some policy interventions and not others. Getting the causal story right, therefore, is key to addressing the underlying set of problems.

For example, it is precisely social inequality and struggles for social power that many empirically-oriented political scientists point to as key underlying factors behind the 2016 elections that, ironically, sparked the present research concerns over things such as disinformation and the challenge of informed citizens. For example, Sobolewska and Ford's (2020) empirical study *Brexitland* shows how the United Kingdom vote on the EU Referendum was a product of demographic changes and conflicts over the identity of the nation and who should have the power within it—not social media, disinformation, or propaganda (which they do not discuss in presenting their empirical evidence, suggesting they were not overriding causal factors). In other words, the outcome was not about the power of disinformation on digital media to sway people from their true understanding of themselves as Britons, but fundamental conflicts over national identity and power that were made manifest and contested *on* social media. Such fundamental conflicts appeared and were stoked by elites on social media, but they were not themselves *caused* by technology and media.

Research on the US case provides a parallel story. In Sides et al.'s (2018) *Identity Crisis,* these scholars bring extensive empirical evidence to bear on understanding the determinants of the 2016 US presidential election. They conclude that it was contested over identity and the status and power of various social groups—not Russian or domestic disinformation—that explained the outcome (see also Mutz, 2018). As such, the election was less about a

substantive policy debate between two ideological sides than a clash over which groups should hold and wield power. For example, Donald Trump's appeals to whites *as* whites made white racial identity salient and linked to a clear vote choice of the Republican on the ballot (Jardina, 2019).

These books suggest that researchers' understanding of the threats posed by technology may uphold an idealized vision of democracy that is disconnected from empirical insights citing other drivers of growing political polarization and extremism. A research agenda that proceeded from these insights would pay greater attention to race and ethnicity, identity appeals, social power and status, and disinformation and propaganda as a political tool, especially of elites on the right (Freelon et al., 2020) to lower the political standing and participation of targeted groups—concerns which are simply not well represented in the field (Kreiss, 2021).

It is likely the research literature—and its causal stories—affects policy debate in significant ways. To understand the nature of policy-making discourse, in the sections below, we analyze policymakers' conceptualization of the threat posed by technology to democracy in the United Kingdom and the United States, focusing on consistency and the empirical grounding of policymakers' ideals.

METHODS

To analyze policymakers' conceptions of technological threats we conducted a documentary analysis of reports and (draft) legislation produced by the executive agencies, legislatures, and regulators in our two cases. Mirroring a well-established mode of policy analyses that has previously examined the threats posed by digital technology (Tenove, 2020) and regulatory responses to digital technology (Dommett, 2020), we set out to examine the nature and consistency of policymakers' democratic ideals and diagnosed threats. By analyzing policymaker reports published between 2016 and 2020, our focus does not encompass political speeches or policy announcements but rather the "official story" recorded in formal policy documents. Extending previous work looking at one form of democratic threat (Tenove, 2020), our investigation included reports that (a) overtly mentioned the idea of democracy and (b) focused on digital technology. Using these parameters, we selected key reports and created a corpus that, though not exhaustive, captures the major documents and outputs articulating the clearest and most thorough conceptualizations of digital threats and democratic goods (Table 1). Citations for these documents are available in Appendix A.

In selecting sources, we examined reports published by executive agencies, legislatures, and regulators in these two countries. Recognizing policymaking to be an ecosystem of different agencies and actors with different degrees of power, we were interested in examining the degree to which there was uniformity in understanding.

In the UK, we selected nine documents. Three came from regulators, four from parliamentary committees and two from government departments. Although in the United Kingdom regulators and parliamentary committees have varying degrees of agenda-setting power, it is the Government that enacts legislation, creating interesting power differentials. Collectively these documents work to analyze the challenge posed by digital technology and propose responses, meaning that though different in format, tone, and potential influence, each offers insight into the nature of policymaker debate. In the United States, we selected six documents. Like the UK documents, the US documents come from actors within the government with various levels of power, from the unilateral power of the president to make an executive order to informative reports for the Senate Select Committee on Intelligence (SSCI).

TABLE 1 Reports and draft legislation produced in the United Kingdom and the United States from 2016-2020

United Kingdom Actor type	Report title	Publishing agency	Year	In-text citation
Regulator	Digital campaigning—increasing transparency for voters	Electoral Commission	2018	EC, 2018
	Investigation into the use of data analytics in political campaigns	Information Commissioner's Office	2018	ICO, 2018a
	Democracy disrupted? Personal information and political influence	Information Commissioner's Office	2018	ICO, 2018b
Parliamentary Committee	Disinformation and "fake news:" Final report.	Digital, Culture, Media, and Sport Select Committee	2019	DCMSSC, 2019
	Regulating in a digital world	Communications Committee	2019	CC, 2019
	The resurrection of trust	Democracy and Digital Technology Committee	2020	DDTC, 2020
	Russia	Intelligence and Security Committee of Parliament	2020	ISC, 2020
Government Department	Protecting the debate: Intimidation, influence, and information: Government response	Cabinet Office	2019	CO, 2019
	Online harms white paper	Department for Digital, Culture, Media, and Sport	2019	DCMS, 2019
United States				
Actor type	**Report title**	**Publishing agency**	**Year**	**In-text citation**
Regulator	Proposed rulemaking on Internet ads	Federal Election Commission	2018	FEC, 2018
Legislative Committee	Russian active measure campaigns and interference in the 2016 US election	US Senate Select Committee on Intelligence	2018	SSCI, 2018
	The IRA and political polarization in the united states, 2015-2017	The Project on Computational Propaganda at the University of Oxford and Graphika, Commissioned by the US Senate Select Committee on Intelligence	2018	PCP, 2018
	The tactics and tropes of the Internet Research Agency	Yonder, Commissioned by the US Senate Select Committee on Intelligence	2018	Yonder, 2018
Government	Honest ads act	United States Senate	2019	Honest Ads Act, 2019
	Executive order on preventing online censorship	Executive Office of the President	2020	Executive Office of the President, 2020

As a note, we chose to include the Executive Order on Online Censorship even though it was widely considered to be political posturing rather than a serious attempt at reforming speech rules online (Wolfe, 2020). However, we believe that it is representative in terms of capturing the type of threats from digital technologies that the contemporary Republican party in the United States writ large has articulated, and thus must be accounted for in this study.

Further research is necessary to analyze whether our findings are illustrative of broader themes and tendencies in government and regulatory bodies beyond these limited cases. We focus on these two countries because the United States is where many leading platform companies are headquartered and, therefore, policymaking in this country is particularly important. At the same time, as detailed above, empirical research suggests that these two countries are facing similar democratic strains given shifting demographics and perceived threats to white political, cultural, social, and economic power (layered through with other forms of social differentiation and power, such as gender and class). These two countries were the sites of the high-profile elections that both laid bare these underlying dynamics and shifted much public and policy discourse. Although our focus does not allow us to make claims about the perception of threats in other democratic contexts, we believe that our approach to analyzing public policy discourse with an eye towards clarifying democratic values and what are fundamentally political issues made manifest on social media versus political problems *caused* by media and technological change is of utmost concern. Only by being clear about what policymakers *are* and *should be* solving for can we craft effective responses to the threats facing democracies around the world today.

Having collected our corpus, we conducted an inductive coding process that involved reading each report in full multiple times. Our initial intention in coding these documents was to examine the degree of consistency across reports. To do so, we first inductively identified key codes relating to different democratic goals. This initial coding process identified 13 democratic goods or goals[1] that appeared in texts in either case (Appendix B). We explored the degree to which different reports cited the same ideals and refined the concepts behind the 13 categories. Documents were primarily coded by authors with expertise in that country, but to ensure consistency we double-coded two US documents (Federal Election Commission [FEC], 2018; Honest Ads Act, 2019) and two UK documents (Information Commissioners' Office [ICO], 2018a; Election Commission [EC], 2018) from authors in different countries. There was agreement on primary themes, and minimal disagreement on minor themes within each document (e.g., there was only one line in ICO, 2018a, that was coded within "informed citizenry;" one coder captured that line and the other did not. Neither found any other references beyond that single line to informed citizenry within the document). Uncovering evidence of inconsistency in how the same ideal was articulated within the same or different reports, we revised our analytical focus and re-coded the documents (Appendix C). This process led us to refine our codes to six headings that capture discrete democratic goals,[2] and to highlight *different* understandings of the same ideal.

Second, we identified passages that *explicitly* sought to diagnose the threats technology posed. Using a combination of keyword searches (for democracy, democratic, threat) and hand-coding, we identified passages citing threats including foreign interference, misinformation, manipulation, decreased trust, monopolistic power online, hate speech, and polarization. Once again, we identified recurring themes within different reports and identified which of our six ideals was seen to be under threat.

It is important to highlight two features of our analysis. First, comparing interventions made by policymakers in the UK and US cases, we found important differences between these two cases. Although UK policy documents often included clear and detailed explications of democratic goals and perceived threats, such mentions were much less frequent in our US documents. Where relevant references were found, these tended to focus

on threats rather than ideals, demonstrating a significant mismatch between the two cases. In the analysis below, we acknowledge this unevenness by presenting quotations and examples primarily from the UK case. However, it is important to note that, for each of the categories we present, we did find at least some engagement with these ideas in both cases.

Second, within the documents examined, we found variation in the extent to which different ideals and threats were articulated. As our documents encompassed reports from regulators, legislators, and central government offices this variation is by no means surprising as we would expect different parts of the policy-making environment to place emphasis upon goals and threats that reflect their specific purposes. Offering our findings, we do not seek to highlight this kind of difference in emphasis. Instead, our analysis focuses upon examples of where potentially contradictory ideals are outlined within the entire corpus. We, therefore, treat our corpus as a unified whole when seeking to identify consistency and gaps, meaning that our findings highlight factors absent from all of our sources, rather than only one or two texts.

FINDINGS: POLICYMAKERS, DEMOCRACY, AND DIGITAL TECHNOLOGY

Democratic ideals and digital threats to democracy

When analyzing our selected policy-making documents, we identified six democratic ideals:

- Transparency
- Accountability
- Engagement
- Informed Public
- Social Solidarity
- Freedom of Expression

We discuss each in turn, highlighting how policy documents outline each ideal.

Of these six democratic ideals, policymakers conceptualize transparency and accountability consistently, with little or no internal conflicts and policy solutions that do not contradict one another. Social solidarity, engagement, and freedom of expression have fairly minor conflicts, mostly in different understandings of what levels of social solidarity and engagement are desirable (such as engagement in elections vs. broader engagement in politics). How policymakers conceive of an informed public, however, is deeply fraught. The varying understandings of an informed public and how digital technology threatens it lead to contradictory policy solutions, some of which may also undermine the policies solving for other threats. Even more, these understandings are at odds with what we know about people's political behavior.

Transparency

The idea of transparency is one of the most prominent themes in our analysis. At its most basic level, it conveys the idea that information should be freely available within a democratic society to enable scrutiny and accountability. Policy documents, therefore, spoke of the importance of improving "the fairness and transparency of our democracy" (EC, 2018, p. 1) and argued that "[f]or the public to trust individuals with power there must be

transparency" (Democracy and Digital Technology Committee [DDTC], p. 13). Reviewing references to this idea, we found some variation in why transparency was seen to be desirable that reflected each actors' particular objectives or goals. We found examples of policymakers outlining the importance of transparency for public debate (DDTC), citizens' knowledge (Digital, Culture, Media, and Sport [DCMS] Select Committee [DCMSSC]), political choice (EC), public trust (DDTC), and accountability (Communications Committee [CC]).

While differing in emphasis, we did not find policymakers advancing different understandings of this ideal. Instead, they appeared to promote the same vision of ideal practice: the availability of more information. It, therefore, appears that there is a widely held belief that democratic governance relies on open and accessible information environments, leading policymakers of all types to promote a common ideal.

Thinking specifically about the connection between this ideal and technology, our analysis revealed a widespread perception that digital media and platforms pose a specific threat to transparency by limiting the information available to the public. To take an indicative example from the United Kingdom, the ICO particularly articulated this concern, asserting that "[r]apid social and technological developments in the use of big data mean that there is limited knowledge of—or transparency around—the 'behind the scenes' data processing techniques" (2019b, p. 8). Such developments were seen to be problematic because "[w]ithout a high level of transparency and trust amongst citizens that their data is being used appropriately, we are at risk of developing a system of voter surveillance by default" (Ibid., pp. 8–9).

Although less directly spelled out, the same concerns were present in the US documents. The FEC sought "to promulgate a rule that in its text and interpretation recognizes the paramount importance of providing the public with the clearest disclosure of the payor or sponsor of these public communications on the Internet" (2018, p. 1). Similarly, the SSCI commissioned report "The IRA and political polarization in the united states, 2015-2017" stated that "Social media firms need to share valuable data about public life with the public" (PCP, 2018, p. 40), whereas the Honest Ads Act asserted a need for "meaningful action to ensure that laws and regulations provide the accountability and transparency that is fundamental to our democracy" (2019, p. 7).

Accountability

Related to transparency, but distinct from it, is the idea of democratic accountability. Broadly, this idea is captured in the belief that "[d]emocracy requires that those who hold power must be accountable for that power" (DDTC, 2020, p. 13). This idea was embedded throughout our texts and though discussed in different ways (i.e. in relation to elections or national security) the ideal was consistently articulated. We found widespread evidence of the belief that "processes must be in place to ensure individuals and organisations are held to account for their actions and policies" (CC, 2019, p. 3). As such, electoral integrity and free and fair elections were commonly emphasized in statements such as: "[t]he ultimate accountability mechanisms in a democracy are free and fair elections" (DDTC, 2020, p.13). This line of thinking was also evident in the United States where the Honest Ads Act argued that: "[f]ree and fair elections require both transparency and accountability…in order to make informed political choices and hold elected officials accountable" (2019, p. 7).

The connection between accountability and technology was frequently viewed in terms of threat. It was therefore argued that technology challenged existing systems of democratic accountability, with the Electoral Commission (EC) raising concerns about the implications of "new techniques for reaching voters" on "the integrity of elections and referendums"

(2018, p. 5). Beyond elections, we also found concerns about monopolistic platform power and the need to ensure the existence of checks and balances within the democratic system. The DCMS Select Committee, therefore, observed that "Facebook, in particular, is unwilling to be accountable to regulators around the world. The Government should consider the impact of such monopolies on the political world and on democracy" (2019, p. 42).

ENGAGEMENT

In policy documents, we found repeated support for the idea that citizens should be engaged in the democratic process and should undertake active participation. However, in contrast to the previous two ideals discussed above, we found evidence of potentially different accounts of this ideal with the potential to inform different (and potentially contradictory) policy prescriptions.

These tensions focused on the type of engagement that democracy required. In many texts, references to engagement were least controversially focused on election campaigns and voting. The EC asserted that "our starting point is that elections depend on participation," specifying a vision of engagement underpinned by the idea that "getting more voters to participate in election and referendum campaigns is good for those campaigns and for democracy itself" (2018, p. 5, 14).

Some policy documents, however, implied a wider vision of engagement, not confined to the electoral process. The DDTC argued that "democracy is enhanced through active citizens seeking to improve the society in which they live" and specifically mentioned the idea that citizens should engage in "meaningful conversation about the future shape of society" (2020, p. 13, 38). These calls for public debate were echoed by the Cabinet Office (CO), which argued that "[r]obust debate is fundamental in an open democracy," painting a vision of participation in which individuals were engaged in regular discussion with one another (2019, p. 5).

The significance of these differences becomes apparent when considering the perceived threat of digital technology and appropriate policy responses, as well as their normative basis. For those focused on electoral engagement, technology was seen to pose a particular threat to citizens' ability to exercise political choice without being "unduly influenced" (ICO, 2019a, p. 4) and was seen to violate privacy in ways that "could lead to disengagement with the political process" (ICO, 2019b, p. 12). Others focused on the internet's tendency to amplify "abuse and intimidation" towards candidates and voters and identified a need to tackle these challenges to the electoral process (DCMSSC, 2019, p. 5).

For those bodies focused on more expansive notions of engagement, the threat posed by technology was broader in nature and required the promotion of a different kind of ongoing engagement. In the US, for example, the Project on Computational Propaganda and Graphika (PCP) argued that "[s]ocial media *have gone* from being the natural infrastructure for sharing collective grievances and coordinating civic engagement, *to being* a computational tool for social control…" (2018, p. 40, emphasis added). The very infrastructure of digital technology was, therefore, seen to be in potential contradiction with the ideal of engagement, suggesting the need for significant technological reform. Similarly in the United Kingdom, the DDTC argued that it was democratically problematic that platforms "can, purposefully or not, change whose voice is heard" and "manipulate the flow of political debate," leading to proposals designed to "protect free and open debate online" (2020; p. 9; 6).

It is important to recognize that reforms can be prescribed at both levels, but we argue that tensions could conceivably emerge if these goals are pursued simultaneously. Although, for some, reforms focused on elections and electoral participation may be sufficient,

for others, a more fundamental form of change is required to promote engagement. Even more, as we contend in the discussion, things such as "sharing collective grievances" can also shade into "abuse and intimidation," making reforms potentially more problematic given that engagement can be directed toward antidemocratic ends.

Informed public

The ideal of an informed public suggests that citizens are informed members of a democratic society. Our analysis found different accounts of how this ideal was envisioned that have the potential to contradict, specifically revealing different notions of *why* citizens need to be informed and *what kinds of information* they should possess.

First, regarding why citizens need to be informed, we found some documents emphasizing information about elections, whereas others idealized a public broadly informed on all matters of public importance. A number suggested that "[i]t is a sign of a healthy democracy when campaigners tell voters about their policies and political views," and that "voters are better able to exercise their right to vote in a meaningful and informed way" (EC, 2018, p. 5; 4). These ideas suggested the need for citizens to understand electoral choices to play an active part in democracy. Other documents, however, looked beyond elections to suggest that information was required to ensure "informed debate" (CO, 2019, p. 5). These suggest potentially different foci for ideal practice that could lead to different prescriptions.

Second, we found different accounts of solutions to these problems, including what kind of information citizens need. A small number of texts advanced the idea that citizens should have "good" information and that misinformation undermined "thriving democratic debate" by reducing "faith in democracy, trust in politicians and people's drive to participate" (DDTC, 2020, p. 26; 16; see also DCMSSC, 2019, p. 5–6). Similarly, in the United States, The IRA, Social Media, and Polarization in the United States report calls out the spread of "junk political news and misinformation to voters across the political spectrum" on social media which seeks to "manipulate and deceive the voting public—and to undermine democracies and degrade public life" (PCP, 2018, p. 39). The report further states that "a strong democracy requires high-quality news from an independent media, a pluralistic climate of opinion, and the ability to negotiate public consensus," encoding a set of values of quality, independent information sources, pluralism, and consensus-building (PCP, 2018, p. 39).

In other documents, we found an emphasis placed on a set of skills required by citizens to be able to navigate the information landscape (DCMSSC, 2019, p. 85; DDTC, 2020, p. 107; DCMS, 2019, p. 89). Such statements suggest the importance of "civic competencies" and place emphasis not on preventing bad information, but on equipping citizens with the skills necessary to discriminate between information sources.

The DDTC, for example, sees the threat of digital technology as associated with its impact on expectations of citizens, calling for "a new, digital imperative on existing debates around civic education" (DDTC, 2020, p. 17.). The DCMS Committee argued that the Internet poses particular challenges to citizens' understanding because "[i]t is hard to differentiate on social media between content that is true, that is misleading, or that is false, especially when those messages are targeted at an individual level" (2019, p. 85).

These two accounts (bad information vs. civic competencies) present different visions of citizens and how information should be structured within democracies and different calls to action. When looking at the threats these documents diagnose, we see different types of concerns and calls for action.

Although it is not impossible to pursue reforms that focus on informing citizens about electoral and nonelectoral matters, and that seek to mitigate bad information and equip citizens with critical literacy skills themselves, there is also potential for these ideals to stand

at tension because they advance subtly different ideas about citizens' role in the democratic process and their required competencies. Even more, some more expansive visions require structural changes in the public sphere, such as promoting the public's right to hear high-quality news and pluralistic opinion, whereas others would require better information or combatting misinformation.

Social solidarity

The ideal of social solidarity is a desire for an inclusive democratic practice where there are strong communal bonds and engagement among diverse communities, a contrast to political polarization and social division.

Within our documents, we encountered the idea that, for some bodies, democracy required constructive engagement between people with diverse views. Although this is related to the idea of an informed public detailed above, we address it separately here because we see the underlying concern as fragmentation. For example, there was the idea that "[i]n a democracy, we need to experience a plurality of voices and, critically, to have the skills, experience, and knowledge to gauge the veracity of those voices" (DCMSSC, 2019, p. 6). This focus is on encountering different ideas and critically evaluating them. From a solidarity perspective, there is a concern that such things as echo chambers undermine democratic solidarity. The ICO, therefore, reflected on a particular threat posed by technology whereby:

> Messages are often received in an "echo chamber" online, where voters may not hear the other side of the argument. Voters may not understand why they are receiving particular messages, or the provenance of the messages. (2019b, pp. 10–11)

Somewhat differently, social solidarity was articulated in calls for "an inclusive debate" (DDTC, 2020, p. 13). This accorded with the idea that "tolerance of conflicting views and ideas are core facets of our democracy" (DCMS, 2020, p. 24). In practice, this meant that "different voices, views, and opinions" should be able to "freely and peacefully contribute to public discourse" with harmful behavior discouraged (DCMS, 2019, p. 22, 6). This is not simply confined to elections but spans a potentially ongoing process of democratic engagement.

Noting these nuanced differences, we found considerable attention given to the threat digital technology poses to social solidarity. In the United Kingdom, the DCMS select committee argued:

> We have always experienced propaganda and politically aligned bias, which purports to be news, but this activity has taken on new forms and has been hugely magnified by information technology and the ubiquity of social media… This has a polarising effect and reduces the common ground on which reasoned debate, based on objective facts, can take place. (2019, p. 5)

Similarly, in the United States, the Honest Ads Act argued that social media are enabling political advertisements that are "racially or socially Inflammatory," serving to polarize and create animosity among different communities. Other US documents raised the concern of polarization not through technological bubbles (i.e., the echo chambers that have little empirical support, *see* Guess et al., 2018), but from strategic messages made possible through digital media that are designed to inflame and incite animus among political and

social groups, such as "encouraging extreme right-wing voters to be more confrontational" (PCP, 2020, p.3).

Freedom of expression

Finally, there was a desire to promote freedom of expression, suggesting the need for people to be able to express their views and opinions without undue restrictions or constraints. It was common for UK policymakers to assert that "openness should be an essential quality of the Internet and we believe that it should be a fundamental principle for regulation (including self-regulation). This is vital as the Internet enables users to engage with democratic debate and exercise their rights to freedom of expression and information" (CC, 2019, p. 44). In contrast to many of the values above, policy documents focused not on promoting a certain form of free expression, but rather protecting this value from being eroded. We did not, therefore, find evidence of contradictory understandings of this idea, but we did find variations in policymakers' understanding of how this value should be balanced alongside the other concerns identified above.

Within the United Kingdom, we found freedom of expression commonly discussed as one value that needed to be considered alongside many other concerns—a balancing approach. For the Communication Committee, the principle of "[r]espect for human rights and equality: to safeguard the freedoms of expression and information online" (CC, 2019, p. 4) was therefore presented as one of 10 values alongside ideas such as transparency, education, and privacy. Similarly, the Online Harms White paper outlined a vision with eight goals, including freedom of expression alongside others (DCMS, 2019, p. 6). The precise way in which policymakers aimed to reconcile these potentially contradictory goals was, however, unspecified, making it unclear how exactly these values will be reconciled.

In the United States, there was a different approach to freedom of expression that elevated it above other ideals. Discussing regulation, the FEC highlighted the concern that interventions would create a "burden on political speech" (2018, p. 2). Similarly, the Trump administration argued that social media firms' "censorship" (meaning removal of content or labeling of content) chills free expression and limits information, asserting: "…we cannot allow a limited number of online platforms to handpick the speech that Americans may access and convey on the Internet. When large, powerful social media companies censor opinions with which they disagree, they exercise a dangerous power" (The White House, 2020, p. 1).

The threat posed by digital technology also differed in our two cases. In the United Kingdom, policymakers asserted that "[a]s the Internet plays a greater role in private and public life, human rights, including the rights of freedom of expression and freedom of information, need to be protected online" (CC, 2019, p. 18). From this perspective regulators needed to balance freedom of expression against other values, such as safety and equality. Although there was a concern that "platforms' decisions about what content they remove or stop promoting through their algorithms set the de facto limits of free expression online" (DDTC, 2020, p. 6–7), there was also the acknowledged need to protect safety. In the United States, there was simultaneously the primacy of freedom of expression which required limited governmental intervention, while also ironically a critique of private companies asserting *their* freedom of expression in moderating content on their platforms in ways that might "censor" political views. As such, in the US case, the policy implications of the value of freedom of expression are simply unclear and deeply contested (*see* Klonick, 2017; Kosseff, 2019).

DISCUSSION

Since 2016, research in the United Kingdom and the United States has shifted to emphasize the democratic ills of technology. As this article demonstrates, policy-making discourse reflects this emphasis and often encodes democratic values in ways that are not always clear. This manifests a growing divergence from empirical studies on the drivers of democratic issues. At the same time, there are important differences between the two countries.

To start, our analysis shows interesting differences in how policymakers in the United Kingdom and the United States talk about the impact of technology on democracy. Although the idea of technological "threats" is often raised, it is primarily in the UK case that we find policymakers clearly articulating the democratic values they are seeking to promote—beyond freedom of expression in the US case. To develop our analysis, we turn to discuss the degree of consistency within policy-making discourse, asking what policymakers are solving for and whether their approach is likely to result in successful regulation from the perspective of strengthening democracy. Considering these questions, we highlight three broad themes that spotlight:

1. Inconsistencies in how specific values are understood and promoted;
2. Tensions between different values; and,
3. A lack of congruence between ideal practices and empirical insights on how democracy works in practice.

To start, the analysis above demonstrated important variations in how certain democratic ideals and objectives are understood. Although there was a degree of consistency in how the values of transparency and accountability were depicted, there were different depictions of social solidarity, engagement, freedom of expression, and informed public. In particular, the latter value revealed different understandings of why citizens needed to be informed, what kinds of information they should possess, and what structural media conditions should supply it. At the core of these different ideas lie seemingly different assumptions about the role of citizens within a democracy (i.e., voting and/or debating) and their competencies (consuming good quality information or navigating public life or complex information landscapes). Importantly these inconsistencies are found not only across *different* documents (suggesting the presence of different visions among different actors with varying amounts of power) but also *within* single documents. Although there is potential for these ideas to be reconciled (citizens can after all both vote and take part in debate) at present it is not clear how different objectives fit together, whether policymakers are promoting a consistent and compatible vision of democratic politics, which principles should prevail, and accordingly what regulatory priorities should be.

We also identify similar challenges arising *between* values. As discussed above in isolation, there are clear connections between these different principles and potential challenges arising from the simultaneous pursuit of these ideals. In relation to freedom of expression, for example, with the United Kingdom, there is evidence of a tension between this principle and desires for social solidarity and "an inclusive debate" in which harmful behavior is discouraged (DDTC, 2020, p. 13). Similarly, there is potential dissonance between freedom of expression and a desire for good quality information that informs citizens, as individuals could (and frequently do) claim the right to promote views that are not accurate or attempt to deliberately mislead. Indeed, a vast amount of empirical evidence suggests this is precisely the case, especially in the context of how political actors use disinformation strategically for political gain, or voters share information to signal and strengthen social affiliations, not inform or persuade (Freelon et al., 2020; Polletta & Callahan, 2019).

At present, policy documents engage with these potential tensions to a limited extent, tending instead to outline lists of values that are presented as informative but often

contradictory. This approach allows for considerable ambiguity about how such tensions are to be resolved, opening the door for potentially different interpretations of what desirable democratic practice looks like. It could, for example, be that policymakers in one part of government prioritize the mitigation of harm when determining policy and, as such, move to curtail certain forms of expression online, whereas others prioritize freedom of expression and hence rebuff attempts at regulation, in the process increasing the likelihood of disinformation and harms. Although we recognize the varying capacity of these actors to enact their visions, these findings point to the potential for policymakers to operationalize ideals in different ways, creating potentially contradictory responses if common understandings and priorities are not developed and ascribed to across policy-making domains. Although further study of a larger corpus and other democratic contexts would be necessary to test and extend these insights, we argue that these initial findings are important.

The implications of our initial analysis suggest that there may be ambiguities in what policymakers are solving, a point that has consequences for determining regulatory responses as it may lead to inconsistent interventions. And yet, this is not the only challenge we discern within our analysis. In highlighting different visions of democracy, our analysis has shown policymakers to often be promoting utopian conceptions of citizen behavior that existing empirical research suggests do not reflect actual practice. For those idealizing an informed citizenry and electoral participation, there is little recognition that even before the social media era many citizens failed to vote and lacked the time or inclination to become informed on arcane political matters (Achen & Bartels, 2017). Similarly, there is minimal recognition that citizens are often uninformed and that they rely on heuristics, such as identity cues, rather than 'good information' when they exercise political choice (see Bernhard & Freeder, 2020). Those pointing to the importance of political debate often do not recognize that debate is often uncivil (Sydnor, 2019), and occurs for idiosyncratic reasons (as opposed to between knowledgeable and politically similar discussants (Minozzi et al., 2020)). Discussions of engagement and cross-cutting exposure to political views often overlook evidence that it can lead to polarization when citizens have competing goals, identities (Bail, 2021; Finkel et al., 2020), and values (Tappin & McCay, 2019). Even more, engagement, like expression, can have expressly anti-democratic ends (Miller-Idriss, 2019). In essence, discussions of desirable practice in the online world that appear to be divorced from the empirical realities of the offline world.

This raises a larger question about the democratic expectations policy-makers place on digital media and the degree to which technology is seen to undermine ideals that empirical evidence suggests have not been thriving long before digital technology came along. Our point here is not to condemn policymakers for striving to promote utopian democratic ideals, but rather to question the extent to which digital technology is seen as the driver of trends that have deeper, more longstanding, and social and institutional roots. As Jungherr and Schroeder's study of disinformation argued, and which our own study supports, there appears to be a danger that a focus on digital threats shifts attention away from "deeper drivers of social change and thereby obscures the actual reasons for the contemporary sense of epistemic crisis" (2021, p. 2). And, to the extent that resources and thinking are directed away from these deeper causes, it means that countries are not solving for underlying social inequalities that fuel rising extremism and undemocratic actions—which receive scant mention in any of these documents.

Finally, we will add that although there has been greater attention to the growing threat of right-wing extremism over the past year in the United States, especially after the January 6th attempted coup at the US Capitol, policy-making responses are still consumed by assumptions of clear and present technological threats to democracy. This is evidenced by the *25* separate bills to reform Section 230 of the Communications Decency Act introduced in March 2020 to solve various issues ranging from "dangerous algorithms" and disinformation to online censorship (Jeevanjee et al., 2021), bills that themselves reveal fundamental tensions between things such as freedom of expression and informed citizens.

CONCLUSION

In the end, it is clear there is a need for policymakers on both sides of the Atlantic to more concertedly consider the relationship between democracy and technology. As our case studies show, there has been a flurry of interest in this topic and, in the United Kingdom in particular, there is a desire to enact regulation to "set the global standard for a risk-based, proportionate regulatory framework" (DCMS, 2020, p. 4). Although our analysis has demonstrated there to be a degree of consistency in the values and ideals that policymakers are promoting and seeking to protect, we have also revealed areas of inconsistency and tension that, if left unresolved, have the potential to result in regulatory complexities. In addition, there is a concerning degree to which the realities of democratic life often lack congruence with high-minded democratic ideals. This means that, at best, policy interventions might be ineffective at solving the democratic ills they are designed for; at worst, they might make them worse. For this reason, we argue there is a need for policymakers, particularly in the United States, but also in the United Kingdom, to think about their visions for democracy and its realities in more detail. This entails determining what they are solving for and why and ensuring that a common or, at the very least, a compatible set of ideals are advanced by actors across the policy-making landscape. It also suggests a need to review desires against empirical realities, and to reflect on whether new (and potentially unrealizable standards) are being set for the online world.

ENDNOTES

[1]The initial codes identified were: Procedural fairness; Accountability; Transparency; Active Participation; Informed Citizenry; Anti-Dis- or Misinformation or deception; Anti-Polarization; Freedom of Expression; National Sovereignty (i.e., anti-foreign Interference); Protecting Privacy; Trust and Confidence; Preventing harm; Economic prosperity and opportunity.

[2]Our six final codes are: Transparency; Accountability; Engagement; Informed Public; Social Solidarity; Freedom of Expression.

ORCID

Bridget Barrett http://orcid.org/0000-0002-4446-0135
Katharine Dommett http://orcid.org/0000-0003-0624-6610
Daniel Kreiss http://orcid.org/0000-0003-2533-195X

REFERENCES

Achen, C., & Bartels, L. (2017). *Democracy for realists: Why elections do not produce responsive government*. Princeton University Press.

Bail, C. (2021). *Breaking the social media prism*. Princeton University Press.

Bernhard, R., & Freeder, S. (2020). The more you know: Voter heuristics and the information search. *Political Behavior*, *42*(2), 603–623.

Carlson, M., Robinson, S., & Lewis, S. (2021). *News after trump: Journalism's crisis of relevance in a changed media culture*. Oxford University Press.

Crick, B. (2002). *Democracy: A very short introduction*. Oxford University Press.

Dahlberg, L. (2011). Re-constructing digital democracy: An outline of four 'Positions'. *New Media and Society*, *13*(6), 187–207.

Diamond, L. (2019). The road to digital unfreedom: The threat of postmodern totalitarianism. *Journal of Democracy*, *30*(1), 20–24.

Dommett, K. (2020). Regulating digital campaigning: The need for precision in calls for transparency. *Policy and Internet*, *12*(4), 432–449.

Eyal, G. (2019). *The crisis of expertise*. John Wiley & Sons.

Finkel, E. J., Bail, C. A., Cikara, M., Ditto, P. H., Iyengar, S., Klar, S., Mason, L., McGrath, M. C., Nyhan, B., Rand, D. G., & Skitka, L. J. (2020). Political sectarianism in America. *Science*, *370*(6516), 533–536.

Freelon, D., Marwick, A., & Kreiss, D. (2020). False equivalencies: Online activism from left to right. *Science*, *369*(6508), 1197–1201.

Freelon, D., & Wells, C. (2020). Disinformation as political communication. *Political Communication*, *37*(2), 145–156.
Gest, J. (2016). *The new minority: White working class politics in an age of immigration and inequality*. Oxford University Press.
Guess, A. M., Barberá, P., Munzert, S., & Yang, J. H. (2021). The consequences of partisan media. *Proceedings of the National Academy of Sciences*, *118*(14), e2013464118. https://doi.org/10.1073/pnas.2013464118
Guess, A. M., Nyhan, B., Lyons, B., & Reifler, J. (2018). *Avoiding the echo chamber about echo chambers* [White paper]. Knight Foundation. https://kf-site-production.s3.amazonaws.com/media_elements/files/000/000/133/original/Topos_KF_White-Paper_Nyhan_V1.pdf
Hindman, M. (2008). *The myth of digital democracy*. Princeton University Press.
Jackson, S. J., Bailey, M., & Welles, B. F. (2020). *#HashtagActivism: Networks of race and gender justice*. MIT Press.
Jamieson, K. H. (2020). *Cyberwar: How Russian hackers and trolls helped elect a president: What we don't, can't, and do know*. Oxford University Press.
Jardina, A. (2019). *White identity politics*. Cambridge University Press.
Jeevanjee, K., Lim, B., Ly, I., Perault, M., Ruddock, J., Schmeling, T., Vattikonda, N., & Zhou, J., (2021, March 23). *All the ways Congress wants to change Section 230*. Slate. https://slate.com/technology/2021/03/section-230-reform-legislative-tracker.html
Jungherr, A., & Schroeder, R. (2021). *Disinformation and the structural transformations of the public arena: Addressing the actual challenges to democracy*. Social Media+Society. https://doi.org/10.1177/2056305121988928
Karppinen, K. (2013). Uses of democratic theory in media and communication studies. *Observatorio (OBS*)*, *7*, 1–17.
King, J. (2018, July 8). Democracy is under threat from the malicious use of technology. The EU is fighting back. The Guardian. https://www.theguardian.com/commentisfree/2018/jul/28/democracy-threatened-malicious-technology-eu-fighting-back
Klonick, K. (2017). The new governors: The people, rules, and processes governing online speech. *Harvard Law Reviews*, *131*, 1598.
Kosseff, J. (2019). First amendment protection for online platforms. *Computer Law & Security Review*, *35*(5), 105340.
Kreiss, D. (2021). Social media and democracy: The state of the field, prospects for reform. *The International Journal of Press/Politics*, *26*(2), 505–512. https://doi.org/10.1177/1940161220985078
Kuehn, K., & Salter, L. (2020). Assessing digital threats to democracy, and workable solutions: A review of the recent literature. *International Journal of Communication*, *14*(22) https://ijoc.org/index.php/ijoc/article/view/12959/3082
Margolis, M., & Resnick, D. (2000). *Politics as usual: The cyberspace "revolution"*. Sage Publications.
McKay, S., & Tenove, C. (2020). Disinformation as a threat to deliberative democracy. *Political Research Quarterly*, *74*(3), 703–717. https://doi.org/10.1177/1065912920938143
Mejia, R., Beckermann, K., & Sullivan, C. (2018). White lies: A racial history of the (post) truth. *Communication and Critical/Cultural Studies*, *15*(2), 109–126.
Miller-Idriss, C. (2019). The global dimensions of populist nationalism. *The International Spectator*, *54*(2), 17–34.
Minozzi, W., Song, H., Lazer, D. M., Neblo, M. A., & Ognyanova, K. (2020). The incidental pundit: Who talks politics with whom, and why? *American Journal of Political Science*, *64*(1), 135–151.
Moore, M. (2018). *Democracy hacked: Political turmoil and information warfare in the digital age*. OneWorld Publications.
Mutz, D. C. (2018). Status threat, not economic hardship, explains the 2016 presidential vote. *Proceedings of the National Academy of Sciences*, *115*(19), E4330–E4339.
Persily, N. (2017). Can democracy survive the Internet? *Journal of Democracy*, *28*(2), 63–76.
Pfetsch, B. (2018). Dissonant and disconnected public spheres as challenge for political communication research. *Javnost: The Public*, *25*(1–2), 59–65.
Polletta, F., & Callahan, J. (2019). Deep stories, nostalgia narratives, and fake news: Storytelling in the Trump era. *Politics of meaning/meaning of politics* (pp. 55–73). Palgrave Macmillan.
Sartori, G. (1987). *The theory of democracy revisited (2 vols)*. Chatham House.
Sclove, R. (1998). *Technology and democracy*. The Guilford Press.
Sides, J., Tesler, M., & Vavreck, L. (2018). *Identity crisis*. Princeton University Press.
Sobolewska, M., & Ford, R. (2020). *Brexitland: Identity, diversity and the reshaping of British politics*. Cambridge University Press.
Stone, D. A. (1989). Causal stories and the formation of policy agendas. *Political Science Quarterly*, *104*(2), 281–300.
Sydnor, E. (2019). *Disrespectful democracy: The psychology of political incivility*. Columbia University Press.
Tappin Ben, M., & McKay Ryan, T. (2019). Investigating the relationship between self-perceived moral superiority and moral behavior using economic games. *Social Psychological and Personality Science*, *10*(2), 135–143. http://doi.org/10.1177/1948550617750736

Tenove, C. (2020). Protecting democracy from disinformation: Normative threats and policy responses. *The International Journal of Press/Politics*, *25*(3), 517–537.

Wolfe, J. (2020, May 28). Trump's order taking aim at Twitter is "bluster": Legal experts. *Reuters*. https://www.reuters.com/article/us-twitter-trump-executive-order-analysi-idUSKBN234361

Zuiderveen Borgesius, F., Möller, J., Kruikemeier, S., Fathaigh, Ó., Irion, R., Dobber, K., Bodo, T., B., & de Vreese, C. (2018). Online political microtargeting: Promises and threats for democracy. *Utrecht Law Review*, *14*(1), 82.

How to cite this article: Barrett, B., Dommett, K., & Kreiss, D. (2021). The capricious relationship between technology and democracy: Analysing public policy discussions in the UK and US. *Policy Internet*, 1–22. https://doi.org/10.1002/poi3.266

APPENDIX A

Documents examined for UK case:

Regulators

- Electoral Commission. (2018). *Digital Campaigning—Increasing Transparency for Voters,* London: Stationary Office. https://www.electoralcommission.org.uk/__data/assets/pdf_file/0010/244594/Digital-campaigning-improving-transparency-for-voters.pdf
- Information Commissioners' Office. (2018, November). Investigation into the use of data analytics in political campaigns. London: Stationary Office. https://ico.org.uk/media/action-weve-taken/2260271/investigation-into-the-use-of-data-analytics-in-political-campaigns-final-20181105.pdf
- Information Commissioners' Office. (2018). *Democracy disrupted? Personal information and political influence*. London: Stationary Office. https://ico.org.uk/media/action-weve-taken/2259369/democracy-disrupted-110718.pdf

Parliament

- Digital, Culture, Media and Sport Select Committee. (2019). *Disinformation and 'fake news': Final Report:* Fifth Report of Session 2017–19. London: Stationary Office. https://publications.parliament.uk/pa/cm201719/cmselect/cmcumeds/1791/1791.pdf
- Democracy and Digital Technology Committee 'The Resurrection of Trust.' https://committees.parliament.uk/publications/1634/documents/17731/default/
- Intelligence and Security Committee of Parliament—Intelligence and Security Committee of Parliament. https://docs.google.com/a/independent.gov.uk/viewer?a=v%26pid=sites%26srcid=aW5kZXBlbmRlbnQuZ292LnVrfGlzY3xneDo1Y2RhMGEyN2Y3NjM0OWFl
- Digital Communications Committee. (2019). Regulating in a Digital World. https://publications.parliament.uk/pa/ld201719/ldselect/ldcomuni/299/299.pdf

Government

- Cabinet Office. (2019). *Protecting the Debate: Intimidation, Influence and Information: Government Response*. London: Stationary Office. https://www.gov.uk/government/consultations/protecting-the-debate-intimidation-influence-and-information
- DCMS. (2019). *Online Harms White Paper*. London: Stationary Office. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/793360/Online_Harms_White_Paper.pdf

Documents examined for the US case:

Regulators

- Executive Office of the President. E.O. 13925 of May 28, 2020. Preventing online censorship. https://www.federalregister.gov/documents/2020/06/02/2020-12030/preventing-online-censorship
- 116th United States Congress. 2019–2020. S. 1356—Honest Ads Act. https://www.congress.gov/bill/116th-congress/senate-bill/1356/text
- Federal Election Commission. (2018). 83 FR 12864. Notice of proposed rulemaking: Internet Communication Disclaimers and Definition of "Public Communication." https://sers.fec.gov/fosers/rulemaking.htm?pid=74739

Senate reports

- Senate Intelligence (Select) Committee. S. Rpt. 116–290. Russian Active Measures Campaigns and Interference in the 2016 US election. https://www.intelligence.senate.gov/sites/default/files/documents/report_volume5.pdf
- Yonder (previously New Knowledge). (2018). The Tactics and Tropes of the Internet Research Agency. Independent report commissioned by the US Senate Select Committee on Intelligence. https://www.yonder-ai.com/resources/the-disinformation-report/
- *The IRA and Political Polarization in the United States, 2015–2017. (2018). The Project on Computational Propaganda and Graphika*. Independent report commissioned by the US Senate Select Committee on Intelligence. https://comprop.oii.ox.ac.uk/research/posts/the-ira-and-political-polarization-in-the-united-states/

APPENDIX B: Initial coding framework developed through inductive analysis

Code	Description	Examples
Procedural Fairness	A concern with fair process and the rule of a democracy that is "free and fair elections"	*The Electoral Commission oversees the delivery of elections and is the regulator of political finance in the UK. We work to ensure that parties and campaigners understand and comply with the laws about elections. We investigate where offences may have been committed. We also make recommendations about how to improve the fairness and transparency of our democracy*
Accountability	Often linked to transparency, but can be evoked as a separate ideal. Speaks to the idea that there should be processes for holding powerful actors to account. Evident in passages calling for sanctions and mechanisms for disincentivizing poor practice.	*We are worried that a maximum fine of £20,000 risks becoming a cost of doing business for some campaigners. This penalty does not provide an effective deterrent to stop campaigners committing offences* *Technology is not a force of nature. Online platforms are not inherently ungovernable. They can and should be bound by the same restraints that we apply to the rest of society*

(Continues)

Code	Description	Examples
Transparency	Information being visible or available—either to regulators or the public.	*Parliamentarians, journalists, civil society and citizens have woken up to the fact that transparency is the cornerstone of democracy*
Active Participation	Citizens being active in a democracy. Focus on participation and political engagement	*Democracy is enhanced through active citizens seeking to improve the society in which they live. In Chapter 7, we look at how education can empower citizens to make a difference to their lives in a digital world'* *On digital campaigning, our starting point is that elections depend on participation*
Informed Citizenry	Citizens educated/informed about how things work. They are provided with information and are able to make informed choices. There is a link to concern here about mis/disinformation, but this code captures positive examples of having information as opposed to deception/misinformation captured in another code.	*This is a complex and rapidly evolving area of activity, and the level of awareness amongst the public about how data analytics works and how their personal information is collected, shared and used through such tools is low* *Citizens can only make truly informed choices about who to vote for if they are sure that those decisions have not been unduly influenced*
Anti-dis- or -misinformation	Tied to "informed citizenry," but focuses more explicitly on the need to counter di-s and misinformation and the threat of misleading information.	*More recently we have seen serious allegations of misinformation, misuse of personal data, and overseas interference. Concerns that our democracy may be under threat have emerged* *While the Internet has brought many freedoms across the world and an unprecedented ability to communicate, it also carries the insidious ability to distort, to mislead and to produce hatred and instability.*
Anti-polarization	The Internet can lead to fragmentation and polarization. Citizens need to encounter a diverse range of voices and perspectives so polarization is bad. Filter bubbles, segmented messaging (and microtargeting) are often seen to be bad.	*The tolerance of conflicting views and ideas are core facets of our democracy* *We can also further improve our democracy by using technology specially designed to foster an inclusive debate*
Freedom of Expression	Citizens have the freedom to express their ideas without interference. Free expression or free speech.	*Our vision is for…Freedom of expression online.* *This abuse is unacceptable—it goes beyond free speech and free debate, dissuades good people from going into public life, and corrodes the values on which our democracy rests*

(Continues)

Code	Description	Examples
National Sovereignty (i.e., antiforeign interference)	National sovereignty key. Foreign interference should not be allowed. Self-determination paramount. Often explicit mentions of Russia as a source of disinformation	*GCHQ assesses that Russia is a highly capable cyber actor with a proven capability to carry out operations which can deliver a range of impacts across any sector* *Our vision is for…An online environment where companies take effective steps to keep their users safe, and where criminal, terrorist and hostile foreign state activity is not left to contaminate the online space*
Protecting Privacy	Often linked to data rights. Primacy of individual or group privacy. Desire to protect individual privacy and to promote privacy-preserving practices among actors within a democracy (e.g., parties). Concerns about data misuse	*We have uncovered a disturbing disregard for voters' personal privacy. Social media platforms, political parties, data brokers and credit reference agencies have started to question their own processes—sending ripples through the big data eco-system'*
Trust and Confidence	Trust and confidence are seen as key to democratic engagement	*we believe that the digital economy urgently needs a new regulatory framework to improve our citizens' safety online. This will rebuild public confidence and set clear expectations of companies, allowing our citizens to enjoy more safely the benefits that online services offer* *Developing a culture of transparency, trust and accountability will be a critical element of the new regulatory framework*
Preventing Harm	Harm is defined in many forms seen to have a negative impact on society. Often linked to abuse online, bullying, or other forms of crime enabled by the Internet. Linked to online safety and illegal content	*This Government is committed to ensuring that everyone—candidates, campaigners and voters—can participate in our democracy free from abuse and intimidation* *There are widespread concerns about the role of social media in spreading hate and societal dissonance in spite of services' community standards forbidding hate speech*.
Economic Prosperity and Opportunity	Digital is seen to be valuable for economic prosperity but also seen to threaten the economy if not handled properly.	*The Internet has transformed and disrupted economies thanks to rapid innovation enabled by light-touch regulation and a corporate culture which espoused the mantra "move fast and break things"*

APPENDIX C: Final coding framework

Code	Description	Example
Transparency	Information being visible or available—either to regulators or the public.	*Without a high level of transparency and trust amongst citizens that their data is being used appropriately, we are at risk of developing a system of voter surveillance by default*.
Accountability	Often linked to transparency, but can be evoked as a separate ideal. Speaks to the idea that there should be processes for holding powerful actors to account. Evident in passages calling for sanctions and mechanisms for disincentivizing poor practice.	*Democracy requires that those who hold power must be accountable for that power*.
Engagement	Citizens being engaged in democracy. Often linked to the idea of active participation, but can be evident in more passive forms of citizen attention and awareness.	*Democracy is enhanced through active citizens seeking to improve the society in which they live*.
Informed Public	Citizens educated/informed about how things work and who messages are from. They are provided with information and are able to make informed choices. Mis/disinformation seen to undermine this objective.	*It is a sign of a healthy democracy when campaigners tell voters about their policies and political views*.
Social Solidarity	Citizens are not isolated individuals but encounter a diverse range of voices and perspectives. Emphasis on community and social ties. In contrast to fragmentation and polarization. Focus on the minimization of harm.	*Messages are often received in an 'echo chamber' online, where voters may not hear the other side of the argument. Voters may not understand why they are receiving particular messages or the provenance of the messages*.
Freedom of Expression	Citizens have the freedom to express their ideas without interference. Free expression or free speech.	*Respect for human rights and equality: to safeguard the freedoms of expression and information online*.