

Disinformation and the Structural Transformations of the Public Arena: Addressing the Actual Challenges to Democracy

Social Media + Society
January-March 2021: 1–13
© The Author(s) 2021
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/2056305121988928
journals.sagepub.com/home/sms

Andreas Jungherr¹ and Ralph Schroeder²

Abstract

Current debate is dominated by fears of the threats of digital technology for democracy. One typical example is the perceived threats of malicious actors promoting disinformation through digital channels to sow confusion and exacerbate political divisions. The prominence of the threat of digital disinformation in the public imagination, however, is not supported by empirical findings which instead indicate that disinformation is a limited problem with limited reach among the public. Its prominence in public discourse is instead best understood as a “moral panic.” In this article, we argue that we should shift attention from these evocative but empirically marginal phenomena of deviance connected with digital media toward the structural transformations that give rise to these fears, namely those that have impacted information flows and attention allocation in the public arena. This account centers on structural transformations of the public arena and associated new challenges, especially in relation to gatekeepers, old and new. How the public arena serves actually existing democracy will not be addressed by focusing on disinformation, but rather by addressing structural transformations and the new challenges that arise from these.

Keywords

public arena, journalism, gatekeepers, social structures, disinformation

Open a newspaper, check your newsfeed, discuss politics with friends or colleagues, and you will come away with no uncertain feeling that democracy is in crisis. This crisis has been tied to the increasing role of digital technology in politics. Criticisms have focused on the role of malicious actors in promoting disinformation through digital channels to sow confusion and exacerbate political divisions. This prominence of digital disinformation in the public imagination is not, however, supported by empirical findings which instead indicate that disinformation is a limited problem with limited reach among the public (Allen et al., 2020; Grinberg et al., 2019; Nyhan, 2020). Its prominence in public discourse, we argue, is instead best understood as a “moral panic” (Goode & Ben-Yehuda, 2009), suggesting that ill-understood deeper structural shifts are under way that give rise to unfocused fears. These fears about the detrimental impact of digital media on democracy—such as disinformation, filter bubbles, or the role of bots—have dominated public, academic, and regulatory debates. In this article, we argue that we have to shift attention from these evocative but empirically marginal phenomena toward the structural transformations that give

rise to these fears, namely those that have impacted information flows and attention allocation in the public arena.

These structural shifts have come about mainly because of digital media (Jungherr et al., 2020), economic pressures on traditional media organizations (Nielsen, 2012), the “hollowing” out (Mair, 2013) of traditional political organizations in Western democracies, and the reconfiguration of attention allocation and information flows (Schroeder, 2018). These shifts have partly been recognized but they are ill understood, and they have not been analyzed systematically. To understand the actually existing problems of the contemporary public arena and the role of digital media in democracy, we need to address the underlying structural changes (see also Bennett & Livingston, 2018; Bennett & Pfetsch,

¹Friedrich Schiller University Jena, Germany

²University of Oxford, UK

Corresponding Author:

Andreas Jungherr, Department of Communication, Friedrich Schiller University Jena, Ernst-Abbe-Platz 8, 07743 Jena, Germany.
Email: andreas.jungherr@gmail.com



2018). Only this will allow us to identify and evaluate how actors and contestation in the public arena can be understood to address the detrimental influences of digital technology on democracy and realize its beneficial potential. We argue that the current domineering prominence of disinformation as a topic of public concern and academic attention shifts attention away from these deeper drivers of social change and thereby obscures the actual reasons for the contemporary sense of epistemic crisis and stops journalists, regulators, and the public from addressing them productively.

The public arena plays an indispensable role in democracies: it structures collective attention, defines the political agenda, and mediates between citizens and political elites. We use “public arena” instead of Habermas’ (1989) “public sphere” to indicate that this mediated public includes not only consensus but conflict as well (Fraser, 1990; Schroeder, 2018). Structural changes in the public arena primarily concern information flows and the allocation of attention and include the degree to which gatekeepers are able to introduce and exclude information. Digital media have become powerful conduits of political information to large audiences irrespective of their source and attention is no longer only shaped by the authority or popularity of a source but can be influenced through targeted ad buys and patterns optimized for interaction and sharing. Moreover, publics can now make their voices heard when they circumvent selection decisions by news media or political actors and surface voices hitherto not visible in the gatekept public arena. These changes have positive consequences insofar as they contribute to greater pluralism in the public arena, but also negative ones inasmuch as they may detract from an inclusive and balanced mediated agenda that reflects society’s diverse political interests—in favor of an unruly and distorted one. These changes are significant and have to be subject of a broad and systematic research effort that is not distracted by the moral panic du jour.

This analysis leads to concerns and interventions different from those that focus on curbing obviously detrimental and deviant aspects of contemporary public arenas, such as disinformation (namely, fact checking, preemptive moderation, or additional regulations for digital platforms). We believe these efforts are well-intentioned and well-suited to surgically address deviant phenomena and behavior as they occur. At the same time, they are treating the symptom and not the cause. For one, concerns about digital media’s supposed destructive effects on democracy are driven by an ill-founded assessment of the actual spread of deviant phenomena, given the findings of the few studies that systematically and empirically assess the actual spread of, for example, disinformation. More fundamentally, they treat political disagreement and resulting conflicts as an issue of information quality and not an expression of structural tensions and transformations. This makes the focus on well-publicized but empirically marginal deviance misleading in that it detracts from the benefits and democratic potentials

of the transformed public arena while missing the root cause of much of current concern.

Instead, we propose to focus on structural transformations and their respective impact on the public arena. This leaves us with the following recommendations for those engaged in, commenting on, and moderating the contemporary public arena:

- While harmful and illegal content should be labeled and counteracted, the benefits of a noisy and unruly public arena should be recognized rather than suppressed.
- The skewedness of digital public arenas and of the means of amplification must be made transparent. In response, the impartiality of the digital public arena, how it reflects public views and includes diverse and minority views, must be strengthened. This includes the watchdog function and impartiality of news media, which must be preserved in the face of growing economic and political pressures and the tailoring and targeting of content.
- Publics, citizens, and elites seeking political leadership or influence must contribute to a public arena in which constructive and shareable alternatives are articulated, instead of giving in to the temptation to delegitimize or suppress public challenges.
- Elites need to come to terms with being scrutinized. Their shortcomings will be more obvious to the public, and accordingly, they face increasing skepticism. The solution is not to suppress or delegitimize these challenges, but to accurately communicate uncertainties as well as the bases for reliable and useful knowledge (and their current limits).
- In a high-choice media environment, citizens must take on more responsibility for being well-informed, seeking out reliable and diverse sources of information, and supporting a diverse and critical public arena as a means of active political participation.

In what follows, our account that supports these recommendations centers on structural transformations of the public arena and associated new challenges, especially in relation to gatekeepers, old and new. How the public arena serves actually existing democracy will not be addressed by focusing on disinformation, but rather by addressing structural transformations and the new challenges that arise from these.

Fears About Disinformation

Current debates in the media are flooded by fears of the threats of digital technology for democracy. These debates center on disinformation, here used as an umbrella term for a variety of phenomena: the intentional introduction of lies and misleading statements into the public arena (disinformation) (Lewandowsky et al., 2013); the public contestation of

facts contradicting one's agenda, for example, through the label "fake news" (Egelhofer & Lecheler, 2019), a term frequently used in Trump's Twitter attacks on legacy media (Ross & Rivers, 2018); and practices of targeted amplification of misleading information, so-called "network propaganda" (Benkler et al., 2018); as well as the often unintentional spread of factually wrong information (misinformation) (Southwell et al., 2018).

There are several developments that have given rise to these fears: one is that digital technology allows for the decentralized publication and distribution of information in the public arena. Hence, malicious actors can introduce content into the public arena without vetting or control by the traditional gatekeepers of public discourse. Also, people can find information in line with their views and interests without relying on a few well-established media brands. At the same time, digital technology allows targeting audiences or groups from whom strong receptiveness is expected. Actors interested in manipulating topics, views, or behavior in the public arena can introduce information freely without relying on established media brands while targeting promising individuals or groups specifically and out of sight of the broader public arena. There is also a wider issue in Western democracies arising from a growing lack of trust in political and media institutions (Ladd, 2012; Newman et al., 2019). This, in turn, may lead people to seek out and accept information from alternative sources that are critical of the status quo and make them promising targets for disinformation and resilient to correction. Adding to this growing epistemic insecurity, during the Presidency of Donald Trump, we have seen him and other political leaders in opposition to the political status quo blatantly contradict established facts and to encourage their supporters to reject alternative accounts or assessments (Hennessey & Wittes, 2020; Muirhead & Rosenblum, 2019). In these cases, disinformation did not originate or depend for distribution on digital media or the public; instead, it was introduced into the political communication space through political elites. Taking account of these phenomena, Bennett and Livingston (2018) have diagnosed an emerging "disinformation order."

For a topic like disinformation that elicits such strong fears, the empirical basis of the debate is rather thin. For one, the few studies that have empirically tested the reach of disinformation consistently find this reach to be severely limited (Allen et al., 2020; Fletcher et al., 2018; Grinberg et al., 2019; Guess et al., 2019, 2020). This being said, it may become more difficult to correctly estimate the spread of disinformation once it moves from predominantly public forums into closed communication environments, such as encrypted messaging apps like Telegram or WhatsApp (Rossini et al., 2020).

Beyond politics, the COVID-19 pandemic of 2020 gave rise to new fears of disinformation spread on digital media. While the situation is very much evolving at the time of this writing, there are preliminary findings that indicate that the

informational situation around COVID-19 is not significantly different from the findings reported above. For one, Lazer et al. (2020) identified that between 1.1% and 1.8% of URLs shared in tweets posted by accounts matched to registered US voters pointed to domains known for posting disinformation. More generally, Roozenbeek et al. (2020) showed in an international comparative survey that belief in known false statements about the virus, its origins, and countermeasures were only shared by minorities in each country. This shows that even during an ongoing public health crisis with continuously evolving information, the spread of disinformation on digital media and the belief in known falsehoods appears to be limited.

But even if we assume disinformation to have a much wider spread than current empirical evidence suggests, it is far from clear that disinformation convinces people of political positions they did not hold before (Guess et al., 2019; Kim & Kim, 2019; Mercier, 2020). For example, studies in the United States have shown that users exposed to disinformation favoring the right were predominantly Republican partisans, tended to be older, and were generally strongly interested in politics (Grinberg et al., 2019; Guess et al., 2019). This is an audience for which persuasive effects of disinformation are unlikely. Given that these findings pertain to the Presidential election campaign of 2016, we can safely assume the role of disinformation in the election of Donald Trump to be minimal. In addition, various studies show that users engage in "social correction" in online environments like Twitter or WhatsApp; that is, pointing out to others when they had shared misinformation (Micallef et al., 2020; Rossini et al., 2020). This indicates that people in digital communication environments are far from hapless victims of manipulation but find ways to socially verify information, if so inclined (Nyhan, 2020). More fundamentally, instead of predominantly informational functions, the use and distribution of disinformation follows other functions, such as the signaling of social belonging (Berriche & Altay, 2020; Douglas et al., 2017; Duffy & Ling, 2020), political partisanship (Allcott & Gentzkow, 2017; Bavel et al., 2020; Osmundsen et al., 2020; Pereira et al., 2018; Petersen, 2020; Van Bavel & Pereira, 2018), or an impulse to challenge commonly held beliefs or social values (Altay et al., 2020; Petersen et al., 2018). Disinformation is thus not a driver of social or political divisions. Instead, it is an expression of them (Kreiss et al., 2020). Addressing disinformation primarily from an information quality perspective thus resembles the doctor only treating a patient's symptoms while missing the cause of the disease.

Beyond the individual level, it is possible that disinformation—or the public talk about disinformation—contributes to increased doubts in political and media institutions and thereby over time, in turn, contributes to the destabilization of political systems (Asmolov, 2019; Farrell & Schneider, 2018; Huang, 2017). While conceivable, these effects remain elusive empirically.

In any event, given the limited empirical evidence for the actual reach and effects of disinformation in high-income democracies, the current obsession in public debate about this topic is driven by something else rather than the strength of its effects. The most plausible explanation of this divergence is that the current moral panic about disinformation is driven by a general feeling that something in the structure of the public arena has changed. While hard to pin down, this sense of shifting structures translates into the willingness to attribute any visible deviance from the status quo with the potential to damage democracy. This tendency is further reinforced by these discussions allowing actors like digital platforms, news media, or political organizations to sidestep the deeper discussion of how their practices and governance processes support or detrimentally impact the flow of information and allocation of attention in the contemporary public arena. Getting bogged down in debates about the latest deviance—be it disinformation, filter bubbles, or bots—thus risks missing the forest for the trees. Instead, we have to focus on the deep structural changes to information flows and attention allocation in the public arena.

Structural Transformations of the Public Arena

It is no surprise that the moral panic about disinformation has become prominent in recent times since there is a widespread feeling that the rules and participants in the public arena have changed due to digital technology. Yet the consequences for democracies are uncertain. While previously the public arena was sharply limited with regard to which institutions decided about which publics and positions were allowed access, we have recently witnessed an expansion of these actors as the public arena has begun to expand increasingly onto digital platforms (Chadwick, 2017; Jungherr et al., 2020; Schroeder, 2018). Facebook, Twitter, YouTube, and WhatsApp are now an integral part of the public arena as they provide complementary opportunities for distributing information and political messages in addition to those provided by news media or political organizations (Kreiss & McGregor, 2018; Nielsen & Ganter, 2018). Consequently, how messages are disseminated on these platforms and their internal governance processes matter now beyond the narrow confines of their businesses and they have become subject to legitimate scrutiny. In addition, digital technology produced a shock to the arbiters of information in the public arena impacting their relative strength and influence to control the agenda (Jungherr et al., 2019a), shape the rules of political competition, and exercise gatekeeping over the boundaries of acceptable political speech and of political positions (Jungherr et al., 2019b). This has resulted in a weakening of news and political organizations which until recently held a near monopoly with regard to shaping the flow of information and allocation of attention in the public arena.

In addition, digital technology has started to publicly reveal political attitudes, opinions, and preferences that had remained hidden unless they found representation by established political organizations—parties, movements, or interest groups. Along the same lines, digital technology has provided opportunities for people holding these opinions to find each other, distribute information, coordinate, and organize their challenge to the status quo (Gurri, 2018; Jungherr et al., 2019b). This has extended the plurality of opinions and available political alternatives as well as the supply of political organizations representing them in public discourse and potentially translate them into policy. Protest movements have emerged—such as #BlackLivesMatter, #metoo, or #FridaysForFuture—and so have xenophobic and anti-liberal or anti-democratic candidates and parties all over the world.

The suspicion that these changes have impacted politics is only natural, but the moral panic about disinformation does little to account for the actual democratic impact of these structural shifts. The public arena is the space where democracy is constantly negotiated and contested. By looking more closely at this process, we can identify the structural impact of these changes and identify the topics we should actually be debating.

Coming to Terms With an Open and Unruly Public Arena

A central feature of the public arena is that it constitutes the means to access information and that this access is shaped by gatekeepers. Digital media have reconfigured this access. In the past it was necessary for people, groups, or organizations to be recognized by gatekeepers to disseminate information, voice concerns, and have preferences taken note of. This gave power to news and political organizations to decide about access: to include and to keep out (Levitsky & Ziblatt, 2018; Shoemaker & Vos, 2009). Digital media have changed this. They provide ample opportunity for anyone to publish, find, and access information. In principle, this makes access to the public arena much easier and more broadly available, and originally gave rise to exceedingly high hopes for the democratization of discourse and an expansion of the public arena.

This unmitigated positive vision has since come under critique from two sides: first, critical accounts soon pointed out that while, in principle, people had access to the public arena, it did not necessarily mean that they were heard (Neuman et al., 2011). The critics pointed out correctly, that while people were able to publish information, they still depended on central online hubs (Hindman, 2009) or traditional mass media outlets (Karpf, 2010) for picking up and amplifying their story in order for them to reach large audiences. These accounts emphasized that digital media opened up access to but not recognition in the public arena.

The second criticism focused on the detrimental aspects of opening up access to the public arena by circumventing gatekeepers. Early accounts focused on the power of extending access to the public arena for voices of marginal disenfranchised groups, critics of commercialized mass culture and politics, or groups on the fringes of politics or culture in extending pluralism in politics and culture. Contemporary accounts see the same process of opening up discourse as vulnerable to malicious actors. Contemporary examples of groups benefiting from opening access to the public arena are the radical right and Islamists corrupting especially the young through extremist content, irresponsible peddling of disinformation for commercial or political gain, or foreign powers intent on shaping national discourses to exploit and exacerbate internal divisions (Marantz, 2019; Pomerantsev, 2019; Singer & Brooking, 2018).

On the face of it, these are legitimate concerns. After all, increasing opportunities for access to the public arena do not only apply to nice folks. Yet it is also important to be wary of legitimate concerns over real but marginal phenomena overshadowing the very real benefits of increased access to public arenas. The current focus among the media, politicians, and academics on misuses of increasing access to the public arena risks losing sight of the vital enrichment that alternative information has enabled through the broadening of access to the public arena. There were early hopes for a “fifth estate” (Dutton, 2009) of citizen journalists that could hold power to account more effectively than news organizations that were often seen as being too cozy with political elites (Bennett et al., 2007). Yet perhaps these hopes put too much pressure on too few and economically too fragile actors. Nevertheless, digital born news media, fact checkers, and independent voices have proven powerful sources of information not covered by traditional news media and helped to hold powerful institutions of public arenas to account, including governments, political elites, media organizations, and digital platforms. While in Western societies, we might be worried about continuous challenges to institutions of public life (Gurri, 2018), these challenges might be a small price to pay to hold institutions to account that might otherwise be left to police themselves. This goes double for countries with only weakly established democratic institutions, such as emerging democracies, transitional democracies, or authoritarian states. Here, the opportunities for unfiltered access to the public arena and associated opportunities to publicly scrutinize and hold to account powerful institutions are of paramount importance.

In the early days of digital media, access to the public arena could be won by posting information on independent websites or later weblogs. With the advent of digital platforms—such as Facebook, Twitter, or YouTube—these platforms became important access points to the public arena. Therefore, the governance rules of these platforms are important. As stated above, opening up the public arena to challengers of the political status quo, its institutions, and its

dominant narratives can be an important enrichment for societies. While platforms should be vigilant in pursuing illegal content, at the same time they should be careful not to overreach on behalf of the interests of the powers that be. This is an especially risky proposition with regard to the fight against dis- and misinformation. Often the quest in the name of information quality can turn into the quest to define what constitutes (il)legitimate challenges in political discourse. Here, digital platforms should be careful to resist internalizing the interests of political elites and legacy institutions in the public arena.

News and political organizations in particular cannot be expected to be helpful allies in this quest. For them, increased restrictions to the public arena promise more power and with it a decrease in oversight. The narrative of a threat to democracy resonates among institutions and elites that aim at protecting their power. This makes it all the more important that academics do not uncritically take up their mantle based on thin empirical evidence so that a more open public arena through digital media becomes synonymous with disinformation and the decline of democracy. The very real benefits of an opening up of the public arena through digital media should not be abandoned because of fears about marginal phenomena, such as disinformation or foreign influence operations which should and are being counteracted. A more noisy, impolite, and unrulier arena of political discourse might turn out to be a small price to pay for not increasing control by already powerful institutions.

Establishing Transparency in Amplification

Just as important as access is the amplification of information in the public arena. Amplification in the contemporary public arena can take many forms: Publics amplify information by publicly interacting and sharing it, digital platforms amplify information by algorithmically deciding which information to push and which to hide, they also allow the originators of information to pay for their content being displayed prominently and thereby amplify it, while news organizations and political actors use multiple channels available to them through their social position and authority to amplify selected information and voices. Access is a necessary precondition for visibility in the public arena, but in an age of an information deluge it is not sufficient; for visibility, information needs amplification (Phillips, 2018).

An important feature in the discussion of the contemporary public arena is its networked nature (Benkler, 2006; Friedland & Hove, 2016; Papacharissi, 2011). People do not passively interact in relative isolation with information put uniformly before them, as in a past when the public arena was shaped by mass media. Instead, they interact with information they encounter online by signifying their interest through platform-specific markers, such as “likes” or “favorites,” commenting on information, or sharing it with others (Nahon

& Hemsley, 2013). These publicly visible interactions amplify information by signaling public interest broadly as well as more narrowly via interest in people's direct social circle. As social amplification seems to react strongly to information designed to push psychological buttons, touching on group affiliations, or by means of humor, there are considerable fears of this filter being vulnerable to exploitation by malicious actors.

On digital platforms, we find two additional amplification mechanisms: algorithmic amplification and paid amplification, often combined. Digital platforms run algorithms that determine what information will be displayed to their users with what frequency. The exact workings of these algorithms remain non-transparent but it is reasonable to assume that they at least partially consider some of the signals of social amplification and additionally take into account past behavior of users, behavior of their immediate social surrounding on the platform, and platform-specific metrics such as reading time of items or clickthrough rates. Beyond this, platforms allow originators of information to pay for the prominent placement of their information in form of sponsored content or ads (Zuboff, 2019).

On digital platforms social, algorithmic, and paid amplification mix in highly non-transparent ways and thus give rise to uncertainty as to why specific information is displayed to specific audiences and so, in turn, reasonable fears that algorithms, money, and psychology allow nefarious actors to circumvent vetting processes of politically relevant information by news media to reach large and potentially susceptible audiences. As long as digital platforms were predominantly in the business of displaying cat videos or browser games, the inner workings and interconnection between these amplification processes did not matter much. Once digital platforms become *de facto* institutions shaping access to and visibility in the public arena, however, this starts to matter a great deal. Obviously, more transparency is needed from the platforms about what content is displayed to whom and why. It must be transparent at first glance if content is sponsored and by whom. It is also important to know as an individual why one is shown specific information and just as important, as a society, which actors are targeting which groups of people or tailoring messages to them.

We also find amplification in news media picking up on specific pieces of information they find online and featuring it in their coverage. Many have shown that social media attention is often translated into news media attention (Schroeder, 2018) or social media content is used to represent public opinion (McGregor, 2019). With these decisions, news media amplify selected content with limited original reach and make it available to large audiences. While this can legitimately help to expose scandals, as in the case of Wikileaks, this practice is problematic. Amplifying controversial content found on digital media risks blowing marginal phenomena out of proportion. For example, media coverage of the American far-right has been criticized along

these lines (Donovan & boyd, 2021; Phillips, 2018). There is also the risk that news media uncritically report as the voice of the people trends on digital media that in fact have been the result of artificial content production, such as astroturfing (Kovic et al., 2018). This danger is all the more common as journalists appear to be less than critical when using digital interaction metrics and trends in their work (McGregor, 2019). News organizations and journalists need to reflect critically about which online information is selected for amplification: Does it reflect public sentiment accurately or has it been subject to manipulation by interested actors? If a marginal phenomenon is featured, does it illustrate a larger or more long-term problem? The danger is not amplification itself but the emergence of a skewed reflection of reality. Similarly, the selection and use by political actors of information, episodes, or trends identified in digital environments needs to be interrogated critically as to its strategic uses.

Legitimacy of Referees

Institutions shaping the public arena are *de facto* referees among competing interests and parties and public concerns and preferences. In the past, news organizations dominated the public arena, whereas today, their impartiality is criticized, and they face competition by digital platforms which reluctantly have the role of referees thrust upon them. The role of platforms in the flow of political information, opinion formation, and interest articulation is new and unexpected as they started with more limited areas of focus. Hence, they struggle with their new role and the associated responsibilities which has given rise to much of the discomfort and distrust among publics and political elites that rely on them. Adding to this, unnecessary levels of opaqueness contribute to the moral panic diagnosed above.

Little is known about organizational structures and processes of digital platforms and how they perceive their role as institutions shaping the public arena. What we know comes from journalistic coverage, some insider accounts (Guendelsberger, 2019; Martinez, 2016; Wiener, 2020), or promotional material. While evocative, these accounts tell us little about internal governance rules and processes. Again, as long as platforms predominantly put out browser games or entertaining videos, these questions were best left for owners or shareholders. But with their role shaping the public arena, the internal governance of platforms starts to matter a great deal. For example, what are the rules for political advertisement on a platform? What opportunities do political actors have in selecting audiences? How does this vary between countries or over time? Who decides about this in the first place and how do changes come about? Who monitors and enforces the rules of governance? Questions like these could also be asked regarding issues relating to technical design, content moderation, or the interaction with institutions of legal enforcement. Researchers are beginning to look into these processes, but we are far from understanding them

(Barrett & Kreiss, 2019; Douek, 2019; Gillespie, 2018; Kaye, 2019; Keller, 2018; Suzor, 2019).

This is not simply a matter of platforms but also of how they interface with other institutions. What is the degree of access they provide for state institutions? Does this vary between countries? If so, by what reasoning or justification? What is their relationship with traditional institutions in the public arena, such as political organizations or news media (Kreiss & McGregor, 2018, 2019)? Are these relationships purely commercial or do they recognize the social function shared between them? How do companies providing digital platforms try to influence the political arena (Romm, 2020)? Is this classical lobbying or are close relationships developed as service providers for campaigns maintained once parties are in government and translated into influence on regulatory agendas or practices? Again, these questions are starting to be asked, but the field is far from arriving at any systematic understanding or account. This matters particularly in an atmosphere of heated political debate.

News media also find themselves challenged with regard to another function they perform in the public arena: representing preferences and concerns of publics. In the past, news media were often criticized for not recognizing minority or off-center publics or positions in public discourse, usually since they were perceived as being too close to actors and institutions in power (Bennett, 1990; Bennett et al., 2007; Entman, 2004). But in the past, these critiques usually did not make it into mainstream discourse since news media and political elites tended not to amplify them. Today, unsettled by digital media and political events, challenging the news media has become commonplace. Digital media allow challengers of the status quo to publish information and contest accounts in news media (Jungherr et al., 2019b). The ready availability of contesting information may even have contributed to a general feeling of skepticism or distrust toward news media (Gurri, 2018). It has definitely introduced public challenges of mainstream media as a standard move in the playbook of challengers of the political status quo, as, for example, for right-wing populists who attack public service media (Sehl et al., 2020). News media are still struggling with responding to their changed position. While some have chosen an openly partisan path in aligning themselves clearly with political camps, as, for example, Fox News or MSNBC in the United States, others are trying to defend a position of political centrism or impartiality, as, for example, public broadcasters in the United Kingdom or Germany. Yet in this, they are regularly challenged (Usher, 2020). A prominent example is “balance as bias” (Boykoff & Boykoff, 2004), cases in which news media are seen as being able to decide between two sides of an issue based on available evidence but choose not to do so, thus giving the impression that widely held truths are challenged by giving equal time to fringe positions challenging perceived wisdom. This has featured prominently in the coverage of climate change but also increasingly become the focus of criticism in the

coverage of Donald Trump (Spayd, 2016) or Brexit (Howse, 2018). Another challenge, usually from political outsiders, attacks news media for allegedly suppressing information to keep publics from being able to form their own opinions, or for taking sides with the political establishment against challengers. Again, examples abound, as in relation to Brexit (Greenslade, 2019) or the German immigration crisis (Maurer et al., 2019).

News media have struggled with being publicly challenged on these issues and yet, they must answer these challenges convincingly. In a time of seemingly ubiquitous partisan information sources, it is important that a core set of news media successfully defend a status as impartial news-providers. At the same time, this impartiality cannot be synonymous with anything-goes relativism. Trusted news organizations have to be able to challenge political elites and official spokespersons on the veracity of their claims and the feasibility of their plans. Yet, this willingness to criticize cannot be driven by partisan motivations. The role of news media is not to educate and lecture audiences but rather to inform them by presenting them with the best available information so that they can form their own opinions. The task of news media is to work toward broad social acceptance as impartial but also critical information providers in the public arena; a position that news organizations tended to take for granted in the past. In contemporary public arenas, they have to fight for this position. In this situation, the perception of a ubiquitous threat of disinformation on digital platforms and in digital media serves as a welcome foil for news media to illustrate their worth as defenders of an unbiased truth. But this focus also allows news media to postpone addressing the underlying structural challenges to their role in the public arena.

The flipside to this, of course, is that audiences themselves have to accept more responsibility with regard to their informational behavior. In a high-choice media environment, information alternatives abound (Neuman, 1991; Prior, 2007). Simply leaning back and following one's informational inclinations and preferences will lead to a fracturing of audiences and the loss of the audience base for serious and impartial journalism. For news organizations to fulfill their responsibility in the contemporary public arena, citizens have to recognize their part of the bargain and take on more responsibility for being well-informed, seeking out reliable and variegated sources of information, and supporting a diverse and critical public arena as a means of active political participation.

Tethering of Publics and Elites

The final element of the public arena facing deep transformation through digital media is the mutual tethering of publics to political elites. This is another unexpected role for digital platforms, which includes making the reactions of their users available to observers, thus tethering publics or audiences

and political and media elites ever more closely together (Schroeder, 2018). While the analysis of public reactions on digital platforms is not as straightforward as often suggested (Jungherr et al., 2016; Jungherr et al., 2017), public contributions of users on digital platforms are increasingly translated into media coverage (McGregor, 2019) and provide sources for political elites to assess public opinion or evaluate their own actions (McGregor, 2020). This makes digital platforms powerful conduits of information about attention and perceived preferences and opens a window into views among publics that is not available to traditional news media or to political organizations. This feature has become a focus of criticism as digital platforms have become spaces for political movements widely perceived as reactionary, exclusionary, or discriminatory. At the same time, interaction patterns and conventions among formerly isolated communities of online users have started to seep into general political discourse with online hostility, misogyny, and hate speech. What is legitimate expression from a minority that is not recognized in the wider political discourse and what constitutes the formation of illegitimate fringe groups? How to regulate expressions of political speech between satire, anger, and transgressive statements aimed at delegitimizing political others?

News media have suffered a tremendous shock to their business models through digital media (Nielsen, 2012). For one, news media are increasingly squeezed economically by the ad business moving away from newspapers into digital spaces, thereby threatening this side of the two-sided business of news. At the same time, news organizations have a much harder time monetizing the usage of their services (Bell & Owen, 2017). For any article behind a paywall, there are many articles available for free, covering the same topic. While some specialized outlets, like *The New York Times* or the *Financial Times*, have been successful in growing a readership willing to pay for content, this has not been true for most news outlets which have found it much harder to convince their readership in sufficient numbers to pay for their services (Fletcher, 2019; Pickard & Williams, 2014). This increasing pressure has given rise to doubts as to whether news media are still able to cover current events, political processes, and political elites in sufficient breadth and depth in providing publics with information about political elites. While politics on the national level is still covered by traditional and new news media, politics on the local-level risks becoming increasingly invisible to potentially concerned publics as the business of news on the local and regional level becomes increasingly fraught (Abernathy, 2020; Project for Excellence in Journalism, 2010). Economic pressures thus lead to weakening an important function of news media in the public arena by endangering their role as information providers about political elites to publics. Functional equivalents remain elusive, especially on the local or regional level, as digital media and platforms have been proven to be very efficient in content distribution while remaining weaker with

regard to the production of original content, at least in the regular and systematic coverage of mundane processes of political life.

We also find political organizations struggling with their traditional functions in the public arena: informing political elites about publics—so that their interests, concerns, and preferences can shape policy—and informing publics about elites. Traditional political organizations, such as parties or unions, are consistently losing members while sets of core parties are consistently losing vote shares in Western democracies (Katz & Mair, 2018). While non-traditional political organizations manage to channel participatory energies (Karpf, 2012), they struggle to translate these energies into consistent and prolonged engagement or policy (Jungherr et al., 2020). The weakening of traditional political organizations has negatively impacted their ability to channel information from publics to political elites and vice versa. This “hollowing” of parties has removed them progressively from the representation of preferences and the ideological convictions of the publics that support them (Mair, 2013). This has been described as part of a general trend away from a politics in which ideas and preferences are articulated and put toward contestation and toward a politics focused on the management of political institutions and the state (Katz & Mair, 2018). In its most pronounced form, this has been called TINA, a politics of there-is-no-alternative, in which elites do not open political decisions up for contestation but defend them as being technical and thus beyond alternatives and legitimate debate (Caramani, 2017). Given this development, it is no surprise to find parties losing their ability to serve as an appropriate conduit of information between publics and political elites.

This development can allow political elites to focus on the pressing issues of managing political organizations and the state without getting lost in ideological squabbles and infighting. At the same time, there is a risk of ignoring legitimate concerns and excluding controversial concerns or preferences from public discourse. This might work as long as existing political organizations serve as de facto gatekeepers of political discourse, limiting political options available to citizens (Levitsky & Ziblatt, 2018). But as we have seen, digital media have weakened these gatekeeping powers considerably by lowering the costs of coordination and organization drastically. This allows likeminded people to coordinate quickly and even form stable organizations, such as challenger parties (Jungherr et al., 2019b).

Lowered coordination costs and increasing distance to established political organizations explain the recent international rise of new political organizations channeling participatory energy by people feeling disenfranchised by the political status quo (Jungherr et al., 2020). This can take the form of coordination in groups with low organizational cohesion and few ambitions to contribute to policy or government, such as Occupy Wall Street. As a result, these organizations struggle to actualize preferences or concerns in

the subsequent policy process (Gurri, 2018). Given their light connection with the policy process, these new forms of political coordination are unlikely to be able to communicate the intentions and motivations of political elites back to their supporters or membership, thereby contributing to a growing sense of political disconnect.

At the same time, digital media also help in the foundation and growth process of more formal political organizations, such as parties that try to capitalize on the preferences and concerns of disaffected publics. This can contribute to a more pluralistic representation of political opinion in the party landscape. Yet, currently, we see the dark side of this process in the emergence of parties or candidates in open conflict with liberal democracy. As a countermeasure to these new parties, it is often suggested that established parties should avoid the topics addressed by them. Yet this rests on the belief that these topics and concerns are momentary and will pass. If concerns about climate change, immigration, international integration, or public health interventions are indeed largely driven artificially through focusing events or purely through crafty agenda setting by media or political entrepreneurs—and thus likely to pass once deprived of the oxygen of public attention—this might work. If, on the other hand, these are concerns that are driven by continuous experiences in the lifeworlds of publics, this tactic will only contribute to the estrangement of traditional parties and publics and not contribute to the disappearance of these preferences and concerns.

Recognizing concerns and preferences in publics does not mean of course that they should be uncritically accepted and translated into policy. If publics express parochial, exclusionist, or even racist preferences and concerns, it would be dangerous for political elites to simply follow their lead. Instead, it is necessary that they critically engage and contest these preferences and concerns if brought forward by party members or supporters. Yet it is also important that they take the causes of preferences and concerns deemed problematic seriously and try to channel respective energies in publics toward inclusive concepts of citizenship and solidarity (Schroeder, 2018). If parties or political elites fail to do so and instead push a managerial idea of politics without alternatives, they will ensure that people become vulnerable to new political parties not interested in channeling problematic preferences or concerns but instead aim at capitalizing on them and propose exclusionist, parochial, and even racist ideas of citizenship and policy.

In the long term, feelings of not being heard by political elites will lead to the emergence of large disaffected publics which cannot be excluded from government indefinitely if we are interested in maintaining healthy democracies (Przeworski, 2019). This means that people who hold unrepresented or extreme preferences or concerns must find a home with traditional parties that engage with their concerns without acting on extremist policy solutions. The alternative is that they are represented by smaller parties happy to

reinforce problematic preferences and promise to follow through on extremist policy solutions. Excluding publics disaffected with the political status quo instead of trying to engage and win them over is thus a risky strategy. Focus on the elusive impact of disinformation on democracy allows political organizations to sidestep the much more difficult question of how to answer these questions and how to restore or find alternatives to their functions in the public arena.

Focusing on Structural Transformation

We have highlighted new tensions in the public arena apart from the currently most widely discussed problem of disinformation. To resolve the tensions of how media actually work in democracy requires solutions other than those proposed for disinformation. Instead of eliminating or suppressing a noisy and unruly public arena, it is important to recognize its benefits in tethering publics and elites in new ways. Moreover, while some content is now amplified in digital public arenas in skewed ways which should be made more transparent, it is equally important to strengthen the impartiality of digital public arenas and their inclusion of diverse and minority views. This also applies to the watchdog function of news media which must also be strengthened in the face of growing competitive pressures arising from the tailoring and targeting of content which also skew it. Furthermore, instead of suppressing the sometimes-problematic concerns and interests of citizens and the elites that cater to them, the public arena should be a space for the articulation and promotions of alternatives that are constructive and can be shared. And as the back-stage behavior of elites becomes more open to scrutiny, they need to provide policy supported transparently by robust knowledge and open themselves to skepticism rather than delegitimizing the challenges they face. Finally, citizens need to take on more responsibility for selecting information in a high-choice environment that is diverse and reliable, and also to support a public arena that provides this kind of information.

We have analyzed the tensions of a transformed public arena and put forward suggestions for addressing them. In doing so, we have focused on how gatekeepers have been reshaped and how, in response, political and media elites need to become more responsive to civil society and the two need to learn to control each other. The changes to civil society and to political and media elites are larger changes that we have not fully addressed here; they fall outside the scope of a paper that focuses on the public arena—but should be the subject of future work. Another shift that should be addressed more fully in future work is how the transformation of public arenas is a product of global changes and how digital media have been affected by the new balance between US-dominated platforms in much of the world but also by a rising prominence of China in shaping the world order and promoting its platforms and thereby a model that dominates the governance of digital media within China. In short, we

have shown that the threat of overwhelming disinformation is the wrong diagnosis for a transformed public arena, and while we have pointed to cures based on our own diagnosis of reconfigured gatekeepers, these cures are only the beginning, while tensions are bound to remain and a more systematic analysis that includes the social environment that surrounds the public arena and in which the public arena plays a central mediating role still eludes us.

Let us be clear, disinformation is real. There are efforts by nefarious actors and some political elites to purposefully mislead. This makes disinformation into a legitimate object of study. But those efforts are limited in reach and uncertain with regard to their effects. This makes disinformation far from the democratic crisis public discourse makes it currently out to be. Therefore, it is the duty of disinformation scholars to be very clear about the boundaries of their findings and not to fan related moral panics. Otherwise, they risk contributing to an overall sense of democratic crisis and contribute to delegitimizing democratic processes and results. They therefore become amplifiers of disinformation themselves. It is one thing, to identify a phenomenon and characterize it in the bounded conditions it emerges. It is another thing entirely to extrapolate from these limited and bounded occurrences to an overall crisis of democracy or legitimacy. It is this fallacy, we are addressing, not carefully designed and clearly contextualized research efforts into disinformation as a specific phenomenon in digital communication and its dynamics in the contemporary public arena.

Naturally, our discussion comes with limitations. This article deals with democracies, but a well-known problem is that the reach of platforms extends beyond national jurisdictions and national and transnational regulations. Our suggestions can be implemented within democratic systems where media have autonomy, but where they are also governed by laws and regulations. The problem that platform content that is illegal outside of democracies can be accessed by people within them is a larger issue that admits of no solution that we are aware of. It can be noted of course that this problem has a flipside, which is that this borderlessness is a boon for non-democracies which restrict media freedom.

More generally, our discussion is grounded in the conviction that in addressing contemporary challenges in the public arena, scholars need to focus on its structural transformation (see also Bennett & Livingston, 2018; Bennett & Pfetsch, 2018). This includes analyzing its drivers, nature, and consequences. The analysis of structural conditions of the public arena was a strong feature in research on digital media in the 1990s and early 2000s. But recently it has fallen somewhat out of fashion in favor of studies focusing on individuals' media exposure, effects, or the study of specific types of media content. While highly instructive, this research necessarily neglects the embeddedness of individuals and actors in systems with structural features. As we have shown in this article, the analysis of these structural features and their determinants and consequences provides new and necessary

insights into challenges for societies of contemporary public arenas.

The focus on disinformation or related panics of the moment risk misses out on the deeper challenges to democracy emerging from the structural transformations of the public arena we discussed. These include the ongoing need to establish and maintain legitimacy of institutions democracies rest on in the face of mounting public challenges, the search for a new way to finance organizations establishing and providing information tethering elites to publics, and the general willingness of social groups to compromise and come to terms with each other. In face of these "wicked problems," the current concern about disinformation, filter bubbles, and bots might come to look like worries from the good old days.

Acknowledgements

We want to thank the *Bayerisches Forschungsinstitut für Digitale Transformation (bidt)* for giving us the opportunity to develop the foundations of the argument presented here in a keynote at the *Bavarian Academy of Sciences and Humanities*, Munich. We also want to thank the organizers and the participants of two workshops, "Foundations of Value and Values" at the *New Institute*, Hamburg and "Fracturing Democracy: The Erosion of Civil Society in a Shifting Communication Ecology" at the *University of Wisconsin-Madison*, Madison for providing us with the opportunity of presenting early drafts of this paper.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iDs

Andreas Jungherr  <https://orcid.org/0000-0003-2598-2453>

Ralph Schroeder  <https://orcid.org/0000-0002-4229-1585>

References

- Abernathy, P. M. (2020). *News deserts and ghost newspapers: Will local news survive*. University of North Carolina Press.
- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211–236. <https://doi.org/10.1257/jep.31.2.211>
- Allen, J., Howland, B., Mobius, M., Rothschild, D., & Watts, D. J. (2020). Evaluating the fake news problem at the scale of the information ecosystem. *Science Advances*, 6(14), Article eaay3539. <https://doi.org/10.1126/sciadv.aay3539>
- Altay, S., de Araujo, E., & Mercier, H. (2020). "If this account is true, it is most enormously wonderful": Interestingness-if-true and the sharing of true and false news. *PsyArXiv*. <https://doi.org/10.31234/osf.io/tdfh5>
- Asmolov, G. (2019). The effects of participatory propaganda: From socialization to internalization of conflicts. *Journal of Design*

- and *Science*, 6, 1–25. <https://doi.org/10.21428/7808da6b.833c9940>
- Barrett, B., & Kreiss, D. (2019). Platform transience: Changes in Facebook's policies, procedures, and affordances in global electoral politics. *Internet Policy Review*, 8(4). <https://doi.org/10.14763/2019.4.1446>
- Bavel, J. J. V., Harris, E. A., Pärnamets, P., Rathje, S., Doell, K., & Tucker, J. A. (2020). Political psychology in the digital (mis)information age. PsyArXiv. <https://doi.org/10.31234/osf.io/u5yts>
- Bell, E., & Owen, T. (2017). *The platform press: How Silicon Valley reengineered journalism*. The TOW Center for Digital Journalism.
- Benkler, Y. (2006). *The wealth of networks: How social production transforms markets and freedom*. Yale University Press.
- Benkler, Y., Faris, R., & Roberts, H. (2018). *Network propaganda: Manipulation, disinformation, and radicalization in American politics*. <https://doi.org/10.1093/oso/9780190923624.001.0001>
- Bennett, W. L. (1990). Towards a theory of press-state relations in the US. *Journal of Communication*, 40(2), 103–125. <https://doi.org/10.1111/j.1460-2466.1990.tb02265.x>
- Bennett, W. L., Lawrence, R. G., & Livingston, S. (2007). *When the press fails: Political power and the news media from Iraq to Katrina*. The University of Chicago Press.
- Bennett, W. L., & Livingston, S. (2018). The disinformation order: Disruptive communication and the decline of democratic institutions. *European Journal of Communication*, 33(2), 122–139. <https://doi.org/10.1177/0267323118760317>
- Bennett, W. L., & Pfetsch, B. (2018). Rethinking political communication in a time of disrupted public spheres. *Journal of Communication*, 68(2), 243–253. <https://doi.org/10.1093/joc/jqx017>
- Berriche, M., & Altay, S. (2020). Internet users engage more with phatic posts than with health misinformation on Facebook. *Palgrave Communications*, 6(1), 1–9. <https://doi.org/10.1057/s41599-020-0452-1>
- Boykoff, M. T., & Boykoff, J. M. (2004). Balance as bias: Global warming and the us prestige press. *Global Environmental Change*, 14(2), 125–136. <https://doi.org/10.1016/j.gloenvcha.2003.10.001>
- Caramani, D. (2017). Will vs. Reason: The populist and technocratic forms of political representation and their critique to party government. *American Political Science Review*, 111(1), 54–67. <https://doi.org/10.1017/S0003055416000538>
- Chadwick, A. (2017). *The hybrid media system: Politics and power* (2nd ed.). Oxford University Press.
- Donovan, J., & boyd, d. (2021). Stop the presses? Moving from strategic silence to strategic amplification in a networked media ecosystem. *American Behavioral Scientist*, 65, 333–350. <https://doi.org/10.1177/0002764219878229>
- Douek, E. (2019). Facebook's "oversight board": Move fast with stable infrastructure and humility. *North Carolina Journal of Law and Technology*, 21(1), 1–78.
- Douglas, K. M., Sutton, R. M., & Cichocka, A. (2017). The psychology of conspiracy theories. *Current Directions in Psychological Science*, 26(6), 538–542. <https://doi.org/10.1177/0963721417718261>
- Duffy, A., & Ling, R. (2020). The gift of news: Phatic news sharing on social media for social cohesion. *Journalism Studies*, 21(1), 72–87. <https://doi.org/10.1080/1461670X.2019.1627900>
- Dutton, W. H. (2009). The fifth estate emerging through the network of networks. *Prometheus: Critical Studies in Innovation*, 27(1), 1–15. <https://doi.org/10.1080/08109020802657453>
- Egelhofer, J. L., & Lecheler, S. (2019). Fake news as a two-dimensional phenomenon: A framework and research agenda. *Annals of the International Communication Association*, 43(2), 97–116. <https://doi.org/10.1080/23808985.2019.1602782>
- Entman, R. M. (2004). *Projections of power: Framing news, public opinion, and U.S. Foreign policy*. The University of Chicago Press.
- Farrell, H., & Schneier, B. (2018). *Common-knowledge attacks on democracy*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3273111
- Fletcher, R. (2019). Paying for news and the limits of subscription. In N. Newman, R. Fletcher, A. Kalogeropoulos, & R. K. Nielsen (Eds.), *Reuters institute digital news report 2019* (pp. 34–37). Reuters Institute for the Study of Journalism.
- Fletcher, R., Cornia, A., Graves, L., & Nielsen, R. K. (2018). *Measuring the reach of "fake news" and online disinformation in Europe*. <https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2018-02/Measuring%20the%20reach%20of%20fake%20news%20and%20online%20distribution%20in%20Europe%20CORRECT%20FLAG.pdf>
- Fraser, N. (1990). Rethinking the public sphere: A contribution to the critique of actually existing democracy. *Social Text*, 25–26, 56–80. <https://doi.org/10.2307/466240>
- Friedland, L. A., & Hove, T. B. (2016). Habermas's account of truth in political communication. In J. Hannan (Ed.), *Truth in the public sphere* (pp. 23–39). Lexington Books.
- Gillespie, T. (2018). *Custodians of the Internet: Platforms, content moderation, and the hidden decisions that shape social media*. Yale University Press.
- Goode, E., & Ben-Yehuda, N. (2009). *Moral panics: The social construction of deviance* (2nd ed.). Wiley-Blackwell.
- Greenslade, R. (2019). Brexit bias? BBC faces a difficult balancing act in polarised nation. *The Guardian*. <https://www.theguardian.com/commentisfree/2019/oct/27/brexit-bias-bbc-faces-a-difficult-balancing-act-in-polarised-nation>
- Grinberg, N., Joseph, K., Friedland, L., Swire-Thompson, B., & Lazer, D. (2019). Fake news on twitter during the 2016 U.S. presidential election. *Science*, 363(6425), 374–378. <https://doi.org/10.1126/science.aau2706>
- Guendelsberger, E. (2019). *On the clock: What low-wage work did to me and how it drives America insane*. Hachette Group.
- Guess, A. M., Nagler, J., & Tucker, J. A. (2019). Less than you think: Prevalence and predictors of fake news dissemination on Facebook. *Science Advances*, 5(1), Article eaau4586. <https://doi.org/10.1126/sciadv.aau4586>
- Guess, A. M., Nyhan, B., & Reifler, J. (2020). Exposure to untrustworthy websites in the 2016 US election. *Nature Human Behaviour*, 4(5), 472–480. <https://doi.org/10.1038/s41562-020-0833-x>
- Gurri, M. (2018). *The revolt of the public and the crisis of authority in the new millennium* (2nd ed.). Stripe Press.
- Habermas, J. (1989). *The structural transformation of the public sphere: An inquiry into a category of bourgeois society*. The MIT Press.
- Hennessey, S., & Wittes, B. (2020). *Unmaking the presidency: Donald Trump's war on the world's most powerful office*. Farrar, Strauss and Giroux.

- Hindman, M. (2009). *The myth of digital democracy*. Princeton University Press.
- Howse, P. (2018). The Beeb and an illusion of balance. *The New European*. <https://www.theneweuropean.co.uk/top-stories/patrick-howse-bbc-illusion-of-balance-1-5654342>
- Huang, H. (2017). A war of (mis)Information: The political effects of rumors and rumor rebuttals in an authoritarian country. *British Journal of Political Science*, 47(2), 283–311. <https://doi.org/10.1017/S0007123415000253>
- Jungherr, A., Posegga, O., & An, J. (2019a). Discursive power in contemporary media systems: A comparative framework. *The International Journal of Press/Politics*, 24(4), 404–425. <https://doi.org/10.1177/1940161219841543>
- Jungherr, A., Rivero, G., & Gayo-Avello, D. (2020). *Retooling politics: How digital media are shaping democracy*. Cambridge University Press.
- Jungherr, A., Schoen, H., & Jürgens, P. (2016). The mediation of politics through Twitter: An analysis of messages posted during the campaign for the German federal election 2013. *Journal of Computer-Mediated Communication*, 21(1), 50–68. <https://doi.org/10.1111/jcc4.12143>
- Jungherr, A., Schoen, H., Posegga, O., & Jürgens, P. (2017). Digital trace data in the study of public opinion: An indicator of attention toward politics rather than political support. *Social Science Computer Review*, 35(3), 336–356. <https://doi.org/10.1177/0894439316631043>
- Jungherr, A., Schroeder, R., & Stier, S. (2019b). Digital media and the surge of political outsiders: Explaining the success of political challengers in the United States, Germany, and China. *Social Media + Society*, 5(3), 1–12. <https://doi.org/10.1177/2056305119875439>
- Karpf, D. (2010). Macaca moments reconsidered: Electoral panopticon or netroots mobilization? *Journal of Information Technology & Politics*, 7(2–3), 143–162. <https://doi.org/10.1080/19331681003748891>
- Karpf, D. (2012). *The moveon effect: The unexpected transformation of American political advocacy*. Oxford University Press.
- Katz, R. S., & Mair, P. (2018). *Democracy and the cartelization of political parties*. Oxford University Press.
- Kaye, D. (2019). *Speech police: The global struggle to govern the Internet*. Columbia Global Reports.
- Keller, D. (2018). *Internet platforms: Observations on speech, danger, and money* (Hoover Institution's Aegis Paper Series No. 1807). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3262936
- Kim, J. W., & Kim, E. (2019). Identifying the effect of political rumor diffusion using variations in survey timing. *Quarterly Journal of Political Science*, 14(3), 293–311. <https://doi.org/10.1561/100.00017138>
- Kovic, M., Rauchfleisch, A., Sele, M., & Caspar, C. (2018). Digital astroturfing in politics: Definition, typology, and countermeasures. *Studies in Communication Sciences*, 18(1), 69–85. <https://doi.org/10.24434/j.scoms.2018.01.005>
- Kreiss, D., Lawrence, R. G., & McGregor, S. C. (2020). Political identity ownership: Symbolic contests to represent members of the public. *Social Media + Society*, 6(2), 1–5. <https://doi.org/10.1177/2056305120926495>
- Kreiss, D., & McGregor, S. C. (2018). Technology firms shape political communication: The work of Microsoft, Facebook, Twitter, and Google with campaigns during the 2016 U.S. Presidential cycle. *Political Communication*, 35(2), 155–177. <https://doi.org/10.1080/10584609.2017.1364814>
- Kreiss, D., & McGregor, S. C. (2019). The “arbiters of what our voters see”: Facebook and Google’s struggle with policy, process, and enforcement around political advertising. *Political Communication*, 36(4), 499–522. <https://doi.org/10.1080/10584609.2019.1619639>
- Ladd, J. M. (2012). *Why Americans hate the media and how it matters*. Princeton University Press.
- Lazer, D., Ruck, D. J., Quintana, A., Shugars, S., Joseph, K., Grinberg, N., Gallagher, R. J., Horgan, L., Gitomer, A., Bajak, A., Baum, M. A., Ognyanova, K., Qu, H., Hobbs, W. R., McCabe, S., & Green, J. (2020). *Covid-19 fake news on Twitter* (No. 18; The State of the Nation: A 50-State Covid-19 Survey). The COVID-19 Consortium for Understanding the Public’s Policy Preferences Across States. <https://kateto.net/covid19/COVID19%20CONSORTIUM%20REPORT%2018%20FAKE%20NEWS%20TWITTER%20OCT%202020.pdf>
- Levitsky, S., & Ziblatt, D. (2018). *How democracies die*. Crown Publishing Group.
- Lewandowsky, S., Stritzke, W. G. K., Freund, A. M., Oberauer, K., & Krueger, J. I. (2013). Misinformation, disinformation, and violent conflict: From Iraq and the “war on terror” to future threats to peace. *American Psychologist*, 68(7), 487–501. <https://doi.org/10.1037/a0034515>
- Mair, P. (2013). *Ruling the void: The hollowing of western democracy*. Verso.
- Marantz, A. (2019). *Antisocial: Online extremists, techno-utopians, and the hijacking of the American conversation*. Viking.
- Martinez, A. G. (2016). *Chaos monkeys: Obscene fortune and random failure in Silicon Valley*. Harper Collins.
- Maurer, M., Jost, P., Haßler, J., & Kruschinski, S. (2019). Auf den Spuren der Lügenpresse: Zur Richtigkeit und Ausgewogenheit der Medienberichterstattung in der “Flüchtlingskrise.” [On the trail of the lying press: On the accuracy and balance of media coverage during the “refugee crisis”] *Publizistik*, 64(1), 15–35. <https://doi.org/10.1007/s11616-018-00466-y>
- McGregor, S. C. (2019). Social media as public opinion: How journalists use social media to represent public opinion. *Journalism*, 20(8), 1070–1086. <https://doi.org/10.1177/1464884919845458>
- McGregor, S. C. (2020). “Taking the temperature of the room”: How political campaigns use social media to understand and represent public opinion. *Public Opinion Quarterly*, 84, 236–256. <https://doi.org/10.1093/poq/nfaa012>
- Mercier, H. (2020). *Not born yesterday: The science of who we trust and what we believe*. Princeton University Press.
- Micallef, N., He, B., Kumar, S., Ahamad, M., & Memon, N. (2020). The role of the crowd in countering misinformation: A case study of the COVID-19 infodemic. *ArXiv*. <http://arxiv.org/abs/2011.05773>
- Muirhead, R., & Rosenblum, N. L. (2019). *A lot of people are saying: The new conspiracism and the assault on democracy*. Princeton University Press.
- Nahon, K., & Hemsley, J. (2013). *Going viral*. Polity Press.
- Neuman, W. R. (1991). *The future of the mass audience*. Cambridge University Press.
- Neuman, W. R., Bimber, B., & Hindman, M. (2011). The internet and four dimensions of citizenship. In R. Y. Shapiro & L. R.

- Jacobs (Eds.), *The Oxford handbook of American public opinion and the media* (pp. 22–42). Oxford University Press.
- Newman, N., Fletcher, R., Kalogeropoulos, A., & Nielsen, R. K. (2019). *Reuters Institute digital news report 2019*. Reuters Institute for the Study of Journalism.
- Nielsen, R. K. (2012). The business of news. In T. Witschge, C. W. Anderson, D. Domingo, & A. Hermida (Eds.), *The SAGE handbook of digital journalism* (pp. 51–67). SAGE.
- Nielsen, R. K., & Ganter, S. A. (2018). Dealing with digital intermediaries: A case study of the relations between publishers and platforms. *New Media & Society*, 20(4), 1600–1617. <https://doi.org/10.1177/1461444817701318>
- Nyhan, B. (2020). Facts and myths about misperceptions. *Journal of Economic Perspectives*, 34(3), 220–236. <https://doi.org/10.1257/jep.34.3.220>
- Osmundsen, M., Bor, A., Vahlstrup, P. B., Bechmann, A., & Petersen, M. B. (2020). Partisan polarization is the primary psychological motivation behind “fake news” sharing on Twitter. *PsyArxiv*. <https://doi.org/10.31234/osf.io/v45bk>
- Papacharissi, Z. (Ed.) (2011). *A networked self: Identity, community, and culture on social network sites*. Routledge.
- Pereira, A., Bavel, J. J. V., & Harris, E. A. (2018). Identity concerns drive belief: The impact of partisan identity on the belief and dissemination of true and false news. *PsyArXiv*. <https://doi.org/10.31234/osf.io/7vc5d>
- Petersen, M. B. (2020). The evolutionary psychology of mass mobilization: How disinformation and demagogues coordinate rather than manipulate. *Current Opinion in Psychology*, 35, 71–75. <https://doi.org/10.1016/j.copsyc.2020.02.003>
- Petersen, M. B., Osmundsen, M., & Arceneaux, K. (2018). A “Need for Chaos” and the sharing of hostile political rumors in advanced democracies. *PsyArXiv*. <https://doi.org/10.31234/osf.io/6m4ts>
- Phillips, W. (2018). *The oxygen of amplification: Better practices for reporting on extremists, antagonists, and manipulators online*. Data & Society.
- Pickard, V., & Williams, A. T. (2014). Salvation or folly? The promises and perils of digital paywalls. *Digital Journalism*, 2(2), 195–213. <https://doi.org/10.1080/21670811.2013.865967>
- Pomerantsev, P. (2019). *This is not propaganda: Adventures in the war against reality*. Faber & Faber.
- Prior, M. (2007). *Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections*. Cambridge University Press.
- Project for Excellence in Journalism. (2010). *How news happens: The study of the news ecosystem of one American city*. <http://www.journalism.org/2010/01/11/how-news-happens/>
- Przeworski, A. (2019). *Crises of democracy*. Cambridge University Press.
- Romm, T. (2020). Tech giants led by Amazon, Facebook and Google spent nearly half a billion on lobbying over the past decade, new data shows. *The Washington Post*. <https://www.washingtonpost.com/technology/2020/01/22/amazon-facebook-google-lobbying-2019/>
- Roozenbeek, J., Schneider, C. R., Dryhurst, S., Kerr, J., Freeman, A. L. J., Recchia, G., van der Bles, A. M., & van der Linden, S. (2020). Susceptibility to misinformation about COVID-19 around the world. *Royal Society Open Science*, 7(10), Article 201199. <https://doi.org/10.1098/rsos.201199>
- Ross, A. S., & Rivers, D. J. (2018). Discursive deflection: Accusation of “fake news” and the spread of mis-and disinformation in the tweets of President Trump. *Social Media+ Society*, 4(2), 2056305118776010.
- Rossini, P., Stromer-Galley, J., Baptista, E. A., & Veiga de Oliveira, V. (2020). Dysfunctional information sharing on WhatsApp and Facebook: The role of political talk, cross-cutting exposure and social corrections. *New Media & Society*. Advance online publication. <https://doi.org/10.1177/1461444820928059>
- Schroeder, R. (2018). *Social theory after the Internet: Media, technology and globalization*. UCL Press.
- Sehl, A., Simon, F. M., & Schroeder, R. (2020). The populist campaigns against European public service media: Hot air or existential threat. *International Communication Gazette*. Advance online publication. <https://doi.org/10.1177/1748048520939868>
- Shoemaker, P. J., & Vos, T. P. (2009). *Gatekeeping theory*. Routledge.
- Singer, P. W., & Brooking, E. T. (2018). *LikeWar: The weaponization of social media*. Eamon Dolan.
- Southwell, B., Thorson, E. A., & Sheble, L. (Eds.). (2018). *Misinformation and mass audiences*. University of Texas Press.
- Spayd, L. (2016). The truth about “false balance.” *The New York Times*. <https://www.nytimes.com/2016/09/11/public-editor/the-truth-about-false-balance.html>
- Suzor, N. P. (2019). *Lawless: The secret rules that govern our digital lives*. Cambridge University Press.
- Usher, N. (2020). The NYT in Trump’s America: A failure for liberals, a champion for liberalism. *Political Communication*, 37, 573–581. <https://doi.org/10.1080/10584609.2020.1777686>
- Van Bavel, J. J., & Pereira, A. (2018). The partisan brain: An identity-based model of political belief. *Trends in Cognitive Sciences*, 22(3), 213–224. <https://doi.org/10.1016/j.tics.2018.01.004>
- Wiener, A. (2020). *Uncanny valley: A memoir*. MCD.
- Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. Public Affairs

Author Biographies

Andreas Jungherr (Dr. rer. pol. Otto Friedrich University Bamberg) is professor for Communication, Digitalization, and Publics at the Friedrich Schiller University Jena. His research interests include political communication, the effects of digital technology on politics, and computational social science.

Ralph Schroeder (PhD London School of Economics and Political Science) is professor in Social Science of the Internet at the Oxford Internet Institute. His current research interests include digital media and right-wing populism and the social implications of big data.