UNIVERSITY OF AMSTERDAM

UvA-DARE (Digital Academic Repository)

Exposure Diversity

Helberger, N.; Wojcieszak, M.

DOI
10.1515/9783110481129-029
Publication date
2018
Document Version
Final published version
Published in
Mediated Communication

Link to publication

Citation for published version (APA):
Helberger, N., & Wojcieszak, M. (2018). Exposure Diversity. In P. M. Napoli (Ed.), *Mediated Communication* (pp. 535-560). (Handbooks of Communication Science; Vol. 7). De Gruyter Mouton. https://doi.org/10.1515/9783110481129-029

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, P.O. Box 19185, 1000 GD Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (https://dare.uva.nl)

Download date:12 Nov 2026

Natali Helberger and Magdalena Wojcieszak

28 Exposure Diversity

Abstract: The digital environment has fundamentally changed the conditions for media diversity and for exposure diversity in particular, and has made research in this area more important than ever. Paradoxically, the digital information environment, with its abundance of information, has greatly expanded, and at the same time decreased the opportunities for citizens to encounter diverse content. Never was it possible to receive more information, not only from the traditional national media outlets, but also from a myriad of other media companies. And more than ever do citizens rely on the media but also on new institutions such as search engines, social networks and recommendation algorithms to help them filter through the rich choice of information and find and identify relevant and trustworthy information. The objective of this chapter is to identify the main structural, technological and individual challenges for exposure diversity, the state of the art of exposure diversity research so far, and the contours of a future research agenda. In particular, we stress the need for more comparative work, more research that combines normative and empirical expertise, but also work on methodological innovation. We explain why methodological innovations, in the form of online behavior tracking or new forms of observational computational research, can open up new and exciting avenues for answering questions that could not be studied before.

Keywords: exposure diversity, exposure to dissimilar views, democratic theory, interdisciplinarity, normative-empirical research

"*There can be no democracy without pluralism*"

(European Court of Human Rights 2012)

1 Introduction

The idea of a society in which different people with different opinions are free to engage with others is a prominent condition in democratic theories. Diversity is a normative value, with a long tradition in free speech and democratic theory. Democracies do require that "people in general, and especially differing groups, get to debate their views internally among themselves, receive information relevant to their interests and views, rally support for their group, and finally present their views to the world at large" (Baker 2007: 31–32). Diversity is also a social reality in the sense that each society inevitably consists of individuals that differ in origin, beliefs, history, traditions, political leanings and interests – differences that need to be faced, encountered, and negotiated for a democratic society to function. Insofar, diversity is not

https://doi.org/10.1515/9783110481129-028

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

only about the ability of different speakers to express their views and opinions and make themselves heard. It is also about being exposed to these diverse ideas, engaging with them and, ultimately, forming one's own beliefs on their basis. Expression of and exposure to diverse ideas and opinions are consequently two corresponding ends when talking about diversity and the role of the media in a democratic society. The diversity of supply, of sources and ideas in the media has a long tradition in communication research. The question of if, how, and under which conditions citizens are actually exposed to diversity in the media – exposure on the ground, so to speak – has turned into another important route of inquiry.

The digital environment has fundamentally changed the conditions for media diversity, and for exposure diversity in particular, and has made research in this area more important than ever. Paradoxically, in the digital information environment citizens have more information available than ever before, and yet, it has become far easier to avoid exposure to diverse media content. Never was it possible to receive more information, not only from the traditional national media outlets, but also from a myriad of other media companies. And more than ever do citizens rely on the media to help them filter through the rich choice of information and find and identify relevant and trust-worthy information. While providing readers with a diverse mix of information has traditionally been a key task for the media, in the digital environment, new players have entered the scene that provide this service to users. Search engines, news aggregators and social networks play an increasingly critical role in helping users to select information (Van Dijk 2012). And next to professionally trained editors, selecting and filtering information is increasingly a task that is performed by automated recommendation technologies that rely on (Big) data and artificial intelligence to provide users with information choices that conform to their profiles, interests and information needs. Whether these choices are (sufficiently) diverse or not, or lead to biased, partisan exposure or even filter bubbles are pressing questions of not only academic but also societal importance.

The objective of this chapter is to provide a concise overview of research on exposure diversity. This chapter will demonstrate that this research comes in many facets and with various faces and names. The chapter will also show that research on exposure diversity transcends disciplines, including communication science, psychology, media law, political science, and normative democratic theory. Insofar, another objective of this chapter is to raise awareness of the multi-disciplinarity of the subject and point out how empirical and normative inquiries can complement each other in a useful way.

As a general point of departure, this chapter understands diversity as a normative concept, a "concept with a mission" and considerable societal value. In other words, we regard exposure diversity not so much as a value and worthy study subject in itself, but as a concept that serves a democratic mission of realizing freedom of expression and contributing to a functioning democratic debate (see section 3). This is also the

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

conception of diversity that has informed (directly and even more so indirectly) media law and policy making. For this reason, we will pay particular attention to one critical aspect of exposure diversity, namely exposure to dissimilar views. Encountering ideas and perspectives that challenge citizens' prior attitudes is critical to achieving the public policy objectives of forming better informed and more mutually understanding citizenry.

We first position exposure diversity in its broader democratic and public policy context and later point to some of the main challenges for exposure diversity. We then identify the main lines of inquiry into exposure diversity so far and conclude with sketching the contours of a future research agenda.

2 Conceptual ambiguities

Before we proceed, it is important to realize that sketching a picture of the state of the art of exposure diversity is made difficult by the lack of an authoritative definition of the concept. To begin with the idea of diversity in media law and scholarship: there is considerable conceptual disagreement about the concrete meaning of the notions of diversity, but also of pluralism or plurality. Often, those notions are used interchangeably, creating "conceptual messiness" (McGonagle 2011). McGonagle suggests a pragmatic approach, such that pluralism refers to issues of media ownership and the choice between different providers of services, whereas diversity refers to the range of programs and services available, a distinction that is used more broadly in media law and policy scholarship (Valcke, Picard and Sükösd 2016: 1–3; Karppinen 2013: 4).

Outside media law and policy, research on exposure diversity comes in many forms, and under different headings. "Diversity of exposure" is a term coined by Philip Napoli (Napoli, 1997). In contrast to the more traditional measures of diversity, such as source diversity and content diversity, Napoli made an important contribution in drawing attention to the fact that it is this "exposure to diverse ideas, sources, and perspectives that facilitates the well-informed decision making that is central to the democratic notion of effective self-governance and the increased consumer satisfaction typically associated with economic perspectives on a diverse marketplace of ideas." (Napoli 1999a: 4). More specifically, Napoli defined exposure diversity as "the diversity of content or sources consumed by audience members, which, of course, may be very different from the diversity of content or sources available." (Napoli 1999a: 4). Others refer to "content as received" (McQuail 1993: 157), or "diversity of consumption" (Webster and Phalen 1994). Though by and large referring to the same concept, each notion implicates subtle differences. Additional perspectives focus on "diversity of choice" (Van der Wurff 2004) or "realistic accessibility" (Hargittai 2003; see also Cooper and Tang 2009: 406–7). The latter points to the fact that while many explorations into exposure diversity look into the consumption of media content that is

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

available, issues as to how and under what conditions the audience can actually find and access media content are another important facet of the issue.

Furthermore, related empirical work examines an important aspect of exposure diversity, namely exposure to dissimilar views, work that will be central in this chapter. Also here, scholars use diverse concepts, referring to cross-cutting (e.g., Mutz 2001) or counter-attitudinal exposure (e.g., Knobloch-Westerwick 2011). Despite using these somewhat different headings, this work examines whether, the extent to which, and the sources from which, citizens encounter views that challenge their prior party attachments, voting intentions, policy preferences, or attitudes toward various political issues (e.g., Garrett and Stroud 2014; Mutz and Martin 2001; Wojcieszak and Mutz 2009).

In turn, in the more technical disciplines, exposure diversity is often conceptualized in terms of serendipity or the distance between two items (Murakami et al. 2007; Kotkov, Wang and Veijalainen 2016; Kunaver and Pozrl 2017), and is typically less informed by more normative conceptions of diversity.

It is important to be aware of this diversity within the concept itself in order to avoid that researchers are encapsulated into their own conceptual and disciplinary filter bubbles. Also, the decision of which notion to use can in itself frame and position the research in a particular disciplinary or theoretical tradition.

3 The importance of exposure diversity for a democratic society

Models of democracy highlight the importance of pluralism as a form of dividing power and creating freedom for individuals to participate in the democratic process (Christians, Glasser, McQuail, Nordenstreng and White 2009). This freedom includes, among others, the freedom of speech as an important condition of genuine democracy (Baker 2007). Democracy, in turn, not only entails giving citizens and media the opportunity "to speak" and disseminate information, but also requires the ability for others to receive, listen to, and be able to engage with the opinions and content disseminated.

Indeed, liberal-pluralist conceptions of democracies posit that societies function best when citizens are up-to-date on political events, knowledgeable about the political process, able to engage with other views (even if they are not their own), and familiar with multiple perspectives on relevant topics (see Berelson 1952; Delli Carpini and Keeter 1996). As Meiklejohn (1948: 25) puts it: "[t[he voters, therefore, must be made as wise as possible. The welfare of the community requires that those who decide issues shall understand them... This in turn requires that so far as time allows, all facts and interests relevant to the problem shall be fully and fairly presented... Both facts and interests must be given in such a way that all the alternative lines of action can be wisely measured in relation to one another." The role of the media in this

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

liberal-pluralist conception of democracy is often associated with the "market place of ideas" metaphor, and with organizing an "adversary process" (Schauer 1982: 14) in which different ideas and opinions compete so that in the end truth will prevail (Napoli 1999b).

Sociologists, philosophers, and political theorists have long pointed to the democratic benefits of encountering diverse perspectives. These benefits are said to primarily emerge from exposure to views and arguments that challenge individual prior beliefs (see Mutz 1995). For instance, scholars agree that exposure to oppositional perspectives is a "specific necessary criterion" (Thompson 2008: p. 513) and "a core requirement" of deliberative democracy (Mutz 2008: 535), and also that citizens should encounter and be open to "political *alternatives* in a genuine effort to clarify and refine public policy" (Berelson 1952: 323, emphasis added).

Only when people encounter – and ideally engage with – diverse ideas, can they make informed decisions that account for the predicaments of others and transcend their own personal biases. In short, exposure diversity in general and dissimilar exposure in particular are not only hoped to promote "representative thinking" (Arendt 1968: 241), "sound political judgment" (Page 1996: 2), and "enlightened understanding" (Dahl 1989: 105), and to transform citizens into a cohesive collective (Barber 1984), but are also "necessary conditions for human progress" more generally (Karppinen 2013: 45).

Traditionally, scholars have focused on immediate social circles (e.g., Mutz 2001), larger community, such as town hall meetings (e.g., Tocqueville 2000/1835), or citizen discussions and structured deliberations (Fishkin 1995; Wojcieszak 2011a) as the avenues for citizens to encounter diverse and dissimilar perspectives. Most people, however, receive information about news and current affairs from the media (Mutz 1994; Mutz and Martin 2001), and it is the media that are the key intermediary between political elites and citizens (Esser and Strömbäck 2014). As such, much theorizing and research on exposure diversity, dissimilar exposure, and their democratic contributions focuses on the media (Baker 2002; Habermas 2006; Jacubovic 2007 and 2015), asking questions about the role that the media play in exposing people to diverse media content and the effects of this exposure (e.g., Goldman and Mutz 2014; Helberger 2012; Napoli 1999a; Stroud 2011; Webster 2005 and 2014; Weeks, Ksiazek and Holbert 2016).

4 The practical importance of (research into) exposure diversity in policymaking

The intricate relationship between democracy, pluralism and freedom of speech is not only central to much democratic theory, but also features center stage in media policy. This link is aptly explained by the European Court of Human Rights, according to which:

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

> "Freedom of expression constitutes one of the essential foundations of such a [democratic] society, one of the basic conditions for its progress and for the development of every man. [Freedom of expression] (...) Is applicable not only to 'information' or 'ideas' that are favorably received or regarded as inoffensive or as a matter of indifference, but also to those that offend, shock or disturb the State or any sector of the population. Such as the demands of pluralism, tolerance and broadmindedness without which there is no 'democratic society'." (ECHR, Handyside)[1]

Despite its crucial importance, this relationship between exposure diversity and media policy is a complicated one (Helberger 2011). As illustrated by the quote above, media diversity policies are typically aimed at creating the conditions so that citizens can encounter various opinions from different sources (Council of Europe 1999 and 2007). Indeed, at least in Europe, states have an obligation to put in place the necessary policies to guarantee effective pluralism.[2] Those policies typically do so through safeguarding that in the media a diversity of ideas and opinions is available from a diversity of sources and speakers (often also referred to as pluralism, though the notions of pluralism and diversity are also often used interchangeably, McGonagle 2011). In Europe, the Council of Europe, an international body that has been pivotal in setting standards for media law and policies, has defined the notion of "media pluralism" for the purpose of policy making as "diversity of media supply, reflected, for example, in the existence of a plurality of independent and autonomous media (generally called structural pluralism) as well as a diversity of media types and contents available to the public. Therefore both the structural/quantitative and qualitative aspects are central to the notion of media pluralism. It should be stressed that pluralism is about diversity in the media that is made available to the public, which does not always coincide with what is actually consumed" (Council of Europe 1999, Explanatory Memorandum, para. 3).

It is important to note the restrained position of the Council of Europe, and of media law and policy makers more generally, when it comes to matters of actual exposure to diversity. This is partly due to the difficult position of media law and policymakers in regulating exposure diversity. Constitutional limits in the form of the rights to freedom of expression and the right to privacy limit what law and policy makers can do to tell the audience what it "ought to see" or how diverse a proper citizen's media diet should be (Fenchel 1997; Valcke 2011). Similar concerns apply to media authorities who wish to measure diverse exposure: reading and listening in private and unobserved is not only an expression of citizens' right to privacy, but also a fundamental condition for the exercise of freedom of expression (Irion and Helberger 2017; Ofcom 2015). It is worth mentioning that despite these concerns, the European Convention on Human Rights does leave regulators some leeway to regulate the media, which has been used to also deal with, at least indirectly, matters of exposure diversity, certainly in comparison to the US. Here, the

1 ECtHR 7 December 1976, Handyside v. UK.

2 ECtHR 7 June 2012, Centro Europa 7 S.R.L. and Di Stefano v. Italy

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

constitutional environment, and the strong position of the First Amendment dictate a far more non-interventionist stance, which is even less conductive to interfering with any matters of exposure diversity (Napoli 1997).

The constitutional difficulty of dealing in a meaningful way with exposure diversity persists, even though policy makers increasingly realize that matters of exposure diversity are at the heart of some of the more recent challenges to diversity policies. Examples are new forms of algorithmic filtering as well as the advent of new information intermediaries that have taken an increasingly critical role in channeling attention, and in so doing function as a new mediator between the media and citizens (Vike-Freiberga et.al. 2013), as we detail in section 5 and 6. Insofar, a number of regulatory authorities in Europe have begun paying more attention to exposure diversity, and exploring the possibilities, within the constitutional boundaries, to expand their monitoring activities to matters of exposure diversity (Ofcom 2012: 25; the Dutch Commissariaat voor de Media 2017). Doing so, however, requires a sound understanding of diversity as a value, and how the increasingly complex and fastchanging information ecology is affecting the way the value is being articulated and realised.

Exposure diversity is therefore also an excellent example of the importance of involving and combining social science research and normative research in the actual process of media policy making. This is especially so because the understanding and measuring of exposure diversity and its impact is, and continues to be, an important research challenge as well.

5 Challenges to exposure diversity

Bearing the importance of exposure diversity in a democratic society in mind, we will now briefly outline the various challenges to media diversity in general, and to individual exposure to dissimilar political perspectives in particular. We mostly focus on (non-mutually exclusive) challenges introduced by the dramatic changes in the current media environment.

5.1 Challenges related to the structure of media markets

The first challenge to exposure diversity is related to the structure of media markets, in particular the ever increasing content multiplicity. Traditional offline channels are now tailored to the attitudes, values, and identities of the audiences, the internet offers nearly unlimited content online, and information intermediaries, such as Facebook, Twitter and Google continue to amplify content diversity through integrating users' actively in the process of creating and sharing information. In this multiplicity

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

of sources and content, people must first choose between news about public affairs and information about celebrities, movie releases, or other entertainment content. Because politics is sometimes perceived as complex or boring, people may choose to avoid this topic. The high-choice increases attention to entertainment over public affairs, as people engage in what is termed *interest-based selectivity* (see Feldman, Wojcieszak, Stroud, and Bimber 2013). Estimates vary somewhat but provide a generally consistent picture. In the United States, nearly half of Americans are said to be news avoiders (Ksiazek et al. 2010), and the opportunity to choose between news or non-political content, such as sitcoms, dramas, or sports, leads most people to choose entertainment, with only 35% selecting news (Prior 2007). By limiting exposure to news and public affairs in the first place, interest-based selectivity essentially limits exposure to diverse political viewpoints in the media.

The preference for entertainment over political content may be lower in countries that have strong public service broadcasting in place (see Curran et al. 2009). Media systems offer opportunity structures (e.g., Esser et al. 2012; Skovsgaard et al. 2016) by determining the availability of, and access to, different traditional and new media, and influencing the information people see (Becker and Schoenbach 1989; Napoli 1999a). As such, citizens in public service systems have a greater chance to encounter political programming, albeit inadvertently, than citizens in the US market-driven media system. Research in fact shows that "the public service model of broadcasting gives greater attention to public affairs and international news, and thereby fosters greater knowledge in these areas, than the market model. The public service model makes television news more accessible on leading channels and fosters higher levels of television news consumption" (Curran et al. 2009: 22). The structure of national media markets, of course, cannot be seen separately from the regulatory climate in a respective country, as regulation is an important factor shaping national media markets and creating the conditions for (exposure) diversity (Freedman 2008; Valcke 2004). In sum, the sheer availability of media and content alternatives may decrease exposure to news and current affairs information – a prerequisite to exposure diversity in the first place – although differently in different media systems.

5.2 Challenges related to individual preferences and characteristic of the individual members of the audience

Another related challenge to exposure diversity comes from individual factors, and here in particular *individual political predispositions* that are increasingly important given the aforementioned multiplicity of sources and content in the current fragmented media environment**.** When people select public affairs news, many engage in *partisan selectivity*, namely prefer ring media sources and political content that support their partisanship, ideology, or prior attitudes (Iyengar and Hahn 2009; Knobloch-Westerwick and

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

Meng 2009; Stroud 2008, 2011). This preference is often explained with an individual desire for consistency (i.e., cognitive dissonance theory, Festinger 1957). In short, because people are motivated to avoid cognitive discomfort, they tend to seek out information in line with their established attitudes. Another explanation for individual preference for like-minded political content lies in perceived source credibility (Johnson and Kaye 2013; Metzger et al. 2015; Stroud and Lee 2013). In general, people grant more credibility to sources that share their attitudes than to discrepant sources (Metzger and Flanagin 2013; Metzger et al. 2015). As such, people would choose like-minded outlets and messages not in order to protect their beliefs or avoid dissonance, but simply because they see such sources and content as more credible (Metzger et al. 2015).

Again, the extent to which individual political predispositions limit exposure diversity likely depends on national media systems and policies. In the US, observational data find that citizens are attracted to news sources consistent with their party preferences (e.g., Republicans turning to Fox News at greater rates than Democrats; e.g., Stroud 2011). Experimental designs that examine the selection of specific content focus on individual policy preferences, finding, for instance, that abortion opponents or climate change sceptics prefer media messages consistent with their attitudes, and especially when these attitudes are strong and personally important (e.g., Knobloch-Westerwick 2012; Knobloch-Westerwick and Meng 2009; Peralta et al. 2016).[3]

Because media systems offer more or less crystalized alternatives, depending on media parallelism or the alignment of parties with media sources (Van Kempen 2007), partisan selectivity is lower in media systems where media outlets are not closely aligned with major political parties (Mutz and Goldman 2012). As such, the challenges posed by individual political predispositions to media diversity could be lower in most European systems.

5.3 Technological challenges

Technological changes introduce new dynamics to the way people encounter information, and – consequently – to the chances they have to encounter diverse and dissimilar content. Where the traditional media had a leading role in mediating between citizens and the political world, and determining the conditions of exposure to diverse content, today the traditional outlets are joined by new players – social media platforms, app stores, search engines, and new technologies, such as data-driven algorithmic recommendations, intelligent autonomous agents, such as bots

3 It is important to note that attraction to pro-attitudinal messages is not consistently correlated with an aversion to counter-attitudinal messages (e.g., Garrett, Carnahan, and Lynch 2013), and many factors promote interest in both types of content (Chaffee, Saphir, Graf, et al. 2001).

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

and personal assistants, but also algorithmic filtering and decision-making of which content to display, and which not. Often, these are players that are not bound by existing normative, ethical and legal expectations of complying with the demands of media diversity (e.g. social media platforms, Helberger, Kleinen-Von Königslöw and Van Der Noll, 2015). Their understanding of the relevance of diversity, or what diversity and diverse exposure actually means, may differ fundamentally from the understanding of traditional media companies (see Zuiderveen Borgesius, et al. 2016 for a thorough review of the effects of personalization due to algorithms).

And yet, algorithmic filtering and data-driven recommendations can have an important role in steering users' exposure to information, and thereby also affecting the diversity of such exposure, and whether or not users are exposed to dissimilar views. A growing body of research tests the effects of algorithmic filtering on the diversity of media content that users are exposed to and finds mixed evidence. One study, for example, examined the effects of user-driven versus system-driven customizable recommendation technology, and found that exposure to system-driven recommendation technology can result in political selective exposure, especially when combined with ideology-based customizability (Dylko 2015). Similarly, Beam found evidence of selective exposure as a result of algorithmic recommendations but interestingly the same study also found that explicit user-driven customization can result in higher exposure to counter-attitudinal views (Beam 2013; see also Beam and Kosicki 2014, finding that personlised news can result in users viewing more sources and news categories). A positive correlation between algorithmic recommendations and exposure diversity was found in a study on Facebook's algorithmically ranked news feed that found that use of social media platforms can result in exposure to more diverse news (Bakshy et al. 2015). Another study found both an increase and a decrease in exposure to ideological-conforming content (Flaxman et al. 2016).

6 Research into exposure diversity – different lines of inquiry

Research on exposure diversity can be divided into different lines of inquiry. Not claiming that this is an exhaustive list, this chapter sketches at least 5 partly overlapping areas[4]: research on whether or not people indeed consume diverse content; research on the effects of diverse exposure; research on conditions of diverse exposure; research on exposure diversity and technological innovation; and media law and policy research on exposure diversity. We add some nuance on these issues in section 7.

4 Engaging into a complete literature review would far exceed the scope of this chapter.

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

6.1 Do people have diverse media diets and are they exposed to dissimilar views?

A question that is central to research on exposure diversity is whether citizens' media diets are diverse and whether people encounter dissimilar views in offline and online media. Generally, this line of research shows that the availability of more diverse media content does not necessarily translate into more diverse exposure, and that this holds in both offline and online markets (see e.g. Napoli 1999a; Ferguson and Perse 1993; Webster and Phalen 1994; Prior 2004; Stark 2009). In fact, more media diversity, conceptualized as the sheer number of content options and/or outlets available to citizens, can lead to a decrease in the diversity of the content consumed. Specifically, evidence suggests that exposure to dissimilar political views decreases with the increase of the number of media sources available to an individual. That is, "[a]s the number of potential news sources multiplies, consumers must choose among them, and that exercise of choice may lead to less diversity of political exposure" (Mutz and Martin 2001: 111).

The changes in the current media environment have reinvigorated this area of inquiry (see Stroud 2008). Multiplicity of sources gives citizens unprecedented agency over content production, consumption and dissemination. Also, the algorithms have the power to shape the range of information that people encounter online. These changes are theorized and studied by scholars interested in selective exposure to partisan media outlets and like-minded political content (e.g., Garrett and Stroud 2014; Stroud 2010) as well as those studying so-called "filter-bubbles" (Pariser 2011) and echo-chambers (Garret 2009) in online social networks. Scholars find that the active involvement of citizens in personalizing media diets and the algorithmic filters and data-driven media selection may limit exposure diversity, in the forms of increased selective exposure to like-minded content and homogenous online networks (see section 4). This, in turn, can foment polarization (see Iyengar et al. 2012; Yang et al. 2016), reinforce individual priors (e.g., Knobloch-Westerwick and Meng 2011), and move partisan sub-groups further to their side and farther away from one another (Bennett and Iyengar 2008; Sunstein 2001). As a result, this line of inquiry is crucial to not only communication research but also media law and policy scholars, as well as policymakers.

6.2 What are the effects of diverse exposure?

In a similar vein, research that tests the effects of diverse exposure, and whether the theoretical expectations regarding the democratic benefits of diverse exposure can be confirmed or not, is particularly relevant, also from a democratic theory point of view. Researchers confirmed many theoretical expectations for exposure diversity. For instance, diversity in the media can create opportunities for users to encounter

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

different opinions, self-reflect on their own viewpoints (Kwon, Moon, and Stefanone 2015: 1417–1435) or enhance social and cultural inclusion (Huckfeldt, Johnson, and Sprague 2002: 1–21), for the case of social networks. Also, some work shows that encountering dissimilar views, be it from interpersonal contacts, online groups, or news media enhances tolerance (Mutz 2002), increases one's familiarity with views oppositional to one's own (Price, Cappella, and Nir 2001), has some positive effects on political knowledge (see Scheufele et al. 2004), and also leads people to more accurately perceive public opinion (Wojcieszak 2011b; Wojcieszak and Rojas 2011).

However, it is also important to realize that media pluralism as a democratic ideal is not uncontested. Diversity can compete with other, not less important public or economic values, such as the need for reducing complexities (Neuberger and Lobgis 2010), personal autonomy of the audience, the provision of information of personal importance to the audience, and the freedom not to encounter certain information (Fenchel 2007). Also, research shows that diversity policies and exposure to dissimilar perspectives can at times backfire and produce the opposite of what diversity was hoped to achieve. For instance, encountering counter-attitudinal perspectives in news media depresses political engagement (Dilliplane 2011; Matthes 2012; Nir and Druckman 2008) and can lead to attitude extremity, especially among strongly opinionated citizens who are not open to dissimilar views and do not process them even-handedly (Lodge and Taber 2000; Redlawsk 2002; Taber and Lodge 2006). *Rather,* people are generally driven by directional goals when processing information, readily accepting attitude – consonant information, discrediting, ignoring, or counter-arguing attitude – disconfirming content (see Taber and Lodge, 2016). Ultimately, exposure to dissimilar or even balanced content can polarize attitudes (Lord, Ross, and Lepper 1979; Meffert et al. 2006; Taber and Lodge 2006; Nyhan and Reifler 2011; Wojcieszak 2011a; Wojcieszak and Price 2010).

6.3 What are the conditions that impact diverse exposure?

Other research seeks to understand the conditions that influence if, and how people encounter and engage with diverse content (e.g. Hargittai 2003 with focus on media literacy, or more generally the individual or contextual factors that can predict audience exposure to diverse content, as e.g. in Cooper and Tang 2009). Other work differentiates further according to audience characteristics, showing that exposure to a greater variety of news media results in more diverse consumption for less educated respondents, while the effect on better educated respondents is smaller (Van der Wurff 2011).

Another line of inquiry tries to develop a better understanding of factors that contribute to diverse exposure or lack thereof. Much research about predictors of media and content choice focuses on individual-level factors and predispositions, such as political knowledge, interest in news, and strength of political leanings or

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

attitudes (e.g. Feldman et al. 2013; Garrett 2009a; Knobloch-Westerwick and Meng 2009; Ksiazek, Malthouse, and Webster, 2010; Lee et al. 2016; Prior 2007; Stroud 2011). Scholars also recognize that social or technological factors play an important role. For instance, online endorsements by Facebook friends not only influence users' decisions regarding which content to consume, but can also override partisan selectivity (Anspach 2017; Messing and Westwood 2014). These social factors in online networks are closely intertwined with technological factors, such that the Facebook algorithm prioritizes information shared by close and frequent connections. In sum, individual choice, as well as social network and algorithmic ranking influence exposure diversity (Bakshy, Messing, and Adamic 2015).

Some additional work addresses the systemic-level factors (e.g., the media system, the availability of public service broadcasting, media parallelism, etc.) that may influence the extent to which citizens are exposed to diverse views and dissimilar political perspectives. We mention this work, in section 7.

6.4 Exposure diversity & technological innovation

Research on exposure diversity (in its various dimensions) has received a new surge with the increasing impact of new information intermediaries on media markets, and accompanying concerns about filter bubbles and possible negative implications for overall diversity in the media (Pariser 2011; Sunstein 2001). On the one hand, in its 2017 News Report, the Reuters Institute found that users of, inter alia, social media were significantly more likely to see sources they would not normally use, likely including those that offer dissimilar viewpoints. Similarly, some research finds that the internet in general and social media in particular facilitate incidental encounters with news and political information (Brundidge 2010; Kim et al. 2013; Valeriani and Vaccari 2015; Tewksbury, Weaver, and Maddex 2001) and also diverse and dissimilar perspectives (e.g., Wojcieszak and Mutz 2009; Lee and Kim 2016; Lee et al. 2014; see also Messing and Westwood 2014; Diehl, Weeks, and Zúñiga 2016).

On the other hand, other research points to rather negative effects of the online environment on exposure diversity. Some scholars find that Twitter users are unlikely to be exposed to cross-ideological content and that the networks, or clusters, they form are politically homogeneous (Himelboim, McCreery, and Smith 2013), or that social network users in fact create like-minded echo chambers that limit exposure to attitude-challenging views (Quattrociocchi, Scala and Sunstein 2016). Yet other research, using individual and aggregate data, finds that ideological segregation of online news consumption is low, and – although it is higher than the segregation of news consumed from traditional offline outlets – it is substantially lower than the ideological segregation of face-to-face networks (Gentzkow and Shapiro 2011). Yet other work using browsing histories, suggests that social networks and search engines are associated with increased exposure to political content that challenges one's political views. Still,

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

most people visit mainstream news outlets, ultimately tempering the effects of the technological affordances on exposure diversity (Flaxman, Goel, and Rao 2016).

In sum, this line of research offers somewhat contradictory findings on how technological innovations influence exposure diversity. This mixed evidence is largely due to the fact that research conclusions are highly dependent on the specific scholarly focus (e.g., news websites, social networks, etc.), and on researchers' methodological and conceptual decisions, but also the data themselves (e.g., self-reports, web-logs, content analysis, etc.).

Next to communication science research, an interesting line of technology research is experimenting with ways to translate exposure diversity into technological design (Munson, Zhou, and Resnick 2009; Lathia et al. 2010; Ozturk and Han, 2014; Vargas and Castells 2011; Helberger, Karppinen, and d'Acunto 2016). In other words, research can study not only the effects of technological innovation on the (dynamics of) exposure diversity, but also the means of using technological innovation to promote exposure to diverse content.

6.5 Media law and policy research

The empirical finding that diversity of supply does not automatically translate into diversity of exposure is also an important finding for media law and policy research. More generally, research on the conditions, dynamics and effects of exposure diversity is relevant and useful for media law and policy, which can pave the way to designing more evidence-based policy responses and ways of creating favorable conditions for not only diversity of supply, but also diversity of exposure. This becomes evident in the light of the aforementioned rise of platforms and algorithmic filtering. These technological developments have further highlighted, for example, the need to better measure the risks to pluralism and diversity in general, and exposure diversity in particular (Valcke et al. 2009; Craufurd-Smith and Tambini 2012). Others concentrate on the implications for freedom of expression or democracy (Van Hoboken 2012; Sunstein 2001; Pariser 2011), the regulatory frameworks (Foster 2010; Schulz, Held and Laudien 2015), the role of public service media (Goodman 2004; Burri 2015; Helberger 2015), or regulatory responses to new challenge, such as the arrival of social media platforms and their implications for diversity (Foster 2012; Van Dijk and Poell 2017; Helberger, Poell, and Pierson 2017).

7 Agenda for future work

Research on broadly conceived exposure diversity will continue to be important, due to the dynamic nature of media markets, technological developments, changes in

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

user behavior, and also the role that media play in the process of democratic meaning making. We are only beginning to understand these processes, and so below we outline some lines of inquiry which – in our view – will be theoretically, methodologically, and practically, increasingly important.

Most generally, we propose that academic research needs to develop a comprehensive model that explains the antecedents and the consequences of exposure diversity and dissimilar exposure. What are the conditions in which media diversity and dissimilar exposure backfire? For whom, when, and where do they bring democratic benefits? Addressing these questions is imperative before we fuel resources to confront media users with the "different." Doing so requires normative-empirical approaches.

First, scholars across disciplines should examine the specific *conditions* under which exposure to dissimilar political views in the media occurs; ideally doing so on a comparative scale, in order to systematically show how the macro-system in which citizens are embedded matters to exposure diversity. What factors encourage people to have the media diets they do, to limit or expand the repertoire of sources through which they gather information, to see dissimilar content, on which issues, and through which media? Some theoretically relevant factors include (1) not only the oft-studied and aforementioned individual characteristics and political predispositions, but also (2) one's social context, such as the composition of interpersonal and online networks (e.g., the extent to which one's social ties share a person's political views; after all one's social context facilitates exposure to information), (3) media and political systems (e.g., whether there is a strong alignment between media sources and political parties; whether a strong public service broadcasting system is in place, the extent to which the media are independent of the government), as well as (4) broader economic, social and technological factors. This line of research would shed light on what kinds of people, in what types of social contexts and in which media and political systems have which kinds of media diets.

This leads us to another, so far under-researched question, namely research into *who media users actually are and what their preferences and ideas of diversity are*. For example, research in the Netherlands shows that a majority of Dutch users actually value diversity and are concerned about the potential effects of personalized recommenders in being broadly and diversely informed (Balazs et al. 2017), an insight that adds an important qualification to the discussion about filter-bubbles and demonstrates that some groups in society are unlikely to end up in filter-bubbles. With the trend towards more interactive, personalized and data-driven forms of distribution of media content also comes the realization that the audience, too, is very diverse and that this diversity in turn may affect the effects of diversity. For example, researchers find that polarization effects are especially pronounced among those citizens who have strong prior views, as those individuals have the greatest motivation to counter-argue against any attitude-disconfirming information and often possess the greatest knowledge with which to do so (for a review see Leeper and Slothuus 2014).

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

Studying these issues, using both qualitative and quantitative methods, will be an important line of research.

Third, although theorists and practitioners typically focus on whether citizens *see* diverse and dissimilar views in the media, it is as crucial to examine the specific *effects* exerted by media diversity and dissimilar exposure on democratically relevant attitudes, cognitions, and behaviors. So far, much research operates under the (theoretical) premise that citizens behave like citizens "ought to behave," and that exposure to diverse content is conducive to the democratic goals that societies consider important. But what if these efforts do more harm than good? As was mentioned previously, psychological work on motivated reasoning shows that many *citizens are not open to dissimilar views and do not process them even-handedly* (Lodge and Taber 2000; Redlawsk 2002; Taber and Lodge 2006). In which conditions, for whom and where, does dissimilar exposure backfire, leading to polarization or hostility, versus bringing about the various theoretically claimed benefits, such as increased tolerance or understanding? What are the immediate and cumulative overtime effects of exposure diversity, and what are the individual, social, and system-level factors that enhance or minimize polarization resulting from dissimilar exposure? It is essential to study potential *(side)effects of diverse exposure to potentially adjust democratic theory and media law and policy.*

Fourth, given the evidence from social-psychological work, future research should attend to the question of *how to minimize the potential harms and maximize the benefits of media diversity and dissimilar exposure.* This step speaks to the perennial scholarly and practical challenge to find ways to encourage people – especially the strongly opinionated citizens – to be more open to diverse dissimilar views. Recent research suggests that indications that certain media content is popular (i.e., endorsements: "Likes" or "Most Read") or that being open to difference is socially valued (e.g., "We respect different views") may encourage a person to consider dissimilar views (see www.engagingnewsproject.org; Messing and Westwood 2012). Other research points to the possible role of technology and technological settings in maximizing the benefits of dissimilar exposure (Ansbach 2017; Munson and Resnick 2009; Helberger, Karppinen, and d'Actuno 2016). Future studies should attend to other potential cues, primes, or settings in media that could promote more even-handed processing of dissimilar information and increase the chances that exposure diversity brings about the promised benefits.

Furthermore, another fruitful area of research includes systematically distinguishing between *dissimilarity* versus *diversity* in news and political content more broadly. This avenue for future investigation relates to the lack of conceptual clarity as to what actually is "media diversity" or how to clearly define "diverse" or "dissimilar" exposure. Do dissimilar views have different effects when shown with like-minded views in the same *article* (i.e., internal diversity on content level) *versus* when shown in the same *news outlet* (i.e., internal diversity on outlet level) *versus* when a person accesses both dissimilar and like-minded *news sources* (i.e., external diversity

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

on a media diet level)? For instance, a news article featuring solely dissimilar views may make people feel isolated or angry, motivating them to stand up to defend their views (especially if these views are strong), whereas an article with some like-mined and some dissimilar views may reduce cognitive dissonance by "comforting" a person with information that supports her worldview (see Lewandowsky et al. 2012). Also, the *balance* of like-minded and dissimilar information matters: once dissimilar information reaches a tipping point, people can no longer process it in biased ways and should form more balanced positions (Redlawsk, et al. 2010). These are important nuances, and we need internally and externally valid evidence on which combination of content and media diets produces backfire effects. Such evidence is needed for scholars and practitioners working on media diversity policies and social campaigns.

There is yet another crucial line of inquiry, one that underpins all of these other directions for future research, namely identifying effective ways of *theorizing and measuring diverse exposure*. Currently we lack a joint understanding of the metrics and measures – what exactly is diverse exposure, how can it be measured and when is "diverse" diverse enough from the perspective of, for example, democratic theory? Is it actually desirable to define such metrics (Baker 2007; Karppinen 2013)? These are difficult conceptual questions that need to be solved before scholars and policymakers are able to have a meaningful discussion about, say, whether social networks do or do not have a negative or positive impact on exposure diversity. But also, how to define exposure diversity in the new media environment and how to pinpoint the effects of new technologies, social networks, algorithmic solutions? Many of these algorithms are proprietary in nature, and protected by intellectual and contractual rights, as well as trade secrecy protection (Pasquale 2015). Observability is further rendered difficult by the personalized nature of many instances of data-driven communication, which means that new research approaches can no longer focus on measuring media outlets, but must be designed to measure individual exposure to personalized messages. In addition to presenting methodological challenges, measuring exposure diversity in the digital, data-driven environment also poses new *opportunities*. Researchers can apply new (data-driven) methods to ask new and far more detailed questions, for example about the extent of exposure diversity in social networks or personalized search. But even if the answer to the implications of Big Data is Big Data research, and even if it is possible to build systems that can observe individual exposure, making sense of that observational data poses entirely new challenges to the developing area of computational empirical research. Research like this also poses entirely new ethical and legal challenges (Balazs et al. 2017), and thereby is by nature multi-and inter-disciplinary.

These lines of inquiry contribute to and extend media law and policy scholarship. The digital environment has created a clear need to understand the audience dimension of diversity, and of the realization of diversity and the normative goals that come with it. Technological innovation, new market players and changing user behavior challenge established tools and instruments to safeguard diversity

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

and create the conditions for diverse exposure. The growing need to better conceptualize exposure diversity is also crucial for the purpose of law and policy research. What does exposure diversity mean in the context of the different values or policy objectives that diversity serves (such as deliberation, tolerance, inclusion, etc.)? And does (exposure) diversity mean the same thing for all citizens, or is it time to differentiate diversity policies to the individual and social contexts of an increasingly individualized and heterogeneous audience? *Are new regulatory safeguards needed?* Finally, law and policy research will need to develop benchmarks that can help academics and policy makers alike to identify risks and opportunities for exposure diversity, as well as identifying the constitutional and legal limits within which research into exposure diversity (whether by academics, companies or regulators) can move.

In this context, we have to stress the importance of *media law and policy research that is informed by theoretical and empirical insights* into what exposure diversity actually is, the goals it serves and can reasonably be expected to realize, but also the dynamics, challenges and opportunities for exposure diversity from technological and market innovations. For legal and policy research this can create a challenge in itself of how to integrate empirical findings in a normatively meaningful and scientifically correct way (Baker 2007; Braman 2003).

Lastly, given the polarized political climate and the theoretical claims about the democratic benefits that media diversity and exposure to dissimilar perspectives can have, *the normative aspects of exposure diversity require greater academic attention*. Some scholars argue that targeting and profiling should be used to expose citizens to diverse content (Garret and Resnick 2011; Helberger 2011; Van den Bulck and Moe 2017), and influential thinkers recommend that the state take a proactive role in "nudging" users to adopt diverse news diets (Burri 2015; Goodman 2004; Thaler and Sunstein 2009). Before, such proposals were met with criticism and constitutional concerns, as paternalistic and in conflict with individual freedoms (Valcke 2004; Napoli 1997). Due to growing polarization, information overload and attention scarcity, these proposals are now seen as viable to achieve media diversity, media literacy or social inclusion. Also, the media, policymakers, and regulatory authorities invest time, effort, and public money to offer diverse programming and encourage citizens to attend to dissimilar content. For instance, public service media are urged to combine the increasing knowledge about individual users with the power of algorithms to "guide" users to dissimilar news (BBC Trust 2013; Goodman and Chen 2010).

8 Conclusion

In this chapter, we aimed to give an overview of the increasingly rich body of research into exposure diversity and dissimilar exposure. We outlined the diverse,

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

and sometimes overlapping, areas of inquiry that fall under the conceptual umbrella of media diversity and dissimilar exposure, the challenges to exposure diversity, as well as the fruitful – and needed – opportunities for research that cuts across social sciences, psychology, economics, law and ethics and data science.

Research into exposure diversity, in all its facets and dimensions, will only grow in the future, due to its democratic importance, new technological challenges, changing conditions in media markets, as well as the need to still better understand individual preferences and characteristics of the audience. Also, much of the existing research is still US based, whereas the conditions of, and dynamics behind, exposure diversity are likely to differ as a result of cultural, socio-economic and regulatory differences between the US and (countries in) Europe or elsewhere in the world.

We have also strived to sketch the broader normative dimensions related to exposure diversity, and placed this research into the context of the role of diversity in a democratic society and public policy making. Insofar, it is important to stress that understanding the processes and dynamics behind exposure diversity is not only a worthwhile area of inquiry for empirical research. Also for democratic theory and media law and policy, a better understanding of the conditions under which diverse exposure does or does not contribute to the realization of the democratic project is critical, both as a reality check and as the basis for fine-tuning and adjusting existing theories and policies. We also used this chapter to highlight the potential for fruitful combinations of empirical and normative research approaches, and also the practical importance of research on exposure diversity, in the sense that it can lead to better law and policy making.

Finally, we highlighted the role of technological innovation in exposing users to diverse or dissimilar content. Many questions that are relevant to this area may not have been possible to study with conventional methods, such as surveys or interviews. Methodological innovations, in the form of online behavioral tracking or new forms of observational computational research, can also up the avenue for new exciting questions: how does algorithmic filtering affect individual information diets, what is the extent to which users receive personalized messages, and what is the diversity that users encounter in the online environment? Given the theoretical, practical, and societal relevance of these and related questions, we are confident that the research on exposure diversity will continue to gain prominence across disciplines.

References

Arendt, Hannah. 1968. Truth and Politics. In Hannah Arendt (ed.), *Between past and future: Eight exercises in political thought,* 227–264. New York: Viking Press.

Anspach, Nicolas M. 2017. The new personal influence: How our Facebook friends influence the news we read. *Political Communication*. 1–17. 10.1080/10584609.2017.1316329.

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

Bakshy, Eytan, Solomon Messing & Lada A. Adamic. 2015. Exposure to ideologically diverse news and opinion on Facebook. *Science* 348 (6239). 1130–1132.10.1126/science.aaa1160

Baker, Edwin. 2007. *Media concentration and democracy: Why ownership matters*. Cambridge University Press: New York.

Beam, Michael. A. 2013. Automating the news: How personalized news recommender system design choices impact news reception. *Communication Research* 14. 1019–1041

Beam, Michael. A. & Gerald M. Kosicki. 2014. Personalized news portals: Filtering systems and increased news exposure. *Journalism & Mass Communication Quarterly* 91(1). 59–77.

Bodó, B., N. Helberger, K. Irion, F. Zuiderveen Borgesius, J. Möller, B. van de Velde, N. Bol, B. van Es & C. De Vreese. 2017. Tackling the algorithmic control crisis – the technical, legal, and ethical challenges of research into algorithmic agents." *Yale Journal of Law & Technology* 19. 133–180.

Barber, Benjamin R. 1984. *Strong democracy: Participatory politics for a new age*. Berkeley: University of California Press.

Bennett, W. Lance & Shanto Iyengar. 2008. A new era of minimal effects? The changing foundations of political communication. *Journal of Communication* 58(4). 707–731.

Berelson, Bernard. 1952. Democratic Theory and Public Opinion. *Public Opinion Quarterly* 16. 313–330.

Braman, Sandra. 2003. *Communication Researchers and Policy-making*. Cambridge: MIT Press.

Brenes Peralta, Carlos, Magdalena Wojcieszak, Yphtach Lelkes & Claes de Vreese. 2017. Selective exposure to balanced content and evidence type: The case of issue and non-Issue publics about climate change and health care. *Journalism & Mass Communication Quarterly* 94(3). 833–861. 1077699016654681

Brundidge, Jennifer. 2010. Political discussion and news use in the contemporary public sphere. *Javnost – The Public* 17(2). 63–81. http://dx.doi.org/10.1080/13183222.2010.11009031.

Burri, Mira. 2015. Contemplating a "Public Service Navigator": In Search of New- (and Better-) Functioning Public Service Media. International Journal of Communication, 9. 1341–1359.

Chaffee, Steven H., Melissa Nichols Saphir, Joseph Graf, Christian Sandvig & Kyu Sup Hahn. 2001. Attention to counter-attitudinal messages in a state election campaign. *Political Communication* 18(3). 247–272.

Christians, Clifford G., Glasser, Theordore, McQuail, Denis, Nordenstreng, Kaarle and Robert A. White. 2009. *Normative theories of the media*, Chicago: University of Illinois Press.

Council of Europe. 1999. *Recommendation no R(99)1 of the Committee of Ministers to member states on measures to promote media pluralism*. Strasbourg: Council of Europe.

Council of Europe. 2007. Recommendation no. R(2007)2 of the Committee of Ministers to member states on media pluralism and diversity of media content. Strasbourg: Council of Europe.

Craufurd-Smith, Rachel & Damian Tambini. 2012. Measuring media plurality in the United Kingdom: Policy choices and regulatory challenges. *Journal of Media Law* 4(1). 35–63.

Dahl, Robert A. 1989. *Democracy and its critics.* New Haven: Yale University Press.

Delli Carpini, Michael X. & Scott Keeter. 1996. *What Americans know about politics and why it matters*. New Haven, CT: Yale University Press.

Christians, Clifford G., Theodore Glasser, Denis McQuail, Kaarle Nordenstreng & Robert A. White. 2009. *Normative theories of the media: Journalism in democratic societies*. Chicago: University of Illinois.

Cooper, Roger & Tang Tang. 2009. Predicting audience exposure to television in today's media environment: An empirical integration of active-audience and structural theories. *Journal of Broadcasting & Electronic Media* 53(3). 400–418.

Curran, James, Shanto Iyengar, Anker Brink Lund, & Inka Salovaara-Moring. 2009. Media system, public knowledge and democracy: A comparative study. *European Journal of Communication* 24(1). 5–26.

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

Dilliplane, Susanna. 2011. All the news you want to hear: The impact of partisan news exposure on political participation. *Public Opinion Quarterly* 75(2). 287–316.
Dutch Commissariaat voor de Media. 2017. 15 Jaar Mediamonitor. Van mediaconcentratie naar mediagebruik. Hiversum: Commissariaat voor de Media.
Esser, Frank & Jesper Strömbäck. 2014. *Mediatization of politics: Understanding the transformation of Western democracies*. UK: Palgrave Macmillan.
Esser, Frank, Claes de Vreese, Jesper Strömbäck, Peter van Aelst, Toril Aalberg, James Stanyer, Günther Lengauer, Rosa Berganza, Guido Legnante, Stylianos Papathanassopoulos, Susana Salgado, Tamir Sheafer & Carsten Reinemann. 2012. Political information opportunities in Europe: A longitudinal and comparative study of thirteen television systems. *The International Journal of Press/Politics* 17(3). 247–274.
Feldman, Lauren, Stroud, Natalie Jomini, Bruce Bimber & Magdalena Wojcieszak. 2013. Assessing selective exposure in experiments: The implications of different methodological choices. *Communication Methods and Measures* 7(3–4). 172–194.
Fenchel, Jörg. 2007. *Negative Informationsfreiheit. Zugleich ein Beitrag zur negativen Grundrechtsfreiheit* [Negative freedom of expression. At the same time a contribution to negative fundamental freedoms]. Berlin: Duncker & Humblot.
Ferguson, Douglas A. & Elizabeth M. Perse. 1993. Media and audience influences on channel repertoire. *Journal of Broadcasting & Electronic Media* 37(1). 31–47.
Festinger, Leon. 1957. *A theory of cognitive dissonance*. Stanford: Stanford University Press.
Fishkin, James S. 1995. *The voice of the people: Public opinion and democracy*. New Haven: Yale University Press.
Flaxman, Seth, Sharad Goel & Justin M. Rao. 2016. Filter bubbles, echo chambers, and online news consumption. *Public Opinion Quarterly* 80 (Special Issue). 298–320.
Foster, Robin. 2012. *News plurality in a digital world*. London: Reuters Institute for Journalism.
Freedman, Des 2008. *The politics of media policy.* Cambridge UK: Polity Press.
Garret, R.Kelly. 2009. Echo chambers online?: Politically motivated selective exposure among Internet news users. *Journal of Computer-Mediated Communication* 14(2). 265–285.
Garrett, R. Kelly, Dustin Carnahan & Emily K. Lynch. 2013. A turn toward avoidance? Selective exposure to online political information, 2004–2008. *Political Behavior* 35(1). 113–134.
Garrett, R. Kelly & Natalie Jomini Stroud. 2014. Partisan paths to exposure diversity: Differences in pro- and counterattitudinal news consumption. *Journal of Communication* 64(4). 680–701. doi:10.1111/jcom.12105.
Gentzkow, Matthew & Jesse M. Shapiro. 2011. Ideological segregation online and offline. *The Quarterly Journal of Economics* 126(4). 1799–1839.
Goldman, Seth K. & Diana C. Mutz. 2011. The friendly media phenomenon: A cross-national analysis of cross-cutting exposure. *Political Communication* 28(1). 42–66.
Goodman, Ellen P. 2004. Media policy out of the box: Content abundance, attention scarcity, and the failures of digital markets. *Berkeley Technology Law Journal* 19. 1389–1472.
Habermas, Jürgen. 2006. Political communication in media society: Does democracy still enjoy an epistemic dimension? The impact of normative theory on empirical research. *Communication Theory* 16(4). 411–426.
Hargittai, Eszter. 2000. Open portals or closed gates? Channeling content on the World Wide Web. *Poetics* 27. 233–253.
Helberger, Natali. 2011. Diversity by design. *Journal of Information Policy* 1. 441–469.
Helberger, Natali. 2012. Exposure diversity as a policy goal. *Journal of Media Law* 4(1). 65–92.
Helberger, Natali, Kleinen-Von Königslöw, Katharina & Van Der Noll, Rob. 2015. Regulating the New Information Intermediaries as gatekeepers of information diversity. *Info* 17(6). 50–71.

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

Helberger, Natali. 2015. Merely Facilitating or Actively Stimulating Diverse Media Choices? Public Service Media at the Crossroad. *International Journal of Communication* 9. 1324–134.

Helberger, Natali, Kari Karppinen & Lucia D'Acunto. 2016. Exposure diversity as a design principle for recommender systems. *Information, Communication & Society* 1–17.

High Level Expert Group on Media Freedom and Pluralism. 2013. *A free and pluralistic media to sustain European democracy*. Brussels.

Irion, Kristina & Natali Helberger. 2017. Smart TV and the online media sector: User privacy in view of changing market realities. *Telecommunications Policy* 41(3). 170–184.

Himelboim, Itai, Stephen McCreery & Marc Smith. 2013. Birds of a feather tweet together: Integrating network and content analyses to examine cross-ideology exposure on Twitter. *Journal of Computer-Mediated Communication* 18(2). 154–174.

Hoboken, Joris van. 2012. *Search engine freedom: On the implications of the right to freedom of expression for the legal governance of Web search engines*. Alphen aan den Rijn Kluwer Law International; Frederick, MD, United States of America Aspen Publishers, Inc Biggleswade, Bedfordshire, United Kingdom Turpin Distribution Services, Ltd.

Huckfeldt, Robert, Paul E. Johnson and John Sprague. 2002. Political environments, political dynamics, and the survival of disagreement. *The Journal of Politics* 64(1). 1–21.

Iyengar, Shanto & Kyu S. Hahn. 2009. Red media, blue media: Evidence of ideological selectivity in media use. *Journal of Communication* 59. 19–39.

Iyengar, Shanto, Gaurav Sood & Yphtach Lelkes. 2012. Affect, not ideology. A social identity perspective on polarization. *Public Opinion Quarterly* 76(3). 405–431.

Jakubowicz, Karol. 2007. Public service broadcasting in the 21st century: What chance for a new beginning. In Gregory Ferrell Lowe & Jo Bardoel (eds.), *From public service broadcasting to public service media*, 22–49. Gothenburg, Sweden: Nordicom.

Jakubowicz, Karol. 2016. New Media Ecology: Reconceptualizing Media Pluralism, in: Valcke, Peggy, Sükösd, Miklós and Picard, Rober. G. (eds). *Media pluralism and diversity: Concepts, risks and global trends*, 23–53. New York: Palgrave.

Just, Natascha. 2009. Measuring media concentration and diversity: new approaches and instruments in Europe and the US. *Media, Culture & Society*. 31(1). 97–117.

Karppinen, Kari .2013. *Rethinking media pluralism*. New York: Fordham University Press.

Kim, Yonghwan, Hsuan-Ting Chen & Homero Gil de Zúñiga. 2013. Stumbling upon news on the Internet: Effects of incidental news exposure and relative entertainment use on political engagement. *Computers in Human Behavior* 29. 2607–2614.

Ksiazek, T., Malthouse, C. & J. Webster. (2010). News-seekers and avoiders: Exploring patterns of total news consumption across media and the relationship to civic participation. *Journal of Broadcasting & Electronic Media* 54(4). 551–568, doi: 10.1080/08838151.2010.519808

Knobloch-Westerwick, Silvia & Jingbo Meng. 2009. Looking the other way: Selective exposure to attitude-consistent and counterattitudinal political information. C*ommunication Research* 36(3). 426–448. doi: 10.1177/0093650209333030

Knobloch-Westerwick, Silvia & Jingbo Meng. 2011. Reinforcement of the political self through selective exposure to political messages. *Journal of Communication* 61(2). 349–368. doi: 10.1111/j.1460-2466.2011.01543.x

Kotkov, Denis, Wang, Shuaiqiang. & Jari Veijalainen. 2016. A survey of serendipity in recommender systems. *Knowledge-Based Systems* 111. 180–192.

Kunaver, Matevz & Tomaz Pozrl. 2017. Diversity in recommender systems – a survey. *Knowledge-Based Systems*, 154–162.

Kwon, K. Hazel, Shin-Il Moon & Michael A. Stefanone. 2015. Unspeaking on Facebook? Testing network effects on self-censorship of political expressions in social network sites. *Quality & Quantity: International Journal of Methodology* 49(4). 1417–1435.

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

Lathia, Neal, Stephen Hailes, Licia Capra & Xavier Amatriain. 2010. Temporal diversity in recommender systems. *Proceeding of the 33rd International ACM SIGIR Conference on Research and Development in Information Retrieval*, 210–217. Geneva, Switzerland.

Lee, Jae Kook, Jihyang Choi, Cheonsoo Kim and Yonghwan Kim. 2014. Social media, network heterogeneity, and opinion polarization. *Journal of Communication* 64(4). 702–722.

Lee, Jae Kook & Eunyi Kim. 2017. Incidental exposure to news: Predictors in the social media setting and effects on information gain online. *Computers in Human Behavior* 75. 1008–1015. http://dx.doi.org/10.1016/j.chb.2017.02.018

Leeper, Thomas J. & Rune Slothuus. 2014. Political parties, motivated reasoning, and public opinion formation. *Political Psychology* 35(S1). 129–156.

Lewandowsky, Stephan, Ullrich K. H. Ecker, Colleen M. Seifert, Norbert Schwarz & John Cook. 2012. Misinformation and its correction: Continued influence and successful debiasing. *Psychological Science in the Public Interest* 13(3). 106–131.

Lord, Charles G., Lee Ross & Mark R. Lepper. 1979. Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology* 37(11). 2098–2109.

Meiklejohn, Alexander. 1948. *Free speech and its relation to self-government*. New York: Harper.

McGonagle, Tarlach. 2011. *Minority rights, freedom of expression and the media: Dynamics and dilemmas*. Cambridge: Insertia.

McQuail, Denis. 1992. *Media performance, mass communication and the public interest*. London, UK: SAGE Publications.

Meffert, Michael F., Sungeun Chung, Amber J. Joiner, Leah Waks & Jennifer Garst. 2006. The effects of negativity and motivated information processing during a political campaign. *Journal of Communication* 56(1). 27–51.

Messing, Solomon & Sean J. Westwood. 2014. Selective exposure in the age of social media: Endorsements Trump partisan source affiliation when selecting news online. *Communication Research* 41(8). 1042–1063.

Mill, John Stuart. 1859. *On liberty*. Indianapolis: Bobbs-Merrill.

Munson, Sean A., Daniel Xiaodan Zhou & Paul Resnick. 2009. Sidelines: An algorithm for increasing diversity in news and opinion aggregators. *Proceedings of ICWSM09 Conference on Weblogs and Social Media*. San Jose, CA.

Murakami, T., Mori, K & R. Orihara. 2007. Metrics for Evaluating the Serendipity of Recommendation Lists. *New Frontiers in Artificial Intelligence*, 40–46.

Mutz, Diana C. 1994. Contextualizing personal experience: The role of mass media. *The Journal of Politics* 56(3). 689–714.

Mutz, Diana C. 2002. Cross-cutting social networks: Testing democratic theory in practice. *American Political Science Review* 96(1). 111–126.

Mutz, Diana C. 2006. *Hearing the other side: Deliberative versus participatory democracy*. Cambridge: Cambridge University Press.

Mutz, Diana C. & Paul S. Martin. 2001. Facilitating communication across lines of political difference: The role of mass media. *American Political Science Review* 95. 97–114.

Napoli, Philip M. 1997. Rethinking program diversity assessment: An audience-centered approach. *Journal of Media Economics* 10(4). 59–74.

Napoli, Philip M. 1999a. Deconstructing the diversity principle. *Journal of Communication* 49(4). 7–34.

Napoli, Philip M. 1999b. The marketplace of ideas metaphor in communications regulation. *Journal of Communication*. 49(4). 151–169.

Napoli, Philip M. 2001. Diversity and Localism: A Policy Analysis Perspective. Presented before the Federal Communications Commission's Media Ownership Roundtable, Washington D.C.

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

Neuberger, Christoph & Frank Lobigs. 2010. *Die Bedeutung des Internets im Rahmen der Vielfaltssicherung*. Berlin: Vistas.
Nir, Lilach & James N. Druckman. 2008. Campaign mixed-message flows and timing of vote decision. *International Journal of Public Opinion Research* 20(3). 326–346.
Nyhan, Brendan & Jason Reifler. 2010. When corrections fail: The persistence of political misperceptions. *Political Behavior* 32(2). 303–330.
Ofcom. 2012. *Measuring media plurality*. Ofcom's advice to the Secretary of State for Culture, Olympics, Media and Sport. London: Ofcom. Available at: http://stakeholders.ofcom.org.uk/binaries/consultations/measuring-plurality/statement/statement.pdf
Ofcom. 2015. Measurement framework for media plurality. Ofcom's advice to the Secretary of State for Culture, Media and Sport. London: Ofcom.
Ozturk, Pinar & Yue Han. 2014. *Similar, yet diverse: A recommender system*. Collective Intelligence 2014.
Page, Benjamin I. 1996. *Who deliberates?* Chicago: University Chicago Press.
Pariser, Eli. 2011. *The filter bubble. What the Internet is hiding from you*. New York: Penguin.
Pasquale, Frank. 2015. *The black box society. The secret algorithms that control money and information*. Cambridge: Harvard University Press.
Price, Vincent, Joseph N. Cappella & Lilach Nir. 2002. Does disagreement contribute to more deliberative opinion? *Political Communication* 19(1). 95–112.
Prior, Markus. 2007. *Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections*. New York: Cambridge University Press.
Prior, Markus. 2004. News vs. entertainment: How Increasing media choice widens the gap in political knowledge and turnout. *American Journal of Political Science* 49(3). 577–592.
Quattrociocchi, Walter, Antonio Scala & Cass R. Sunstein. 2016. Echo chambers on Facebook. *Discussion Paper* no. 877 (September). 1–15.
Redlawsk, David P., Andrew J. W. Civettini & Karen M. Emmerson. 2010. The affective tipping point: Do motivated reasoners ever "get it"? *Political Psychology* 31(4). 563–593.
Reuters Institute for the Study of Journalism. 2017. *Reuters Institute Digital News Report 2017*. London: Reuters Institute.
Schauer, Frederick. 1982. *Free speech – A philosophical enquiry*. Cambridge: Cambridge University Press.
Scheufele, D. A., Nisbet, M. C., Brossard, D., & Nisbet, E. C. 2004. Social structure and citizenship: Examining the impacts of social setting, network heterogeneity, and informational variables on political participation. *Political Communication* 21. 315–338.
Schoenbach, Klaus & Lee B. Becker. 1989. The audience copes with plenty: Patterns of reactions to media changes. *Audience responses to media diversification: Coping with plenty*. 353–366.
Skovsgaard, Morten, Adam Shehata & Jesper Strömbäck. 2016. Opportunity structures for selective exposure investigating selective exposure and learning in Swedish election campaigns using panel survey data. *The International Journal of Press/Politics* 21(4). 527–546. 1940161216658157
Schulz, Wolfgang, Thorsten Held & Arne Laudien. 2005. Search engines as gatekeepers of public communication: Analysis of the German framework applicable to Internet search engines including media law and anti trust law. *German Law Journal* 6(10). 1419–1433.
Stroud, Natalie J. 2010. Polarization and partisan selective exposure. *Journal of Communication* 60(3). 556–576.
Stroud, Natalie J. 2008. Media use and political predispositions: Revisiting the concept of selective exposure. *Political Behavior* 30(3). 341–366.
Sunstein, Cass R. 2001. *Republic.com*. Princeton: Princeton University Press.
Taber, Charles S. & Milton Lodge. 2006. Motivated skepticism in the evaluation of political beliefs. *American Journal of Political Science* 50(3). 755–769.

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

Taber, Charles S. & Milton Lodge. 2016. The illusion of choice in democratic politics: The unconscious impact of motivated political reasoning. *Political Psychology* 37(1). 61–85.
Tewksbury, David, Andrew J. Weaver & Brett D. Maddex. 2001. Accidentally informed: Incidental news exposure on the world wide web. *Journalism & Mass Communication Quarterly* 78(3). 533–554. http://dx.doi.org/10.1177/107769900107800309.
Thompson, Dennis F. 2008. Deliberative democratic theory and empirical political science. *Annual Review of Political Science* 11. 497–520.
Tocqueville, Alexis de. 1835 [2000]. *Democracy in America*. Chicago: University of Chicago Press.
Valcke, Peggy, Robert Picard, Miklos Sükösd, Beata Klimkiewicz, Brankica Petkovic & Cinzia dal Zotto. The European media pluralism monitor: Bridging law, economics and media studies as a first step towards risk-based regulation in media markets. Workshop on *Competition Policy and Regulation in Media Markets: Bridging Law and Economics*, June 4–5, 2009.
Valcke, Peggy. 2011. Looking for the user in media pluralism: Unravelling the traditional diversity chain and recent trends of user empowerment in European media regulation. *Journal of Information Policy* 1. 287–320.
Valcke, Peggy, Picard Robert. G. & Miklás Sükösd. 2016. A Global Perspective on Media Pluralism and Diversity: Introduction. In: Valcke, Peggy, Sükösd, Miklós and Picard, Rober. G. (eds). Media Pluralism and Diversity. Concepts, Risks and Global Trends. New York: Palgrave,
Van den Bulck, Hilde & Hallvard Moe. 2017. Public service media, universitality and personalisation through algorithms: mapping strategies and exploring dilemmas. *Media, Culture & Society* (online first), 1–18.
Van der Wurff, Richard. 2004. Supplying and viewing diversity: The role of competition and viewer choice in Dutch broadcasting. *European Journal of Communication* 19(2). 215–237.
Van Dijk, José. 2012. Facebook and the engineering of connectivity: A multi-layered approach to social media platforms. Convergence: *International Journal of Research into New Media Technologies* 19(2). 141–155.
Van Dijk, José, Poell, Thomas & Martijn Waal. 2017. De Platformsamenleving. Amsterdam: Amsterdam University Press.
Van Kempen, Hetty. 2007. Media-party parallelism and its effects: A cross-national comparative study. *Political Communication* 24(3). 303–320.
Valeriani, Augusto & Cristian Vaccari. 2015. Accidental exposure to politics on social media as online participation equalizer in Germany, Italy, and the United Kingdom. *New Media & Society* 18(9). http://dx.doi.org/10.1177/1461444815616223.
Vike-Freiberga, V. Däubler-Gmelin, H. Hammersley, B., Pessoa Maduro, L.M.P. 2013. A free and pluralistic media to susstain European democracy. Report from the High Level Expert Group on Media Pluralism to the European Commission. Brussels: European Commission.
Webster, James & Particia Phalen. 1994. Victim, consumer, or commodity? Audience models in communications policy. In. Ettema, J. and D.C. Whitney (eds.), Audiencemaking: How the media create the audience, 19–37. Thousand Oaks, CA: Sage.
Webster, James G. 2005. Beneath the veneer of fragmentation: Television audience polarization in a multi-channel world. *Journal of Communication* 55. 366–382.
Webster, James G. 2014. *The marketplace of attention*. Cambridge: MIT Press.
Weeks, Brian E., Thomas B. Ksiazek & R. Lance Holbert. 2016. Partisan enclaves or shared media experiences? A network approach to understanding citizens' political news environments. *Journal of Broadcasting & Electronic Media* 60(2). 248–268.
Wojcieszak, Magdalena. 2011a. Deliberation and attitude polarization. *Journal of Communication* 61. 596–617.
Wojcieszak, Magdalena. 2011b. Computer-mediated false consensus: Radical online groups, social networks and news media. *Communication and Society* 14(4). 527–546.

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM

Wojcieszak, Magdalena & Hernando Rojas. 2011. Hostile public effect: Communication diversity and the projection of personal opinions onto others. *Journal of Broadcasting & Electronic Media* 55(4). 543–562.

Wojcieszak, Magdalena & Vincent Price 2010. Bridging the divide or intensifying the conflict? How disagreement affects strong predilections about sexual minorities. *Political Psychology* 31(3). 315–339.

Yang, J., H. Rojas, M. Wojcieszak, T. Aalberg, S. Coen, J. Curran, K. Hayashi, S. Iyengar, P. K. Jones, G. Mazzoleni, S. Papathanassopoulos, J. W. Rhee, D. Rowe, S. Soroka & R. Tiffen. In press. Why are "others" so polarized? Perceived political polarization and media use in 10 countries. *Journal of Computer-Mediated Communication* 21(5). 349–367.

Zuiderveen Borgesius, Frederik, Damian Trilling, Judith Möller, Balázs Bodó, Claes H. de Vreese & Natali Helberger. 2016. Should we worry about filter bubbles? *Internet Policy Review* 5(1). 1–16.

Brought to you by | Universiteit van Amsterdam - UVA Universiteitsbibliotheek SZ
Authenticated
Download Date | 7/15/19 1:40 PM