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Automated Editorial Control

Responsibility for News Personalisation under European Media Law

M. Z. van Drunen

U.S. Edition Friday, July 13, 2023

President to talk
on radio tonight

The network -
tomorrow's
newspaper

WASHINGTON, DECEMBER 9 (AP) — President Roosevelt will address the nation through radio broadcast tomorrow night at 10 P.M. EST. The White House press secretary said he will make a more complete statement about the Japanese attack on Pearl Harbor.

Mr. Roosevelt urged our countrymen to reject all rumors. These are the times of complete safety and confidence in wartime. It is the responsibility of each and every one of us to our country to maintain rapid communication these days and to be greatly restricted in wartime. The newspapers and radio are so close to each other and ears of the people. I say this: You have a great responsibility to the nation and for the duration of this war. If you believe your government is not acting in the best of the truth, you have a right to say so. But in the end of all the news, is revealed by the sources — you have to right in the

SAN DIEGO, FEB. 24, 1961 — "Our newspaper may soon be obsolete. Its news organization is likely to be on, and news will be with us forever. But in the near future, we may receive news through interactive media, electronic networks that respond to us. The print media served radio and TV news because it could reach in depth news in a way that still allowed individuals to select what to read. New forms of narrative news are set to combine the instant access of electronic media with the depth and selectivity of print media.

The invention of cheap microelectronic, high-speed personal computers, including personal computers, as well as the international communication networks to connect them. These developments have made personalized news possible. Each day, you can turn on a screen that shows an "electronic news report" that gives you the latest information on only those topics in which

five of our soldiers. The whole future of this. The manner in which of us fulfill his obligation. Many rumours and lies have originated with the instance, under the a that as a result of this. Hawaii they have a supremacy in the Pacific. The practice of propaganda in numerous times by the purposes of such far, course, to spread fear among us, and to go

President argues regulation reform. BETHESDA, OCT 6 — Sweet, the president fundamental overhaul. The tweet referred to section 230, a 1996 law interactive computing

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M.Z. van Drunen

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Automated Editorial Control

Responsibility for News Personalisation under European Media Law

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor

aan de Universiteit van Amsterdam

op gezag van de Rector Magnificus

prof. dr. ir. P.P.C.C. Verbeek

ten overstaan van een door het College voor Promoties ingestelde commissie,

in het openbaar te verdedigen in de Agnietenkapel

op vrijdag 13 januari 2023, te 16.00 uur

door Max Zeno van Drunen

geboren te Utrecht

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First among those is Natali Helberger. In addition to the academic capacities that are clear to everyone who can read her work, she is an all-round excellent human being. Her continuous drive to improve the work are inspiring as well as of course a large part of the reason this dissertation is here. João Quintais is her excellent supervisory counterpart. The man could think of an interesting, logical, persuasive structure for a plate of spaghetti, though he would of course be too busy being charming to his fellow dinner guests to do such a thing. Both of them contributed incredible amounts of energy and patience, which were invisible to everyone else but are greatly appreciated by me. The same is true for Mariella Bastian and Balázs Bodó, who provided invaluable support, not least in the form of many interesting (and for them I have to imagine frustrating, though they never let it show) conversations introducing me to the ways of thinking of different disciplines.

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1. Introduction

1.1. A personalised media system

News personalisation allows legacy and social media to provide different information to each member of the audience. This idea is not new, with science fiction having explored it since the 1880s and media reports on researchers experimenting with the technology dating back to at least the 1980s. Using their early access to the necessary communication networks, these researchers began to put personalisation into practice by automatically collecting stories from the AP news wire which matched their interests. As the reporter put it, 'Paul has been serving as his own editor, selecting his own personalised news.'¹

Personalisation has since become an increasingly important manner in which people access their news. Platforms such as Facebook, YouTube, and Twitter have gradually integrated algorithmic personalisation into their services.² As these platforms have become more popular, their personalisation algorithms increasingly determine if and how citizens are exposed to news.³ At the same time (and partially because of the competition from platforms), legacy media organisations have also started to use personalisation to inform their own audiences.⁴ Improving the effectiveness of news recommendations is now seen as one of the most important uses of artificial intelligence (AI) in the media industry.⁵

¹ James A Levin, 'The "network" -- Tomorrow's "Newspaper"' *Christian Science Monitor* (24 February 1981) <<https://www.csmonitor.com/1981/0224/022448.html>> accessed 23 October 2020; Jules Verne, 'In the Year 2889' [1889] *Forum* 262; Natali Helberger, 'Policy Implications From Algorithmic Profiling and the Changing Relationship Between Newsreaders and the Media' (2016) 23 *Javnost - The Public* 188.

² Facebook, 'Facebook Gets a Facelift' (*Facebook*, 5 September 2006) <<https://www.facebook.com/notes/facebook-app/facebook-gets-a-facelift/2207967130/>> accessed 1 October 2020; Jason Kincaid, 'YouTube Leanback Brings Personalized Channels To Your TV' (*TechCrunch*, 2 December 2010) <<https://social.techcrunch.com/2010/12/01/youtube-leanback-brings-personalized-channels-to-your-tv/>> accessed 28 April 2021; Eric Farkas, 'An Improved Timeline for Consumers and Brands' (*Twitter*, 10 February 2016) <https://blog.twitter.com/en_us/a/2016/an-improved-timeline-for-consumers-and-brands.html> accessed 28 April 2021.

³ Eurobarometer, 'Media Use in the European Union: Report.' (European Commission 2020) <<http://op.europa.eu/en/publication-detail/-/publication/c2fb9fad-db78-11ea-adf7-01aa75ed71a1/language-en>> accessed 28 April 2021; Judith Möller and others, 'Explaining Online News Engagement Based on Browsing Behavior: Creatures of Habit?' (2020) 38 *Social Science Computer Review* 616; Richard Fletcher, Antonis Kalogeropoulos and Rasmus Kleis Nielsen, 'More Diverse, More Politically Varied: How Social Media, Search Engines and Aggregators Shape News Repertoires in the United Kingdom' [2021] *New Media & Society* 1.

⁴ Philip M Napoli, *Social Media and the Public Interest: Media Regulation in the Disinformation Age* (Columbia University Press 2019) 71; Nicholas Diakopoulos, *Automating the News: How Algorithms Are Rewriting the Media* (Harvard University Press 2019) 177.

⁵ Nic Newman, 'Journalism, Media and Technology Trends and Predictions 2020' (Reuters Institute for the Study of Journalism 2019) 22 <<https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2020->

Personalisation is a natural solution to a problem which both platforms and legacy media companies encounter in a digital media system. First, there is a lot of news that is available for individuals to read. Platforms of course have access to a virtually unlimited amount of (news) content. However, legacy media organisations also produce more news than their average individual customer is able to read. The New York Times, for example, publishes over 200 articles per day.⁶ Second, the audience consists of different individuals with diverging information needs. The news which an American investment banker wants or needs to know is not going to be identical to the news which a Dutch PhD student wants or needs to know. A frontpage or app moreover does not have the space to show either individual even a small amount of the content which they could read. News personalisation promises to solve the problem that arises when a service has both a wide variety of both users and content by more effectively matching individuals to news.⁷

Determining what news individuals should see, however, involves nuanced editorial judgment. The literature has highlighted personalisation's negative impact on editorial values when the need for this judgment is ignored: polarisation, filter bubbles, chilling effects, and new inequalities in access to information have all featured prominently in the legal and public debate.⁸ Personalisation contributes to these dangers by making it possible for platforms and media organisations to act on the detailed information about individuals and their reading habits which became available when news consumption moved online. The interests of society and individuals had been to some extent protected by technological limits forcing the mass media to deliver the same information to everyone who could pay for it. As media organisations increasingly point out, however, personalisation is not inherently in conflict with the

01/Newman_Journalism_and_Media_Predictions_2020_Final.pdf>; Charlie Beckett, 'New Powers, New Responsibilities. A Global Survey of Journalism and Artificial Intelligence' (LSE 2019) <<https://blogs.lse.ac.uk/polis/2019/11/18/new-powers-new-responsibilities/>>.

⁶ Robinson Meyer, 'How Many Stories Do Newspapers Publish Per Day?' (*The Atlantic*, 26 May 2016) <<https://www.theatlantic.com/technology/archive/2016/05/how-many-stories-do-newspapers-publish-per-day/483845/>> accessed 25 February 2021; New York Times, 'New York Times Archive 01/01/2020 to 31/12/2020' *New York Times* <<https://www.nytimes.com/search?dropmab=true&endDate=20210630&query=&sort=newest&startDate=20200701>>. The latter shows a slightly lower number of 140 articles per day, in addition to other content such as videos, infographics, and recipes.

⁷ Tarleton Gillespie, *Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media* (Yale University Press 2018).

⁸ Eli Pariser, *The Filter Bubble: What The Internet Is Hiding From You* (Penguin 2011); Efrat Nechushtai and Seth C Lewis, 'What Kind of News Gatekeepers Do We Want Machines to Be? Filter Bubbles, Fragmentation, and the Normative Dimensions of Algorithmic Recommendations' (2019) 90 *Computers in Human Behavior* 298; SU Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (2018); JW Penney, 'Internet Surveillance, Regulation, and Chilling Effects Online: A Comparative Case Study' (2017) 6 *Internet Policy Review* <<https://doi.org/10.14763/2017.2.692>>; Sarah Eskens, 'The Fundamental Rights of News Users: The Legal Groundwork for a Personalised Online News Environment' (University of Amsterdam 2021); Judith Möller and others, 'Do Not Blame It on the Algorithm: An Empirical Assessment of Multiple Recommender Systems and Their Impact on Content Diversity' (2018) 21 *Information, Communication & Society* 959.

media's role in society. Any writer or teacher knows that taking the audience's characteristics into account is critical to communicate information effectively. Similarly, whether the media actually promotes editorial values through the information which it provides, depends on the impact on the reader. Whether a perspective is new, a story is informative, or a framing is understandable is different for each individual, depending on their background knowledge, interests, and information needs. Personalisation can help the media account for these differences and allow it to provide news which is more diverse, informative, or likely to be read and understood.⁹

The role of the editors and journalists that used to make such editorial judgments is changing in the context of news personalisation. The number of decisions involved in determining what news should be visible to which individual precludes meaningful human oversight over the individual editorial decisions taken by news personalisation algorithms. However, the more general way personalisation algorithms provide news is also subject to a wide range of influences. Within the newsroom, the design of the algorithm is not only influenced by editors and journalists, but also by engineers, product managers, commercial departments, and third-party software developers providing off the shelf solutions.¹⁰ Additionally, the media has come to rely on the personalisation algorithms controlled by platforms to reach the part of their audience which consumes content on platforms. Although relatively little is known about the way platforms employ personalisation algorithms, the available evidence points to a larger role for engineers than editors, and a focus on attracting audiences that can be sold to advertisers rather than editorial values.¹¹ Finally, on platforms as well as in legacy media, users have a more direct impact on the news which they receive through their expressed or inferred preferences. Personalisation's impact on editorial values is in short the result of a complex network of actors.¹²

This dissertation explores the roles and responsibilities of these actors. In doing so, it focuses on the way law can shape the conditions under which media organisations and platforms implement news personalisation. Issues such as the changing position of journalistic actors, the difficulty of encoding

⁹ Matthew Hindman, 'Journalism Ethics and Digital Audience Data' in Pablo J Boczkowski and others (eds), *Remaking the News: Essays on the Future of Journalism Scholarship in the Digital Age* (MIT Press 2017); Natali Helberger, 'On the Democratic Role of News Recommenders' (2019) 7 Digital Journalism 993.

¹⁰ Balázs Bodó, 'Selling News to Audiences – A Qualitative Inquiry into the Emerging Logics of Algorithmic News Personalization in European Quality News Media' (2019) 7 Digital Journalism 1054; Sylvain Malcorps, 'News Website Personalisation: The Co-Creation of Content, Audiences and Services by Online Journalists and Marketers' (2019) 16 Journal of Media Business Studies 230; Neil J Thurman, 'Making "The Daily Me": Technology, Economics and Habit in the Mainstream Assimilation of Personalized News' (2011) 12 Journalism 395.

¹¹ Michael A DeVito, 'From Editors to Algorithms' (2017) 5 Digital Journalism 753; Frank Michael Russell, 'The New Gatekeepers' (2019) 20 Journalism Studies 631; Napoli, *Social Media and the Public Interest* (n 4); Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power: Barack Obama's Books of 2019* (Profile Books 2019).

¹² Mike Ananny, *Networked Press Freedom: Creating Infrastructures for a Public Right to Hear* (MIT press 2018).

editorial values into algorithms which take editorial decisions, and a changing relationship with the audience ultimately determine whether news personalisation helps media and platforms fulfil their role in democratic society. This dissertation therefore aims explore how the conditions under which news personalisation is implemented can be shaped to retain editorial responsibility.

In this exploration, the following research question is addressed:

How should editorial responsibility be safeguarded in the context of news personalisation?

Sections 1.2 and 1.3 briefly analyse the two main elements of the research question: editorial responsibility and news personalisation. Section 1.4 outlines the structure through which this dissertation answers the research question. Section 1.5 explains the methodology used to do so.

1.2. Editorial responsibility and control

1.2.1. What is editorial responsibility, and how does it relate to editorial control?

A first necessary step is to disentangle editorial responsibility and editorial control. Despite their central role in European media law, the concepts remain quite vague – a consistent source of frustration for media regulators and in the literature.¹³ Moreover, the two concepts are regularly used interchangeably. Part of the issue is that actors assume editorial responsibility when they exercise editorial control, and that editorial responsibility involves the exercise of editorial control to ensure that editorial output aligns with editorial norms. When the two concepts are concretised, however, a distinction emerges. Editorial responsibility has a more normative dimension, involving an actor's obligation to ensure that editorial values are promoted and safeguarded when media content is distributed to the public. Conversely, editorial control is more descriptive, referring to the actions through which an actor exerts influence over the way that media content is made available to the public. This influence can be exercised in line with an actor's editorial responsibility, but it can naturally also be exercised in a way that runs counter to editorial values. For the sake of clarity, this dissertation distinguishes between the two in the following way: editorial control concerns the factual exercise of influence; editorial responsibility concerns the obligation to exercise that control in line with the relevant editorial norms.

Legal frameworks conceptualise editorial control in slightly different ways, depending on the responsibility which they aim to allocate. The EU's Audiovisual Media Services Directive (AVMSD) aims to enable the free movement of audiovisual services. As such, it can leave the responsibilities of individual

¹³ Oliver Castendyk, Egbert Dommering and Alexander Scheuer, *European Media Law* (Kluwer Law International BV 2008); ERGA, 'ERGA Report on Territorial Jurisdiction in a Converged Environment' (ERGA 2016) ERGA(2016)08 11; *Baltic Media Alliance* [2019] CJEU, AG opinion ECLI:EU:C:2019:154 [40].

creators to national law and focuses on the publication and organisation of content.¹⁴ Conversely, the European Court of Human Rights (ECtHR) generally has to determine whether an expression is so harmful that a restriction on article 10 of the European Convention on Human Rights (ECHR) is justified. The court correspondingly concentrates on the editorial choices made during the production and publication of content, noting that '[t]he choice of the material that goes into a newspaper, the decisions made as to limitations on the size and content of the paper and the treatment of public issues and public officials – whether fair or unfair – constitute the exercise of editorial control and judgment.'¹⁵ Finally, recommendations of the Committee of Ministers of the Council of Europe (CoE) are not tied to the characteristics of any particular case or type of media. It takes a broad approach and argues that '[e]ditorial control can be evidenced by the actors' own policy decisions on the content to make available or to promote, and on the manner in which to present or arrange it.'¹⁶

These definitions focus on the influence over (1) the information which a content item contains, (2) what content is available to the public, and (3) how this content is organised. The first element covers the production of content. This includes choices concerning the format and what information will include, but also what information it will focus on and in what tone and style it will be presented.¹⁷ The second element of editorial control was traditionally much more binary: a media organisation could choose to make a content item either available to the public or not. At most, content could be published in a way which ensured that it would reach a larger or specific target audience.¹⁸ Digitalisation has created new ways to make content available to new audiences. For instance, organisations can use hyperlinks to point their

¹⁴ Rachael Craufurd Smith, 'Determining Regulatory Competence for Audiovisual Media Services in the European Union' (2011) 3 *Journal of Media Law* 263, 266; Peggy Valcke and Jeff Ausloos, 'Television on the Internet: Challenges for Audiovisual Media Policy in a Converging Media Environment' in Yu-li Liu and Robert G Picard (eds), *Policy and Marketing Strategies for Digital Media* (Routledge 2014) 30. Valcke and Ausloos note disagreement among regulators whether choices on this point need to relate to the content. Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of changing market realities (AVMSD 2018) 2018.

¹⁵ *Saliyev v Russia* [2010] ECtHR 35016/03; *Miami Herald Publishing Co v Tornillo* [1974] United States Supreme Court 418 U.S. 241.

¹⁶ CoE, 'Recommendation of the Committee of Ministers to Member States on a New Notion of Media' (Council of Europe 2011) CM/Rec(2011)7 para 30 <https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805cc2c0>.

¹⁷ *Axel Springer v Germany (no 2)* [2014] ECtHR 48311/10 [65, 67]. *Gündüz v Turkey* [2003] ECtHR 35071/97 [43–44]. *Bergens Tidende and others v Norway* [2000] ECtHR 26132/95 [58]. *Sigma Radio Television v Cyprus* [2011] ECtHR 32181/04 and 35122/05 [208]. *Sekmadienis Ltd v Lithuania* [2018] ECtHR 69317/14 [74]. *Stoll v Switzerland* [2007] ECtHR 69698/01 [147]. *Communist Party of Russia and Others v Russia* [2012] ECtHR 29400/05 [120]. *Flux v Moldova (No 2)* [2007] ECtHR 31001/03. *Wirtschafts-Trend Zeitschriften-Verlagsgesellschaft m.bH (no 3) v Austria* [2006] ECtHR 66298/01 and 15653/02 [47].

¹⁸ *Jersild v Denmark* [1994] ECtHR 15890/89 [34]; *Payam Tamiz v United Kingdom* [2017] ECtHR 3877/14 [80]. *Vejdeland v Sweden* [2012] ECtHR 1813/07 [56].

audience in the direction of content published by others and which can be changed without their control.¹⁹ Organisations may also refrain from making an active choice to make content available by merely providing the space for users to upload content without prior review.²⁰ Here too, an organisation can nevertheless exercise various kinds of control. In *Delfi*, the ECtHR noted that a news portal ‘exercised a substantial degree of control’ over its reader comments, as it provided the articles which sparked the discussions, invited commenters to share their views, had the exclusive power to block contributors and alter or remove contributions, and steered discussions through its code of conduct.²¹

The third element of editorial control covers the manner in which content is organised. Organisations can selectively promote the visibility of content by for example publishing certain pieces on the front page, or in press archives rather than the news section.²² Similarly, organisation under the AVMSD involves some deliberate action of the media actor, allowing the latter to differentiate between content based on its attributes.²³ Accordingly, organising content alphabetically or chronologically does not constitute control over the organisation of content, whereas organising it by genre or popularity does.²⁴ The AVMSD recognises a number of different ways in which actors can control the organisation of content. Firstly, broadcasters exercise strict control by determining exactly what content will be available at what time, and in what order. Video-on-demand (VOD) providers leave more control to the viewer by organising content in a catalogue, but allowing the viewer to determine when to watch it.²⁵ Finally, with regard to video-sharing platform services (VSPs), the AVMSD acknowledges that content can be organised algorithmically, and names displaying, tagging, and sequencing as specific methods with which VSPs may organise content.²⁶

¹⁹ *Magyar Jeti ZRT v Hungary* [2018] ECtHR 11257/16 [74–77].

²⁰ CoE, ‘Recommendation of the Committee of Ministers to Member States on the Roles and Responsibilities of Internet Intermediaries’ (2018) CM/Rec(2018)2 para 5 <https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=0900001680790e14>.

²¹ It also derived commercial benefits from these contributions. *Delfi v Estonia* [2015] ECtHR 64569/09 [115–116, 144–145].

²² *Stoll v. Switzerland* (n 17) para 150. *ML and WW v Germany* [2018] ECtHR 60798/10 and 65599/10 [112–113].

²³ Remy Chavannes and Oliver Castendyk, ‘Article 1 (Definitions)’ in Oliver Castendyk, Egbert Dommering and Alexander Scheuer (eds), *European Media Law* (Kluwer Law International 2008) 825; Wolfgang Schulz and Stefan Heilmann, ‘IRIS Special: Editorial Responsibility’ (European Audiovisual Observatory 2008) 22 <<https://rm.coe.int/1680783c0e>>.

²⁴ Valcke and Ausloos (n 14) 30. Schulz and Heilmann (n 23) 22.

²⁵ See analogously with regard to the press, on the point that young recipients had no choice not to receive the content *Vejdeland v. Sweden* (n 18) para 56.

²⁶ CoE, ‘Recommendation on Intermediaries’ (n 20) para 5. and AVMSD 2018 article 1(aa). regarding ranking and sequencing, respectively. Peggy Valcke and Ingrid Lambrecht, ‘The Evolving Scope of Application of the AVMS Directive’ [2021] Research Handbook on EU Media Law and Policy 296 <<https://www.elgaronline.com/view/edcoll/9781786439321/9781786439321.00022.xml>> accessed 5 January 2022.

1.2.2. The value of editorial control and responsibility

The concept of editorial control allows us to identify the actors who determine what information reaches the public. These actors have the ability to impact individuals' and public opinion, depending on how they exercise their influence. The ECtHR emphasised this point in *Stoll*, when it stated in respect of the media's duties and responsibilities: '[n]ot only do they inform, they can also suggest by the way in which they present the information how it is to be assessed.' In addition to controlling the tone and content of an individual news story, media organisations can also affect the visibility of a story by publishing it on primetime, in the news archives, or not at all.²⁷ By making these decisions, media organisations can not only heighten the impact of a specific story, but they can also determine what kind of news audiences are exposed to in general.

This influence distinguishes media actors from other actors involved in the mass dissemination of information to audiences.²⁸ For example, the AVMSD defines broadcasters and publishers by 'the exercise of effective control both over the selection of the programmes and over their organisation'. Conversely, the European Electronic Communications Code defines services which transmit content by their lack of editorial control.²⁹

The ability to exercise editorial control is central to freedom of expression and the media's ability to fulfil its role in society. It is therefore strongly protected. As the ECtHR has reiterated consistently, '[i]t is not for this Court, nor for the national courts for that matter, to substitute their own views for those of the press as to what technique of reporting should be adopted by journalists.'³⁰ The ability of a media organisation to determine which ideas and information to express to the audience, is central to its ability to act as a public watchdog, a forum for public debate, and a source of credible information. However, also on a more structural level, it is important to ensure that different media organisations are able to exercise editorial control, both to ensure that citizens can be exposed to diverse perspectives, and to prevent one party from monopolising the ability to influence the public debate.

Precisely because of the impact on individuals and society, the media also has duties and responsibilities with regard to the manner in which it exercises editorial control. This is evident from the ECtHR's emphasis in *Stoll* on the duties and responsibilities which editors and journalists assume when they decide how to present a story. Accordingly, journalists and editors preparing to publish information about the private life of another individual are for example required to take into account the impact of the photos and

²⁷ *Belpietro v Italy* [2013] ECtHR 43612/10.

²⁸ Jan Oster, *European and International Media Law* (Cambridge University Press 2016) 13.

²⁹ Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (Electronic Communications Code) 2018 (321) para 2(4).

³⁰ *Jersild v. Denmark* (n 18) para 31.

information which they publish.³¹ Their responsibility is higher when they use a medium with a higher impact, such as television.³² The goal of assigning editorial responsibility is not only to hold an individual accountable for illegally publishing information, it is also to ensure the practical effect of media law by targeting the party which can mitigate or prevent this impact. This idea arguably lies at the core of *editorial* responsibility: not only is the initial author responsible, but also the larger media organisation which chooses to publish and disseminate said work. As a result, it is relevant to assess who actually determines what information reaches the public, rather than just to determine who took the decision to run a story on the frontpage.

This focus is evident in the factors which courts and media regulators consider when establishing whether an actor exercises the type of control which leads to responsibility. The emphasis lies on the power to shape the editorial approach of a particular media organisation as a whole, rather than solely the individual selection to publish or reject a certain story.³³ In *Sürek*, for example, the ECtHR emphasised that the applicant ‘was an owner and as such had the power to shape the editorial direction of the review. For that reason, he was vicariously subject to the “duties and responsibilities” which the review’s editorial and journalist staff undertake in the collection and dissemination of information to the public.’³⁴ The CoE similarly stresses the importance of high level policies such as instructions on how editorial decisions should be made, editorial policies, and mission statements.³⁵ In the context of the AVMSD as well, media regulators analyse which actor has the final say over what content is included in a media service.³⁶ What matters is however not only the formal authority to determine what content is published, but also the ability to put that policy into practice. The ability to direct the workforce which takes individual editorial decisions is accordingly another crucial indicator of whether a particular actor actually has the power to determine what information reaches the public.³⁷

The discussion above evidences that many different actors can exercise editorial control simultaneously. This is not necessarily a problem. It is possible to impose editorial responsibility on multiple actors involved in the editorial process; ECtHR judgments which explore the joint responsibility of the journalist,

³¹ *Dupate v Latvia* [2020] ECtHR 18068/11 [47]; *Couderc and Hachette Filipacchi Associés* [2015] ECtHR 40454/07 [89].

³² *Purcell and others v Ireland* [1991] ECtHR 15404/89 262.

³³ Schulz and Heilmann (n 23) 17.

³⁴ *Sürek v Turkey (No 2)* [1999] ECtHR 26682/95 [36]; *Arkady Romanovich Rotenberg v Council* [2016] CJEU ECLI:EU:T:2016:689 [131].

³⁵ CoE, ‘New Notion of Media’ (n 16) para 30.

³⁶ Jenny Weinand, *Implementing the EU Audiovisual Media Services Directive: Selected Issues in the Regulation of AVMS by National Media Authorities of France, Germany and the UK* (Nomos Verlag 2018) 377.

³⁷ *Baltic Media Alliance* [2019] CJEU ECLI:EU:C:2019:566 [43]; CoE, ‘New Notion of Media’ (n 16) para 43; ERGA, ‘ERGA Report on Territorial Jurisdiction in a Converged Environment’ (n 13) para 51.

the editor-in-chief, and the media organisation as a whole, are common.³⁸ Similarly, in its new notion of media, the CoE advocated for a graduated approach to editorial responsibility, linked to ‘the part that media services play in content production and dissemination processes.’³⁹ Nevertheless, allocating responsibility to a single actor can be useful from a regulatory and enforcement perspective. For example, the AVMSD assumes that a single media organisation controls both the publication and organisation of content and thereby is the only one responsible for ensuring compliance with the AVMSD’s rules. Some media regulators have consequently accepted that different parties, which each exercise some editorial control over a service, assign editorial responsibility contractually to a single actor.⁴⁰ This approach has its benefits. It prevents Member States from imposing conflicting obligations on the different actors which exercise control over a media service. It also ensures that supervisory authorities can hold one actor accountable, and that they are not dragged into legal conflicts over which actor exercised control over the part of the service in violation of media law.

Regardless, this centralised approach to responsibility has increasingly come under strain.⁴¹ It assumes that even if one actor does not exercise full editorial control, said actor has enough control to guarantee that a media service does not violate any editorial norms. That assumption is challenged by the automation of editorial decision-making in general, and news personalisation in particular.⁴² Editors and journalists using personalisation to inform the audience have to rely on actors with technical expertise to execute their editorial judgment. Additionally, other actors such as users, product owners, and third-party software providers can influence the news which the personalisation algorithm ultimately delivers to the audience. Simply allocating responsibility to one media organisation does very little to clarify what the relationship between these actors should be like, what the appropriate role of editors and journalists is, and what conditions need to be in place to ensure that editorial control is exercised in a way which promotes editorial values. Moreover, it leads the party to whom responsibility is allocated, to assume more control over the way others exercise their part in the editorial process. This is not an unintended side-effect, but rather the intended aim of a strategy which promotes regulatory efficiency. However, as

³⁸ *Sürek v. Turkey (No. 2)* (n 34); *Bergens Tidende and others v. Norway* (n 17); *Couderc and Hachette Filipacchi Associés* (n 31).

³⁹ CoE, ‘New Notion of Media’ (n 16) para 7.

⁴⁰ Weinand (n 36) 375; Ofcom, ‘Guidance Notes on Who Needs to Notify an On-Demand Programme Service to Ofcom’ (Ofcom 2015) <https://www.ofcom.org.uk/__data/assets/pdf_file/0028/71839/guidance_on_who_needs_to_notify.pdf> accessed 9 June 2019.

⁴¹ Weinand (n 36) 484. The challenges to the centralised approach to editorial responsibility have been recognised for a long time. See e.g. Castendyk, Dommering and Scheuer (n 13) 349; Tarlach McGonagle and Ad van Loon, ‘Jurisdiction over Broadcasters in Europe: Report on a Round-Table Discussion & Selection of Background Materials’ (European Audiovisual Observatory 2002) 12. citing : T. McGonagle/A van Loon, workshop of academics, policymakers, regulators and industry professionals, organised in 2001 by the European Audiovisual Observatory, European Platform of Regulatory Authorities and the Institute for Information Law

⁴² Ananny (n 12).

argued in the literature and chapter 4 of this dissertation, it incentivises platforms to assume more control over the interactions of their users in order to avoid regulatory scrutiny.⁴³

The objective of this dissertation is to determine how the allocation of editorial responsibility can be adapted to ensure that it can continue to be safeguarded in the context of news personalisation. To on the one hand make sure organisations are not able to avoid responsibility by pointing to the role of third parties or the ability of individuals to influence news personalisation, while on the other hand accounting for the changes in the way that editorial control is exercised. Laying the groundwork for this analysis, the following section first provides an overview of the manner in which news personalisation relates to editorial control.

1.3. News personalisation and the automation of editorial decision-making

A popular definition of news personalisation states that it is a ‘form of user-to-system interactivity that uses a set of technological features to adapt the content, delivery, and arrangement of a communication to individual users’ explicitly registered and / or implicitly determined preferences.’⁴⁴ Simply put, news personalisation matches a piece of information to an individual based on their characteristics. As the definition above shows, news personalisation can take many different forms.⁴⁵ This makes it difficult to make any universal claims about the way that it is employed. Nevertheless, the following section aims to provide a basic understanding of (1) the different ways in which news personalisation is generally used and (2) how news personalisation impacts the editorial process. In order to do so, section 1.3.1 explains where in the editorial process personalisation takes place, and section 1.3.2 analyses how editorial control over news personalisation is exercised.

1.3.1. Personalisation’s place in the editorial process

1.3.1.1. Personalised news distribution

News personalisation is mostly used to distribute news. Platforms as well as legacy media organisations use personalisation to offer individuals a personalised set of (news) articles. For example, platforms rely

⁴³ Martin Moore and Damian Tambini (eds), *Digital Dominance: The Power of Google, Amazon, Facebook, and Apple* (Oxford University Press 2018); Natali Helberger, ‘The Political Power of Platforms: How Current Attempts to Regulate Misinformation Amplify Opinion Power’ (2020) 8 *Digital Journalism* 842.

⁴⁴ Neil Thurman and Steve Schifferes, ‘The Future of Personalization at News Websites: Lessons from a Longitudinal Study’ (2012) 13 *Journalism Studies* 775, 776.

⁴⁵ Beckett (n 5); Mariella Bastian and others, ‘Explanations of News Personalisation across Countries and Media Types’ (2020) 9 *Internet Policy Review* 1; Balázs Bodó and others, ‘Tackling the Algorithmic Control Crisis -the Technical, Legal, and Ethical Challenges of Research into Algorithmic Agents’ (2017) 19 *Yale Journal of Law and Technology* <<http://digitalcommons.law.yale.edu/yjolt> <http://digitalcommons.law.yale.edu/yjolt/vol19/iss1/3>>.

on personalisation to power their content feeds and automatically suggest new content to watch.⁴⁶ Legacy media organisations similarly use personalisation to recommend news in (sections of) their apps and sites, to enable individuals to set up their own homepages, and to send custom news alerts and newsletters.⁴⁷

Legacy media organisations and platforms use personalisation to different extents. In simple terms of digital real-estate, news personalisation makes up a relatively small portion of most legacy news sites and apps. The New York Times app for example displays three buttons at the bottom: Today (the traditional frontpage), For You (personalised recommendations), and Sections (where readers can browse). The choice to limit the amount of personalisation taking place, is partly driven by a desire to retain human editorial control and limit some of the dangers associated with algorithmic recommendations. For instance, Bodó found that a desire to preserve core information led media organisations to use personalisation in addition to, rather than instead of, human curation.⁴⁸ Having the traditional frontpage still available is also important to convince audiences who are worried about filter bubbles.⁴⁹

Platforms have traditionally relied on personalisation to a much larger extent. More recently, however, platforms have also begun to introduce non-personalised sections on their websites on specific contentious topics. YouTube has created a separate ‘shelf’ on its homepage where it exposes viewers to information about the COVID-19 from government sources. Similarly, platforms increasingly expose all users to information from official sources regarding where and how to vote. Platforms use these efforts as examples of their attempts to address the harms associated with their recommender systems, such as increased exposure to disinformation.⁵⁰ Rather than only relying on improvements to the impact of personalisation systems on editorial values, platforms also limit the extent to which news personalisation takes place.

⁴⁶ Gillespie (n 7); Mark Ledwich and Anna Zaitsev, ‘Algorithmic Extremism: Examining YouTube’s Rabbit Hole of Radicalization’ (2020) 25 First Monday <<https://firstmonday.org/ojs/index.php/fm/article/view/10419>> accessed 3 March 2020; Napoli, *Social Media and the Public Interest* (n 4); Paul Covington, Jay Adams and Emre Sargin, ‘Deep Neural Networks for YouTube Recommendations’, *Proceedings of the 10th ACM Conference on Recommender Systems* (ACM Press 2016) <<http://dx.doi.org/10.1145/2959100.2959190>>.

⁴⁷ Thurman (n 10); Thurman and Schifferes (n 44); Jessica Kunert and Neil Thurman, ‘The Form of Content Personalisation at Mainstream, Transatlantic News Outlets: 2010–2016’ (2019) 13 Journalism Practice 759.

⁴⁸ Bodó (n 10).

⁴⁹ Cristina Monzer and others, ‘User Perspectives on the News Personalisation Process: Agency, Trust and Utility as Building Blocks’ (2020) 8 Digital Journalism 1142.

⁵⁰ Facebook, ‘Facebook Response to the European Commission Communication on Covid-19 Disinformation’ (Facebook 2021) 4 <<https://ec.europa.eu/newsroom/dae/redirection/document/75741>>; Google, ‘EU & COVID-19 Disinformation Google Report, March 2021’ (Google 2021) 5 <<https://ec.europa.eu/newsroom/dae/redirection/document/75108>>; Twitter, ‘Twitter Report: Staying Safe and Informed on Twitter during COVID-19’ (Twitter 2021) 6 <<https://ec.europa.eu/newsroom/dae/redirection/document/75109>>.

A second key difference between platforms and legacy media is whose news they recommend. Legacy media organisations generally use the content which they have produced and published themselves, or which has been produced by a partner (such as a local media organisation). Platforms conversely personalise the content which their users choose to upload to their service. This is firstly a significant legal distinction between the two. As chapter 2 explores in further detail, the AVMSD defines platforms as services which enable their users to make content available to the public, and which focus on exercising control over the way that this content is organised.⁵¹ In addition (and related) to this legal distinction, the media's control over the content which is recommended can function as a safeguard in personalisation systems. By exercising strict quality control over the content which a personalisation algorithm can recommend, media organisations argue that they are able to limit some of personalisation's potential negative impact on editorial values.⁵² In short, one of the ways in which media organisations exercise control over the information which is recommended to individuals, is by controlling the quality of the information produced.

1.3.1.2. Personalised news articles.

The content and presentation of news stories can also be personalised. Data journalism reporting contains many small examples. Because data journalism uses large datasets to tell a story, it allows journalists to localise their stories by showing readers the specific piece of information which is relevant to them. For example, during the COVID-19 pandemic, the New York Times combined geolocation with a dataset of hospitalisations to run the story 'How Full Are I.C.U.s Near You'.⁵³ More far-reaching forms of content personalisation are also beginning to emerge. In 2019, the BBC commissioned a documentary which automatically adapted its content to the characteristics of the viewer.⁵⁴ The goal of this project was not

⁵¹ For more detail, also in respect of the way that this definition relates to other legal instruments such as the Copyright Directive and DSA, see section 4.2. A semantic tangent: The term 'platform' itself is at odds with personalisation. 'Platform' implies a space in which users can freely choose between different alternatives. Conversely, the use of personalisation means that the party which operates said space selectively chooses to show only a small amount of the available offerings. In other words, the term platform minimises the active way in which those organisations determine what content reaches which audiences. Nevertheless, the term 'platform' has become the accepted label in the public debate as well as in the EU legal framework. Gillespie (n 7); Philip M Napoli and Robyn Caplan, 'Why Media Companies Insist They're Not Media Companies, Why They're Wrong, and Why It Matters' (2017) 22 *First Monday* <<https://journals.uic.edu/ojs/index.php/fm/article/view/7051>> accessed 31 October 2018; Thibault Schrepel, 'Platforms or Aggregators: Implications for Digital Antitrust Law' (2021) 12 *Journal of European Competition Law & Practice* 1; Thomas Poell, David Nieborg and José van Dijck, 'Platformisation' (2019) 8 *Internet Policy Review* <<https://policyreview.info/concepts/platformisation>> accessed 19 December 2019.

⁵² Bodó (n 10).

⁵³ Matthew Conlen and others, 'How Full Are Hospital I.C.U.s Near You?' *New York Times* (15 December 2020) <<https://www.nytimes.com/interactive/2020/us/covid-hospitals-near-you.html>>.

⁵⁴ BBC, 'Instagramification' (*BBC Taster*, 2019) <<https://www.bbc.co.uk/taster/pilots/instagramification>> accessed 11 March 2021.

only to produce a documentary, but also to explore how content personalisation impacts editorial values and processes.⁵⁵

Content personalisation has the potential to strengthen personalisation's influence over the way that the media fulfils its role in democracy. Expanding personalisation from news distribution to production would import personalisation's impact on values such as pluralism into the news production process, while also raising new questions regarding libel law, for example.⁵⁶ Moreover, it could erode the safeguarding role which human editorial control over content production currently plays for the legacy media, and potentially blur the line between the various stages of the editorial process. Where news productions and distribution are both personalised, it is increasingly less useful to think about which news articles are published and how they are organised. Instead, it becomes more important to think about the individual pieces of information to which users are exposed, and the context in which they are received.

Nevertheless, the actual impact of personalised news articles is currently negligible. At the time of writing, content personalisation is mostly used to add colour to stories which are for the most part written and structured by humans. Fully automated content production in general remains mostly limited to topics for which a lot of highly structured source data is available and with little need for complex analysis, such as news on financial and sports results.⁵⁷ The technology behind content personalisation in particular also does not yet seem to be advanced enough to have a significant impact on the news media.⁵⁸ This dissertation therefore focuses on personalisation in the news distribution process. The term news personalisation is used to refer to recommender systems which tailor their recommendations to specific individuals, unless otherwise specified.

⁵⁵ Nick Hanson, 'Making a Personalised, Data-Driven Documentary' (*BBC R&D*, 21 February 2020) <<https://www.bbc.co.uk/rd/blog/2019-07-personalised-documentary-data-instagramification>> accessed 15 March 2021.

⁵⁶ Seth C Lewis, Amy Kristin Sanders and Casey Carmody, 'Libel by Algorithm? Automated Journalism and the Threat of Legal Liability' (2018) 96 *Journalism & Mass Communication Quarterly* 60; Pieter-Jan Ombelet, Aleksandra Kuczerawy and Peggy Valcke, 'Employing Robot Journalists', *Proceedings of the 25th International Conference Companion on World Wide Web* (ACM Press 2016) <<https://dl.acm.org/citation.cfm?id=2890093>> accessed 2 October 2018.

⁵⁷ Stefanie Sirén-Heikel and others, 'Unboxing News Automation: Exploring Imagined Affordances of Automation in News Journalism' (2019) 1 *Nordic Journal of Media Studies* 47; M Carlson, 'The Robotic Reporter: Automated Journalism and the Redefinition of Labor, Compositional Forms, and Journalistic Authority' (2015) 3 *Digital Journalism* 416; Eytan Adar and others, 'PersaLog: Personalization of News Article Content', *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems* (ACM Press 2017) <<https://doi.org/10.1145/3025453.3025631>> accessed 30 November 2020.

⁵⁸ Adar and others (n 57).

1.3.2. Editorial control over news personalisation

The previous subsection has highlighted news personalisation's position in the editorial process. Firstly, news personalisation is used along with non-personalised news distribution, especially by legacy media. Secondly, it is used in addition to editorial processes through which organisations determine what content is available to be personalised. Again, platforms exercise relatively little control over the content which their users upload; legacy media exercise stricter control over the production and publication of content which is recommended. In both cases, editorial control outside the news personalisation process functions as a safeguard which limits personalisation's potential negative impact. This leaves open the question of how editorial control can be exercised over news personalisation. Such control is necessary not only to limit personalisation's negative impact, but also to ensure that personalisation actually aligns with the editorial values of the organisation implementing it. The following explores how the use of news personalisation introduces new actors into the editorial process and adds complexity to the exercise of editorial judgment.

Automating the editorial judgment involved in recommending news is difficult. Part of the challenge simply lies in making the properties of a content item recognisable to an algorithm. This may be easy for properties such as the age or popularity of a content item, yet is more complicated for properties which are relevant for editorial values, such as which voices are represented, whether it contributes to a public debate, or the level of informativeness. Consider: is a story about Delphi a cultural piece about the oracle, travel journalism about a town in Greece, or a misspelled article about intermediary liability? Accurately and automatically identifying the editorially relevant characteristics of all news articles which can be recommended, is not easy. Moreover, it is only part of the challenge. After the properties of a content item have been identified correctly, they also have to be related to editorial values. In specific cases, this requires a certain awareness of the context. The NYTimes data science blog gives the following example: ““Children” is one of the component tags that feeds the “Parents & Families” interest. Yet, many stories that have children as their subject might get the tag, such as this news story about children who fled the conflict in the Tigray region of Ethiopia.”⁵⁹

Editors and journalists cannot solve these problems alone. They have to collaborate with actors who have the technical expertise, such as engineers and data scientists. The latter not only build the actual news personalisation algorithm, but also play an important role in enabling editors and journalists to influence news personalisation. They are the actors who can develop metrics which clarify how a personalisation algorithm impacts editorial values, include control tools allowing editors to directly control how news is

⁵⁹ Joyce Xu, ‘Machine Learning and Reader Input Help Us Recommend Articles’ (*New York Times Open*, 14 January 2021) <<https://open.nytimes.com/we-recommend-articles-with-a-little-help-from-our-friends-machine-learning-and-reader-input-e17e85d6cf04>> accessed 4 May 2021.

recommended, and incorporate editorial feedback into the design of the news personalisation algorithm.⁶⁰ This collaboration between technical and editorial actors can take many different forms. Media organisations, especially smaller ones which lack the required expertise or resources, can rely (in part) on code or off-the-shelf solutions provided by third parties. This leaves editors relatively little room to negotiate the editorial values promoted by the algorithms which their organisations use to distribute news. Partly out of a desire to retain editorial control over the news personalisation algorithm, legacy media organisations sometimes emphasise the importance of developing news personalisation inhouse. In this case, however, factors such as the level of seniority and time at which media actors are involved in the design of personalisation algorithms determine if and how they are actually able to impact its editorial direction. On platforms, for example, the influence of engineers and technical solutions over editors and editorial values has been well-established.⁶¹

As the analysis above has already alluded to, editors' and journalists' ability to influence the design of personalisation algorithms is shaped by the broader organisational structure and technological ecosystem in which they work. Within organisations which implement news personalisation, product owners, marketers, and business departments play a role in providing the funding and approval necessary to use news personalisation. Their roles raise the same old questions on whether news is used to inform or to monetise the audience, and who decides the values to be promoted with editorial output.⁶² However, the way that organisations are able to implement news personalisation is also influenced by the available technical research and off-the-shelf solutions for news personalisation. Platforms increasingly invest in the media's technological development.⁶³ The media's relationship to external actors providing technical knowledge or tools not only has implications for the specific media organisation which employ news personalisation, it also has more structural implications for the media system by shaping which approaches to news personalisation are cheap and easy to implement.

Finally, users have an impact on the way that news is recommended to them. They can communicate their preferences directly by (dis)liking specific content or topics, following certain content producers, or

⁶⁰ However, metrics designed to measure a personalisation algorithm's impact on editorial values encounter many of the same challenges which crop up when embedding editorial values within the personalisation algorithm itself. Shaina Raza and Chen Ding, 'News Recommender System: A Review of Recent Progress, Challenges, and Opportunities' [2021] *Artificial Intelligence Review* 1; Abhijnan Chakraborty and others, 'Optimizing the Recency-Relevance-Diversity Trade-Offs in Non-Personalized News Recommendations' (2019) 22 *Information Retrieval Journal* 447.

⁶¹ Russell (n 11); DeVito (n 11).

⁶² Malcorps (n 10); Bodó (n 10); Jannick Kirk Sørensen, 'Public Service Media, Diversity and Algorithmic Recommendation', *CEUR Workshop Proceedings* (Aalborg University 2019); Alexander Fanta and Ingo Dachwitz, 'Google, the Media Patron. How the Digital Giant Ensnarcs Journalism.' (Otto Brenner Foundation 2020) <<https://osf.io/3qbp9>> accessed 6 April 2021.

⁶³ Fanta and Dachwitz (n 62).

choosing between different values which drive the personalisation system.⁶⁴ In addition, individuals' personalised news diet can also be influenced by data collected without their awareness, such as where, on what device, for how long, and at what time they reads which news items.⁶⁵ In practice, news personalisation systems often rely on both types of information.⁶⁶ This exacerbates concerns raised in some of the earliest literature on media digitalisation regarding the way that metrics have changed the relationship between editors and the audience. They revealed the difference between what editors believe is newsworthy, and what audiences choose to read. Moreover, metrics can selectively highlight those audience preferences which are easy to measure, such as clicks, time spent reading, or conversion to subscriber.⁶⁷ They are therefore often argued to increase the commercial pressure on the news media.⁶⁸

Personalisation makes the influence of the audience on editorial decision-making more direct. Instead of an editor taking an editorial decision which is informed by metrics, individuals' data affects the information which they see directly. The volume of decisions made by personalisation algorithms moreover precludes human oversight over what appears on a personalised frontpage, except by the reader himself.⁶⁹ Compared to non-personalised news, individuals thus have an inherently stronger impact on the news which they see, as well as the potential to exercise more active oversight and control over their news diet. At the same time, the organisation which uses personalisation algorithms, is of course able to determine how users' data is taken into account, and what choices they have to influence their personalised information diet. The way in which media organisations account for the influence that they give the audience over their news intake, is increasingly central to their responsibility. This can involve determining how the data and choices of the audience can be taken into account in a way that

⁶⁴ Jaron Harambam, Natali Helberger and Joris van Hoboken, 'Democratizing Algorithmic News Recommenders: How to Materialize Voice in a Technologically Saturated Media Ecosystem' (2018) 376 *Philosophical Transactions of the Royal Society A* 1.

⁶⁵ Mariella Bastian, Mykola Makhortykh and Tom Dobber, 'News Personalization for Peace: How Algorithmic Recommendations Can Impact Conflict Coverage' (2019) 30 *International Journal of Conflict Management* 309, 19; Raza and Ding (n 60) 17.

⁶⁶ Jannick Kirk Sørensen, 'PSB Goes Personal: The Failure of Personalised PSB Web Pages' (2013) 29 *Mediekultur: Journal of media and communication research* 28 p.; Kunert and Thurman (n 47).

⁶⁷ Philip M Napoli, *Audience Evolution: New Technologies and the Transformation of Media Audiences* (Columbia University Press 2010). Federica Cherubini and Rasmus Kleis Nielsen, 'Editorial Analytics: How News Media Are Developing and Using Audience Data and Metrics' (Reuters Institute for the Study of Journalism 2016) <<https://www.digitalnewsreport.org/publications/2016/editorial-analytics-2016/>> accessed 2 April 2019.

⁶⁸ Joseph Turow, 'Audience Construction and Culture Production: Marketing Surveillance in the Digital Age': (2005) 597 *The ANNALS of the American Academy of Political and Social Science* 103; Caitlin Petre, 'The Traffic Factories: Metrics at Chartbeat, Gawker Media, and The New York Times' (Tow Center for Digital Journalism 2015) <<https://doi.org/10.7916/D80293W1>> accessed 12 September 2019.

⁶⁹ Personalisation can be 'blunted' to allow editors to determine which stories should be shown to which subgroups of the audience.

does not undermine editorial values, and the extent to which users' objectives can be aligned with the organisation's editorial mission.⁷⁰

All of the above has complicated the manner in which editors and journalists traditionally exercised editorial judgment. Personalisation fragments editorial control. Within the newsroom, control over news personalisation is negotiated by a combination of familiar actors like marketing departments, and newer actors such as (third-party) engineers. On platforms, moreover, control over what is published and how content is organised is separated further. Platforms' control focuses on the organisation and removal of content, rather than content publication. Finally, users are better able to influence the news which they see.

Additionally, personalisation changes the level at which editors and journalists can exercise editorial judgment. Editors and journalists who could previously decide exactly what the frontpage would look like for all readers must now exercise control in a different way. That is, they can influence the success metrics which the personalisation algorithm promotes, how it is designed to do so, the metadata which determines how a specific content item is recommended, the way in which user data is taken into account and the choices users should have, the types of articles which should always be shown to (segments of) the audience, and how the aggregate impact of all recommendations on editorial values is evaluated.⁷¹

Such editorial control over the personalisation algorithm is important because the need for editorial judgment has not disappeared simply because the editorial choices involved in news distribution have been automated. The brief explanation of news personalisation at the beginning of this section already raised many questions which require editorial expertise to answer. What should be the objective of a news personalisation system? What are the news items (if any) to which every member of the audience should be exposed? What are the properties of a content item which are relevant for values such as newsworthiness or pluralism? Should news personalisation be developed in a framework which prioritises engineers and technical solutions over editors and editorial values, these questions can easily fall by the wayside. Yet, the impact of these choices on editorial values naturally does not disappear.⁷²

⁷⁰ Jaron Harambam and others, 'Designing for the Better by Taking Users into Account: A Qualitative Evaluation of User Control Mechanisms in (News) Recommender Systems', *Proceedings of the 13th ACM Conference on Recommender Systems - RecSys '19* (ACM Press 2019) <<http://dl.acm.org/citation.cfm?doid=3298689.3347014>> accessed 27 September 2019; Monzer and others (n 49).

⁷¹ Tomoko Komatsu and others, 'AI Should Embody Our Values: Investigating Journalistic Values to Inform AI Technology Design', *Proceedings of the 11th Nordic Conference on Human-Computer Interaction: Shaping Experiences, Shaping Society* (ACM 2020) <<https://dl.acm.org/doi/10.1145/3419249.3420105>> accessed 4 May 2021.

⁷² Russell (n 11); DeVito (n 11).

1.4. Outline

The research question addressed in this dissertation is:

How should editorial responsibility be safeguarded in the context of news personalisation?

The dissertation explores this research question by means of five chapters, each based on a separate article. The choice to organise the dissertation around publications was made to match the high pace of change in the regulation of news personalisation and editorial control. Publishing papers made it possible to contribute to these discussions more directly. The chapters are not presented in chronological order, but are structured around the following three sub-questions:

1. How can media law promote the conditions under which the media can exercise editorial control in the context of news personalisation?
2. How does platforms' control relate to the traditional concept of editorial control, and what are the implications of the difference between the two forms of control for the allocation of responsibility on platforms?
3. How should the individuals who use news personalisation be enabled to fulfil their role in the algorithmic news distribution process?

Chapters 2 and 3 explore the first sub-question by analysing the relationship between news personalisation and editorial independence. The assumption is that media organisations are (and should be) fully responsible for their editorial output, regardless of whether they use algorithms or humans to distribute the news. The more interesting question is how states can create the conditions under which the media can exercise editorial control over news personalisation in a way that promotes editorial values. Editorial independence is a key concept with which media law regulates the media's relationships with outside actors and ensures that it continues to have the capacity to exercise editorial judgment. Chapter 2 therefore develops a normative framework which outlines four perspectives on why editorial independence is valued in European media law. It then uses this framework to analyse how editorial independence is challenged by the automation of editorial decision-making from these different perspectives. Chapter 3 builds on this framework. It first provides a conceptual analysis of the interaction between legal and journalistic perspectives on editorial independence. It then contrasts the normative framework with an analysis of interviews with journalists and editors which surveyed automation's impact on their role in the editorial process, as well as their view on the need for editorial independence.

The second sub-question is explored in chapter 4. This chapter argues that the control platforms exercise differs from the 'full' editorial control exercised by the legacy media, and that it should come with a

different model of responsibility. The chapter is centred around the 2018 revision of the AVMSD, which brought video-sharing platforms under the scope of European media law. These platforms do not exercise editorial control or bear editorial responsibility, but do bear responsibility for their exercise of organisational control. The chapter analyses what this new concept entails, how it relates to editorial control, and critically evaluates its implications for the allocation of responsibility on platforms.

The third question is addressed in chapters 5 and 6. Chapter 5 first explores what role transparency towards individuals can play in the context of algorithmic profiling. It focuses on articles 13-15 and 22 GDPR, which provide individuals with information about profiling technologies (commonly referred to as a right to an explanation). It argues that the goals of these provisions (accountability, agency, and trust) should be understood in the specific context in which profiling technologies are used (in this case the dissemination of news). Subsequently, a conceptual framework of disclosures is developed which should enable the achievement of these goals in the light of the right to an explanation. Chapter 6 focuses on the concept of trust, arguing that trust is a useful concept in law, as it captures an important manner in which individuals interact with media organisations. The objective in law is however not to promote trust blindly, but rather to facilitate the kind of trust which citizens and the media need to fulfil their respective roles in democratic society. Chapter 6 then draws on the framework developed in chapter 5 to present a set of transparency and control measures which promotes this kind of trust. The chapter reports the results of a survey of a representative sample of the Dutch population which has explored whether individuals find these measures important to their trust in organisations using news personalisation to inform them.

1.5. Methodology

The approach of this dissertation is normative, exploring how editorial responsibility should be given shape in the context of news personalisation. In order to do so, it draws on the normative background of editorial control and responsibility as outlined in section 1.2. Chapters 2, 4, and 5 begin with a more in-depth exploration of the normative background of their respective sub-questions. In all cases, the dissertation uses an internal perspective, relying on normative principles within European law to evaluate it.⁷³ Of course, to draw normative conclusions about the way that legislation should be applied or revised, it is also necessary to research what the law actually is at present. Part of the research is therefore descriptive doctrinal legal research, systematising, describing, and interpreting the existing legal sources to determine the key concepts and rules surrounding editorial responsibility and how they are adjudicated.

⁷³ Sanne Taekema, 'Theoretical and Normative Frameworks for Legal Research: Putting Theory into Practice' [2018] *Law and Method* <<https://www.bjutijdschriften.nl/tijdschrift/lawandmethod/2018/02/lawandmethod-D-17-00010>> accessed 17 May 2021.

Additionally, chapters 3 and 6 rely on qualitative and quantitative empirical analysis, respectively. Each chapter describes the methodology used in more detail. At this stage, an overarching observation about the way that this empirical research fits into the dissertation as a whole, is of use. The main purpose of the chapters is to learn more about the impact on normative concepts by news personalisation.⁷⁴ Both chapters therefore start from a normative framework rooted in legal analysis. They subsequently use empirical analysis to determine what challenges to these concepts arise in the context of news personalisation, and what methods may be most suitable to address these challenges. This data is evidently not sufficient for a normative argument. Even if members of the audience might value media companies which act as a 'good neighbour' equally or more than sceptical public watchdogs,⁷⁵ this does not automatically mean that the press should be regulated or supported differently. However, this information makes it possible to build an argument about the measures with which law should enable individuals to trust the media or support editorial independence which takes better account of the perspectives of the actors to which these measures apply. That is the main purpose which this dissertation tries to achieve with its interdisciplinary research.

The legal analysis is primarily based on European media law. Concretely, the analysis draws on article 10 ECHR,⁷⁶ secondary law such as the AVMSD, and policy documents, particularly the declarations and recommendations of the CoE. While the latter are non-binding, they reflect a consensus among the 47 Member States which constitute the Council of Europe. The dissertation does not engage in comparative legal research, primarily due to the fact that many of the technological trends in this dissertation are cross border and regulated at the European level. Such trends include the reliance on personal data, the use of technological services which are not bound to any particular Member States, and the prominence of platforms. That is not to say that Member States' competencies in the field of media law in general, or editorial responsibility in particular, should be disregarded. However, such a decision necessitates a better understanding of how news personalisation relates to the general principles governing editorial responsibility in European media law. This dissertation aims to contribute to this better understanding.

⁷⁴ In contrast to, for example, studying how law impacts individuals' behaviour or how law is applied in practice. P Ishwara Bhat, *Empirical Legal Research: Nature, Features, and Expanding Horizons* (Oxford University Press) <<https://oxford.universitypressscholarship.com/view/10.1093/oso/9780199493098.001.0001/oso-9780199493098-chapter-10>> accessed 20 May 2021.

⁷⁵ Paula M Poindexter, Don Heider and Maxwell McCombs, 'Watchdog or Good Neighbor?: The Public's Expectations of Local News' (2006) 11 *Harvard International Journal of Press/Politics* 77; Irene Costera Meijer, 'What Does the Audience Experience as Valuable Local Journalism?: Approaching Local News Quality from a User's Perspective', *The Routledge Companion to Local Media and Journalism* (Routledge 2020).

⁷⁶ Article 10 ECHR, as interpreted by the ECtHR, has the same meaning and scope as its counterpart in EU law (article 11 Charter) due to the link established in article 52(3) Charter. *Buivids* [2019] CJEU ECLI:EU:C:2019:122 [65]; Charter of Fundamental Rights of the European Union 2012 article 11, 52(3). This dissertation focuses on article 10 ECHR simply because it has a much more developed history in the area of freedom of expression.

News personalisation is not only an editorial but also a technical process. The dissertation takes account of this fact in both its legal and factual scope. Legally, the automation of editorial decision-making and use of it by platforms brings news personalisation into the scope of horizontal legal frameworks such as the General Data Protection Regulation (GDPR), eCommerce Directive (ECD), and most recently the proposed Digital Services Act (DSA).⁷⁷ This dissertation approaches these legal frameworks from the perspective of media law. Especially in chapters 4 and 5, the intention is to explore how news personalisation fits into these legal frameworks, and to what extent their open norms can be used to allocate editorial responsibility. In many cases, it is not possible to fully understand personalisation without taking into account the broader technological ecosystem of which it is part. From a legal perspective as well, personalisation is not (and to ensure technologically neutral legislation, should not be) regulated as a separate technology. Rather, it falls under more general concepts which capture the manner in which organisations use automated decision-making to either control the visibility of information or profile individuals. In order to better understand the technology and place it in its proper context, this dissertation also draws on insights from the automation of editorial decision-making more broadly, especially in chapters 2 and 3.

Finally, the dissertation is part of a broader research project into the impact of personalisation on individuals, the media, and democratic society.⁷⁸ It is complemented by legal research which focuses on personalisation's implications for individuals' rights, communication science research into personalisation's implications for the media and individuals, and journalism studies research into personalisation's impact on the democratic role of the media.⁷⁹ Throughout the writing process, I have contributed to the other work packages, activities, and publications of this project, and in turn received invaluable support from the other team members.⁸⁰

⁷⁷ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (GDPR) 2016; Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (ECD) 2000.

⁷⁸ Natali Helberger, 'Profiling and Targeting News Readers – Implications for the Democratic Role of the Digital Media, User Rights and Public Information Policy. Project No. 638514' (*European Research Council*, 2015) <<https://cordis.europa.eu/project/id/638514>> accessed 7 August 2021.

⁷⁹ E.g. Eskens (n 8); Möller and others (n 8); Mariella Bastian, Natali Helberger and Mykola Makhortykh, 'Safeguarding the Journalistic DNA: Attitudes towards the Role of Professional Values in Algorithmic News Recommender Designs' (2021) 9 *Digital Journalism* 1; Bodó (n 10); Monzer and others (n 49).

⁸⁰ Natali Helberger and others, 'Implications of AI-Driven Tools in the Media for Freedom of Expression' (Council of Europe 2020); Natali Helberger and others, 'A Freedom of Expression Perspective on AI in the Media' (2020) 11 *European Journal of Law and Technology* <<https://ejlt.org/index.php/ejlt/article/view/752>> accessed 23 February 2021; Bastian and others (n 45); Natali Helberger and others, 'Regulation of News Recommenders in the Digital

Services Act: Empowering David against the Very Large Online Goliath' [2021] Internet Policy Review <<https://policyreview.info/articles/news/regulation-news-recommenders-digital-services-act-empowering-david-against-very-large>> accessed 21 July 2021; N Helberger and others, 'News Personalization Symposium Report' (IViR) <<http://personalised-communication.net/wp-content/uploads/2018/05/Report-2018-Amsterdam-News-Personalisation-Symposium-1.pdf>>.

2. The media's editorial independence and automated decision-making

2.1. Introduction

Faced with competition from platforms and a pressing need to convince audiences to pay attention and/or money, newsrooms have increasingly embraced automation.⁸¹ Algorithms are now used throughout the editorial process to help journalists and editors gather and analyse data, semi-automatically produce stories, and personalise news distribution.⁸² This shift has been partially driven by automation's expected commercial advantages in the form of increased efficiency, clicks, and subscriptions.⁸³ However, automation also enables organisations to adapt their editorial role to a changing media system. By personalising news distribution, media organisations can for example deliver more diverse news to each member of the audience.⁸⁴

Despite its increasing commercial and editorial necessity, the media's reliance on technology has far-reaching implications for the way that the media fulfils its role in society. Editorial control, which has long necessarily been a human activity, is now ceded to algorithms in whole or in part.⁸⁵ This creates new conflicts with regard to the ways in which editors and journalists can continue to define and safeguard editorial values. Personalisation, for example, requires editors to outsource their editorial judgment over which stories appear where on the frontpage to an algorithm whose many recommendations cannot be reviewed individually. The (partial) automation of editorial control moreover subjects the media to new pressures. Within newsrooms, editors and journalists must increasingly rely on semi-automated tools, and the engineers and business departments which develop and fund them. Media organisations, especially those which are smaller or local, can come to require the services of external data and software providers to automate editorial decision-making. And ultimately, the media as an institution is faced with new dependencies on the metrics and distribution tools offered by platforms to reach and understand their

⁸¹ This chapter is a copy of the following article: Max Zeno van Drunen, 'Editorial Independence in an Automated Media System' (2021) 10 Internet Policy Review <<https://policyreview.info/articles/analysis/editorial-independence-automated-media-system>> accessed 7 October 2021. With the exception of minor textual revisions and changes made to standardise the dissertation's spelling and reference style, the content remains unchanged.

⁸² Beckett (n 5).

⁸³ Newman (n 5).

⁸⁴ Möller and others (n 8).

⁸⁵ Diakopoulos (n 4) 28.

audience.⁸⁶ Taken together, these trends challenge our understanding of what it means to be editorially independent in an automated media system.

This is problematic, as editorial independence continues to fulfil a number of key functions in European media policy. The media requires distance from other actors to be able to fulfil its role in democratic society as a public watchdog or source of the information citizens need to form their political opinions, and to insulate the audience from manipulation by for example advertisers. Editorial independence is also a precondition for the existence of different voices in the public debate, which is in turn important to ensure pluralism and prevent the emergence of a dominant actor in the media system. In order to safeguard these goals, states must secure the media's independence from external parties, while simultaneously refraining from interfering in editorial decision-making themselves. This involves a delicate balance. Safeguarding editorial independence thus presented a challenge in media policy even before the changes introduced by the automation of editorial decision-making. The media has often remained subject to pressure from prominent actors, including the state, and has played an important role in safeguarding its own independence. Nevertheless, media policy has traditionally also played an important role in creating the conditions for editorial independence.⁸⁷ Policy initiatives increasingly revisit how the conditions for editorial independence can be adapted to the pressures introduced by the media's technological transformation.⁸⁸ Safeguarding editorial independence in a consistent and comprehensive manner however, first requires a better understanding of the concept of editorial independence and its roles in European media policy.

To that end, this chapter asks how editorial independence's normative functions in European media policy are challenged by the technological transformations identified in journalism studies literature. In doing so, it aims to provide a theoretical basis for further research into the way in which editorial independence is challenged in newsrooms, and what role policy can and should play in addressing these challenges. Drawing on earlier lessons from the literature and identifying common pressures on the media's editorial

⁸⁶ E Bell, 'The Dependent Press. How Silicon Valley Threatens Independent Journalism' in M Moore and Damian Tambini (eds), *Digital Dominance. The Power of Google, Amazon, Facebook and Apple* (Oxford University Press 2018); Bodó (n 10).

⁸⁷ James Bennett and Niki Strange (eds), *Media Independence: Working with Freedom or Working for Free?* (Routledge 2015); Jan Oster, *Media Freedom as a Fundamental Right* (Cambridge University Press 2015) <<http://ebooks.cambridge.org/ref/id/CBO9781316162736>> accessed 21 May 2019.

⁸⁸ CoE, 'Declaration by the Committee of Ministers on the Financial Sustainability of Quality Journalism in the Digital Age' (Council of Europe 2019) Decl(13/02/2019)2 <https://search.coe.int/cm/pages/result_details.aspx?objectid=090000168092dd4d> accessed 9 June 2019; European Commission, 'Europe's Media in the Digital Decade: An Action Plan to Support Recovery and Transformation' (European Commission 2020) COM(2020) 784 final <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0784>> accessed 15 December 2020; European Commission, 'On the European Democracy Action Plan' (2020) COM(2020) 790 final <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A790%3AFIN&qid=1607079662423>> accessed 16 December 2020.

independence, the chapter focuses on the automation of editorial control in general rather than on a specific technology. It uses the term ‘automated editorial decision-making’ to refer to the processes by which technology informs, supports, or replaces human control over content production, publication, and organisation.

The analysis is grounded in article 10 ECHR, as further concretised through case law of the ECtHR and CoE recommendations. The latter are non-binding but authoritative, as they reflect a consensus among the 47 Member States which constitute the CoE. They can thereby provide overarching guidance on the manner in which abstract or fragmented principles such as editorial independence should be understood in new situations.⁸⁹ The chapter aims to analyse the arguments for editorial independence which are put forward in these recommendations, case law, and the corresponding literature in order to determine which functions the concept of editorial independence has traditionally performed in European media policy. It subsequently uses this analysis to establish how editorial independence’s functions are challenged by the automation of editorial decision-making.

The following sections (1) analyse how editorial independence is conceptualised in legal and journalism studies literature; (2) provide a normative framework of editorial independence’s functions in European media policy, and highlight how the latter are impacted by trends identified in journalism studies literature; (3) explore how these trends combine to challenge policy’s traditional understanding of editorial independence, and the new policy initiatives which aim to safeguard it.

2.2. Editorial independence as a legal and journalistic concept

Definitions of editorial independence generally centre on the ability to exercise control over the production, publication, and dissemination of content free from external influences, and aligned with the editorial values of a particular news outlet.⁹⁰ Purely descriptive research in journalism studies has identified a wide variety of such influences, often by exploring how media professionals perceive their own independence. These influences include the commercial and political pressures which are also mainstays in media policy discussions, as well as sources, media routines, and journalists’ own stances.⁹¹ This open approach to independence has also made it possible to quickly incorporate the influences

⁸⁹ Tarlach McGonagle, ‘The Council of Europe and Internet Intermediaries: A Case Study of Tentative Posturing’ in Rikke Frank Jørgensen (ed), *Human Rights in the Age of Platforms* (The MIT Press 2019) <<https://direct.mit.edu/books/book/4531/Human-Rights-in-the-Age-of-Platforms>> accessed 12 March 2020.

⁹⁰ Elda Brogi and others, *Monitoring Media Pluralism in the Digital Era: Report 2020*. (European University Institute 2020) <<https://data.europa.eu/doi/10.2870/21728>> accessed 6 January 2021; Thorbjørn Jagland, ‘State of Democracy, Human Rights and the Rule of Law’ (Council of Europe 2017); Kari Karppinen and Hallvard Moe, ‘What We Talk About When Talk About “Media Independence”’ (2016) 23 *Javnost - The Public* 105.

⁹¹ Zvi Reich and Thomas Hanitzsch, ‘Determinants of Journalists’ Professional Autonomy: Individual and National Level Factors Matter More Than Organizational Ones’ (2013) 16 *Mass Communication and Society* 133.

associated with the automation of editorial decision-making. Journalism studies research which explores these influences is driven by the notion that editorial values are embedded in algorithms, for example through the choices on what data they use, what performance metrics they are intended to achieve, and how they are designed to do so. Journalists and editors are not the only parties which influence these choices, as they often lack the skills and resources necessary to develop the technology used to automate editorial decision-making. Algorithmic editorial independence research thus explores how journalists' and editors' control over content production, publication, or dissemination is affected by algorithms, and which actors, such as engineers, marketing departments, data providers, and external software companies, influence how these algorithms are developed and used.⁹²

Third parties' important role in automated editorial decision-making has reignited a long-standing discussion over the meaning of editorial independence. This discussion revolves around the argument that it is difficult to imagine a media system, be it automated or not, which is not influenced by outside forces. As long as the media relies on advertisers or the audience to pay for journalism, it will for example be subject to market pressures. Furthermore, media being influenced by its environment is not necessarily negative. Schudson's argument that a media system which is invulnerable to outside pressure would become isolated from society has proven especially influential.⁹³ The inevitability and potential desirability of external influences on the media mean that attempts to pin the meaning of editorial independence down quickly get wrapped up in the question of who should be able to influence the media and for what purposes.⁹⁴

Though rarely explicitly discussed in these terms, the idea that journalism should not be fully independent is ingrained in media law, which requires the state to limit the media's independence when necessary to protect the interests of society and other individuals. Policy discussions on editorial independence instead focus on the follow-up questions: to what extent should the media be independent from the state and other actors, and what obligations do states have to secure such independence? In that context, article 10 ECHR firstly provides individuals with a subjective right against state interference. The state is hence prohibited from interfering with the media's right to impart information unless such interferences can be shown to be necessary in a democratic society. This is the classic form of media freedom, which prevents the state from (for example) pressuring the media to not express a particular political view, including through financial or organisational means.⁹⁵ At the same time, article 10 ECHR imposes a positive

⁹² Bodó (n 10); Rodrigo Zamith, 'Quantified Audiences in News Production' (2018) 6 Digital Journalism 418.

⁹³ Michael Schudson, 'Autonomy from What' (2005) 214 Bourdieu and the journalistic field 214.

⁹⁴ Mike Ananny, 'The Partnership Press: Lessons for Platform-Publisher Collaborations as Facebook and News Outlets Team to Fight Misinformation' (Tow Center for Digital Journalism 2018) <<https://doi.org/10.7916/D85B1JG9>> accessed 16 April 2020; Bennett and Strange (n 88); Karppinen and Moe (n 91).

⁹⁵ Bennett and Strange (n 88).

obligation on states to take action to create a favourable environment in which journalists and media organisations can effectively exercise their right to free expression.⁹⁶ This requires states to take action in relations between private actors. In a limited number of cases, the ECtHR has recognised the right of individual journalists to invoke their freedom of expression rights in a dispute with their employer.⁹⁷ More generally, the Court emphasises states' obligation to put in place the conditions for a pluralistic media system. In that context, the ECtHR has also consistently argued that Member States must prevent groups from obtaining a dominant position which would allow them to restrict the media's editorial freedom.⁹⁸ The CoE has furthermore expanded on the way that states' positive obligations to institute the necessary conditions for an independent media can be operationalised in a digital media system, for example through funding models, press subsidies, or digital skills training.⁹⁹

In order to properly understand how the means by which policy protects editorial independence are challenged, the underlying question of why media policy aims to secure editorial independence should first be engaged with. Writing from a US and first amendment perspective, Ananny has argued in particular that the infrastructures through which the media forms relationships with others should be evaluated by which kinds of publics they create.¹⁰⁰ From a European policy perspective, editorial independence has fulfilled somewhat similar functions by enabling the media to serve diverse audiences and promote the public interest, as well as different functions such as protecting individuals from commercial manipulation and the democratic process from undue influence of political and other powerful societal actors.¹⁰¹ The following section develops four perspectives on the functions of editorial independence in European media policy, and assesses the challenges which the automation of editorial decision-making poses from these different perspectives.

2.3. Four policy perspectives on the role of editorial independence in an automated news system

Policy frameworks often indicate the need for editorial independence with broad references to the media's role in democracy. Where the ECtHR, CoE, and legal literature elaborate on the role of editorial independence, their arguments can be divided along the two axes visualised in Figure 1: preventive/enabling, and individual/systemic. The preventive/enabling axis distinguishes between the types of influences from which the media should be independent. Preventive arguments focus on the

⁹⁶ Oster (n 88).

⁹⁷ *Frăsilă and Ciocîrlan v Romania* [2012] ECtHR 25329/03 [62]; *Wojtas-Kaleta v Poland* [2009] ECtHR 20436/02 [42–52].

⁹⁸ Amedeo Arena and others, 'Media Ownership: Market Realities and Regulatory Responses' (Council of Europe 2016) <<https://rm.coe.int/media-ownership-market-realities-and-regulatory-responses/168078996c>>.

⁹⁹ CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89); European Parliament, 'Resolution on Media Pluralism and Media Freedom in the European Union' (2018) 2017/2209(INI) <https://www.europarl.europa.eu/doceo/document/TA-8-2018-0204_EN.html> accessed 14 April 2020.

¹⁰⁰ Ananny (n 95).

¹⁰¹ CoE, 'New Notion of Media' (n 16).

need to prevent external actors from exercising ‘undue influence’ over the media. Concretely, this is often used to refer to influence which is used to manipulate the audience for commercial or political purposes, for example in the form of undisclosed influence from advertisers. Arguments which see editorial independence in an enabling role go a step further. They point out that, in order for the media to determine how it will fulfil its role in a democratic society, it requires a certain distance from actors which can shape how it exercises its influence, regardless of whether this is done for commercial, political, or other purposes.

The systemic/individual axis distinguishes between the level at which challenges to editorial independence become relevant. Systemic arguments focus on influences which are not problematic on their own, but become so when viewed in the context of the media system as a whole. For example, it is not inherently problematic for a media organisation to get a new owner. However, if that owner thereby comes to control 60 per cent instead of 40 per cent of the media market, the change in ownership creates a dangerous concentration of power in the media system which threatens the media’s ability to function as a separate institution in a democratic society. Conversely, individual arguments focus on influences which are problematic regardless of what is happening in the rest of the media system. A classic example is an advertiser pressuring the editorial department not to run a damaging story. Such influences will have an impact on the media system as a whole if they occur regularly, yet they are already problematic even if they only occur once. Combining these axes reveals four perspectives on the role editorial independence plays in European media policy (see Figure 1). The following sections expand on each perspective and the way in which they are challenged by the risks on automated editorial decision-making identified in journalism studies literature.

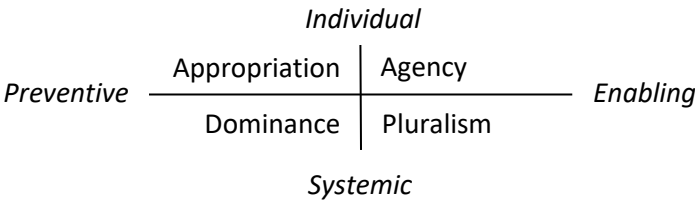


Figure 1. Normative perspectives on editorial independence in European media policy.

2.3.1. Preventive/individual: the appropriation perspective

One of editorial independence’s most basic functions is to prevent third parties from appropriating the media’s influence for their own purposes. The media’s ability to fulfil its democratic role is based on its impact on individuals’ and public opinion.¹⁰² This influence is valuable to any number of third parties.

¹⁰² Linda van den Heijkant and others, ‘Intermedia Agenda-Setting in a Policy Reform Debate’ (2019) 13 International Journal of Communication 23.

Editorial independence policy traditionally has been especially concerned with the influence of political actors. As their power ultimately derives from the will of the people, allowing political actors to control the media's role in the formation of public opinion, for example by allowing persons with political authority to determine what a media organisation reports on, would corrupt the legitimacy of the democratic process.¹⁰³ However, other actors also have an interest in the media's ability to influence the minds of individuals. Conventionally, editorial independence policy has been especially concerned with commercial influences over editorial content. For audiovisual content, the AVMSD prohibits sponsorship and product placement for news and current affairs programmes, or if it affects how other content is produced and organised.¹⁰⁴ Preventing the manipulation of the media's audience is not only a matter of media law, however. Consumer law, including article 5(5) of the Unfair Commercial Practices Directive, also prohibits third parties from exercising undisclosed commercial influence over editorial content. Its goal in doing so is not to protect the media's editorial independence for its own sake, but rather to prevent third parties from abusing the media's ability to influence the audience for commercial persuasion.¹⁰⁵

The automation of editorial decision-making opens up new ways for other actors to influence algorithms' design in order to manipulate the audience. Advertisers could, for example, seek to influence the way editorial content is personalised in order to create an environment in which individuals are more likely to buy their product.¹⁰⁶ A lack of algorithmic transparency could moreover make such commercial influence difficult for the public to detect.¹⁰⁷ In the example above, commercial influence over how content is distributed, would be difficult to detect for outsiders, and potentially circumvent obligations such as those in articles 9-11 AVMSD, which focus on making advertisements and commercial influences over the production of content more recognisable.¹⁰⁸ Using automated editorial decision-making to manipulate the audience for commercial purposes should however be distinguished from using technologies such as personalisation to attract valuable audiences which can be exposed to online behavioural advertising.¹⁰⁹ The latter does not require that editorial decision-making is misused to change the minds of the audience, though it poses its own challenges to editorial independence which are explored in the next section.

¹⁰³ CoE, 'New Notion of Media' (n 16) para. 65; Thomas Gibbons, *Regulating the Media* (2nd edition, Sweet & Maxwell UK 1998) 35; Oster (n 88) 85.

¹⁰⁴ Thomas Gibbons and Irini Katsirea, 'Commercial Influences on Programme Content: The German and UK Approaches to Transposing EU Rules on Product Placement' (2012) 4 *Journal of Media Law* 159.

¹⁰⁵ *RLvS Verlagsgesellschaft mbH v Stuttgarter Wochenblatt GmbH* [2013] CJEU ECLI:EU:C:2013:669.

¹⁰⁶ Joseph Turow, *The Daily You* (Yale University Press 2012).

¹⁰⁷ Diakopoulos (n 4).

¹⁰⁸ On the regulation of commercial communications and choice architectures more generally, see Marijn Sax, 'Between Empowerment and Manipulation: The Ethics and Regulation of for-Profit Health Apps' (University of Amsterdam 2021) 183.

¹⁰⁹ Sophie C Boerman, Sanne Kruikemeier and Frederik J Zuiderveen Borgesius, 'Online Behavioral Advertising: A Literature Review and Research Agenda' (2017) 46 *Journal of Advertising* 363.

Another category of concern focuses on situations in which the media makes editorial decisions based on third-party data.¹¹⁰ As the New York Times puts it in its explanation on data journalism, '[m]ore data is released than ever before — there are nearly 250,000 datasets on data.gov alone — and increasingly, government, politicians and companies try to twist those numbers to back their own agendas'.¹¹¹ Although the way in which data is used in editorial decision-making may have changed, the core editorial independence concern remains the same: the direct relationship between input data and editorial output potentially allows the data provider to influence editorial decision-making. Literature on data journalism, for example, emphasises that an uncritical attitude to the data provided by others leaves journalists at risk of incorporating their analyses and viewpoints.¹¹² Similar concerns arise with regard to other technologies which make editorial decisions based on third-party data, such as news personalisation and automated journalism.¹¹³

The traditional threat of direct political interference with editorial decision-making has so far received relatively little attention in western literature on the legacy media's collection and use of audience data. Nevertheless, the use of automated editorial decision-making by non-independent media organisations raises considerable concerns regarding state manipulation of individuals' and public opinion. In the Ukrainian context, for example, Makhortykh and Bastian highlight the risk of personalisation technologies being used to further increase state control through government influence over their design or access to the data which they collect.¹¹⁴ In this sense, strong safeguards for editorial independence can be seen as necessary to responsibly develop targeting and tracking technologies in general.

2.3.2. Enabling/individual: the agency perspective

Editorial independence is not just used to prevent third parties from appropriating the media's influence, but also to enable media organisations to determine how to use their influence to further the public interest in accordance with their own professional norms. Arguments to this effect frame editorial independence as a precondition for the media's ability to fulfil its role in democratic society by providing information which serves public values. Specifically, such arguments highlight the need for the media to

¹¹⁰ Carlson (n 57).

¹¹¹ Lindsey Rogers Cook, 'How We Helped Our Reporters Learn to Love Spreadsheets' *New York Times* (12 June 2019) <<https://open.nytimes.com/how-we-helped-our-reporters-learn-to-love-spreadsheets-adc43a93b919>> accessed 14 May 2020.

¹¹² Florian Stalpl, 'Classifying Data Journalism' (2018) 12 *Journalism Practice* 1332.

¹¹³ Diakopoulos (n 4) 120; Rodrigo Zamith, 'Algorithms and Journalism', *Oxford Research Encyclopedia of Communication* (OUP 2019) <<https://oxfordre.com/view/10.1093/acrefore/9780190228613.001.0001/acrefore-9780190228613-e-779>> accessed 20 June 2019.

¹¹⁴ Mykola Makhortykh and Mariella Bastian, 'Personalizing the War: Perspectives for the Adoption of News Recommendation Algorithms in the Media Coverage of the Conflict in Eastern Ukraine' [2020] *Media, War & Conflict* 1; Mariëlle Wijermars, 'Russia's Law "On News Aggregators": Control the News Feed, Control the News?' [2021] *Journalism* 1.

be able to provide credible information, offer a forum for public debate, and act as a public watchdog. For example, journalists and editors require distance from commercial interests in order to provide information which they believe citizens should know, as opposed to information which is the most profitable to provide. The agency perspective assumes particular importance in contentious situations, where independent media can have a stabilising effect by providing reliable information.¹¹⁵

An agency perspective on editorial independence requires the state to act as a buffer, and ensures that the media has the ability to act without having to rely on others which can shape how it exercises its editorial control. Exercising their public watchdog function inherently puts the media in an adversarial relationship with powerful third parties. However, journalists may also need space from market forces to be able to make their own judgments on what is in the public interest. Concretely, this can require the state to not only refrain from interfering with the media's freedom of expression in court disputes between private parties, but also to create the conditions which afford journalists the independence necessary to determine how they exercise their editorial control – for example by strengthening the rights of the editorial department in relation to the publisher or promoting funding models which sustain independent journalism.¹¹⁶

The automation of editorial decision-making further complicates the role of editors in the newsroom. As the extensive discussion on audience metrics has particularly emphasised, technology in newsrooms can often favour specific editorial values.¹¹⁷ When metrics selectively highlight what individuals want as consumers rather than citizens, they create a pressure to make editorial choices attracting large audiences which are valuable to advertisers or the business department.¹¹⁸ Personalisation technologies which enable media organisations to directly tailor the distribution of content to the audience's perceived preferences potentially exacerbate this pressure on media's ability to independently make editorial decisions for the public interest.¹¹⁹ Although these technologies can be used to support editors in their civic roles, this requires the editors and journalists using them to have a nuanced understanding of the way in which a specific technological tool affects specific editorial values.¹²⁰

¹¹⁵ CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89); Oster (n 88) 33; Gibbons (n 104) 35–36.

¹¹⁶ CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89); *Animal Defenders International v United Kingdom* [2013] ECtHR 48876/08; José van Dijck, Thomas Poell and Martijn de Waal, *The Platform Society: Public Values in a Connective World* (Oxford University Press 2018) <<https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=1901418&site=ehost-live&scope=site>> accessed 13 February 2019.

¹¹⁷ Zamith (n 93); Valerie Belair-Gagnon, Rodrigo Zamith and Avery E Holton, 'Role Orientations and Audience Metrics in Newsrooms: An Examination of Journalistic Perceptions and Their Drivers' (2020) 8 *Digital Journalism* 347.

¹¹⁸ Belair-Gagnon, Zamith and Holton (n 118).

¹¹⁹ Bodó (n 10).

¹²⁰ Hindman (n 9); Zamith (n 93).

As editorial technology has matured, it has been used not only to inform editorial decision-making, but also to automate various parts of the editorial process.¹²¹ This puts the role of journalists and editors on a spectrum. This spectrum ranges from situations in which editors and journalists use automation as a support for their own editorial decisions (as is the case for many of the more complex editorial tasks, such as writing), to situations in which algorithms take editorial decisions that are not (and due to scale cannot be) checked by a human, such as personalised news distribution. From an agency perspective, the shift from informing to (partially) automating editorial decision-making affects professional autonomy by further increasing media actors' reliance on the engineers who develop technologies which promote editorial values. However, the lack of algorithmic transparency also has the potential to remove many individual editorial decisions from human oversight, and obscure which (third) party has shaped which part of the editorial algorithm.¹²²

2.3.3. Preventive/systemic: the dominance perspective

Editorial independence is also used to counteract concentrations of opinion power in the media system.¹²³ Along similar lines to the next section's pluralism perspective, this perspective deals with influences which are not problematic in isolation, but become so when viewed in the context of the media system as a whole. In *VgT Verein gegen Tierfabriken v Switzerland*, for example, the ECtHR qualified its statement that the applicant made a permissible contribution to the public debate by noting that it was not a powerful organisation which aimed to abuse its competitive advantage.¹²⁴ Organisations which do have such an advantage, can use it to limit the editorial freedom of other media organisations, and overexpose citizens to their preferred viewpoints.¹²⁵ This affords them outsized influence over the formation of individual and public opinion, i.e. opinion power.¹²⁶ Arguments against the concentration of such influence primarily take a precautionary approach. Simply allowing a dominant actor to emerge in the media system is already problematic for democratic systems which are based on a balance of power.¹²⁷ By limiting powerful actors' influence over smaller organisations, editorial independence can function as a counterweight to concentrations of opinion power. However, in order to prevent dominant actors from emerging, it is also necessary to disperse power among multiple independent organisations, for example by limiting cross-

¹²¹ Beckett (n 5).

¹²² Zamith (n 114) 4.

¹²³ CoE, 'Recommendation of the Committee of Ministers to Member States on Media Pluralism and Transparency of Media Ownership' (Council of Europe 2018) CM/Rec(2018)1 <https://search.coe.int/cm/Pages/result_details.aspx?ObjectId=0900001680790e13> para. 1.3.

¹²⁴ *VgT Verein gegen Tierfabriken v Switzerland* [2001] ECtHR 24699/94 para. 75.

¹²⁵ Helle Sjøvaag, 'The Principles of Regulation and the Assumption of Media Effects' (2014) 11 *Journal of Media Business Studies* 5; Rachael Craufurd Smith and Damian Tambini, 'Measuring Media Plurality in the United Kingdom: Policy Choices and Regulatory Challenges' (2012) 4 *Journal of Media Law* 35.

¹²⁶ Helberger, 'The Political Power of Platforms' (n 43).

¹²⁷ C Edwin Baker, *Media Concentration and Democracy: Why Ownership Matters* (Cambridge University Press 2006); CoE, 'New Notion of Media' (n 16).

media ownership and preventing centralised control over distribution channels and content on which the media depends.¹²⁸

Even though platforms are not the focus of this chapter, the role of editorial independence as a counterbalance to the concentration of opinion power must take into account the media's new institutional dependencies on platforms.¹²⁹ a small number of platforms is increasingly able to determine how media content is distributed through their control over the algorithms which shape the visibility of content online. These platforms can moreover decide how the media understands its audience on platforms by determining which metrics to make available.¹³⁰ In other words, the nature of power concentrations concerns not only control over what is published, but also control over the relationship between media organisations and their audiences.¹³¹

Platforms' control over the media's access to the audience creates new pressures on editorial decision-making. Regardless of their concerns about becoming dependent on a distribution service which they do not control, smaller, commercial, and even public service media organisations – with their special obligation to remain independent and serve as a counterbalance to powerful organisations – are unable to ignore platforms entirely. This reliance creates a pressure to tailor editorial decisions to the values which are presumed to be encoded in platforms' personalisation algorithm.¹³² The results can be seen in editorial decisions to turn to video, or to produce large quantities of content and leave it to the platform to determine what to show to whom.¹³³ The potential for interference with editorial decision-making created by this dependency is especially problematic because the media is expected to act as a public watchdog with regard to the platforms on which they rely to reach their audience.

Moreover and more fundamentally, the institutional dependency of the press complicates its ability to serve as a tool to counteract concentrations of opinion power. This function of editorial independence presumes that independent and distinct organisations are able to contribute to the public debate outside the influence of another dominant organisation. Media organisations' ability to do so is frustrated by the press' institutional dependency on platforms for access to the audience. This dependency is further

¹²⁸ Tom Evens and Karen Donders, 'Mergers and Acquisitions in TV Broadcasting and Distribution: Challenges for Competition, Industrial and Media Policy' (2016) 33 *Telematics and Informatics* 674.

¹²⁹ Bell (n 87); van Dijck, Poell and de Waal (n 117).

¹³⁰ Bennett and Strange (n 88); Victor Pickard, 'Restructuring Democratic Infrastructures: A Policy Approach to the Journalism Crisis' (2020) 8 *Digital Journalism* 704.

¹³¹ Natali Helberger, *Challenging Diversity—Social Media Platforms and a New Conception of Media Diversity* (Oxford University Press 2018).

¹³² Chelsea Peterson-Salahuddin and Nicholas Diakopoulos, 'Negotiated Autonomy: The Role of Social Media Algorithms in Editorial Decision Making' (2020) 8 *Media and Communication* 27; Karin van Es and Thomas Poell, 'Platform Imaginaries and Dutch Public Service Media' (2020) 6 *Social Media + Society* 1.

¹³³ van Dijck, Poell and de Waal (n 117).

characterised by platforms' ability to connect media organisations to audiences on different levels of democracy. Because platforms cross the boundaries of local, national, and supranational democratic systems, they can have an outsized influence in local democracies, even in countries where the national media system continues to have an autonomous relationship with the audience.¹³⁴

Looking forward, as algorithms are increasingly integrated in media organisations' internal content production and distribution processes, concentration of power over such technologies, source data, and intellectual property rights can also become important indications of power in the media system. For the moment, no dominant actor has arisen in these fields, and the market structure of audience metrics suggests editorial technologies may not need to become concentrated in a few hands. Moreover, especially PSM and larger organisations increasingly (collaborate to) develop their own technologies, sometimes as an explicit counterweight to platforms' services.¹³⁵ Nevertheless, platforms' data, technological expertise, and financial advantage also place them in a good position to increasingly control the tools which legacy (and especially smaller or local) media use for automated editorial decision-making. The ability to steer the development of technology throughout the news sector, for example through developing and training journalists in the use of proprietary tools, raises concerns that dominance is expanded from distribution to other parts of the editorial process.¹³⁶

2.3.4. Enabling/systemic: the pluralism perspective

Finally, editorial independence functions as a precondition for a pluralistic media system. A strong overlap exists between the pluralism and dominance perspectives. Indeed, ensuring pluralism is one way to prevent dominance.¹³⁷ But where the dominance perspective uses editorial independence to protect the democratic process from concentrated power, the pluralism perspective uses it to ensure that the public debate contains a wide variety of perspectives. Preventing dominance alone does not automatically achieve this goal, since for example economic factors can still leave certain voices underrepresented even in media systems where no single dominant actor is present.¹³⁸ The pluralism perspective therefore sees editorial independence as one way to ensure pluralism. It is especially used as a precondition for the

¹³⁴ Bell (n 87); Konrad Bleyer-Simon and others, 'Monitoring Media Pluralism in the Digital Era: Application of the Media Pluralism Monitor in the European Union, Albania, Montenegro, Republic of North Macedonia, Serbia & Turkey in the Year 2020' (European University Institute 2021) 96, 115 <https://cadmus.eui.eu/bitstream/handle/1814/71970/CMPF_MPM2021_final-report_QM-09-21-298-EN-N.pdf?sequence=1&isAllowed=y>.

¹³⁵ van Es and Poell (n 133).

¹³⁶ Fanta and Dachwitz (n 62).

¹³⁷ *VgT Verein gegen Tierfabriken v. Switzerland* (n 125) para. 73.

¹³⁸ *Centro Europa 7 S.r.l and Di Stefano v Italy* [2012] ECtHR 38433/09 para. 30; Oster (n 88); Smith and Tambini (n 126).

existence of different media organisations which can provide the perspectives of the different societal groups and political outlooks.¹³⁹ This is commonly referred to as source pluralism.¹⁴⁰

Source pluralism assumes that a diverse set of media organisations will produce diverse output with which different members of a heterogeneous audience can engage.¹⁴¹ That assumption has increasingly been challenged by the media system's trend toward personalisation. Control over exposure to content is thereby shifted from editors who determine what content is available and audiences who choose from a mass media offer, to personalisation algorithms determining which stories are supplied to which audiences. This has led to an increased focus on the diversity of viewpoints to which citizens are actually exposed, i.e., exposure diversity.¹⁴² This change complicates editorial independence's function as a mechanism which ensures pluralism. What is the added value of editorial independence in exposure diversity, especially compared to directly measuring the diversity of the viewpoints to which citizens are exposed?

The answer to this question depends on the normative justification for diversity. Deliberative and agonistic perspectives on diversity for example value a media system which reflects society, and includes different societal actors engaged in critical debate. Exposing citizens to different independent voices which explicitly disagree with one another is valuable under this approach. Conversely, approaches which focus on individual autonomy value citizens' ability to develop themselves by drawing on different perspectives. From this angle, having editorial independence is only useful insofar as it is necessary to produce a variety of viewpoints to which citizens can be exposed.¹⁴³

Automated editorial decision-making also has the potential to complicate editorial independence's ability to safeguard source pluralism. In order to do so, independent organisations must exercise editorial control in differing ways and offer different perspectives. This is potentially in conflict with the efficiency which is a key selling point of many automated systems. The reproducibility of data sets and algorithms allows media organisations to use the same data sets or algorithms which promote the same editorial values in the same way, while remaining independent from one another and their ownership. Newsroom automation can thereby have a homogenising influence by making it possible to copy editorial decision-

¹³⁹ CoE, 'Recommendation on Pluralism' (n 124); *Frăsilă and Ciocîrlan v. Romania* (n 98) para. 64.

¹⁴⁰ Felicia Loecherbach and others, 'The Unified Framework of Media Diversity: A Systematic Literature Review' (605) 8 *Digital Journalism* 1.

¹⁴¹ CoE, 'Recommendation on Pluralism' (n 124); Sjøvaag (n 126).

¹⁴² Natali Helberger, Kari Karppinen and Lucia D'Acunto, 'Exposure Diversity as a Design Principle for Recommender Systems' (2018) 21 *Information, Communication & Society* 191.

¹⁴³ Loecherbach and others (n 141); Peggy Valcke, Miklos Sukosd and Robert Picard, *Media Pluralism and Diversity: Concepts, Risks and Global Trends* (Springer 2015).

making, rather than having to rely on different human editors making editorial decisions.¹⁴⁴ Moreover, this trend likely does not affect all types of organisations equally, but may be especially problematic for smaller media organisations without the resources to develop technologies inhouse.¹⁴⁵

2.4. Safeguarding editorial independence in an automated media system

Editorial independence's many functions create the risk of safeguarding a narrow version of the concept which leaves a number of public values unprotected. Protecting the media's independence from advertisers trying to manipulate the audience, for example, does not ensure that the media has the independence necessary to act as a public watchdog or function as a democratic safeguard against concentrations of power. At the same time, the different perspectives on independence face common challenges which have traditionally been addressed with common methods. Limits on the influence of media ownership have afforded editors the agency necessary to independently decide how to use their influence while preventing one powerful owner from exercising a dominant or homogenising influence through multiple outlets.¹⁴⁶ Ensuring a consistent and comprehensive protection of editorial independence thus requires a broader view of the way in which automation challenges editorial independence. Table 1 therefore distils the analysis of the previous section into an overview of the roles editorial independence plays, the values it protects, and the challenges which it faces in the context of automated editorial decision-making. The following section explores common challenges to the four policy perspectives on editorial independence, and reflects on the manner in which recent policy has begun to address these challenges.

¹⁴⁴ Daniel Vogler, Linards Udris and Mark Eisenegger, 'Measuring Media Content Concentration at a Large Scale Using Automated Text Comparisons' (2020) 21 Journalism Studies 1459.

¹⁴⁵ Beckett (n 5).

¹⁴⁶ Brogi and others (n 91).

	Appropriation	Agency	Dominance	Pluralism
Role of editorial independence	Prevent outside influences from being laundered through editorial content.	Ensure that media actors are able to exercise editorial control.	Prevent the abuse of concentrations of opinion power.	Ensure the existence of different voices in the public debate.
Challenges posed by automated editorial decision-making	<p>New opportunities to influence editorial content through input data.</p> <p>New opportunities for commercial or political influence.</p> <p>Hidden influences over algorithms or their input data due to a lack of algorithmic transparency.</p>	<p>New dependencies on (third-party) software developers who build tools which take or support editorial decisions.</p> <p>Changing distribution of influence between departments (e.g., editorial; technical; business).</p> <p>Influence of values encoded in technology over journalistic decision-making.</p>	<p>Media's Increasing dependency on platform-controlled distribution algorithms.</p> <p>Concentration of power over tools used by legacy media to take editorial decisions.</p>	<p>Advantages of editorial values which are easy to automate and optimise.</p> <p>Homogenising influence of the use of the same input data or software on the values promoted by independent organisations.</p> <p>Unequal access to the ability to integrate automation for, e.g., smaller media organisations.</p>

Table 1. Four perspectives on the changing role of editorial independence in the automated news system.

At the most basic level, automation challenges editorial independence by changing the nature of influence over the media. It creates new opportunities for familiar political and commercial actors, as well as new actors such as platforms or external software providers to influence editorial decision-making. A lack of algorithmic transparency can moreover make it more difficult to identify and manage these new influences. Editors and journalists often lack the technical knowledge necessary to directly assess how an

algorithms' design impacts the editorial values promoted. This problem is exacerbated when algorithms take a large number of editorial decisions which cannot be individually reviewed. In that case, editors and journalists must rely on systems which flag individual decisions for editorial review, or an analysis of the aggregate impact of the editorial decisions taken by an automated system.¹⁴⁷

In part, the challenges to editorial independence which result from these new and potentially hidden influences, revolve around editors' and journalists' continued ability to exercise editorial control. From the appropriation perspective, editors' and journalists' lack of direct control over algorithms can make it more difficult to identify how third parties affect editorial decisions. For example, a lack of algorithmic transparency, as well as business and technical departments' influence over automated decision-making, can cause external influences to escape editorial oversight. However, editorial oversight is not only necessary to manage external influences over automated editorial decision-making, but also to ensure that algorithms are implemented in a way which serves the editorial mission of the media organisation. Knowing how a news personalisation algorithm impacts the diversity of the audience's news diet allows for a meaningful discussion between editors and engineers about the way in which the algorithm should be adapted.¹⁴⁸

Zooming out, the institutional capacity of the media to exercise editorial control over automated decision-making has structural implications as well. It allows the media to approach automated decision-making from the starting point of their own editorial values, rather than follow the method established by technology companies or platforms. Technologies such as recommender systems have been developed and successfully implemented by platforms and other technology companies. This track record makes it easy for media organisations which automate editorial decision-making to use the approach already developed by other institutions.¹⁴⁹ However, doing so limits the media's ability to follow its own editorial logics and potentially serve as a counterweight to the approach to automation offered by platforms.

The media's reliance on automation, coupled with the value chain of actors and influences behind algorithmic tools, creates new dependencies as well. The platform-press relationship is perhaps the clearest example of a situation where the media relies on tools controlled by third parties to reach its audience, and gain an understanding of the way in which its content is consumed. However, even in a field such as data journalism, where the technology is relatively easy for journalists to control directly,

¹⁴⁷ Diakopoulos (n 4).

¹⁴⁸ Sanne Vrijenhoek and others, 'Recommenders with a Mission: Assessing Diversity in News Recommendations', *Proceedings of the 2021 Conference on Human Information Interaction and Retrieval* (ACM 2021) <<http://arxiv.org/abs/2012.10185>> accessed 12 January 2021.

¹⁴⁹ Napoli, *Social Media and the Public Interest* (n 4).

reporting heavily relies on data sets published and controlled by government institutions.¹⁵⁰ In both cases, the media is confronted with a reliance on technology or data which is not neutral but rather ultimately shapes the editorial values promoted by the news provided to its audience by a media organisation. The control exercised by other actors such as platforms, software providers, or government institutions, can however leave editors little room to negotiate the editorial values embedded in the data and technology which they use. This holds particularly true for smaller and local organisations without the resources or negotiating power necessary to determine exactly how their editorial decision-making is automated. Automation thereby potentially homogenises editorial decision-making, rearranging the power in the media system by creating new dependencies on a limited set of data and technologies.

Policy's ability to highlight where power lies in the media system, is key to understanding and addressing automation's challenges to editorial independence. Through information access requirements and consistent funding, policy can also help overcome some of the obstacles which a lack of algorithmic transparency imposes on outsiders' ability to assess automation's implications for editorial independence.¹⁵¹ Along these lines, article 31(2) of the proposed DSA would give vetted researchers access to the data necessary to understand the systemic risks to media freedom posed by exceptionally large online platforms. This is essential to better understand not only platforms' impact on editorial independence, but also how the DSA's obligations concerning the relationship between platforms and (media) organisations on their service can mitigate this impact. As the analysis above indicates, however, automation's challenges to editorial independence are of a larger scope than the influence of platforms alone. In order to fully understand how editorial independence is affected by the use of automated tools, it is also necessary to ensure that media policy can allow researchers to identify which actors control the tools and data used in automated editorial decision-making, which editorial values they promote, and how widely they are used.¹⁵²

At the same time, recent EU and CoE policy initiatives aim to guide the media's technological transformation, and address the accompanying new pressures and structural dependencies.¹⁵³ The EU media action plan, for example, tries to strengthen the European media market by supporting the creation of a media data space. This would take the form of an infrastructure through which content and (meta)data can be pooled by media organisations and technology providers, and the tools necessary to

¹⁵⁰ Stephen Cushion, Justin Lewis and Robert Callaghan, 'Data Journalism, Impartiality And Statistical Claims: Towards More Independent Scrutiny in News Reporting' (2017) 11 *Journalism Practice* 1198; Stalph (n 113).

¹⁵¹ Brogi and others (n 91).

¹⁵² Arena and others (n 99); Nicholas Diakopoulos and Michael Koliska, 'Algorithmic Transparency in the News Media' (2017) 5 *Digital Journalism* 809.

¹⁵³ CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89); European Commission, 'On the European Democracy Action Plan' (n 89); European Commission, 'Europe's Media in the Digital Decade: An Action Plan to Support Recovery and Transformation' (n 89).

manage and process this data can be provided. Such an initiative could address some of the structural dependencies identified in this chapter by making it easier for the media to develop their own approaches to automated editorial decision-making without having to adopt the logics of commercial software providers. However, securing editorial independence in this context requires careful attention to the editorial values embedded in the data and tools provided, as well as the actors which are able to influence these values. This evidently includes the principles which traditionally limit political influence over mechanisms to support media, such as non-discriminatory access requirements.¹⁵⁴ Moreover, it requires policy to ensure that the technology which is promoted, can support the editorial values of different media organisations. Concretely, this involves investment in the development of a diverse set of tools promoting different editorial values, enabling media organisations to use those forms of automated decision-making which fit their own editorial approach.

Additionally, policy initiatives focus on the capacity of editors and journalists to continue to fulfil their role in the context of automated decision-making, for example through digital skills training and subsidies.¹⁵⁵ The challenges to the conditions which policy aims to put in place for such editorial independence, are both organisational and technological in nature. On the organisational side, addressing the challenge to media actors' ability to exercise editorial control first requires the recognition that editorial algorithms are precisely that – not matters for the IT department, but areas which have traditionally fallen under the responsibility of editors and journalists.¹⁵⁶ Their influence over the design process takes on added importance with regard to technologies producing decisions which due to scale cannot be checked individually, such as personalisation systems. In order to continue to fulfil their role, media actors need the technological skills and tools necessary to evaluate how the technologies which they use relate to editorial values. As the discussion on metrics has demonstrated, this requires a better understanding of whether specific technologies affect editorial values, and if so, how.¹⁵⁷ Diakopoulous among others argues that media organisations can verify whether an algorithm aligns with their editorial mission by formulation and subsequent testing of a hypothesis on the way in which an algorithm impacts an editorial value.¹⁵⁸ Such mechanisms can modernise existing procedural approaches to editorial independence which require media organisations to create agreements on the allocation of responsibility between business and editorial departments. In doing so, policy can not only ensure that media actors have the

¹⁵⁴ CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89).

¹⁵⁵ CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89).

¹⁵⁶ Helberger and others, 'Implications of AI-Driven Tools in the Media for Freedom of Expression' (n 81).

¹⁵⁷ Abraham Bernstein and others, 'Diversity, Fairness, and Data-Driven Personalization in (News) Recommender System' (Schloss Dagstuhl - Leibniz-Zentrum für Informatik 2020) <<https://drops.dagstuhl.de/opus/volltexte/2020/11986/>>; CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89); Vrijenhoek and others (n 149).

¹⁵⁸ Diakopoulous (n 4).

skills and tools necessary to fulfil their role, but also that they have the ability to determine whether the automated editorial decision-making is in line with their editorial values.

2.5. Conclusion

This chapter has laid out a normative framework which allows us to better understand how European media policy can continue to safeguard editorial independence in an automated media system. Key challenges lie in editors' continued ability to exercise editorial control and detect how the data and algorithms which they use influence editorial values, as well as the homogenising impact of, and structural dependencies on new technologies. These create opportunities for traditional parties – such as politicians and advertisers –, as well as new actors – such as platforms and software providers – to influence how editorial decisions are taken. Addressing these challenges requires a reassessment of editorial independence, and the way in which states could and should create the conditions which would allow an independent media to thrive. This involves the EU, which continues to play a central role in the regulation of platform power and data processing, but even more so the Member States, who retain strong competencies in the regulation of the media.

Such a reassessment must moreover draw on both legal and journalistic perspectives on editorial independence, given the complementary relationship between the two. This is not only necessary to better understand the challenges to editorial independence, but also to rebalance policy measures which require and enable editorial independence with the media's role in safeguarding its own independence. This requires further insights into the way in which editorial independence's policy functions are challenged in newsrooms, and the ways in which editors and journalists expect policy to create the conditions for editorial independence. In the light of the structural and appropriation concerns identified in this chapter, this understanding must include commercial and local media organisations in addition to the quality and public service media which are often the focus of qualitative research. When grounded in the normative functions which editorial independence performs, such research enables a more nuanced understanding of the way in which policy can continue to shape the conditions for editorial independence in an automated media system.

3. Editorial independence from legal and journalistic perspectives

3.1. Introduction

Policymakers are beginning to reassess how law should support editorial independence in the face of the increasing automation of editorial decision-making.¹⁵⁹ Law has traditionally played an important role in the media's editorial independence.¹⁶⁰ Not only does it regulate the relationship between the state and the media, but it also creates the conditions under which the media interacts with private actors and exercises editorial control. Legal measures, such as limits on media concentrations and bans on certain commercial influences, protect the media's independence from private actors, while measures such as subsidies are intended to support independent media organisations.¹⁶¹

A number of policy initiatives have recently begun to address a (perceived) need to adapt the manner in which law safeguards editorial independence. At the European level, the EU's democracy and media action plans and CoE's declaration on the financial sustainability of quality journalism in the digital age outline a wide range of potentially far-reaching measures intended to sustain a free and independent media. These measures include among others infrastructure which facilitates access to data and computing resources for European media organisations, investments in the technological skills of editors and journalists, and a reassessment of media concentration regulations.¹⁶² By means of these measures, policymakers revisit law's role in securing editorial independence in the context of the automation of editorial decision-making.

¹⁵⁹ This chapter is based on the following article: Max van Drunen and Denise Fechner, 'Safeguarding Editorial Independence in an Automated Media System: The Relationship Between Law and Journalistic Perspectives' (2022) 0 Digital Journalism <<https://doi.org/10.1080/21670811.2022.2108868>>. With the exception of changes made to standardise the dissertation's reference style and further revisions required by the journal before the article was accepted, the content remains unchanged.

¹⁶⁰ Basyouni Ibrahim Hamada, 'Determinants of Journalists' Autonomy and Safety: Evidence from the Worlds of Journalism Study' (2021) 0 Journalism Practice 1; Reich and Hanitzsch (n 92).

¹⁶¹ Arena and others (n 99); Bennett and Strange (n 88); Oster (n 88).

¹⁶² CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89); European Commission, 'On the European Democracy Action Plan' (n 89); European Commission, 'Europe's Media in the Digital Decade: An Action Plan to Support Recovery and Transformation' (n 89).

There is already a solid body of research in journalism studies which outlines how the media's reliance on automation impacts the way in which editors and journalists fulfil their role.¹⁶³ The large-scale data processing which makes automation useful to journalism, also changes the way in which media actors can exercise editorial judgment. Increasingly, editors and journalists produce stories on the basis of automated analysis, or provide input on the implementation of algorithms which take editorial decisions without direct human oversight.¹⁶⁴ The technical expertise and resources needed to automate editorial decision-making can moreover create new dependencies with regard to other parties, such as engineers, product owners, third-party technology companies, and data brokers.¹⁶⁵ Taken together, these trends change how editors and journalists can continue to exercise editorial judgment independently.¹⁶⁶

However, the discussions in legal literature and journalism studies on technology's impact on editorial independence have remained disconnected. This is problematic. This disconnect limits any normative discussion on what law's role as a safeguard for editorial independence should look like in the context of automation.¹⁶⁷ Such a discussion first requires a better understanding of the perspective of the media actors whose independence media law is expected to safeguard in the face of automation, and how their perspective aligns with the reasons why, and ways in which law has traditionally ensured editorial independence. Only with such an understanding does it become possible to see how the approach to editorial independence in European media law is challenged, and how law can continue to support editorial independence in the context of the automation of editorial decision-making.

This chapter explores how journalists and editors evaluate editorial independence, and its functions and challenges in European media law, in the context of automated editorial decision-making. These functions and challenges are derived from a normative framework developed in chapter 2.¹⁶⁸ The framework draws on article 10 ECHR, as further concretised by case law, recommendations of the CoE, and legal literature to outline four functions editorial independence performs in European media law. This study uses interviews with editors and journalists involved in the automation of editorial decision-making to identify their perspective on the concept and value of, and challenges to editorial independence in their work, and explore how they reflect on the conceptualisation and function of editorial independence in European

¹⁶³ Mark Deuze, 'What Is Journalism? Professional Identity and Ideology of Journalists Reconsidered' (2005) 6 *Journalism* 442; Diakopoulos (n 4); Neil Thurman, Seth C Lewis and Jessica Kunert, 'Algorithms, Automation, and News' (2019) 7 *Digital Journalism* 980.

¹⁶⁴ Beckett (n 5); Diakopoulos (n 4).

¹⁶⁵ Seth C Lewis and Oscar Westlund, 'Actors, Actants, Audiences, and Activities in Cross-Media News Work' (2015) 3 *Digital Journalism* 19.

¹⁶⁶ Bell (n 87); Bodó (n 10); Fanta and Dachwitz (n 62).

¹⁶⁷ Ananny (n 12); Pickard (n 131); Sarah K Wiley, 'The Grey Area: How Regulations Impact Autonomy in Computational Journalism' [2021] *Digital Journalism* <<https://www.tandfonline.com/doi/abs/10.1080/21670811.2021.1893199>> accessed 29 March 2021.

¹⁶⁸ van Drunen (n 82).

media law. The purpose for doing so, is to explore how the legal and journalistic approaches to (the challenges to) editorial independence relate to one another on a conceptual and normative level, rather than identify how journalists evaluate specific legal measures.

To concretise the research, the chapter focuses on the use of automated decision-making in two contexts: data journalism, where journalists algorithmically gather and analyse data to support or automate the production of news stories, and news personalisation, which allows the media to tailor news distribution to the characteristics of individual readers.¹⁶⁹ Two reasons underlie this choice. Firstly, it enables us to capture the way in which technology impacts on editorial independence at the beginning of the editorial process, when the information necessary to produce news is gathered, and at the end stages, when news articles are distributed to readers. Secondly, it makes it possible to explore how editorial judgment is exercised in relation to technologies of differing levels of complexity.

Section 3.4 further explains the methodology used to explore the perspectives of editors and journalists, including the role and operationalisation of the normative framework in the interviews. Section 3.5 reports the results of these interviews, and section 3.6 draws conclusions from the preceding sections. However, it is first necessary to outline how the approaches to editorial independence in law and journalism studies relate to one another (section 3.2), and explore why automation, and data journalism and news personalisation in particular, potentially challenge editorial independence (section 3.3).

3.2. Editorial independence as a concept in media law and journalism studies

Definitions of editorial independence in both legal and journalism studies literature broadly focus on the ability to determine how news is produced, published, and distributed to the public free from outside influences.¹⁷⁰ As legal literature generally assumes and journalism studies literature has argued explicitly, complete editorial independence is neither possible nor desirable.¹⁷¹ The media has always had to rely on others to for instance fund journalism, access information, and implement technology.¹⁷² The ability of among others the state and the audience to influence the media is also necessary to realise values such

¹⁶⁹ Ester Appelgren and Gunnar Nygren, 'Data Journalism in Sweden' (2014) 2 *Digital Journalism* 394; Jonathan Gray, Lucy Chambers and Liliana Bounegru, *The Data Journalism Handbook: How Journalists Can Use Data to Improve the News* (O'Reilly Media, Inc 2012); Thurman and Schifferes (n 44).

¹⁷⁰ Hamada (n 161); Wolfgang Schulz, 'Approaches to Independence' in Wolfgang Schulz, Peggy Valcke and Kristina Irion (eds), *The Independence of the Media and its Regulatory Agencies* (Intellect 2014) <<https://www.press.uchicago.edu/ucp/books/book/distributed/I/bo15571080.html>> accessed 14 April 2020; Jane B Singer, 'Contested Autonomy: Professional and Popular Claims on Journalistic Norms' (2007) 8 *Journalism studies* 79.

¹⁷¹ Schudson (n 94).

¹⁷² Ananny (n 12).

as media accountability.¹⁷³ In short, the practical meaning of editorial independence depends on the specific influences from which the media should be independent.¹⁷⁴

The relationship between journalistic and legal perspectives on editorial independence is pushed to the forefront when the two conflict on the extent to which media should be independent from law. The media's role in democratic society revolves around the collection and distribution of information.¹⁷⁵ This activity is regulated extensively, including in data protection law, copyright law, and of course media law itself. A solid body of journalism studies research accordingly analyses how the legal framework limits editorial independence by restricting the way in which journalists distribute information to the public.¹⁷⁶ For example, Wiley has explored how US data journalists work to maintain their autonomy in the face of anti-hacking legislation potentially prohibiting web scraping which would violate a website's terms of service.¹⁷⁷ In this context, the law is simply another outside force that restricts editorial independence.

However, media law supports editorial independence as well. Article 10 ECHR not only prohibits states from interfering with the freedom of the press themselves, but also imposes a positive obligation on states to protect editorial independence from private parties.¹⁷⁸ States must for example prevent groups from obtaining a dominant position which would allow them to restrict the media's editorial freedom. This obligation is operationalised in secondary law which limits media concentrations and bans specific parties, such as owners and advertisers, from influencing the media's editorial choices.¹⁷⁹ Media law can also require member States to proactively create the conditions for a healthy media system.¹⁸⁰ As the ultimate guarantors of pluralism, states have for example used not only media ownership regulations, but also press subsidies to ensure the existence of multiple independent perspectives which would otherwise be missing from the public debate.¹⁸¹ More recently, regulatory attention has moved to the economic

¹⁷³ Tobias Eberwein (ed), *Mapping Media Accountability: In Europe and Beyond* (Herbert von Halem Verlag 2011).

¹⁷⁴ Karppinen and Moe (n 91).

¹⁷⁵ Clifford G Christians and others, *Normative Theories of the Media: Journalism in Democratic Societies* (University of Illinois Press 2009) <<https://experts.illinois.edu/en/publications/normative-theories-of-the-media-journalism-in-democratic-societies>> accessed 29 January 2020; B McNair, 'Journalism and Democracy' in K Wahl-Jorgensen and T Hanitzsch (eds), *The handbook of journalism studies* (Routledge 2009).

¹⁷⁶ Daniel C Hallin and Paolo Mancini, *Comparing Media Systems. Three Models of Media and Politics* (Cambridge University Press 2004) <<https://www.cambridge.org/core/books/comparing-media-systems/B7A12371782B7A1D62BA1A72C1395E43>>; Reich and Hanitzsch (n 92).

¹⁷⁷ Wiley (n 168).

¹⁷⁸ Beata Klimkiewicz, 'Community and Minority Media: The Third Sector in European Policies and Media Pluralism Monitor' [2021] Research Handbook on EU Media Law and Policy <<https://www.elgaronline.com/view/edcoll/9781786439321/9781786439321.00028.xml>> accessed 7 January 2022; Oster (n 88).

¹⁷⁹ Arena and others (n 99).

¹⁸⁰ Schulz (n 171).

¹⁸¹ Smith and Tambini (n 126).

models, digital skills, and technological infrastructure which can support independent journalism online.¹⁸²

Nevertheless, the role which media law can play in supporting editorial independence is inherently limited. Tension is present between the state's obligation to ensure editorial independence, and the danger that laws determining who is able to influence editorial decision-making, are misused. Media ownership regulation, for example, can be used to limit the ability of media owners who are critical of the state to contribute to the public debate.¹⁸³ Media regulation is partially able to resolve this issue internally, with rules regarding the independence of media authorities limiting the threat of media law being applied to interfere with editorial decision-making for political purposes.¹⁸⁴ Additionally however, media regulation avoids the danger of state interference altogether by relying on the media to further safeguard its own independence.

This approach is mirrored in journalism studies literature, which emphasises that relying on law to support or impose norms on journalism can threaten editorial independence.¹⁸⁵ From the perspective of journalism studies, the law is accordingly only one possible way to safeguard editorial independence, complemented by mechanisms like formal ethical guidelines, press councils, and a professional culture.¹⁸⁶ Journalism studies literature is thereby able to explore the manner in which the media should maintain its independence from some sources, such as internal business departments, in further detail. They are also able to capture some influences over editorial independence which traditionally fall outside the scope of the law, such as journalists' own stances and opinions.¹⁸⁷ These efforts not only satisfy journalism's own commitment to independence, they also provide journalism with a legitimacy which prevents more stringent regulation. From a legal perspective, conversely, policymakers are able to use journalists' own efforts to maintain their editorial independence in order to support aspects of editorial independence which are contentious to regulate.¹⁸⁸

¹⁸² CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89); European Parliament (n 100).

¹⁸³ Carolina Vendil Pallin, 'Internet Control through Ownership: The Case of Russia' (2017) 33 *Post-Soviet Affairs* 16.

¹⁸⁴ Bennett and Strange (n 88).

¹⁸⁵ Eddy Borges-Rey, 'Unravelling Data Journalism' (2016) 10 *Journalism Practice* 833; Diakopoulos (n 4); Stephen JA Ward, 'Journalism Ethics from the Public's Point of View' (2005) 6 *Journalism Studies* 315.

¹⁸⁶ Eberwein (n 174).

¹⁸⁷ Reich and Hanitzsch (n 92).

¹⁸⁸ CoE, 'New Notion of Media' (n 16); Jingrong Tong, 'Journalistic Legitimacy Revisited' (2018) 6 *Digital Journalism* 256.

3.3. Editorial independence in data journalism and news personalisation

The editorial decision-making which both the media and media law aim to keep independent is increasingly automated.¹⁸⁹ The automation of editorial decision-making typically involves translating inputs (such as structured source data; reader's characteristics; audience consumption patterns) into outputs (such as news articles; content recommendations; metrics) through a series of computational actions.¹⁹⁰ This process changes the way in which journalists and editors exercise control over editorial decisions. At the far end of the spectrum, algorithms are used to replace human editorial decision-making. This especially occurs in news personalisation and some forms of automated journalism. The Washington Post for example inserted automatically produced and voiced results of local elections into its political podcasts during the elections.¹⁹¹ However, automated decision-making can also simply inform or support human editorial decisions by providing journalists with insights about the manner in which their audience consumes their articles, or by creating partial drafts of articles which can be expanded on by journalists.¹⁹² In both cases, influence over the editorial values which a media organisation promotes transfers to the actors who are able to influence the algorithm which now informs, supports, or replaces the journalist or editor who exercises editorial control. By changing the way in which editorial control is exercised, automation opens up new opportunities to influence editorial decision-making and ultimately challenge editorial independence. The following section will explore the implications for editorial independence in the specific context of data journalism and news personalisation.

Data journalism takes place early in the editorial process. It is a set of journalistic processes involving the production of news from large datasets with computational methods, and the communication of news through interactive visualisations.¹⁹³ Due to the 'quantitative turn', quantitative data and computational methods have become more prevalent in journalism.¹⁹⁴ This has also led to a change in journalistic routines, processes, and knowledge-generation, demanding that journalists employ new skill sets in order

¹⁸⁹ Beckett (n 5); Mark Coddington, 'Clarifying Journalism's Quantitative Turn: A Typology for Evaluating Data Journalism, Computational Journalism, and Computer-Assisted Reporting' (2015) 3 *Digital Journalism* 331.

¹⁹⁰ Laurence Dierickx, 'News Automation, Materialities, and the Remix of an Editorial Process' [2021] *Journalism* <<https://doi.org/10.1177/14648849211023872>> accessed 30 September 2021; Rob Kitchin, 'Thinking Critically about and Researching Algorithms' (2017) 20 *Information, Communication & Society* 14; Ulrike Klinger and Jakob Svensson, 'The End of Media Logics? On Algorithms and Agency' (2018) 96 *New Media & Society* 60.

¹⁹¹ Carlson (n 57); Washington Post, 'The Washington Post to Debut AI-Powered Audio Updates for 2020 Election Results' *Washington Post* (13 October 2020) <<https://www.washingtonpost.com/pr/2020/10/13/washington-post-debut-ai-powered-audio-updates-2020-election-results/>> accessed 23 November 2020.

¹⁹² Beckett (n 5); Coddington (n 190).

¹⁹³ Julian Ausserhofer and others, 'The Datafication of Data Journalism Scholarship: Focal Points, Methods, and Research Propositions for the Investigation of Data-Intensive Newswork' (2020) 21 *Journalism* 950; Sergio Splendore, 'Quantitatively Oriented Forms of Journalism and Their Epistemology' (2016) 10 *Sociology Compass* 343.

¹⁹⁴ Coddington (n 190).

to deal with big data, statistics and computational methods, and interactive design.¹⁹⁵ Although data journalism requires the interpretation of large data sets and complex analytical and computational methods because '[d]ata do not speak for themselves', it also allows journalists and editors to algorithmically gather and analyse data to support or automate the production of news stories.¹⁹⁶ Finally, these results can be presented with the help of pre-designed interactive visualisations at the end of the news production process. The extent to which each of these forms of automation plays a role in data journalism varies from one data journalism project to another. While award-winning data journalism is especially known for complex data analysis, everyday data journalistic projects can simply use pre-designed interactive visualisations to provide an overview of automatically collected data.¹⁹⁷ The daily updated covid dashboards are a common example of the later type of data journalism.

The second technology which this chapter focuses on, news personalisation, comes into play at the end of the editorial process. News personalisation is generally used to automatically show a different set of news articles to each individual reader based on their characteristics.¹⁹⁸ For example, a media organisation may include a 'for you' section on the frontpage including perspectives which are new to a specific reader.¹⁹⁹ Using news personalisation in this way involves the automation of editorial decisions about how visible a piece of news should be. The amount of recommendations made by personalisation algorithms preclude editorial oversight over each individual decision. Instead, editors influence personalisation algorithms by collaborating with technical departments to determine how the personalisation algorithm should be designed.²⁰⁰

Journalism studies literature has identified a number of new pressures on journalists' editorial independence in the context of data journalism as well as news personalisation. Concerns are generally driven by two assumptions which reflect broader challenges posed by automation. Firstly, algorithms which automate editorial decision-making are not neutral. They involve decisions which determine how the algorithms will influence editorial values, for example regarding the type of input data which is included or excluded, or the success metrics which the algorithm is designed to promote.²⁰¹ And secondly,

¹⁹⁵ Sylvain Parasié, 'Data-Driven Revelation?' (2015) 3 *Digital Journalism* 364; Splendore (n 194); Sylvain Parasié and Eric Dagiral, 'Data-Driven Journalism and the Public Good: "Computer-Assisted-Reporters" and "Programmer-Journalists" in Chicago' (2013) 15 *New Media & Society* 853.

¹⁹⁶ Paul Dourish and Edgar Gómez Cruz, 'Datafication and Data Fiction: Narrating Data and Narrating with Data' (2018) 5 *Big Data & Society* <<https://doi.org/10.1177/2053951718784083>> accessed 28 October 2021; Appelgren and Nygren (n 170); Gray, Chambers and Bounegru (n 170).

¹⁹⁷ Borges-Rey (n 186); Stalph (n 113).

¹⁹⁸ Kunert and Thurman (n 47).

¹⁹⁹ Jockum Hildén, 'The Public Service Approach to Recommender Systems: Filtering to Cultivate' [2021] *Television & New Media* <<https://doi.org/10.1177/15274764211020106>> accessed 3 June 2021; Vrijenhoek and others (n 149).

²⁰⁰ Bodó (n 10).

²⁰¹ Tarleton Gillespie, 'The Relevance of Algorithms' in Tarleton Gillespie, Pablo J Boczkowski and Kirsten A Foot (eds), *Media technologies: Essays on communication, materiality, and society* (MIT Press 2014).

journalists and editors are not necessarily in full control of the decisions which determine how an algorithm will impact editorial values.²⁰² Exclusive editorial control over news personalisation algorithms is rare. Implementing these systems requires collaboration with engineers, but often also involves product owners, business departments, or third-party technology companies which supply or fund the development of the algorithm.²⁰³ Similarly, in the context of data journalism, traditional journalists rely on actors with technical expertise in the newsroom, outside data analysts, or data suppliers to provide access to and analysis of the data on which data journalism reporting is based.²⁰⁴

The concerns which underlie automation's potential challenges to editorial independence are in many cases not new. Sources, governments, and business departments have always tried to influence reporting, and automation is not the first development which has required the media to collaborate with others.²⁰⁵ Automation's challenge to editorial independence lies in the fact that it changes the way in which editorial control is exercised. By moving control out of the hands of editors and journalists, who often cannot build the algorithms or the datasets which fuel them alone, automation opens up new ways to influence editorial processes for actors on whom the media relies to automate editorial decision-making.

One way in which automation potentially challenges editorial independence is by changing the way in which editorial control is exercised, enabling non-media actors to directly influence the way in which a specific media organisation automates its editorial decision-making. This can take place at the earliest phases of the editorial process. For example, literature on data journalism and editorial independence emphasises the importance of input data, and its ability to influence journalistic judgment. Companies and other third parties gather data for their own use, and in a manner which serves their needs, including their own definition of variables in the dataset. Decisions on what data to make available to journalists involve their own (editorial) analysis and choices concerning, for example, what data to exclude or what information to provide about the way in which data was collected. Lack of awareness of such choices can lead journalists to copy the editorial decisions embedded in the data which they use, in their final reporting.²⁰⁶ Similar concerns are sometimes voiced in the context of news personalisation. Wijermars for example notes that the Russian law on news aggregators does not focus on the way in which personalisation algorithms are designed to recommend content to users. Instead, the law simply controls the personalised selection of articles shown to users by restricting the types of sources which these

²⁰² Klinger and Svensson (n 191); Zamith (n 114).

²⁰³ Bodó (n 10); Fanta and Dachwitz (n 62); Malcorps (n 10).

²⁰⁴ Stefan Baack, 'Practically Engaged: The Entanglements between Data Journalism and Civic Tech' (2018) 6 *Digital Journalism* 673; Shangyuan Wu, Edson C Tandoc Jr and Charles T Salmon, 'When Journalism and Automation Intersect: Assessing the Influence of the Technological Field on Contemporary Newsrooms' (2019) 13 *Journalism Practice* 1238.

²⁰⁵ Bennett and Strange (n 88); Deuze (n 164); Schudson (n 94).

²⁰⁶ Stalph (n 113); Constance Tabary, Anne-Marie Provost and Alexandre Trottier, 'Data Journalism's Actors, Practices and Skills: A Case Study from Quebec' (2016) 17 *Journalism* 66.

systems can recommend.²⁰⁷ More commonly, however, concerns over news personalisation in European media organisations revolve around non-state actors who influence the algorithmic design of the system. In particular, the use of news personalisation potentially moves editorial control away from editors who decide what is on the frontpage, towards the designer of the algorithm which is used to determine what news will be shown to which individual. This opens up the possibility that non-journalistic actors affect editorial decision-making by influencing the design of the algorithm used to distribute the news. Malcorps indicates the influence that commercial and business departments exercise over the success metrics which the algorithm is expected to promote, and – as such – the news recommended.²⁰⁸

On a more structural level, the media's use of automation for editorial decision-making also potentially creates new dependencies and power concentrations. A case in point, media organisations need access to large datasets to produce data journalism reporting. Since such datasets are often inaccessible or expensive to gather, data journalists rely on other actors which have already collected such data. Control over access to data used for data journalism can thereby become centralised in the hands of a few data brokers.²⁰⁹ This issue is exacerbated by the fact that much of the data used for data journalism reporting comes from government sources, whose influence is especially suspect in the context of editorial independence.²¹⁰ Concentrated control over the data and technology needed to automate editorial decision-making would not only allow outside actors to influence a single news article, but also how editorial decision-making is automated in general. In the context of data journalism, for example, concentrated control over the data necessary for data journalism reporting potentially allows actors to shape the kinds of stories which data journalists are able to tell. Moreover, the power to determine how editorial decision-making is automated is not necessarily equally distributed. For example, smaller media organisations may have particularly little room to negotiate the editorial values embedded in third party personalisation tools, or influence how collaboration in data journalism takes place.²¹¹ This can leave them less able to use automated decision-making to promote their own editorial values. As a result, automation potentially shifts the distribution of power in the media system. More concretely, it potentially allows a limited set of actors to determine how editorial values are operationalised in a media system which relies on automation, and leaves smaller media organisations less able to use automated tools in line with their own editorial values.²¹²

²⁰⁷ Wijermars (n 115).

²⁰⁸ Malcorps (n 10); Turow (n 107).

²⁰⁹ Baack (n 205); Borges-Rey (n 186).

²¹⁰ Cushion, Lewis and Callaghan (n 151); Stalph (n 113); Tabary, Provost and Trottier (n 207).

²¹¹ Bodó (n 10); Borges-Rey (n 186).

²¹² Bodó (n 10); Borges-Rey (n 186); David Cheruiyot, Stefan Baack and Raul Ferrer-Conill, 'Data Journalism Beyond Legacy Media: The Case of African and European Civic Technology Organizations' (2019) 7 Digital Journalism 1215; Fanta and Dachwitz (n 62).

3.4. Methodology

We have explored how journalists and editors involved in the automation of editorial decision-making evaluate editorial independence, and its functions and challenges in European media law, through 13 in-depth interviews. Interviewees were identified through existing contacts, identifying the relevant stakeholders in media organisations, and referential sampling. We aimed to cover a broad spectrum of stakeholders who would be able to point out the challenges for executing editorial independence which result from the integration of automated tools in media organisations. To that end, we interviewed data journalists (6), and managers and team members in news personalisation units (7). The latter's companies had differing organisational structures. The persons responsible for news personalisation were either part of a team on their own or part of a broader unit on digitalisation; in both cases, they represented management units. As is discussed in the results section, for some, this meant that they worked as journalists before they were promoted to management positions in these units.

Participants worked for media companies in European democratic countries with comparable media systems, namely the Netherlands (5), the UK (6) and Germany (2). The selection was informed by the objective to balance smaller and larger media companies across the countries. As the aim of this study was to explore how journalists and editors evaluate editorial independence's functions and challenges in the context of automation, we focused on media companies which had implemented automation in their routine to some degree. As a result, we can only evaluate the procedures and concepts of editorial independence of media companies which have already integrated automated decision-making, and cannot make claims about media companies which refuse or are only planning to use automated decision-making. The latter two could not have answered questions about changes to the procedures due to automation and the accompanying challenges.

The interviews were conducted via video conference (using the software *Zoom*) in 2021, with an average timeframe of an hour. Working in global collaborations, data journalists are used to communicating with colleagues or collaborators via video conference tools, so this interview form matched their work environment and did not compromise the naturality of the conversations. Although the interviewees from the personalisation units usually work in an office together, their day-to-day work includes communication with external consultants or agencies (i.e., on their news personalisation algorithm) and demands the regular use of video conference tools as well.

The field manual included questions about work procedures, concepts of editorial independence and the normative values attached to it, as well as changes in procedures due to automation and challenges which arose from it. Participants were asked to describe a recent project involving data journalism or news personalisation which they had worked on, and explain the way in which they had made editorial decisions

and collaborated with other actors in- and outside the newsroom. Participants were then asked to describe their view on independence and its importance to their work in the context of data journalism and news personalisation. Depending on the stakeholder, an explanation of editorial independence was necessary, describing it as professional autonomy in the journalistic context. Doing so built a bridge between the language of law and journalism studies on the one hand, and the word choice of journalists who connected editorial independence solely with the role of ‘editor’ or ‘editor in chief’ in the newsroom, on the other hand. Subsequently, participants were asked to reflect on the concept and functions of editorial independence in European media regulation, and whether these were crucial to their work in the context of data journalism or news personalisation. The functions referred to the need to prevent third parties (e.g., advertisers or politicians) from manipulating the audience by influencing editorial decisions (manipulation); guarantee that media actors can freely decide how to inform the public and fulfil their role in society (agency); prevent power concentrations by ensuring that multiple independent actors decide how content is produced, published, and distributed (power dispersal); support the existence of different independent voices in the public debate (pluralism). Participants were then asked whether a number of potential challenges to editorial independence were significant in their work. These included among others hidden influences over algorithms or their input data due to a lack of algorithmic transparency; a changing distribution of influence between departments (e.g., editorial; technical; business); concentration of power over tools used by legacy media to make editorial decisions.²¹³ Finally, questions about safeguards covering existing safeguards and the need for new safeguards were asked.

We coded statements using a qualitative methodology, executing a qualitative content analysis by close reading and coding passages based on a deductive coding scheme which emerged from the normative framework.²¹⁴ Starting from coding meaningful passages of the interviews, we coded those for the following broader categories: *concept of editorial independence*, including subcategories on definitions giving by the participants; normative reasons for the importance of editorial independence; *procedures* including subcategories on procedural aspects, specific procedural aspects of data journalism and news personalisation, and changes in these procedures; *challenges*, including subcategories on procedural challenges in data journalism and in news personalisation, which were connected to the normative functions of the theoretical framework which could be linked to them in a following coding step; *safeguards*, which included subcategories on existing safeguards and the need for (new) safeguards. The interviews were coded with the qualitative data analysis software *MAXQDA*.

²¹³ van Drunen (n 82).

²¹⁴ Philipp Mayring, ‘Qualitative Inhaltsanalyse’ in Günter Mey and Katja Mruck (eds), *Handbuch Qualitative Forschung in der Psychologie* (VS Verlag für Sozialwissenschaften 2010) <https://doi.org/10.1007/978-3-531-92052-8_42> accessed 2 August 2021.

3.5. Results

3.5.1. The concept of editorial independence: defining the journalistic role in automated decision-making

Despite representing a wide range of automation in journalism, stakeholders conceptualised editorial independence in similar ways, focusing on the ability of individual journalists or editors to decide what topics to work on and how to publish and distribute them free from internal and external influences. For example, when asked to define editorial independence a data journalist working in a newsroom at a public service media organisation referred to the following decisions at the start of a project:

‘Within the company I have a lot of autonomy so I can decide for myself what topics I find interesting, what datasets I want to analyse, requests I want to do. Of course, I always talk about that with my colleagues, but the initial decision is mine.’ (Lines 775-777).

The participants placed a relatively heavy focus on the importance of establishing independence on an individual level inside the newsroom. This reflects the broader approach to editorial independence in journalism studies in general. Although definitions of editorial independence in media law and journalism studies can often remain rather vague on the influences which the media should be independent from, in practice media law is focused on external influences on the media. Conversely, journalism studies literature also thoroughly explores the independence of individuals within the newsroom. It is important to note, however, that this is a matter of degrees. There are areas in which law aims to safeguard editorial independence within media organisations, for example to secure the right to free expression of individual journalists, to limit the influence of state actors over public service media, or to balance the relationship between editorial departments and publishers.²¹⁵

The participants instinctively connected their definitions of editorial independence to its normative functions. Editorial independence was seen as both a duty of journalism and a basic condition enabling journalism. This basic need for editorial independence applies regardless of whether automated tools are used or not, as reflected upon by a data journalist:

‘I believe it’s important to my role as a journalist, not specifically as a data journalist but as a journalist in general, including as a data journalist. [...] I think journalism creates the maps people use to navigate

²¹⁵ CoE, ‘Recommendation of the Committee of Ministers to Member States on Public Service Media Governance’ (Council of Europe 2012) CM/Rec(2012)1 <https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805cb4b4>; Commissariaat voor de Media, ‘Het Redactiestatuut Bij Aanbieders van Audiovisuele Mediadiensten’ (2021) <<https://www.cvdm.nl/actueel/beleid-nodig-voor-inhoud-redactiestatuten>>; *Fuentes Bobo v Spain* [2000] ECtHR 39293/98.

society with. Which means our maps should be accessible to all, ideally read by many, and should give people the information they need to make up their minds.’ (Lines 339-344).

When asked to reflect on four concrete normative functions of editorial independence in European media law, the participants specifically focused on the way in which editorial independence enabled them to fulfil their role in society, and prevented external actors from influencing the audience through the media (although participants generally noted that all four functions were important). Similar to their conceptualisation of editorial independence, participants paid less attention to structural functions of editorial independence, such as the need to ensure the media system contains a diverse set of voices and that power is not concentrated in a few media organisations. In our interviews, the achievement of editorial independence is judged by whether journalists as individuals, or media companies as institutions, are able to execute editorial decisions based on journalistic norms and fulfil their democratic role. A fundamental part of that role is being neutral and not being influenced by the commercial or political interests of third parties.

Being part of the journalist’s function and professional identity, editorial independence cannot be safeguarded by media law exclusively. Media law can serve an instrumental function by creating the conditions under which the media can be independent, for example by protecting journalists from interference by the state itself or powerful private actors. But from the perspective of journalists who view independence as core to their identity, these general rules must also be complemented by mechanisms media actors use to safeguard their own independence. This is necessary for individual journalists or media organisations to ensure they are able to take editorial decisions in line with their own editorial values.²¹⁶ The in-depth interviews demonstrate the complementary way in which the existing self-conception of journalists, the structure of the media organisation, and the media system enable independence in this respect. This data journalist who works for at a national daily newspaper explains how their editor protects editorial independence by insulating journalists within the media organisation from external influences, while pointing out the importance of working in a media system in which journalists are protected:

‘How do you prevent that? Well that’s the editor in chief, [...] to say we decide what our own pieces will be. [...] You could say, they could push it in a direction. But that doesn’t happen. In that respect, we live in a country where that’s fairly to extremely well taken care of. My international projects, I work with journalists from over the entire world, you don’t want to know.’ (Lines 1956-1960).

²¹⁶ Eberwein (n 174).

Editorial independence was not seen as incompatible with relationships with parties in- and outside the newsroom who enable journalism in the context of automation. On the contrary, collaboration was perceived as necessary to ensure that the editorial values of the organisation are enacted as the media transitions to automated decision-making. Both data journalism and news personalisation stakeholders see themselves as having the ability and duty to adjust to these changed procedures. However, in order to maintain editorial independence within media organisations in the context of different modes of automation, the individual needs to be enabled to decide without the threat of consequences. In this case, influences are seen as suggestions arising in an increasingly collaborative work environment, as described by a data journalist in our sample working for a public service media organisation (lines 485-487). External influences can also be useful data sources, as long as the editorial decision-making is kept inside the newsroom:

‘We have some good connections with some sources and they sometimes send us things, like this could be interesting for you. But I do feel total autonomy [...] in deciding ‘no’. we’re not going to do this, maybe go to a different source.’ (Lines 786-789).

The ‘good connections’ mentioned in the statement above are necessary from the journalist’s perspective but they also show the reliance on third parties for input data in the context of data journalism. This dependence extends beyond the third parties’ values and decisions embedded in the data to third parties suggesting data and topics for journalistic investigation, and thereby directing the journalist’s attention towards it.²¹⁷ Editorial independence is thus not an all-or-nothing concept which is safeguarded as long as media actors have the ability to stop or not proceed with a particular journalistic project. As a result, in spite of journalists ultimately ‘feeling the autonomy’ to decline as stated above, third parties can nevertheless intervene in the decision-making process by suggesting data for potential projects, and providing their own data for analysis, impacting the journalistic process at the point of initial decision-making. While the journalists seem to be aware of the influence from third parties, they seem to feel independent from it which can lead to downplaying or overlooking the extent of external influences. The importance of ensuring editorial oversight at various stages of the automation process is supported by stakeholders such as managers working in the field of news personalisation:

‘[...] we put together a prototype that will enable us to actually try this. So, it works well enough that we can put it in front of audiences or journalists, or both. And we can then do [a] proper assessment of cost benefit, audience reactions, editorial policy. All the things a big organisation needs to think about before it goes down the road of saying yes, I am building this new artificial intelligence system.’ (Lines 2848-2854).

²¹⁷ Stalph (n 113); Tabary, Provost and Trottier (n 207).

3.5.2. Procedural changes and challenges in the way editorial independence is exercised

Stakeholders emphasised the challenges which automation poses to the role of journalistic staff, and the need to safeguard against the influence of third parties over editorial processes. Stakeholders viewed structural challenges through the lens of these more individual challenges, and perceived them to be important, but occurring less often.

3.5.2.1. Independence through collaboration

The interviews show editors' and journalists' ability to influence news production and distribution changes when those processes are automated. The need for increased collaboration challenges the existing formal guidelines and the breakdown of the journalistic role among the different stakeholders and departments. Although all stakeholders face this challenge, it plays out differently depending on the specific technological context. In data journalism, the automated collection of data can occur before the journalistic process of investigation and interpretation. This changes the processes inside the newsroom. The extent to which data journalists collaborated varied. By exception, one data journalist who works at a smaller media organisation notes 'sometimes we do projects with other media [...] but usually we do things kind of alone or me with a colleague' (lines 668-676). More generally, journalists with editorial expertise on a particular topic collaborate with journalists adept in data to ensure that specialised editorial knowledge is applied in data journalism projects. A data journalist working at a public service media organisation specifies it as follows:

'So, I'm in constant collaboration basically. (line 33) [...] And you need to have real world context that goes with the data, but I specialise in doing data analysis which is in and of itself a respectable specialisation, but it also means that I'm not specialised in all these contexts that come with every data set, so I need my colleagues to provide context for me and they need me for the data analysis specialisation. We couldn't make the story, I could not have done it without [my colleague].' (Lines 102-106).

This creates new dependencies inside media organisations, between individual journalists as well as between different departments (e.g., editorial, technical, and data visualisation teams). The individual journalist or data journalist is no longer solely responsible for their project, but rather increasingly relies on others for expertise. Not only the data, but the data journalist himself becomes another source, in addition to other journalistic sources (e.g., experts, institutions, etc.), to depend on for the topic journalist – and vice versa. Especially further along the process of moving towards publication, this also involves editors influencing the story which is based on an analysis outside of their expertise. However, in the context of data journalism the different actors involved (such as the data journalists themselves, the beat reporter, the visualisation department, and the editor) generally shared a journalistic background. Though one data journalist working for a daily national newspaper noted they sometimes relied on employees

from a commercial sister company in order to scrape or aggregate data (lines 1870-1875), the involvement of such outside technical experts in the journalistic process was the exception. In general, the role of non-journalistic actors in our sample is limited to providing the data necessary for data journalism projects (as section 3.5.2.2 will explore in further depth). Collaboration within the media organisation focuses on combining various kinds of journalistic expertise (e.g., on the topic of the story, the analysis of the data, and the presentation of the story) to develop a story based on data provided by an external source or aggregated by the media organisation themselves, as this data journalist points out:

'[...] it would be very difficult if not impossible if we didn't collaborate. Because a lot of our best ideas come from non-data journalists [...] who have spotted [...] something that really needs investigating, which we can then [see] if that is born out in the data.' (Lines 3228-3231).

In the case of news personalisation, cooperation is similarly essential. In this context, participants emphasised the importance of drawing on editorial judgment to identify how the media organisation's editorial values are affected and can be incorporated into the design of the personalisation algorithm. An editor who works on news personalisation projects for a national daily newspaper explains the role of editors as follows:

'[...] you need an editor to classify what is what. (line 1626) [...] The technique and editing have to work together here because otherwise it's quite difficult to have this nuance and these little steps just by an algorithm, I think.' (Lines 1652-1654).

However, the cooperation between journalists, editors, and other actors plays out differently in the context of news personalisation and data journalism. As a result of the cost and difficulty involved in developing news personalisation algorithms, journalists and editors have to rely on other experts, or more typically departments, for the technical realisation of embedding editorial values into a news personalisation algorithm. These actors (such as engineers, business departments, and product owners) perform the specialised roles necessary to deploy personalisation algorithms. However, in light of their specialisation they often lack the shared journalistic background which characterises the relationship between data journalists and beat reporters. As different departments with different goals and backgrounds are involved in the development of news personalisation as a new feature, they can aim not to involve journalists in this process as a) personalisation is perceived as a technical process and/or b) other goals matter more in this context from the point of view of other departments. A manager directing journalistic projects like these explains their perspective and the reasoning behind their decision-making:

‘And then how do you make sure that people get the best out of their experience, out of that 15 minutes that they will spend with your brand [...] So, that’s the reason why we do it and of course that’s expressed in KPI’s [...] like making engagement better. [...] That’s all very directly linked to keeping their subscription or entering into a subscription, so the whole monetising part of our business.’ (Lines 1173-1180).

By involving other departments in the design of algorithms which are used to determine the visibility of news articles, news personalisation can create a new arena in which tensions between editorial, established (such as business departments) and newer (such as engineering departments) actors in the media organisation play out. The personalisation algorithm reflects the interplay between these different actors, and alterations in the tensions between them impact the values embedded in the algorithm. Especially the influence of the audience, potentially pushing the prominence of marketing goals as mentioned in the quote above, was a recurring theme. This is related to the increasing financial influence of the audience. This means that the media’s income moves from advertisers to subscribers, making the latter ‘more influential’ and affords the audience’s needs a central place in features like news personalisation (lines 1252-1257). Stakeholders emphasise however that they are able to resolve potential conflicts between editorial and marketing objectives. In this context, stakeholders, like a manager at a large media organisation who oversees different journalistic projects, point to journalists’ obligation to the audience as well as their continued editorial control over the production of content:

‘But in the [personalised] section, [...] the selection of what people see won’t be in the hands of the editorial floor anymore. [...] And of course, this interferes [...] not with editorial autonomy because they still decide what they do [...]. But the selection of what people see first is more democratised and more put in the hands of the user. I don’t think this is problematic.’ (Lines 1266-1271).

News personalisation is thereby framed as serving editorial values when it provides audiences with the editorial output which they want to read. This highlights a conflict between journalists seeing the distribution of news as an editorial responsibility while other departments do not primarily categorise it as an act of editorial decision-making. That is not to say other departments automatically aim to exclude editors and journalists. However, the basis on which editors and journalists are involved is different when news personalisation is not viewed as an editorial process. Rather than viewing editorial oversight over news personalisation as a necessary precondition for editorial independence, other stakeholders instead perceive editors’ and journalists’ influence in this context as a factor that may be valuable when it supports marketing and business goals. Driven by this different motivation, news personalisation stakeholders can remain in favour of integrating editors and journalists in the decision-making process concerning news personalisation, for example because they perceive the input of their editorial staff as ‘a unique selling point of [the media company’s] product’ (line 1354). However, they also highlight the difficulty of

automating human editorial judgment as compared to other values that support business goals. In their view, editorial judgment concerning for example serendipity or pluralism is difficult to automate, while audience engagement-oriented goals are more easily woven into the algorithm. In part, this tension is argued to be solved by ensuring news personalisation algorithms are solely used as an addition to fully human editorial judgment, as managers like one of our participants, who works at a large media company that publishes multiple newspapers, justifies:

'Your eye settles on something that you didn't know you were interested in and maybe you haven't read anything before about this and still it interests you. This is all gut feeling of the editorial staff, the editors. And we've done it for 100 years with gut feeling. And it's a rather efficient and successful approach, so I wouldn't change that [...] of course, the editorial floor has to work with instinct and gut feeling and serendipity for the reader.' (Lines 1182-1187)

The focus on ensuring editorial control over the traditional, non-personalised version of the newspaper matches the view that editors' influence is valuable but not necessary in the specific context of news personalisation. Intervening at a point in the process where decision-making used to be carried out by editors as a default, automation takes editorial control away from the newsroom in favour of other departments, which are responsible for marketing and business.²¹⁸ While the latter are aware of the responsibilities of the editors in this context before automation, they do not see taking this responsibility away from journalists and into their own hands as a limitation of the editorial control of the former. Media organisations' existing structure has a strong impact on the way new projects, such as news personalisation, are managed, and how different departments collaborate:

'With something like the [organisation's] data science team that is very firmly sitting in engineering so the senior engineering people don't see it as important. They want editorial input. They don't see it is important that that's a senior person because 'it's a data science problem'. I think a lot of it actually comes down to the accident of internal organisation and where a team sits. And where a team sits on boundaries you are much more likely to get what I would regard as a healthy balance.' (Lines 3045-3050).

While the technical unit is usually the team that is responsible for the automation, they are not always the decision maker. In some cases, former journalists take up management positions and become responsible for the development of products such as news personalisation. This was especially common in interviews with participants who work at public service media organisations. According to them, they are for example supposed 'to make sure they [the technical department] understand what good recommendations, personalisation, and services look like and I'm the translator' (lines 4161-4162). They

²¹⁸ Malcorps (n 10); Turow (n 107).

bring in their journalistic expertise in order to safeguard journalistic quality and editorial independence by instructing the technical department if and how to implement news personalisation or other new products. One of the participants working a public service media organisation included in our sample aims to safeguard editorial independence and their responsibility as a PSM by ensuring the ‘responsible development of technologies’ (line 2391) and therefore, non-technical staff members, who have editorial or policy backgrounds for example, oversee those projects:

‘[...] so I focused on AI and machine learning technologies and developing tools and frameworks to implement our public service and responsible commitment in practice.’ (Lines 2391-2393).

Ad hoc integration of automation into the existing organisational structures can also lead to the involvement of the journalists as decision-makers at the end of the process, who can vote or speak out against the implementation of the algorithm developed and designed by other departments as a manager for a commercial media organisation explains:

‘But there is a safeguard for these kinds of questions when the editorial staff feels that the soul of the newspaper is being damaged by this, interfered with, then they can call a conflict and ask the foundation who also plays a role in the conflict solution mechanism. And of course a good publisher never lets things go so far.’ (Lines 1331-1335).

However, as this stakeholder has demonstrated, involvement of the editorial department early in the process can prevent conflicts between departments by ensuring that design choices in the development of the algorithm align with editorial values. Stakeholders have emphasised the need to identify where automated tools impact editorial values, and to involve journalists and editors in the process of their design at an early stage. By integrating journalists in the creation of automated tools as described by this interviewee, the journalists can advocate for editorial values, provide insights into the way in which they should be realised in the context of automation, and keep editorial control over the automation process. In larger organisations which aim to ensure a consistent implementation of editorial values and keep a record of design choices, this process can be formalised. This formalisation can involve the creation of new professional roles, such as intermediaries with technical and editorial expertise who facilitate the collaboration between editorial and technical departments, as well as new procedures outlining the role of editors and journalists in algorithmic design. The following quote by a manager, who works at a public service media organisation, shows what these new procedures can look like and how they are intended to connect technical development and editorial expertise:

'[...] if we are creating any technology that impacts editorial output, then those are the people making it more central to the editorial people. And then once that conversation is initiated, we have our kick-off meeting. We make sure that people understand how we are going to be working together and then we tend to have essentially a series of meetings which are review points of the recommender or personalisation service where those editorial people can give feedback'. (Lines 4282-4287).

3.5.2.2. Limiting dependencies on external actors

Stakeholders also noted that automation changed the way in which third parties, such as companies or governmental institutions, could influence the news-making process. This challenge was mostly raised by data journalists. The media organisations in our sample had developed their own news personalisation algorithms in part to ensure that they would retain control over the manner in which news is recommended, as one of the managers working at a public service media organisation explains:

'We have in the past been using third parties for algorithmic recommendations [...] We are in the process of bringing that inhouse. And I know a number of other media organisations are also using third parties in this space. And it's collaborative how we [worked] with them in the past, and editorial decision-making and the business rules I talked about always come from the [media organisation] and you got written into the contract that how these tools work needs to reflect the [...] editorial values and guidelines. [...] this is why it's so helpful to have guidelines explicitly written out [...].' (Lines 2712-2728).

In order to safeguard editorial independence and limit external influences, media companies either avoid external organisations for the implementation of automation in their newsrooms altogether, or they bring their existing editorial guidelines into the contractual relationship with these external organisations. While the first approach removes the risk of external software companies influencing the way a media company automates its editorial decision-making, it is only available to media organisations with the resources to develop technology in house. Conversely, the second approach tries to limit the third parties' impact and is also applicable should a media organisation not be able to automate the news-making process without external help. Incorporating editorial guidelines in the contractual relationship with external software providers could therefore be an alternative approach for smaller media companies which do not have the resources to develop a personalisation algorithm tailor-made to enact their editorial values, and offer them the ability to make use of automated tools offered by third parties without ceding full control over the editorial values embedded in these tools.

While news personalisation stakeholders within media companies can choose to change to an inhouse solution or influence the values embedded in algorithms provided by third parties, data journalists often have to rely on third parties to make datasets available or usable. Such external control over datasets creates new opportunities to influence what kind of stories are told through data journalism. To start with,

this includes control over the content of the dataset,²¹⁹ as this data journalist from a public service media organisation notes:

'[...] there's always this influence organisations have and sometimes they are aware of it and they actually actively make different choices to try to influence a story [...] more often, organisations are unaware of it, or the data was collected for a totally different use. But it's like any other type of journalism. A source might have a different goal and that makes it worthy for him or her to lie to you during [an] interview. You have to figure that out.' (lines 277-285).

Manipulation of the data was however not a pressing concern for this or other data journalists in our sample. In line with the broader notion that the basic need for editorial independence applies regardless of whether automated tools are used or not, they moreover identified it as part of their own responsibility as journalists to 'detect lying sources' as this data journalist puts it: '[...] to me it's an old challenge in a new form, basically a lying source. A politician or company can have an agenda themselves, and simply lie about it. [...] Same goes for data. If it's a lie, if it's not true, it's my job to check it and not publish.' (Lines 426-433). In that sense, data journalism as a form of automation of input or journalistic research only extended the range of sources to be checked. Participants noted that, while a lack of transparency of the way in which the dataset was produced, could mean that values and interest from third parties would unknowingly impact on the journalistic analysis, the same held true for traditional journalism. In addition, where the data was reliable or alternative data sources were available, data journalism could also strengthen editorial independence:

'At the same time a lot of journalists have to actually go by the word of the people that they speak with within companies. And data journalists can actually check the data if what they're saying is correct. [...] I think that helps data journalism be a bit more independent.' (Lines 829-837).

More commonly, data journalists emphasised the need for collaboration with the source. They focused on collaboration as a way of expanding their opportunities to work with data, rather than the potential external influence of the third parties with which they are collaborating. Underlining the benefits of this collaborative situation, data journalists might overlook or downplay potential risks to their editorial independence. A way of ensuring editorial independence when engaging in this kind of collaboration is to gather as much information about the third parties' data set as possible. In order to work with data, it has to be clear what the data set is about, how it was collected, and what conclusions can be drawn from it. This information about the data is crucial for a data journalism project; a lack of that information can hinder a project. Collaborating with technical departments of external organisations which are usually less

²¹⁹ Stalph (n 113); Tabary, Provost and Trottier (n 207).

engaged in strategically shaping the journalist's reporting than, for example, PR departments, data journalists can decrease external influences in this context. However, the increased need for technical collaboration can also add new challenges to the journalistic process. Engaging in this exchange as an act of collaboration instead of perceiving it as strategically influencing the reporting, leads to 'a more personal relationship with [the] sources.' as a data journalist describes it in the interviews (lines 811-822). Stressing the collaborative aspect of that exchange and its importance for data journalism, the journalists still indicate to experience the autonomy which they need to fulfil their journalistic role instead of giving in to external influences if external sources provide access to their data, whether the journalists follow their suggestions or not (lines 811-822).

If there is no collaborative relationship between a data journalist and a potential source for a data set, journalists might sometimes not even get access to the data in the first place. In order to influence the journalistic message, access to data is sometimes impeded. This limits editorial independence especially where data journalists have no alternative source. This data journalist summed up the situation like this:

'So, I think that also plays a role with the organisations that are more aware of what kind of data they have. [...] they feel like they're not in control of the message if they send you a big dataset and you can get out of it whatever you want. [...] that's what I believe [...] are two main reasons for organisations not being willing [...] either that they don't really know what you could do with the data or they're scared of sharing data. And also, they want to have more control over the message you send out in the end.' (Lines 942-947).

Data journalists employ different tools in order to maintain their editorial independence in this context. Where data is held by government institutions, freedom of information requests help to not only get access to data, but also to structure the relationship with the source and limit the latter's ability to interfere with the usability of the data:

'But doing freedom of information requests instead of informal requests kind of helps me to stay independent because they have to follow a set of rules and they have to follow my request, they're not really able to tweak it which is something they would do if I would send an informal request.' (Lines 904-907).

While freedom of information requests formally structure the relationship between data journalists and their sources, practical obstacles continue to limit the extent to which these procedures actually provide data journalists with useful data, as this data journalist working for a PSM explains: 'It will be mostly just people kick things back really late and not being that helpful, rather than being actively constructive.' (Lines 3968-3969). This proves especially problematic where data journalists use freedom of information requests to create a dataset by requesting small amounts of information from multiple parties, rather

than requesting larger amounts of data from a single party. However, especially where data journalists gathered information from multiple different sources to tell a broader story about the industry (meaning no individual data source would be the main subject), the data journalists in our sample generally ascribe mistakes or unhelpful attitudes to a lack of time or expertise. One data journalist working for a public service media organisation explains as follows:

‘Sometimes people will just not respond with the CSV format and just respond to the question directly[...] I want to give them the benefit of the doubt, a lack of technical understanding.’ (Lines 3975-3980).

Collecting their own dataset - either by scraping data or by directly receiving the data from sources - helps data journalists become less dependent on a single source as well, enabling them to contrast the information from different datasets. Moreover, it expands the portfolio of journalistic resources, and makes it possible to tell new stories:

‘And then we prefer to get our own database with which we can constantly do something. My colleague and I, [...] we can’t keep up with everything daily [...]. But I do that with a few topics [...]. I built that over many years and I think it’s one of the best in [the country] regarding [this specific] data. I can use that for any article and then we have our own unique data we can generate. That’s very nice [...].’ (Lines 1889-1894).

Finally, data journalists also emphasise their reliance on colleagues in- and outside the newsroom to check for mistakes or misinterpretations in their analysis of the data. Having a strong community of data journalists beyond the newsroom enables a data journalist to access the skills and judgment of others. Especially for media organisations that do not have a big data journalism team (lines 964-967), these external data journalists are crucial to ensure editorial independence. Having reliable work relationships outside the newsroom helps data journalists deal with external influences on their projects by for example receiving assistance in understanding a dataset provided by a third party, in checking data and analysis, in discovering mistakes, in ‘detecting the lies’ in the data, and potentially in providing access to data sets. While this mutual support mostly serves quality management purposes, it also provides data journalists with a network of experts who are not driven by commercial interests or the interests of the organisation they work for but rather by the same journalistic function. This functions as a safeguard that encourages data journalists to ensure their analysis is accurate and editorially justifiable (lines 3410-3416).

3.5.2.3. Which organisations and values benefit from automation?

The ability to influence reporting by determining what data is easily available, is part of a larger challenge which automation poses to editorial independence in the interviews. Creating new datasets or building a personalisation algorithm which enacts the organisation's editorial values takes valuable resources.

Talking about the ability of organisations to integrate automation, this stakeholder from a legacy media organisation explains:

'you need the capacity to, for example, communicate and plan and structure these automated editorial decision-making projects. [...] an editorial [...] team like we have it now, hasn't been working [here] for so many years. [...]. And so many other newsrooms also don't have a team like that. And this means that it's harder for them to bring in the editorial perspective and in the early stages of projects. [...] And it was just a huge process, and it did cost, and it will be costing so much money. But, I think, it's worth it to stay in control of your own dashboards, because they are really the basis that our news desk uses to make decisions. So, this maybe worked the other way around, but we had the state of being dependent for many, many years. And now we see that it really takes time and many resources to really develop your own solution at this point.' (Lines 4774-4810).

Highlighting the importance of keeping control over the process of implementing automation (in this case news personalisation) inhouse, media organisations which are more financially stable or generally established seem to have an important advantage when it comes to maintaining their editorial independence. Simply put, the mechanisms with which media organisations in our sample ensure editorial control over personalisation (such as building prototypes editorial staff can review, creating interdisciplinary teams that determine how news personalisation should be used, or hiring employees that manage the collaboration between technical and editorial departments) cost money, time, and manpower. This cost is easier to bear for media organisations that do not require personalisation to have an immediate return on investment, and have a larger staff that can be rearranged into new organisational structures. Conversely, others might have to cede some of their editorial control in exchange for the implementation of automation by an external organisation in order to keep up with the competing media companies. In the previous section, we have discussed the possibility of ensuring editorial independence and control over the implantation process of automated tools like news personalisation algorithms by embedding editorial values into contracts with external organisations. This alternative approach ensures less editorial control than handling automation within the media company, and especially limits the editorial control at the early stages of development as stressed in the statement above. Therefore, smaller media organisations struggle more than larger, more established media companies in implementing automation in such a way as to ensure that their editorial values are embedded properly as they have to rely on external companies. While participants pointed out that smaller media organisations due to financial and staff resources may encounter difficulties in implementing automated tools in a way which prevents manipulation and ensures that they fulfil their journalistic role, they also noted that Dutch companies are all small compared to US platforms as well as US media organisations, limiting their independence as media companies on a structural level:

'I think every media organisation in the Netherlands is a small organisation compared to all the big tech and US media organisations [...]. The whole media ecosystem in the Netherlands will be dependent on third-party software.' (Lines 1694-1697).

At the same time, especially in the context of data journalism, interviewees indicated the potential advantages for smaller organisations created by their flexibility and innovative culture. The latter might be especially found in smaller organisations which have the potential to excel in this field, and outsmart larger media companies:

'[I] don't see that challenge, though, because a smaller media organisation that is smart in using and trying and experimenting with new technology is much quicker to adopt a new way of working so I think it's an advantage if they do it right, [...].' (Lines 563-566).

Playing to the strengths of being a smaller, more agile media company and being strategic about automation from the beginning, is described as a chance to implement automated tools quickly and independently from external organisations. This could offer a wider range of media organisations the ability to reap the benefits of automated tools, and use them to provide different perspectives – or in terms of the functions of editorial independence in European media law, support pluralism and power dispersal. Consequently, where automated tools which require significant resources or financial stability to develop can provide an advantage for a small set of media organisations, automated tools which can be developed by smaller teams and a quicker return on investment potentially benefit smaller independent media organisations.

3.6. Discussion

Media actors working with automated tools have conceptualised editorial independence in a similar manner to the approach in European media law. Both take an instrumental approach to the need for editorial independence in the context of automation, defining its value in terms of its ability to enable the media to serve the audience and democracy.²²⁰ When asked to reflect on concrete functions of editorial independence in European media law, the participants noted that, while all aspects are important to their work, the need to insulate the audience from external influences and enable media actors to fulfil their democratic role is particularly pressing. They framed structural challenges, such as the danger that a decrease in editorial independence would limit pluralism and concentrate power in the media system, in terms of their implications for individual media actors to fulfil their role.²²¹ This normative overlap is key,

²²⁰ Gibbons (n 104); Karppinen and Moe (n 91); Schulz (n 171).

²²¹ Basyouni Hamada and others, *Editorial Autonomy: Journalists' Perceptions of Their Freedom* (Columbia University Press 2019) <<https://www.degruyter.com/document/doi/10.7312/hani18642-007/html>> accessed 13 May 2021; Schulz (n 171).

as it indicates that legal and journalistic efforts to safeguard editorial independence in the context of automated decision-making can do so with a shared purpose.

The interviews revealed a number of challenges to editorial independence. Below, we highlight three of these challenges, and explore their implications for the way in which law can be used to support editorial independence.

As other researchers have emphasised and this study confirms, automation requires a collaborative process to implement.²²² This collaboration is not inherently incompatible with editorial independence. Indeed, interviewees underlined that collaboration is an important way to retain editorial independence in the context of automated decision-making. In particular, collaboration between actors with editorial and technical expertise enables media actors to ensure that their editorial values are enacted in the context of news personalisation, and to better scrutinise data provided by external parties forming the basis for data journalism reporting. However, for collaboration to support editorial independence, editors and journalists must be able to effectively assume their role in the process needed to automate editorial decision-making. The study indicated a number of factors which can limit their ability to do so. These include the existing organisational structure determining which department leads automation projects, the stage at which editors and journalists are involved in such projects, and the existence of prototypes or metrics which allow them to provide feedback on the way in which automated tools are used or developed.

These internal organisational matters have increasing relevance in ensuring editorial independence in the context of automation. They also fall outside the traditional focus of regulation which safeguards editorial independence in the sphere of private actors, specifically aimed at limiting external (commercial) influences or media concentrations.²²³ Further research is needed to explore the extent to which editors' and journalists' ability to fulfil their role is challenged in different media systems and in relation to different technologies, and what role (if any) media law can play to address this challenge. The results point to two types of legal measures which are particularly worth exploring in further detail. The first concerns policy measures which endeavour to increase media actors' ability to fulfil their role in the digital media system. These measures often focus on providing skills training or financial support to sustain independent media organisations. However, in order to support media actors' independence in the context of automation, it is increasingly important that they have access to the tools which they need to assume their role in the process needed to automate editorial decision-making. This can involve among other measures investment in the development of metrics which allow editors to identify how a

²²² Ananny (n 12); Bodó (n 10).

²²³ Arena and others (n 99); Baker (n 128); Gibbons and Katsirea (n 105).

personalisation algorithm affects different aspects of a value such as diversity.²²⁴ The second type of legal measures are those which strengthen the position of the newsroom vis-à-vis other departments. The Dutch Media Act, for example, requires media organisations to contractually outline the rights of the editorial department in relation to the publisher.²²⁵ The interviews brought up a number of mechanisms which could concretise such agreements, including intermediaries who ensure a smooth collaboration between editorial and technical departments, and formal agreements that editorial departments should be consulted early and without distinctions between the stages of the editorial process at which automation is implemented. Drawing on these mechanisms could allow legal frameworks to be used to strengthen media actors' ability to exercise editorial control over automated decision-making within their organisation.

A second but related challenge to editorial independence concerns the media's collaboration with external actors involved in the automation of editorial decision-making. In our study, this challenge particularly regarded outsiders who provide the data needed for data journalism reporting. Interviewees working with news personalisation indicated that they had developed the technology in house in part to retain editorial control. This strategy was less feasible for data journalists, who more often had to collaborate with outside actors to make datasets accessible and carry out their analyses. Where collaboration occurs with outside actors, ensuring the availability of alternative data sources or technologies can strengthen media actors' position. Interviewees especially indicated the need to be able to gather their own datasets, which allowed them to better scrutinise, or avoid having to rely on datasets provided by third parties. Although regulation can and has been shown to limit journalists' ability to make use of this tool to safeguard their independence, for example by limiting their ability to collect data through web-scraping, this was not a prominent concern raised in the interviews.²²⁶ Issues mentioned instead revolved around cases in which the government itself acts as a data source. Even if freedom of information regulation formally structures the relationship between journalists and government actors, interviewees signalled the presence of a number of obstacles in the context of data journalism. These related especially to the inconsistency of the format in which information was supplied and the time-consuming nature of forcing multiple smaller government departments to provide what would only be a small part of the final dataset.²²⁷

The final challenge is associated with new structural dependencies. The resources needed for automation create a new challenge to editorial independence by reallocating the power to determine if and how editorial decision-making is automated. For example, the cost of gathering the datasets needed to tell

²²⁴ CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89); Vrijenhoek and others (n 149).

²²⁵ Commissariaat voor de Media (n 216); Mediawet 2008 articles 2.88, 3.5.

²²⁶ Wiley (n 168).

²²⁷ Derigan Silver, 'The News Media and the FOIA' (2016) 21 Communication Law and Policy 493.

new stories or developing personalisation algorithms which are tailored to the editorial approach of a specific media organisation was a recurring theme in the interviews. This expense potentially puts organisations with large technical or financial resources at an advantage over smaller media organisations. The latter are potentially less able to reap the commercial benefits of automated tools or to use them to promote their editorial values. The unequal accessibility of automated editorial decision-making moreover leaves the media system as a whole open to new concentrations of power from parties which invest in making specific forms of data or technology more easily available.²²⁸ The interviews revealed a number of ways in which media organisations manage to retain their independence in the face of these dependencies. Such methods include focusing on cheaper forms of automation, where their small size and flexibility can prove to be an advantage, as well as working with third parties to tailor the tools provided to better reflect the organisation's editorial values. Nevertheless, media law has traditionally also played an important role in this context by creating the conditions under which media organisations can retain their independence, for example through media concentration and ownership limits.²²⁹ In order to address this concern of unequal accessibility for automation for different organisations promoting diverging editorial values, media law needs to refocus its attention to the data and technology which media organisations can use to enact their own editorial values. It could for example aim to prevent new concentrations of power by ensuring that the data and technology needed to automate editorial decision-making are accessible to a wide variety of media organisations, and by stimulating competition between the organisations which provide these technical resources. Additionally, regulatory initiatives have to consider which media organisations will benefit from the technological resources which are (made) available to support the independence of an array of media organisations.²³⁰ This aspect remains undervalued in policy initiatives which tend to frame technology and data as a homogenous resource equally useful to all editorial perspectives and media organisations.²³¹

There are several limitations to this study. Its focus on a relatively small number of western-European media organisations means that the generalisability of its conclusions, especially to other media systems, is limited. Moreover, the study did not include the perspective of media organisations which do not use data journalism or news personalisation (for example because they cannot afford to or because their editors are able to reject their use), as well as media organisations whose editors and journalists are not involved in the use of automation (for example because the technologies are not perceived as editorial processes, or are supplied as off-the-shelf solutions by a third party). Particularly the latter causes

²²⁸ Cushion, Lewis and Callaghan (n 151); Fanta and Dachwitz (n 62); Pier Luigi Parcu and Elda Brogi, *Research Handbook on EU Media Law and Policy* (Edward Elgar Publishing 2021).

²²⁹ Arena and others (n 99); CoE, 'New Notion of Media' (n 16).

²³⁰ Brogi and others (n 91).

²³¹ European Commission, 'On the European Democracy Action Plan' (n 89); European Commission, 'Europe's Media in the Digital Decade: An Action Plan to Support Recovery and Transformation' (n 89).

potential challenges to editorial independence which are relevant to include in future research on the way in which automation prevents editors and journalists from fulfilling their societal role.

4. Platforms' organisational control and responsibility

4.1. Introduction

EU law is carving out a new legal space for platforms by focusing on their organisational control over the interactions of their users.²³² Platforms have traditionally qualified as neutral hosts, on the grounds that they only provide the infrastructure through which their users share content. It has become increasingly clear that this fails to accurately reflect platforms' activities.²³³ Platforms selectively promote and remove specific kinds of content to organise the uploaded content into an attractive environment for users and advertisers. Hence, they have taken over some tasks customarily performed by publishers.²³⁴

Simply extending the scope of media law to platforms would however disregard the differences between platforms' and publishers' editorial activities. Platforms outsource the production and publication of content to their users, focusing on organising and curating this content instead. Moreover, much of the control platforms exercise over this process is automated and directly influenced by the behaviour and preferences of their users. That is not to say platforms have less influence than legacy media organisations. Rather, editorial control over platforms is exercised in a different manner, and by multiple parties. The AVMSD acknowledges these differences by pointing out that platforms do not bear traditional editorial responsibility, defining platforms by their ability to organise user-generated content and programmes.²³⁵

What responsibility to attach to platforms' control is a highly contentious question. For example, the Copyright Directive largely places the responsibility to prevent the availability of protected works on platforms themselves.²³⁶ Conversely, the AVMSD not only involves platforms, but also the uploaders and users which exercise influence on their service. The AVMSD thereby moves away from centralised

²³² This chapter is a copy of the following article: MZ van Drunen, 'The Post-Editorial Control Era: How EU Media Law Matches Platforms' Organisational Control with Cooperative Responsibility' (2020) 12 Journal of Media Law 166. With the exception of minor textual revisions and changes made to standardise the dissertation's spelling and reference style, the content remains unchanged.

²³³ Napoli and Caplan (n 51) 22.

²³⁴ Gillespie (n 7).

²³⁵ This chapter therefore uses the term platform to refer to services which exercise organisational control over user-uploaded content (in further detail, see sections 4.2.2 and 4.2.3).

²³⁶ Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC (Copyright Directive) 2019.

responsibility, and towards cooperative responsibility. Cooperative responsibility, initially developed and explored in further detail by Helberger, Pierson, and Poell, draws on insights from theories on risk sharing and the problem of many hands. It aims to address situations in platform governance in which no single actor causes or can provide a solution to a service's impact on public values on their own. Rather than allocating responsibility to a single central actor, resolving such a problem of many hands requires consideration of the roles, capacities, knowledge, and incentives of the different stakeholders which contribute to the cause or can contribute to the solution.²³⁷

Cooperative responsibility accordingly emphasises that many different stakeholders exercise control on platforms, including among others the party which initially uploads harmful content, the users which share it and make it go viral, the advertisers which provide the economic incentives, and of course the platform which provides the tools and infrastructure enabling this process. In line with literature on risk sharing and the many hands problem, this distribution of control makes it difficult to assign responsibility to platforms themselves alone. They often do not have the capacity to address the impact of their service without taking into account the other parties which exercise control on their service. Cooperative responsibility accordingly highlights the need for a 'shared responsibility and a division of labour between the platform and users' to adapt to the distribution of control of platforms.²³⁸ In part, this involves recognising the responsibility of other parties which exercise control on platforms. However, it also requires platforms to actively create the conditions which allow the other parties on their service to exercise their influence responsibly. As section 4.4 explores in further detail, the exact distribution of responsibility between platforms and other stakeholders differs according to not only the control exercised by the platform, but also the capacities of the other stakeholders, and the responsibility which they can be expected to take.²³⁹

The upcoming revision of the ECD, the Digital Services Act, aims to further revise platforms' responsibilities by building on existing sector-specific platform legislation, and creating a stronger link between a service's responsibility and its level of knowledge, influence, and control.²⁴⁰ Regardless, the concept of organisational control and its implications for the traditional, centralised approach to (editorial)

²³⁷ Natali Helberger, Jo Pierson and Thomas Poell, 'Governing Online Platforms: From Contested to Cooperative Responsibility' (2018) 34 *The Information Society* 1; Dennis F Thompson, 'Moral Responsibility of Public Officials: The Problem of Many Hands' (1980) 74 *American Political Science Review* 905; Dennis F Thompson, 'Responsibility for Failures of Government: The Problem of Many Hands' (2014) 44 *The American Review of Public Administration* 259; Jessica Nihlén Fahlquist, 'Moral Responsibility for Environmental Problems—Individual or Institutional?' (2009) 22 *Journal of Agricultural and Environmental Ethics* 109.

²³⁸ Helberger, Pierson and Poell (n 238) 3.

²³⁹ Helberger, Pierson and Poell (n 238).

²⁴⁰ ECD 31; Alexander Fanta and Thomas Rudl, 'Leaked document: EU Commission mulls new law to regulate online platforms' (*Netzpolitik*, 16 July 2019) <<https://netzpolitik.org/2019/leaked-document-eu-commission-mulls-new-law-to-regulate-online-platforms/>> accessed 3 January 2020.

responsibility remain unclear. This chapter therefore asks how the obligations which the AVMSD attaches to the exercise of organisational control can be understood, and how those obligations can and should be evaluated in the light of cooperative responsibility. The first section explores organisational control and its relation to the traditional concept of editorial control. The second section describes the obligations for content which the AVMSD attaches to the exercise of organisational control. The final section analyses the measures required by the AVMSD through the lens of cooperative responsibility, highlights potential pitfalls, and suggests how it could be interpreted and further developed.

4.2. From editorial to organisational control

4.2.1. The traditional allocation of editorial responsibility

Media law has traditionally used editorial control to determine which organisations are media actors, and bear the rights and responsibilities which come with the role.²⁴¹ Editorial control for example determines which organisations are media service providers under the AVMSD, and which organisations qualify for the Copyright Directive's protection for press publications. Conversely, communications networks which only transmit content are defined by their lack of editorial control.²⁴² Editorial control can be an ambiguous concept, as it is often defined in a way matching the responsibility which a particular legal framework is used to allocate. The AVMSD aims to enable the free movement of audiovisual services, and can accordingly focus on services which control the publication and organisation of content.²⁴³ The ECtHR and recommendations of the CoE are able to take a broader approach which also includes 'policy decisions on the content to make available or to promote, and on the manner in which to present or arrange it'.²⁴⁴ In these definitions, editorial control concerns the influence over (1) the production of content, (2) its publication, and (3) how it is organised in relation to other content.

Owing to the impact on individuals and society which they can have by determining whether and how information will be received by the public, media actors have editorial responsibility for the way in which they exercise their editorial control.²⁴⁵ Editorial control and editorial responsibility are not always neatly distinguished. Editorial control is sometimes used to refer to the responsible exercise of influence over editorial processes, and the AVSMD defines editorial responsibility as the exercise of effective control.²⁴⁶

²⁴¹ CoE, 'New Notion of Media' (n 16).

²⁴² Copyright Directive para 2(4)(c) and 15; Directive 2010/13/EU of the European Parliament and of the Council of 10 March 2010 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (AVMSD) 2010 para 1(c); Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) 2002 para 2(c); CoE, 'New Notion of Media' (n 16) paras 29–36.

²⁴³ Smith (n 14) 266; Valcke and Ausloos (n 14) 30.

²⁴⁴ *Saliyev v. Russia* (n 15); *Miami Herald Publishing Co. v. Tornillo* (n 15); CoE, 'New Notion of Media' (n 16) para 30.

²⁴⁵ *Stoll v. Switzerland* (n 17) para 104; *ES v Austria* [2018] ECtHR 38450/12 [51].

²⁴⁶ AVMSD 2010 article 1(c).

However, when editorial control is concretised, it is often used to refer to the actions with which an actor exercises influence and thereby assumes editorial responsibility.²⁴⁷ This chapter therefore uses the term editorial control to refer to the factual exercise of influence over editorial processes, and the term editorial responsibility to refer to the need to exercise this influence in compliance with the relevant norms and rules. It takes the same approach to the terms organisational control and organisational responsibility.

Editorial responsibility is not equally distributed between the different types of editorial control. It varies depending on a number of factors, including the specific type of editorial control exercised, the impact of the medium, and the amount of choice which users continue to have.²⁴⁸ Choices made during the production of content, such as the tone of and information included in a content piece, fall almost completely outside the scope of the law.²⁴⁹ In this sense, the extensive freedom for the production of content is similar to the freedom of belief, which can only be restricted once the belief is expressed. Responsibilities increase when content is published, at which point both the publisher and creator can be held responsible for illegal content.²⁵⁰ However, even where content is intended to be published, creators and publishers of course benefit from extensive protection rooted in traditional arguments for the freedom of expression.²⁵¹

The third element of editorial control covers the organisation of content. Media actors can selectively promote the visibility of certain content by for example publishing certain pieces on the front page, or in the news section or press archives.²⁵² Responsibilities for the organisation of content have traditionally been intertwined with responsibilities for the publication of content. The ECtHR, for example, typically assesses organisational actions by asking whether a publisher who targeted a specific audience or published a story in a prominent place bears more responsibility due to its increased impact.²⁵³ The AVMSD similarly did not impose responsibility on actors which only organise content. Instead, it was built around the assumption that one media service provider controls both publication and organisation.²⁵⁴ Such broadcasters and VOD-providers have traditionally been subject to the highest levels of editorial responsibility. They are not only prohibited from publishing illegal content, but may also be required to

²⁴⁷ *Baltic Media Alliance* (n 37) para 40.

²⁴⁸ See for example the ECtHR's distinction between publishing and linking to defamatory content in *Magyar Jeti ZRT v. Hungary* (n 19) paras 74–77.

²⁴⁹ *Axel Springer v. Germany (no. 2)* (n 17) paras 65, 67; *Gündüz v. Turkey* (n 17) paras 43–44. Some exceptions exist for particularly harmful content, such as child sexual abuse material.

²⁵⁰ On this change, see *Medžlis Islamske Zajednice Brčko and Others v Bosnia and Herzegovina* [2017] ECtHR 17224/11 [91, 106].

²⁵¹ *Oster* (n 88) 17; *Lindon, Otchakovsky-Laurens and July v France* [2007] ECtHR 21279/02, 36448/02 [45].

²⁵² *Stoll v. Switzerland* (n 17) para 150; *Schulz and Heilmann* (n 23) 22; *M.L. and W.W. v. Germany* (n 22) paras 112–113.

²⁵³ *Belpietro v. Italy* (n 27); *Jersild v. Denmark* (n 18).

²⁵⁴ For a detailed analysis, see Weinand (n 36) 484.

promote a wide range of other public values, including the protection of minors, the capacity of people with disabilities to participate in social life, and the availability of general interest content.²⁵⁵

4.2.2. The turn towards organisational control in EU platform regulation

Platforms have traditionally fallen outside this model of editorial responsibility. Their limited responsibility is of course not unique to media law but often rests on two pillars. Firstly, article 14 ECD provides a general liability exemption for neutral hosting services which take down illegal content once they become aware of it.²⁵⁶ This focus on neutrality is not a natural fit for platforms which actively organise content, and in *L'Oréal v. eBay* the CJEU suggested that promoting the offers of users decreases a service's neutrality.²⁵⁷ Conversely, Google's AdWords service could qualify for the safe harbour despite ordering search results partially based on remuneration. Later caselaw continues to assume that social networks can fall under article 14 ECD.²⁵⁸ Angelopoulos argues that the CJEU'S case law suggests an interpretation under which an organisation remains neutral when it sets the general criteria for organising content, but not when it intervenes with regard to a specific piece of content.²⁵⁹

In addition to article 14 ECD's safe harbour, platforms can escape sector specific responsibility when they only facilitate the activity to which legislation is designed to apply. Media law traditionally has focused on the editorial responsibility for content production and publication. This allowed services which only organised content to escape the responsibility for the content available on their service, as well as the organisational responsibilities which are tied to the publication of content. This focus matched the conventional importance of publication as an element of editorial control. For example, regulators have sometimes qualified publication as a more powerful editorial tool than organisation, as the publisher is able to limit what the organiser is able to present to the public.²⁶⁰ The balance of power between publication and organisation is not set in stone, however, and starts to change when the amount of available content exceeds the amount of content which the audience can process.

²⁵⁵ AVMSD 2010 articles 6a-7a, recitals 22-25.

²⁵⁶ ECD recital 42; *Google France* [2010] CJEU ECLI:EU:C:2010:159 [114].

²⁵⁷ *L'Oréal v eBay* [2011] CJEU ECLI:EU:C:2011:474 [116].

²⁵⁸ *Google France* (n 257); *Eva Glawischnig-Piesczek* [2019] CJEU ECLI:EU:C:2019:821 [22]; *SABAM v Netlog* [2012] CJEU ECLI:EU:C:2012:85.

²⁵⁹ Christina Angelopoulos, 'Study on Online Platforms and the Commission's New Proposal for a Directive on Copyright in the Digital Single Market' [2017] University of Cambridge Repository 34 <<https://www.repository.cam.ac.uk/handle/1810/275826>> accessed 5 June 2019.

²⁶⁰ See for regulators' perspective, Commissariaat voor de Media, 'Beleidsregels Classificatie Commerciële Mediadiensten Op Aanvraag 2011' (2011) BWBR0030512 para 30 <<https://www.cvdm.nl/wp-content/uploads/2013/08/Beleidsregels-classificatie-commerci%C3%ABle-mediadiensten-op-aanvraag-2011.pdf>> accessed 9 June 2019; Ofcom (n 40).

This change is especially pronounced for user-upload platforms. By allowing users to freely upload content, they are essentially guaranteed to contain a large quantity and variety of illegal, harmful, normal, and general interest content. Platforms must algorithmically organise this stockpile of content in order to make it accessible to users.²⁶¹ In turn, this allows the platform considerable influence over what content users are exposed to. Unless users already know that a piece of content or uploader exists, they cannot encounter it without going through the platforms' organisational filter. As a result, while a large quantity and wide variety of content may be available, the platform's organisational algorithm determines what content will find an audience. Media law's focus on responsibility for the publication of content made it difficult for this increasing importance of organisational control to be taken into account.²⁶²

The AVMSD changed this situation by extending its scope to video-sharing platforms. These are defined along the same lines to traditional media services, with the exception that video-sharing platforms do not exercise editorial control over publication *and* organisation, but only determine the organisation of programmes and user-generated videos.²⁶³ The AVMSD's platform definition is similar to the Copyright Directive's, which also targets services organising user-uploaded content. However, unlike the Copyright Directive, the AVMSD does not contain specific carveouts for e.g. academic repositories or educational services.²⁶⁴ Its definition also does not centre on economic factors (such as the role of network effects in the Commission's initial guidance on platforms), or include services exercising more control over content publication – such as Netflix, which qualifies as a VOD-provider rather than a platform under the AVMSD.²⁶⁵

In the broader discussion on which services are platforms and should bear the related responsibilities, the AVMSD thus concentrates on services which exercise organisational control over third-party media content. This does not capture all tiers of the services offered by platforms, such as their increasing involvement in content publication. YouTube for example offers a premium service which gives users access to content produced and published by YouTube itself. When such services are dissociable from

²⁶¹ Gillespie (n 7).

²⁶² Jillian C York and Ethan Zuckerman, 'Moderating the Public Sphere' [2019] Human Rights in the Age of Platforms 137, 140.

²⁶³ On the interpretation of traditional elements of the AVMSD's definition of platforms, see Lorna Woods, 'Video-Sharing Platforms in the Revised Audiovisual Media Services Directive' (2018) 23 Communications Law 127.

²⁶⁴ The P2B regulation broadly talks of 'facilitating the initiating of direct transactions', whereas the AVMSD and Copyright Directive focus on platforms' role in the organisation of content. Copyright Directive article 17; Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services (P2B Regulation) 2019 article 2(2).

²⁶⁵ European Commission, 'Public Consultation on the Regulatory Environment for Platforms, Online Intermediaries, Data and Cloud Computing and the Collaborative Economy' (2016) <<https://ec.europa.eu/digital-single-market/en/news/public-consultation-regulatory-environment-platforms-online-intermediaries-data-and-cloud/>> accessed 16 April 2019; Pieter Nooren and others, 'Should We Regulate Digital Platforms? A New Framework for Evaluating Policy Options' (2018) 10 Policy & Internet 264.

platforms' main activity, they could be qualified as audiovisual media services on their own merit, with the accompanying set of responsibilities under the AVMSD. The AVMSD indicates that traditional media services may be provided on platforms by stating that platforms can exercise organisational control over programmes, which are defined as being provided by traditional media service providers. At the same time, the AVMSD covers a wide variety of services by relying on the loosely defined concept of organisational control to determine what constitutes a platform. From the perspective of cooperative responsibility, the different kinds of services which platforms provide can come with different levels of responsibility depending on (among other aspects) their degree of control. The AVMSD does not impose a predefined set of responsibilities on every service which exercises organisational control, but instead requires them to take appropriate measures depending on, among other things, the nature of the service they provide.

4.2.3. Organisational control in detail

The AVMSD defines platforms' organisational control in a very open manner. Specifically, it states that 'the organisation of [programmes and/or user-generated content] is determined by the video-sharing platform provider, including by automatic means or algorithms in particular by displaying, tagging and sequencing'.²⁶⁶ The AVMSD gives two reasons why services exercising organisational control should bear more responsibility. Firstly, it argues that platforms should bear additional responsibilities because they compete with traditional media service providers.²⁶⁷ This objective is more related to the need for a level playing field than platforms' organisational control.²⁶⁸ However, as the previous section has set out, platforms' organisational control is key to their ability to turn the content hosted into an attractive (and competitive) service. The Copyright Directive makes this argument more explicitly by stating that platforms aim to monetise the content which their users upload 'by organising it and promoting it in order to attract a larger audience'.²⁶⁹ Secondly, the AVMSD notes that platforms 'have a considerable impact in that they facilitate the possibility for users to shape and influence the opinions of other users'.²⁷⁰ Later recitals specify that platforms exercise their influence by organising content. Their responsibilities are therefore linked to the organisation of content, rather than the content as such.²⁷¹ This distinguishes the AVMSD's approach to platforms from its approach to traditional media service providers, who are

²⁶⁶ AVMSD 2018 article 1(aa); ERGA, 'ERGA Analysis & Discussion Paper to Contribute to the Consistent Implementation of the Revised Audiovisual Media Services (AVMS) Directive: Towards the Application of the Revised Directive by National Regulatory Authorities (NRAs)' (ERGA 2018) 69 <<http://erga-online.eu/wp-content/uploads/2018/11/ERGA-2018-08-SG3-Analysis-and-Discussion-Paper.pdf>> accessed 10 June 2019.

²⁶⁷ AVMSD 2018 recital 4, 44.

²⁶⁸ Alternatively, on the desire to protect national media markets, see Andrej Savin, 'Regulating Internet Platforms in the EU - The Emergence of the "Level Playing Field"' (2018) 34 Computer Law & Security Review 1215.

²⁶⁹ Copyright Directive recital 62.

²⁷⁰ AVMSD 2018 recital 4.

²⁷¹ AVMSD 2018 recital 48, article 28b(3). The latter ties a platforms' responsibilities in part to the nature of the service provided.

assumed to exercise full editorial control and bear full editorial responsibility.²⁷² In other words, the AVMSD adapts the traditional argument for editorial responsibility to include the significant impact of platform users.

The AVMSD expands on the notion that platforms organise content in three ways. Firstly, it notes that platforms *determine* the organisation of content. This wording indicates that platforms do not need to have exclusive control over the organisation of content. Indeed, all major current platforms targeted by the AVMSD partially rely on explicit (e.g., sharing; liking; commenting on content) or implicit (e.g., time spent watching; likelihood that a user will continue watching) user feedback to organise content.²⁷³ However, while users can provide input to the organisational algorithm, the platform decides how, when, and on what they can give input, and if and how this input will affect the organisation of content. Such factors afford the platform decisive influence over the manner in which content is organised. In line with traditional approaches to editorial control, this ability to exercise decisive (albeit not exclusive) influence over the way in which content is organised, is key.²⁷⁴

Secondly, the AVMSD states that algorithms determine the organisation of content ‘in particular by displaying, tagging and sequencing’. This language makes it clear that this list of methods is neither cumulative nor exhaustive, highlighting that platforms often use multiple methods to organise content simultaneously.²⁷⁵ Platforms may among other approaches automatically sequence videos, recommend a set of videos which a user can choose from, and allow users to explore and contribute to tagged topics. That is, organisational control does not necessarily require the platform to organise content in one way, but instead describes the variety of organisational methods through which platforms allow users to easily access content. Previous approaches to editorial control typically required a degree of selectivity which would allow an actor to differentiate between content based on its attributes. Thus, organising content alphabetically or chronologically typically did not constitute organisational control, whereas organising it by genre or popularity did.²⁷⁶ In line with the rationale of organisational control, what may be key is that the organisation allows the platform to draw and have an impact on a large audience.

Thirdly, the AVMSD for the first time explicitly recognises that organisational control may be exercised algorithmically. In so doing, it shows that the terms ‘tech company’ and ‘media company’ are not mutually

²⁷² Weinand (n 36) 484.

²⁷³ DeVito (n 11); Jane B Singer, ‘User-Generated Visibility: Secondary Gatekeeping in a Shared Media Space’ (2014) 16 *New Media & Society* 55.

²⁷⁴ Schulz and Heilmann (n 23) 15.

²⁷⁵ Woods, ‘Video-Sharing Platforms in the Revised Audiovisual Media Services Directive’ (n 264) 133.

²⁷⁶ Chavannes and Castendyk (n 23) 825; Valcke and Ausloos (n 14) 30.

exclusive; a company can still fall under media law if it uses technology to perform editorial tasks.²⁷⁷ The recognition that organisational control can be automated, creates a number of complexities. For example, human editorial staff has traditionally been an important indicator of an organisation exercising editorial control and therefore bearing responsibility.²⁷⁸ Analogously, being able to direct the engineers who design the organisational algorithm, could indicate exactly which company exercises control and falls under the AVMSD. At the same time, recognising that platforms exercise organisational control algorithmically produces a number of complexities which the AVMSD does not tackle. Some are avoided explicitly: while the country where editorial decisions are taken affects jurisdiction over traditional media services, organisational control plays no role in jurisdiction.²⁷⁹ Others fall outside the AVMSD's substantive scope. For example, although the Green Paper which preceded the AVMSD's revision indicated that platforms may create new vulnerabilities by personalising content organisation, the current directive does not address such matters as manipulation or diversity.²⁸⁰ Instead, it focuses on issues which result from platforms' ability to attract a large audience, such as that audience's exposure to illegal or harmful content. The AVMSD therefore continues to focus on responsibilities which are traditionally associated with the publication of content. Although the AVMSD moves the debate forward by acknowledging platforms' algorithmic organisational control and its implications for the operationalisation of responsibility, it does not yet deal with the full implications of this recognition.²⁸¹

4.3. The building blocks of organisational responsibility

Media law has not only relied on editorial control to determine who bears editorial responsibility, but has also tailored editorial responsibility to the control exercised by publishers and broadcasters. As the previous section has set out, platforms are able to compete with publishers and influence users by exercising algorithmic control over the organisation of content, rather than human control over content production and publication. The AVMSD has adapted to this adjustment by creating a new, separate set of responsibilities for the exercise of organisational control in article 28b.²⁸² Article 28b(1) and (2) generally require platforms to take appropriate measures with regard to content which is illegal,

²⁷⁷ Philip M Napoli, 'Social Media and the Public Interest: Governance of News Platforms in the Realm of Individual and Algorithmic Gatekeepers' (2015) 39 Telecommunications Policy 751.

²⁷⁸ *Baltic Media Alliance* (n 37) para. 43.

²⁷⁹ AVMSD 2018 article 28a.

²⁸⁰ European Commission, 'Green Paper Preparing for a Fully Converged Audiovisual World: Growth, Creation and Values' (European Commission 2013) COM(2013) 231 final 13 <<https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0231:FIN:EN:PDF>>.

²⁸¹ Legal history indicates that Member States could not reach a consensus on issues related to pluralism. Proposal for a Directive of the European Parliament and of the Council amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services in view of changing market realities 2016 [COM(2016) 287 final].

²⁸² Depending on their control, platforms may fall under the AVMSD's traditional advertising obligations. For further details, see section 4.4.

commercial, or harmful to minors.²⁸³ Article 28b(3) outlines ten concrete appropriate measures. The following section describes the measures which the AVMSD requires platforms to (enable their users to) take with regard to the content on their service, in order to lay the groundwork for an evaluation of its responsibility model through the lens of cooperative responsibility in section 4.4.

4.3.1. Reporting mechanisms

Understanding the way in which organised content relates to public values is a precondition for organising this content in accordance with these values. By outsourcing the production and publication of content to users, platforms can distance themselves from the choices made during these phases of the editorial process. They can focus on the organisation of this content instead, and can use metainformation to do so – e.g., how popular is the content, or by how many friends has it been shared. In short, exercising organisational control does not automatically afford platforms knowledge about how the content which they organise relates to public values.²⁸⁴

Article 14 ECD has nevertheless ensured that third parties are able to inform platforms about illegal content on their service. However, it does not explicitly regulate who should notify platforms, or how notification mechanisms should be designed.²⁸⁵ Recent (self-)regulation is relying on more specific stakeholders to provide platforms with information about the content on their service. These stakeholders include the platform itself (Copyright Directive), national authorities (proposed Terrorism Regulation), as well as traditional media organisations (primarily in the field of disinformation).²⁸⁶ Finally, the AVMSD requires platforms to put in place mechanisms which allow users to flag, report, and rate content which is illegal or harmful, uploaders to declare commercial communications.²⁸⁷ The AVMSD

²⁸³ In contrast to the UK's online Harms White Paper, the AVMSD aims to protect the general public from illegal content, and only protect minors from content which is harmful to them. The AVMSD continues to leave the definition of harmful content to the Member States. AVMSD 2018 recital 4; Jenny Weinand, 'The Revised Audiovisual Media Services Directive 2018 – Has the EU Learnt the Right Lessons from the Past?' (2018) 82 UFITA 260, 291; Lorna Woods, 'The Duty of Care in the Online Harms White Paper' (2019) 11 Journal of Media Law 6.

²⁸⁴ DeVito (n 11); Karin van Es, 'YouTube's Operational Logic: "The View" as Pervasive Category' (2019) 21 Television & New Media 223.

²⁸⁵ *l'Oréal v. eBay* (n 258); Martin Husovec, *Injunctions Against Intermediaries in the European Union: Accountable But Not Liable?*, vol 41 (Cambridge University Press 2017) 53.

²⁸⁶ Copyright Directive article 17; European Parliament legislative resolution of 17 April 2019 on the proposal for a regulation of the European Parliament and of the Council on preventing the dissemination of terrorist content online 2019 [P8_TA-PROV(2019)0421] article 4; CoE, 'Draft Recommendation of the Committee of Ministers to Member States on Promoting a Favourable Environment for Quality Journalism in the Digital Age (7th Draft)' (Council of Europe 2019) <<https://rm.coe.int/msi-joq-2018-rev7-e-draft-recommendation-on-quality-journalism-finalis/168098ab76>>; European Commission, 'Tackling Online Disinformation: A European Approach' (European Commission 2018) COM(2018) 236 final <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0236>> accessed 20 February 2020. See also the role of news media and advertisers as third-party fact-checkers for platforms in the context of disinformation.

²⁸⁷ On the definition of user, see Woods, 'Video-Sharing Platforms in the Revised Audiovisual Media Services Directive' (n 264) 133.

therefore aims to complement the ECD with notification systems which more explicitly target the parties already active on platforms (i.e., users and uploaders), are better designed and easier to use for these parties, and apply to a wider range of content.²⁸⁸ These reporting mechanisms are the basis for four specific actions which platforms may be required to (enable their users to) take. The remainder of this section divides these actions among those which are platform-driven, and those which are user-driven.

4.3.2. Platform-driven measures

The AVMSD firstly demands that platforms take appropriate measures with regard to illegal content. At first glance, this would seem to be a bad match with the AVMSD's focus on organisational control. Platforms' ability to remove content does not result from their organisational control, but rather from the fact that they host content. As article 14 ECD already requires hosting services to remove content if they have actual knowledge of its being illegal, additional obligations, such as an obligation to demote suspected illegal content, could only apply to content which is not (yet) known to be illegal. The AVMSD accordingly does not expect platforms to further restrict the accessibility of illegal content, but focuses on platforms' control over the architecture through which the audience accesses content. It requires them to adapt this design to include the reporting mechanisms outlined in section 4.3.1, relying on article 14 ECD to make platforms remove illegal content.²⁸⁹ This signifies the added responsibility which comes with organisational control: all hosting services must remove illegal content once they are notified but the AVMSD requires platforms to use their higher degree of control in this respect to better enable users to bring said content to their attention. Specifically, by setting explicit rules for the ease-of-use of notification mechanisms, the AVMSD reduces the likelihood that notifications are too vague or unsubstantiated to produce the actual knowledge necessary for article 14 ECD.²⁹⁰

The AVMSD also targets the way in which platforms exercise organisational control more directly by requiring platforms to change the default accessibility and visibility of content which is harmful to minors. Platforms can restrict the accessibility of content in a wide variety of ways. Among other methods, they

²⁸⁸ See also the AVMSD's legislative history. The relationship between the two directives indicates that platforms can exercise organisational control without losing the neutrality required under the ECD. Proposal for a Directive of the European Parliament and of the Council amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services in view of changing market realities (n 282) 3; Angelopoulos (n 260) 34.

²⁸⁹ A takedown obligation was proposed and rejected during the AVMSD's legislative process: European Parliament Committee on the Internal Market and Consumer Protection, 'Opinion of the Committee on the Internal Market and Consumer Protection for the Committee on Culture and Education on the Proposal for a Directive of the European Parliament and of the Council Amending Directive 2010/13/EU on the Coordination of Certain Provisions Laid down by Law, Regulation or Administrative Action in Member States Concerning the Provision of Audiovisual Media Services in View of Changing Market Realities' (European Parliament 2016) 2016/0151(COD) 53 <[http://www.europarl.europa.eu/RegData/commissions/imco/avis/2016/589291/IMCO_AD\(2016\)589291_EN.pdf](http://www.europarl.europa.eu/RegData/commissions/imco/avis/2016/589291/IMCO_AD(2016)589291_EN.pdf)> accessed 17 February 2020.

²⁹⁰ *l'Oréal v. eBay* (n 258) para 122.

can require users to prove that they want or should be able to access certain content, but they can also cut off some of the organisational methods described in section 4.2.3. Instagram for example removes misinformation from its hashtag pages and explore functionality.²⁹¹ Reddit has similarly stopped recommending contentious content to non-subscribers, and additionally requires users to opt in before they view it.²⁹² In all cases, the default restrictions apply to content which does not violate the law or community guidelines, but is nevertheless seen as contentious enough to limit its visibility for the general public.²⁹³

This diversity in platforms' organisational control to restrict the accessibility of content is difficult to capture in legislation. This holds particularly true for when platforms are expected to link accessibility restrictions to the harmfulness of content. The AVMSD accordingly frames its default access restrictions in broad terms. It generally demands that platforms put in place age verification mechanisms, highlighting that the most harmful content should be subject to the strictest access control measures. It similarly requires Member States to encourage self- or co-regulation which effectively reduces children's exposure to advertising for unhealthy foods, without prescribing a specific way in which the visibility of such content must be limited.²⁹⁴ In both cases, the AVMSD does not establish a link between users' reports and platforms' obligation to act, in contrast to illegal content notifications which can trigger removal obligations).

This flexibility matches the variety of ways in which organisational control can be exercised. At the same time, the exact manner in which platforms' obligation to restrict access to content is operationalised, has a significant impact on the public values at stake on platforms. Blocking all the paths through which users can encounter a piece of content, would effectively turn a platform into a hosting provider, and remove its added value as a tool for freedom of expression for contentious but legal content.²⁹⁵ Cutting off only certain paths can also disproportionately affect the ability of specific groups to encounter content. The platform policies outlined above try to do exactly this by limiting content's accessibility for non-

²⁹¹ Facebook, 'Combatting Misinformation on Instagram' (*Facebook*, 16 December 2019) <<https://about.fb.com/news/2019/12/combatting-misinformation-on-instagram/>> accessed 17 December 2019.

²⁹² YouTube, 'Continuing Our Work to Improve Recommendations on YouTube' (*Official YouTube Blog*, 25 January 2019) <<https://youtube.googleblog.com/2019/01/continuing-our-work-to-improve.html>> accessed 3 January 2020.

²⁹³ Certain content can also be promoted over contentious content, see for example CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89).

²⁹⁴ ERGA, 'Children in Audiovisual Media Services - The Effectiveness of Age Verification and Media Literacy' (ERGA 2019) <https://erga-online.eu/wp-content/uploads/2019/05/ERGA-Academy-2018-Workshop-PoM-Effectiveness-of-age-verification-and-media-literacy_03-10-2018.pdf>.

²⁹⁵ *Magyar Kétfarkú Kutya Párt v Hungary* [2020] ECtHR 201/17 para. 87; Matthew Hindman, *The Internet Trap* (Princeton University Press 2018) 24 <<https://press.princeton.edu/books/hardcover/9780691159263/the-internet-trap>> accessed 17 February 2020. The latter explores how even a small obstacle can prevent users from consuming content online

subscribers. In other words, the many different forms of organisational control create ambiguities which must be resolved when the legislation is implemented. This puts added pressure on the underlying governance mechanism through which a platform's organisational responsibilities are operationalised and contested, which is explored in section 4.4.2.

4.3.3. User-driven measures

In addition to restricting the default accessibility of content, the obligations which the AVMSD has established also target the way in which users access and evaluate content. Enabling users to become more active participants in the media system, and make more informed judgments about the content they watch, has a long history in media law.²⁹⁶ This is one way to avoid the impact on public values created when media organisations limit the default accessibility of legal content.²⁹⁷ Transparency is the first and, in some cases, only step to allowing users to become more active participants. It is especially important in the context of advertising, where both consumer and media law require that commercial influences over editorial content are disclosed so that users are not misled.²⁹⁸ Although the AVMSD generally requires platforms to take appropriate measures to comply with its rules on advertising, the only concrete obligation proposed in this context focuses on the transparency of commercial content within programmes or user-generated videos. Platforms must enable uploaders to declare commercial content, and notify the viewer when uploaders use this mechanism or the platform otherwise learns that a video contains commercial communications.²⁹⁹ The AVMSD therefore again requires platforms to facilitate compliance with an existing obligation through making it easier for uploaders to comply with their obligation to notify viewers of commercial influences on their content. In turn, this enables the platform to relay these notifications to users in a more uniform and recognisable fashion.

Platforms' control over the way users access content poses new challenges to the role transparency plays in media law more generally. Because users must rely on the ways in which platforms organise content, simply informing them does not necessarily enable them to access or avoid specific content on a platform. The change in organisational control thus also increases the relevance of obligations which target the way in which users are enabled to access content. By using such tools, users can moreover determine what content they wish to be exposed to without affecting the visibility of content for the general audience.

²⁹⁶ CoE, 'Recommendation on Quality Journalism' (n 287); CoE, 'Recommendation of the Committee of Ministers to Member States on the Protection of Human Rights with Regard to Social Networking Services' (Council of Europe 2012) CM/Rec(2012)4 <https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805caa9b> para. 16.

²⁹⁷ AVMSD 2018 recital 15; CoE, 'Recommendation on Pluralism' (n 124) para. 10.

²⁹⁸ AVMSD 2018 articles 9-11; Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council (UCPD) 2005.

²⁹⁹ AVMSD 2018 articles 28b(2) and 28b(3)(c).

The AVMSD provides for such filters in the form of parental control tools. Like default accessibility restrictions, control tools come in many specific forms.³⁰⁰ Users can for example choose to filter out certain content (as YouTube's restricted mode does by hiding content rated as unsafe for minors) or choose to only filter in content (as YouTube Kids does by gradually allowing access to more content rated as safe for different ages).³⁰¹

Of course, users are already able to exercise influence over the way in which content is organised by following topics, subscribing to uploaders, or searching for keywords. However, the preferences indicated are typically only one signal which is used to organise content according to a non-transparent metric.³⁰² Individual control tools place users in a different position by allowing them more direct control over the content to which they are exposed. Media literacy programs and transparency requirements have long aimed to increase users' ability to navigate media system, and critically evaluate what information to consume and how to process it. Individually controlled curation tools enable users to act on such knowledge as their ability to seek out or avoid content is increasingly mediated by platforms' organisational control.

4.4. Organisational responsibility from the perspective of cooperative responsibility

In contrast to the centralised approach which the AVMSD takes to traditional media actors and other EU law takes towards platforms, the former's approach to organisational responsibility foresees a larger role for the users and uploaders on the platform. It recasts their status from passive actors who must be protected, to participants who are given the tools needed to exercise their influence responsibly.³⁰³ In so doing, the AVMSD adapts its approach to responsibility to the fact that platforms do not exercise full editorial control. The AVMSD's approach to commercial communications serves as an example of this shift. Platforms must comply with traditional advertising rules only with regard to the advertising which they sell, market, or arrange themselves. For other commercial content, platforms are only required to take appropriate measures to comply with advertising rules 'taking into account the limited control exercised'.³⁰⁴

³⁰⁰ Harambam and others (n 70).

³⁰¹ For a critical note, see Benjamin Burroughs, 'YouTube Kids: The App Economy and Mobile Parenting' (2017) 3 *Social Media + Society* 1.

³⁰² DeVito (n 11).

³⁰³ Francisco Javier Cabrera Blázquez and others, 'The Legal Framework for Video-Sharing Platforms' (European Audiovisual Observatory 2018) <<http://book.coe.int/usd/en/european-audiovisual-observatory/7690-iris-plus-the-legal-framework-for-video-sharing-platforms.html>> accessed 3 January 2019; Karine Barzilai-Nahon, 'Toward a Theory of Network Gatekeeping: A Framework for Exploring Information Control' (2008) 59 *Journal of the American Society for Information Science and Technology* 1493. The latter is an example of a similar alteration in gatekeeping theory.

³⁰⁴ The AVMSD complements other rules on advertising. AVMSD 2018 article 28b(2); Ingrid Lambrecht, Valerie Verdoodt and Jasper Bellon, 'Platforms and Commercial Communications Aimed at Children: A Playground under Legislative Reform?' (2018) 32 *International Review of Law, Computers & Technology* 58.

The following section uses the concept of cooperative responsibility to better understand and evaluate how the AVMSD adjusts responsibility to platforms' organisational control. Cooperative responsibility was developed by drawing on insights from literature on risk sharing and the problem of many hands in order to address the fact that multiple stakeholders on platforms contribute to the erosion and realisation of public values. It thus takes account of platforms' lack of full editorial control, and correspondingly does not impose the exclusive responsibility to safeguard public values on platforms. The latter continue to be responsible for actions in their own sphere of influence, such as the processing of user data and the need to take down content which they know is illegal. However, they also have a responsibility to enable the other stakeholders on their service (in the AVMSD's case users and uploaders) to exercise their influence responsibly. This not only requires platforms to put in place the mechanisms required for these stakeholders to exercise their influence in line with public values, but also, crucially, to actively create the conditions for and foster the abilities needed by these stakeholders to do so. This requires a delicate division of responsibilities between the different actors which exercise control on platforms. This division is not set in stone. This is not only because the specific infrastructure through which stakeholders on platforms exercise their influence differs from case to case, but also because part of platforms' task under cooperative responsibility is to actively change the capabilities and infrastructure which determine how users exercise their influence. As a result, cooperative responsibility can take on different forms depending on the conditions under which it is implemented.³⁰⁵

Given the concept's aim of addressing the distributed manner in which control is exercised on platforms, it can be used to bring further clarity and coherence to the AVMSD's approach to organisational control. By definition, an actor who exercises organisational control only controls part of the editorial process.³⁰⁶ Users not only have a large role in producing and publishing the content which is available on platforms, but they can often influence how this content is organised for them and others as well. Acknowledging this influence allows the AVMSD to enable and incentivise users to exercise their influence to safeguard the public values at stake on platforms, rather than building around it by requiring the platform to assume more control. This makes it possible to avoid a situation in which platforms channel users' influence for their own purposes – as is currently often the case –, or are required to increasingly strengthen their control over the content which their users see and upload.³⁰⁷

³⁰⁵ Helberger, Pierson and Poell (n 238).

³⁰⁶ *Editorial Board of Pravoye Delo and Shtetel v Ukraine* [2011] ECtHR 33014/05 para. 63.

³⁰⁷ Tobias Schmid, Laura Braam and Julia Mischke, 'Gegen Meinungsmacht – Reformbedürfnisse Aus Sicht Eines Regulierers' [2020] *Multimedia und Recht* 19; Indrek Ibrus and Ulrike Rohn, 'Sharing Killed the AVMSD Star: The Impossibility of European Audiovisual Media Regulation in the Era of the Sharing Economy' (2016) 5 *Internet Policy Review* <<https://policyreview.info/articles/analysis/sharing-killed-avmsd-star-impossibility-european-audiovisual-media-regulation-era>> accessed 31 October 2018. The former deals with concerns over platforms' opinion power surrounding the recent revision of the Rundfunkstaatsvertrag; the latter focuses more generally on the AVMSD and media concentration.

However, operationalising this responsibility model is a difficult task. It not only requires that users are given the tools which they need, but also that these tools are designed in such a way that users can exercise their responsibility, that the latter are able to develop the capacity to do so, and that a determination can be made of platforms' responsibility when users do not use the tools available to them. An operationalisation of cooperative responsibility which does not take these factors into account, but only gives users the tools with which they can exercise their influence responsibly, is only window dressing. Moreover, it would take a very reductive view of platforms' organisational control, as it would stop at the acknowledgment that platforms can enable their users to determine what content they see, while failing to take account of the fact that platforms also create the infrastructure through and conditions under which users exercise their influence. The following section evaluates these concerns by exploring how the AVMSD operationalises cooperative responsibility in two parts: a front end comprising the tools outlined in section 4.3 through which users can exercise influence directly, and a back end through which more specific choices and the allocation of responsibility between platforms and other stakeholders can be contested.

4.4.1. The front end: adapting channels for user influence

The AVMSD firstly requires platforms to integrate tools into the user interface which allow users to directly exercise influence over content curation. Of course, platforms already offer such tools, e.g., subscribe -, block -, share - and flag buttons. However, they have developed in the context of a significant power imbalance between the user and platform, and are often designed to channel users' input for platforms' own purposes. Flags can be hidden or ambiguous so that users' reports can be converted into justifications for the platform's moderation decisions.³⁰⁸ The AVMSD takes some of these mechanisms, such as flagging and parental control tools, away from the platforms' exclusive control. This modifies the platform-user relationship from one in which the platform channels users' influence for its own purposes, to one in which platforms enable users to safeguard and promote public values.

The changing function has implications for the design of these mechanisms. Accordingly, the AVMSD requires flagging mechanisms and user control tools to be transparent and easy to use. These requirements must be viewed in the light of users' role in the governance system established by the AVMSD. In order to enable users to exercise their influence more responsibly, they must be able to know what they are communicating when they use the tools which the AVMSD makes available to them. One of the goals of the AVMSD was to ensure that platforms use the content standards laid down in EU law rather than their own.³⁰⁹ Users of course do not know what exactly constitutes illegal content under EU

³⁰⁸ Gillespie (n 7); van Dijck, Poell and de Waal (n 117).

³⁰⁹ Proposal for a Directive of the European Parliament and of the Council amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services in view of changing market realities (n 282).

law.³¹⁰ For transparency's sake, a flag referring to concrete behaviour which a user can identify is of more relevance than clarifying that it relates to a standard as defined by EU law.

The AVMSD does not explicitly address platforms' responsibilities in case users do not use the tools which platforms are required to make available. This is potentially problematic, as it increases the likelihood that users are simply put in the position of active consumers who are expected to take responsibility regardless of their capacity or the incentive structure to do so. In certain situations, platforms can be required to assume a more active role when users do not use the available tools. For example, the AVMSD's obligations for the accessibility of harmful content target both platforms and users. Although it does not explicitly address the allocation of responsibility in these cases, the AVMSD's revision has in general moved away from the standpoint that offering users control tools justifies a lower level of responsibility for media organisations. VOD providers have traditionally been subject to less responsibility than broadcasters, in part because they organise content in a way which allows users more choice about what they view than broadcasters do. Their responsibility has been largely equalised in the 2018 revision of the AVMSD.³¹¹ The legislative history indicates that the reason for this lies not in user choice having decreased, but rather in that the increasing importance of VOD services required a higher level of consumer protection, and a more level playing field with traditional broadcasters.³¹² That is, what is essential is not the amount of user choice which is technically available, but the goals of the AVMSD being safeguarded for services on which users increasingly access content. Analogously, platforms may be expected to do more to ensure that minors are not exposed to harmful content as long as users do not use the control tools which are available to them. This is especially true in the context of the harmful content targeted by the AVMSD, as the party whose responsibility it is to use the control tools (the parent), and the party which is affected if these are not used (the minor), are not the same.

In other cases, users' and platforms' responsibilities do not overlap, but complement one another. For example, the AVMSD maintains the prohibition on general monitoring obligations for platforms, built around the privacy and freedom of expression concerns triggered by requiring platforms to assume such broad control.³¹³ The AVMSD therefore fully relies on users and uploaders to flag content which platforms

³¹⁰ Joan Barata, 'New EU Rules on Video-Sharing Platforms: Will They Really Work?' (*Center for internet and Society*, 18 February 2019) <<http://cyberlaw.stanford.edu/blog/2019/02/new-eu-rules-video-sharing-platforms-will-they-really-work>> accessed 10 June 2019; Weinand (n 36) 731.

³¹¹ Some differences remain, especially with regard to European works, advertising, and the right of reply.

³¹² European Commission, 'Ex-Post REFIT Evaluation of the Audiovisual Media Services Directive 2010/13/EU' (European Commission 2016) COM(2016) 287 final <<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016SC0170&from=EN>> accessed 9 June 2019; Weinand (n 284) 274. Weinand argues that the distinction makes less sense in the light of increasing convergence.

³¹³ Aleksandra Kuczerawy, *Intermediary Liability and Freedom of Expression in the EU: From Concepts to Safeguards* (Intersentia 2018) <<https://intersentia.com/en/intermediary-liability-and-freedom-of-expression-in-the-eu-from-concepts-to-safeguards.html>> accessed 15 July 2019.

are expected to remove, restrict access to, or make transparent. Platforms' role is in this a case restricted to enabling and incentivising users to fulfil their responsibility. Of course, users' actual obligation to use the tools available to them is highly contextual. Consider that, while users' responsibility to report illegal content is very limited, uploaders have a well-established legal responsibility to make advertising recognisable under media and consumer law.³¹⁴ Article 28b(3)(b) AVMSD moreover requires platforms to include and apply its rules on advertising recognisability in their terms of service. Failing to easily declare advertising through the AVMSD's tools can therefore not only factor into the assessment of the uploaders' violation of their own responsibility, it can also require the platform to conclude that the uploader has violated its terms of service.

More fundamentally, platforms' responsibility is not separate from whether users can and do use the tools made available. Platforms' obligation to enable users to exercise their influence responsibly also requires them to ensure that users can develop the capacity to do so. The AVMSD accordingly demands that platforms provide for effective media literacy measures and raise users' awareness of these measures. Doing so requires the platform to not only promote the general media skills necessary for the information ecosystem which they provide, but also to inform users about the specific tools which they offer. Platforms' obligation to promote the media literacy of their users is further complemented by a more general obligation to develop media literacy on the part of the Member States which have set up a governance mechanism relying on users to take a more active role.³¹⁵ Users' passive approach on platforms is therefore not taken as a given. Nevertheless, acclimatising the public to a new information environment will be a long process, and one which will not be evenly distributed among all users.³¹⁶ That is, although users' passive approach is not considered an established fact, the extent to which they can be expected to assume responsibility will change over time.

4.4.2. The back end: operationalising and contesting responsibility

Directly involving the other stakeholders which are able to exercise influence on platforms is vital, but not sufficient in itself. Enabling them to exercise their influence in line with public values triggers a number of more specific normative choices. Broadly defined normative standards such as hate speech or content which is harmful to minors must be broken down into concrete elements which a user can identify.³¹⁷ Platforms' responsibility to act on the signals provided to them must be operationalised and tailored to

³¹⁴ See on influencers' responsibility especially Catalina Goanta and Sofia Ranchordas, 'The Regulation of Social Media Influencers: An Introduction', *The Regulation of Social Media Influencers* (Elgar 2019) <<https://www.elgaronline.com/view/edcoll/9781788978279/9781788978279.xml>> accessed 17 February 2020.

³¹⁵ AVMSD 2018 articles 33a, 28b(3)(j), recital 59.

³¹⁶ Robert Tomljenović, 'Regulatory Authorities for Electronic Media and Media Literacy Comparative Analysis of the Best European Practices' (2018) <<https://rm.coe.int/regulatory-authorities-for-electronic-media/1680903a2a>> accessed 1 April 2019.

³¹⁷ Weinand (n 284) 291; Barata (n 311).

the specific ways in which organisational control is exercised. Crucially, platforms' responsibility when users remain passive, must be determined.

These aspects are difficult to set down in legislation. Platforms exercise organisational control in diverse and constantly evolving ways, and the AVMSD explicitly aims to increase users' capacities through media literacy programs. Moreover, there is a connection between the platform's infrastructure which the AVMSD means to change, and the audience which is expected to use it. Users adapt to changes in the infrastructure of the platform, which in turn adapts to its changing userbase.³¹⁸ For example, although Twitter's 'favourite' button was first introduced to allow users to bookmark tweets, it was changed to a 'like' button as users began to use it to signal agreement.³¹⁹ In short, the exact form which cooperative responsibility takes is not static, but evolves in the light of the changing behaviour and capacities of the different stakeholders. Operationalising it therefore requires not only that mechanisms are put in place for users and uploaders to exercise their influence responsibly, but also that the operationalisation of these measures, as well as the overarching standards, can be openly negotiated and contested.³²⁰

Public oversight over and collaboration in the processes through which platforms organise content first of all necessitates more transparency regarding the specific way in which platforms standards are operationalised.³²¹ The AVMSD accordingly calls for platforms to explain what effect they have given to the user notifications which lie at the basis of the regulatory system described in section 4.3. Such transparency has long been argued to be necessary to hold platforms accountable for the way in which they curate content, and can provide substance for a debate about whether a platform is over- or under-restrictive in its moderation.³²² However, transparency alone will not produce accountability if the parties receiving the information are not able to exert the pressure necessary for the platform to change its policies.³²³

³¹⁸ Peter Nagy and Gina Neff, 'Imagined Affordance: Reconstructing a Keyword for Communication Theory' (2015) 1 *Social Media + Society* 1; Jean Burgess and Joshua Green, *YouTube: Online Video and Participatory Culture* (Polity Press 2018).

³¹⁹ For a broader perspective, see Taina Bucher and Anne Helmond, 'The Affordances of Social Media Platforms', *The SAGE handbook of social media* (Sage Publications 2017).

³²⁰ Lorna Woods, 'The Carnegie Statutory Duty of Care and Fundamental Freedoms' (Carnegie UK trust 2019) <<https://www.carnegieuktrust.org.uk/blog/the-statutory-duty-of-care-and-fundamental-freedoms/>>; van Dijck, Poell and de Waal (n 117) 139.

³²¹ van Dijck, Poell and de Waal (n 117) 70.

³²² van Dijck, Poell and de Waal (n 117) 149; Lubos Kuklis, 'European Regulation of Video-Sharing Platforms: What's New, and Will It Work?' (*Media@LSE*, 29 November 2018) <<https://blogs.lse.ac.uk/medialse/2018/11/29/european-regulation-of-video-sharing-platforms-whats-new-and-will-it-work/>> accessed 26 November 2019.

³²³ M Ananny and K Crawford, 'Seeing without Knowing: Limitations of the Transparency Ideal and Its Application to Algorithmic Accountability' (2016) 20 *New Media & Society* 973.

The AVMSD provides the public with a number of ways to contest the operationalisation and application of platforms' responsibilities under the AVMSD. It firstly enables individual users to contest the measures which a platform takes under the AVMSD through internal complaint mechanisms, as well as in and out of court.³²⁴ The exact scope of these rights is fragmented and unclear.³²⁵ This holds particularly true for the removal of content, which strictly speaking falls under the ECD rather than the AVMSD. As section 4.3.2 has outlined, however, the AVMSD is intended to complement the ECD, specifically relying on the latter to order the removal of content reported as a result of the former. More fundamentally, article 28b(3) requires every appropriate measure imposed on platforms to strike a careful balance between all interests and rights involved, including those of the initial creator or uploader and the general interest. This supports the notion that users can assert their freedom of expression rights when content is removed, or has its accessibility restricted through the mechanisms harmonised by the AVMSD.³²⁶

Asserting their rights not only enables users to obtain effective protection in cases where their rights are violated, but also allows them to contest how the overarching standard should be operationalised in specific cases.³²⁷ The complaint - and out of court redress mechanisms which the AVMSD provides moreover enable users to contest the ways in which the AVMSD's provisions regarding illegal and harmful content are implemented and applied by raising a complaint or dispute, without the specific requirement that they assert their rights. This broader function of individual redress mechanisms is especially important given the amount of moderation decisions taken on platforms, not all of which are in themselves significant enough to motivate users to contest them.

Nevertheless, not all decisions taken in the implementation and application of the AVMSD are so apparent or impactful that individuals can or will contest them. These decisions are left to the implementation process where the AVMSD encourages and prefers co-regulation.³²⁸ This ties into broader calls in the literature and CoE recommendations for a more prominent role for other stakeholders in algorithmic and platform governance.³²⁹ The role of these parties differs from the role of individual users. In contrast to individual users who contest a standard following a specific decision, actors such as civil society

³²⁴ AVMSD Arts. 28b(3)(i)), 28b(7), 28b(8).

³²⁵ Commercial communications are not covered. The internal complaint mechanisms pertain to the implementation of the notification mechanisms and platforms' actions relating to harmful content; out of court disputes concern the application of articles 28b(1) and (3); users can assert their rights pursuant to articles 28b(1) and (3). Barata (n 311); Lubos Kuklis, 'AVMSD and Video-Sharing Platforms Regulation: Toward a User-Oriented Solution?' (*LSE Media Policy Project*, 28 May 2019) <<https://blogs.lse.ac.uk/mediapolicyproject/2019/05/28/avmsd-and-video-sharing-platforms-regulation-toward-a-user-oriented-solution/>> accessed 10 June 2019.

³²⁶ See analogously *UPC Telekabel Wien* [2014] CJEU ECLI:EU:C:2014:192 para. 57.

³²⁷ CoE, 'Recommendation on Intermediaries' (n 20) para. 2.5.6.

³²⁸ Hab Klafkowska-Wasniowska, 'Soccer or Football: The Level Playing Field Idea for the European Single Market in the Audiovisual Media Services' (2018) 26 *Michigan State International Law Review* 296, 326.

³²⁹ CoE, 'Recommendation on Quality Journalism' (n 287) para. 2.2.3; van Dijk, Poell and de Waal (n 117) 151.

organisations play a role in shaping the overarching standard as representatives of particular interests of users or the public.³³⁰ In doing so, they can increase democratic control over the way in which public values are affected and realised on platforms in a broader sense.³³¹ However, they also possess thorough institutional knowledge about the normative issues associated with editorial decision-making, and the way in which these normative issues can be translated into organisational culture and decision-making. Media providers have long experience with the practical choices involved in deciding among others issues what content is harmful to minors, and what this means for its accessibility. Along similar lines, academia possesses empirical data on for example what content is harmful to minors' psychological development, how more legal/normative concepts such as hate speech can best be understood, and – increasingly – how such legal terms can be translated into a metric which algorithms can use.

The information needs of parties which assess the operationalisation of a platform's responsibility are different from the information needs of the general public. The AVMSD accordingly requires national regulators to put in place mechanisms to assess the appropriateness of the measures taken by platforms. Moreover, it emphasises that regulators and co-regulatory schemes ought to provide for a way to monitor the effectiveness of the governance system which it has set up, and 'allow for the possibility of state intervention in the event of its objectives not being met.'³³² In other words, continuously monitoring whether the objectives of the AVMSD are being achieved following changes in the platform infrastructure is key to safeguard public values on platforms. This enables an iterative process by which the operationalisation of the responsibilities of the different stakeholders can be adapted in keeping with their evolving capacities and behaviour.³³³

4.5. Conclusion

Although organisational control allows platforms to have a significant impact on public values, it does not afford them the kind of knowledge and control which traditional publishers have. Instead, other stakeholders such as users and uploaders have an inherently large influence over the way in which public values can be realised on platforms. The responsibility which the AVMSD attaches to organisational control accordingly not only targets platforms' responsibility for their own actions, but also requires platforms to enable others on their service to exercise their influence in line with public values. Thereby,

³³⁰ On transnational governance initiatives between NGO's, firms, and governments, see Robert Gorwa, 'The Platform Governance Triangle: Conceptualising the Informal Regulation of Online Content' (2019) 8 Internet Policy Review <<https://policyreview.info/articles/analysis/platform-governance-triangle-conceptualising-informal-regulation-online-content>> accessed 10 November 2019.

³³¹ van Dijck, Poell and de Waal (n 117) 71.

³³² AVMSD 2018 recital 14.

³³³ ERGA, 'A Framework for Effective Co-Regulation of Video Sharing Platforms' (ERGA 2018) 2 <<http://erga-online.eu/wp-content/uploads/2018/11/ERGA-2018-09-SG4-Framework-for-Effective-CR-of-VSPs.pdf>> accessed 3 January 2020.

the AVMSD moves away from its traditional centralised approach to editorial responsibility. This opens up a number of questions on the way in which the AVMSD's new approach to responsibility can be understood and should be operationalised.

Cooperative responsibility can help to identify and answer these questions, as it aims to address the distribution of control on platforms. Concerns revolve around whether users employ the tools available to them, as well as which conditions platforms have to create for users to assume responsibility, and how platforms' responsibilities can continuously be adapted as users' capabilities change. In several instances, the AVMSD triggers these questions but does not fully engage with them. This creates the possibility that users will again be expected to become active consumers without the conditions and capacities necessary to do so, having been put in place. This risk is partially mitigated by the fact that the AVMSD establishes the procedural mechanisms through which the appropriate allocation and operationalisation of responsibility can be contested. This process requires however that the implications of the AVMSD's shift away from centralised editorial control to distributed organisational control on platforms are fully recognised.

Doing so would enable the AVMSD to draw on calls in the literature for a stronger focus on the influence and responsibility of other stakeholders on the platform, the platform architecture which shapes their influence, and an iterative regulatory process which can adapt to changes in both.³³⁴ The lessons learnt in doing so provide essential practical information for not only the AVMSD, but also future media and platform law. Even though the AVMSD recognises platforms' organisational control, it does not yet fully address the responsibilities which come with platforms' own increasingly sophisticated algorithmic organisation of content, or the role of all stakeholders on platforms – including not only users and uploaders, but also advertisers, among others. However, by putting forward an alternative approach to responsibility, it broadens the policy options as the Commission builds on existing platform regulation with a Digital Services Act which better matches platforms' knowledge and control.

³³⁴ Helberger, Pierson and Poell (n 238); Woods, 'The Carnegie Statutory Duty of Care and Fundamental Freedoms' (n 321).

5. Individuals' role and right to an explanation about news personalisation

5.1. Introduction

Citizens' online lives are shaped by algorithms which tailor their search results, create their credit scores, or sort their news.³³⁵ Yet, their awareness of how, why, or even if they are affected by the algorithms which judge them, is typically limited and sometimes mistaken.³³⁶ Moreover, they have traditionally lacked easy access to the information needed to remedy this situation. This is problematic. A lack of algorithmic transparency can hide discrimination, enable manipulation, or cause individuals to blindly (dis)trust algorithmic decision-making. However, making algorithms transparent can be costly, and organisations have few incentives to show users how their algorithms engage in manipulation or discrimination.³³⁷ This incentive-structure has fuelled increasing calls for regulation.³³⁸ In particular, an individual transparency mechanism in the GDPR which entitles users to information about these automated processes, commonly referred to as the right to an explanation, has recently been seized upon to combat the lack of algorithmic transparency.³³⁹

However, which kind of individual transparency (if any) is a suitable policy tool to regulate algorithms remains a contested issue. Many critiques take an instrumental approach to transparency, arguing that especially with regard to private parties, it is primarily valued because of the goals which it furthers. Making more information available does not automatically advance these objectives, as users often lack

³³⁵ This chapter is a copy of the following article: MZ van Drunen, N Helberger and M Bastian, 'Know Your Algorithm: What Media Organizations Need to Explain to Their Users about News Personalization' (2019) 9 International Data Privacy Law 220. With the exception of minor textual revisions and changes made to standardise the dissertation's spelling and reference style, the content remains unchanged.

³³⁶ See for example the 2018 Reuters Institute report, which found that only 29 per cent of respondents answered correctly that an algorithm takes most of the individual decisions regarding which stories to include in someone's newsfeed. Nic Newman and others, 'Reuters Institute Digital News Report 2018' (Reuters Institute for the Study of Journalism 2018) 34; Emilee Rader and Rebecca Gray, 'Understanding User Beliefs About Algorithmic Curation in the Facebook News Feed', *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (ACM Press 2015) <<http://dl.acm.org/citation.cfm?doid=2702123.2702174>> <http://dl.acm.org/citation.cfm?id=2702123.2702174>>.

³³⁷ Jenna Burrell, 'How the Machine "Thinks": Understanding Opacity in Machine Learning Algorithms' (2016) 3 Big Data & Society <<https://doi.org/10.1177/2053951715622512>> accessed 20 September 2018.

³³⁸ In the context of the media, see Diakopoulos and Koliska (n 153).

³³⁹ Electronic Communications Code 95.

the ability or motivation to process complex technical information.³⁴⁰ Not only the form, but also the content of the information which is to be communicated, can be unsuitable to achieve the desired aim. Disclosures may not be relevant to the particular context in which individuals try to exercise their rights, may be shown not to enhance trust, or may be unable to produce accountability where individuals are unable to exert pressure on the party which should be held accountable.³⁴¹ Disregarding the connection between a disclosure and the goal it pursues creates the risk of a transparency fallacy, in which transparency functions as an ineffective solution which wards off stronger regulation.³⁴²

The argument made in this chapter is that the purposes of the right to an explanation and the information which is suitable to further them, cannot be assessed in isolation. Instead, like other general open transparency norms in EU law, the right to an explanation of automated decision-making must be interpreted in the context of the decision-making which is to be explained.³⁴³ This context shapes the objectives which the right to an explanation aims to promote. An algorithm which decides on credit applications, for example, puts different rights at risk than an algorithm which determines what news an individual is able to see. If the right to an explanation is expected to be a suitable safeguard against threats to individuals' rights and interests, such contextual risks must be taken into account. Existing sector-specific literature already contains well-developed insights on the exact nature of these risks, and the corresponding suitable disclosures.³⁴⁴ Drawing on these insights provides a better normative foundation for the information required by the right to an explanation, and ensures consistency between data protection law and the public values which are specific to the many different contexts in which data protection law applies.

In order to operationalise the context-specific approach, this chapter focuses on news personalisation algorithms, a form of profiling which uses personal data to tailor the selection, content, or layout of news

³⁴⁰ David Albert Heald, 'Varieties of Transparency' in Christopher Hood and David Heald (eds), *Transparency: The Key to Better Governance?: Proceedings of the British Academy 135* (Oxford University Press 2006); Matteo Turilli and Luciano Floridi, 'The Ethics of Information Transparency' (2009) 11 *Ethics and Information Technology* 105; Lilian Edwards and Michael Veale, 'Slave to the Algorithm: Why a Right to an Explanation Is Probably Not the Remedy You Are Looking For' (2017) 16 *Duke Law & Technology Review* 18, 39.

³⁴¹ Ananny and Crawford (n 324).

³⁴² Edwards and Veale (n 341).

³⁴³ Article 7 UCPD, for example, prohibits misleading omissions, and covers information requirements ranging from the labelling of advertisements to the disclosure of shipping costs.

³⁴⁴ The Council of Europe's recommendation on profiling, referred to in the Commission's proposal for article 22 GDPR, similarly notes 'that it is desirable to assess the different situations and purposes in a differentiated manner'. CoE, 'Recommendation of the Committee of Ministers to Member States on the Processing of Personal Data in the Context of Employment' (Council of Europe 2015) CM/Rec(2015)5 <https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805cdd00>; Andrew Selbst and Julia Powles, 'Meaningful Information and the Right to Explanation' (2017) 7 *International Data Privacy Law* 233.

stories to an individual's characteristics or preferences.³⁴⁵ Such algorithms are increasingly adopted by the legacy media, and are already at the core of the social media platforms where individuals spend much of their time.³⁴⁶ This allows the right to an explanation to provide protection with regard to algorithms which play a large role in individuals' daily lives and which have the potential to significantly affect their fundamental rights, in particular their right to receive information. At the same time, legal obligations regarding the use of algorithms, including the disclosures required under the right to an explanation, must stay within the limits set by freedom of expression. A rich history exists in media law and literature concerning disclosures which stay within these limits while allowing individuals to safeguard their own interests, address declines in trust, and promote accountability – objectives which feature heavily in the GDPR, but are understood and achieved in a particular way in the media.

In order to understand why and how the right to an explanation needs to be tailored to the context in which an algorithm is implemented, this chapter asks what concrete disclosures are necessary to further the goals of the right to an explanation in the context of news personalisation. The context-specific approach is developed in three steps. Firstly, existing work on the right to an explanation is reviewed to identify the limits of the right, and make the argument why a contextual approach is necessary to understand which disclosures are suitable to advance its aims. Secondly, the purposes of the right to an explanation are analysed, including how they are understood in the context of the media. Finally, literature on media and algorithmic transparency is drawn on to develop a conceptual framework of disclosures which are suitable to further the goals of the right to an explanation in the context of news personalisation.

5.2. The right to an explanation: consensus and gaps

To understand what the right to an explanation requires in a specific context, it is first necessary to outline its more general applicability and limits. The right to an explanation is used as a catch-all term for the provisions in the GDPR which give users a right to information about the logic and consequences of automated decisions.³⁴⁷ Iterations of the right can be found in articles 13-15 and 22 GDPR. Articles 13(2)(f), 14(2)(g) and 15(h) uniformly specify that data subjects are to be informed of 'the existence of automated

³⁴⁵ Thurman and Schifferes (n 44).

³⁴⁶ Nic Newman, 'Journalism, Media, and Technology Trends and Predictions 2018' (2018) <<https://reutersinstitute.politics.ox.ac.uk/our-research/journalism-media-and-technology-trends-and-predictions-2018>>.

³⁴⁷ Coined by Goodman and Flaxman in reference to recital 71, it is now used more broadly to refer to the provisions in the GDPR which concern transparency in automated processing. Bryce Goodman and Seth Flaxman, 'European Union Regulations on Algorithmic Decision-Making and a "Right to Explanation"' (2016) 38 *AI Magazine* 50; Selbst and Powles (n 345); Sandra Wachter, Brent Mittelstadt and Luciano Floridi, 'Why a Right to Explanation of Automated Decision-Making Does Not Exist in the General Data Protection Regulation' (2017) 7 *International Data Privacy Law* 76; Gianclaudio Malgieri and Giovanni Comandé, 'Why a Right to Legibility of Automated Decision-Making Exists in the General Data Protection Regulation' (2017) 7 *International Data Privacy Law* 243.

decision-making, including profiling, referred to in article 22(1) and (4) and, at least in those cases, meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject.’

Article 22(1) gives users a right ‘not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her.’ While the wording is ambiguous, the provision is commonly interpreted as a prohibition, as opposed to a right which needs to be actively invoked.³⁴⁸ Article 22(3) sets down that safeguards are put in place when this prohibition does not apply because the decision is necessary for a contract or based on explicit consent. Recital 71 clarifies that the right ‘to obtain an explanation of the decision reached after such assessment’ may be one such safeguard. Additionally, Mendoza and Bygrave argue that the right to information about a decision is also necessary for the effective exercise of the right to contest it, as provided in article 22(3) GDPR.³⁴⁹

Much has been written about the conditions under which the right to an explanation becomes applicable. The intent of this chapter is not to relitigate that debate, or explore the applicability of the GDPR more generally. Instead, it assumes that news personalisation – like online behavioural advertising – can likely fall under the relevant legislative provisions in certain circumstances.³⁵⁰ On that basis, it will assess what specific kinds of information need to be communicated about news personalisation to further the goals of the right to an explanation.

³⁴⁸ Article 29 Working Party, ‘Guidelines on Automated Individual Decision-Making and Profiling for the Purposes of Regulation 2016/679 (WP251 Rev.01)’ (2018) 19 <http://ec.europa.eu/newsroom/article29/item-detail.cfm?item_id=612053>; Isak Mendoza and Lee A Bygrave, ‘The Right Not to Be Subject to Automated Decisions Based on Profiling’ in TE Synodinou and others (eds), *EU Internet Law* (Springer International Publishing 2017) <http://link.springer.com/10.1007/978-3-319-64955-9_4>; BC van Breda, ‘Profiling in de AVG: nieuwe regels, voldoende bescherming?’ [2017] *Computerrecht* 224 <<https://www.navigator.nl/document/id2261c6083ed0470689cb260c6f1fc7b/computerrecht-profiling-in-de-avg-nieuwe-regels-voldoende-bescherming>> accessed 25 June 2021; Bryan Casey, Ashkon Farhangi and Roland Vogl, ‘Rethinking Explainable Machines: The GDPR’s “Right to Explanation” Debate and the Rise of Algorithmic Audits in Enterprise’ (2019) 34 *Berkeley Technology Law Journal* 143, 14.

³⁴⁹ Mendoza and Bygrave (n 349); Article 29 Working Party (n 349).

³⁵⁰ Article 29 Working Party (n 349) 22. See also the suggestion that profiling can ‘undermine [data subjects’] ability to choose, for example, ... newsfeeds’ on page 5 of the same guidelines.

5.2.1. The information to which data subjects are entitled: indications and limits

Neither the provisions themselves nor the relevant recitals indicate to what concrete information data subjects are entitled under their right to an explanation.³⁵¹ As a result, scholars are faced with the difficult task of determining what information is ‘meaningful’, and which (transparency) measures are ‘suitable’. There has been some debate as to whether suitable measures include a transparency requirement at all. The examples provided in article 22 itself do not explicitly require any disclosures, and the recital which refers to the need for an explanation is nonbinding.³⁵² Recitals can play, and have played, an important role in the interpretation of EU (data protection) law, however. While the Article 29 Working Party (A29WP) appears careful not to state explicitly that article 22(3) requires an explanation in all cases, it emphasises the vital nature of transparency as an appropriate safeguard and notes that recital 71 interprets suitable safeguards as always including a right to obtain an explanation.³⁵³ This chapter therefore operates under the assumption that article 22 can institute transparency requirements, and is especially likely to do so where such requirements are suitable to safeguard users’ rights and the effectiveness of EU law.³⁵⁴

The breadth of the term ‘meaningful’ makes it difficult to determine what information it covers. Different language versions of the term have provided a useful first indication as to its meaning. Several authors have observed that the term can be understood as ‘comprehensible,’ but that other language versions of the GDPR reflect different aspects of the term, namely significant and useful.³⁵⁵ As article 12(1) already stipulates that any information in the relevant articles is communicated to users in such a way that they can understand it, the information must also be significant and/or useful if the term ‘meaningful’ is to have any added value.

This raises a follow-up question: meaningful or suitable for what? On this point, article 22 is refreshingly clear: measures must at least be suitable ‘to safeguard the data subject's rights and freedoms and

³⁵¹ This issue was also flagged in the deliberations, most bluntly by the Slovak delegation: ‘It is not clear for us at all, so we appreciate clearer reformulation of this part in the way which [sic] could provide better and stricter interpretation.’ Council of the European Union, ‘Comments from the Slovak Republic on Articles 11-27 of the Draft General Data Protection Regulation’ (Council of the European Union 2014) 14147/12 ADD 1 <<http://data.consilium.europa.eu/doc/document/ST-14147-2012-ADD-1/en/pdf>>.

³⁵² Wachter, Mittelstadt and Floridi (n 348); Margot E Kaminski, ‘The Right to an Explanation, Explained’ (2019) 34 Berkeley Technology Law Journal 189. for a different perspective.

³⁵³ Article 29 Working Party (n 349) 27; Michael Veale and Lilian Edwards, ‘Clarity, Surprises, and Further Questions in the Article 29 Working Party Draft Guidance on Automated Decision-Making and Profiling’ (2018) 34 Computer Law & Security Review 398.

³⁵⁴ Koen Lenaerts and Jose A Gutierrez-Fons, ‘To Say What the Law of the EU Is: Methods of Interpretation and the European Court of Justice’ (2013) 20 Columbia Journal of European Law 3, 20.

³⁵⁵ Malgieri and Comandé (n 348) 257. By contrast, ‘suitable’ is generally translated in comparable ways: *angemessene* (German), *appropriées* (French), *appropriate* (Italian), *adecuadas* (Spanish), *właściwe* (Polish), *corespunzătoare* (Romanian), *passende* (Dutch).

legitimate interests.’ Selbst and Powles advocate a functional approach, arguing that information should at a minimum enable data subjects to exercise their rights under the GDPR and human rights law.³⁵⁶ Other scholars also indicate other goals, such as accountability and trust.³⁵⁷ The contextual nature of these goals and the information which is suitable to further them, is explored in section 5.3 and 5.4 respectively.

What information users are entitled to may also depend on the time at which information must be communicated. Wachter, Mittelstadt and Floridi maintain that the law cannot require that a specific decision is explained before it has been taken. Information which must be communicated before data is processed, can therefore only concern the algorithm in general, and not its specific output.³⁵⁸ Selbst and Powles point out that this distinction is not quite that stark with regard to deterministic models, as the specific decision which they will take, can be predicted as soon as the input for that decision is known – and as such before a final decision takes place. Information about the model will therefore allow users to understand specific decisions, and controllers can explain individual future decisions as long as they know the input which they will be based on.³⁵⁹ However, where users lack the time or understanding necessary to infer information about specific decisions from the model, explanations of individual decisions will have an added value and increase the likelihood of the rights provided by the GDPR being effective in practice.

Timing is not mentioned explicitly in the provisions which constitute the right to an explanation. However, recital 71’s reference to an explanation after an assessment, and transparency’s function as prerequisite for the right to object, both provide a strong indication that article 22 sets forth that users also have access to information after a decision concerning them has been taken. By contrast, articles 13 and 14 link the moment when data subjects must be informed to the moment when their data is acquired.³⁶⁰ As such, they will often require that users are informed before the processor knows what data will be used in a specific future decision. Finally, article 15 is triggered upon users’ requests; as such, it could apply at any point in time after their data is collected. In practice, data subjects would likely invoke the right after being confronted with a decision which affects them particularly negatively. Nevertheless, the A29WP asserts that, while article 15 allows a user to become aware of a decision, it does not entitle him to an explanation of the factors which underlie that particular decision.³⁶¹ This considerably lowers the chances of article

³⁵⁶ Selbst and Powles (n 345) 236.

³⁵⁷ Kaminski (n 353); Tae Wan Kim, ‘Informational Privacy, A Right to Explanation, and Interpretable AI’, *IEEE Privacy-Aware Computing 2018* (IEEE Xplore 2018) <<https://ieeexplore.ieee.org/document/8511831>>.

³⁵⁸ Wachter, Mittelstadt and Floridi (n 348) 83.

³⁵⁹ Selbst and Powles (n 345) 239–241.

³⁶⁰ Art. 13 requires that information should be communicated as soon as data is collected from the data subject. Art. 14(a)-(c) applies when data is acquired from a third party, and provides for a more flexible timeframe, which the A29WP interprets as having a maximum limit of one month after data is acquired. Article 29 Working Party, ‘Guidelines on Transparency under Regulation 2016/679 (WP260 Rev.01)’ (2018) 16 <http://ec.europa.eu/newsroom/article29/item-detail.cfm?item_id=622227>.

³⁶¹ Article 29 Working Party (n 349) 25–27; Veale and Edwards (n 354) 399.

15(h) providing any added value with regard to the information about the algorithm which must be provided.³⁶²

A number of concrete information requirements have been suggested in the context of these indications and limits. Disclosure of the source code is used as an example of information which is not required by the right to an explanation more often than it is seriously proposed. Indeed, the costs of its disclosure seem to outweigh its contribution to the goals of the right to an explanation.³⁶³ Proposed disclosures are typically more limited and more easily understandable. They include the data which the algorithm takes into account and how it is weighted, details about the profile which it is used to construct, and what the algorithm aims to do.³⁶⁴ In particular the (weighting of) factors and input data are commonly proposed as ways to better explain individual decisions as well. With regard to the consequences which must be explained, most opt for concrete ways in which the algorithm might impact on the data subject in the future, such as the potential ineligibility for a loan and an increased insurance premium, or broader information on an algorithm's purposes or statistical effect.³⁶⁵

5.2.2. A contextual approach to the right to an explanation

The discussion above has provided useful insights into the information which can be required under the right to an explanation. However, why (only) these specific disclosures are necessary to meet the requirements and further the goals of the right to an explanation, is not always clarified. Moreover, the argument that a specific list of information must always be communicated to users assumes that the right to an explanation compels the same kind and level of transparency regardless of context. This assumption is valid when different algorithms have shared characteristics which create similar problems. As long as algorithms produce inaccurate results, for example, transparency about their output can promote accountability.

However, the decision-making processes which algorithms now automate traditionally fell under open norms and sector-specific transparency policies tailoring the information which must be communicated

³⁶² This in turn raises questions with regard to article 15's recital 63, which contains an exception for 'trade secrets or intellectual property and in particular the copyright protecting the software' which is omitted in articles 13 and 14. If article 15(h) does not entitle users to additional information, the recital is either irrelevant or applies to other information which must be communicated under article 15.

³⁶³ When source code is mentioned in the context of the right to an explanation, it is to mention the limited usefulness of its disclosure to data subjects or its incompatibility with trade secrets. Interestingly, the A29WP does not categorically exclude this possibility. Selbst and Powles (n 345) 239; Kaminski (n 353); Article 29 Working Party (n 349) 25.

³⁶⁴ Wachter, Mittelstadt and Floridi (n 348); Article 29 Working Party (n 349) 16; Maja Brkan, 'AI-Supported Decision-Making under the General Data Protection Regulation', *Proceedings of the 16th international conference on Artificial intelligence and law* (ACM 2017) 5 <<https://doi.org/10.1145/3086512.3086513>>; Edwards and Veale (n 341) 55.

³⁶⁵ Mendoza and Bygrave (n 349) 93; Malgieri and Comandé (n 348) 258; Wachter, Mittelstadt and Floridi (n 348) 84.

to the unique characteristics of specific sectors. Glossing over these differences with a uniform approach to the right to an explanation would undermine the effectiveness of the right. In other words, while the GDPR may aim for a minimum level of protection across sectors, this outcome cannot be realised with uniform measures. Instead, open norms such as the right to an explanation must be connected to the context in which the algorithm is implemented. In order to facilitate this process, overarching discussions of the right must increasingly be complemented by discussions of how it should be understood in specific sectors.

The right to an explanation's text and goals support such an approach. Because different algorithms affect different rights and interests, the information which is meaningful or suitable to safeguard these rights and interests, is inherently contextual. This can be illustrated by comparing the different goals pursued by transparency in radically different sectors, such as the media and self-driving cars. For the media, transparency regarding the (commercial) source of content has traditionally been an essential way of allowing the audience to independently evaluate the information which shapes their opinions. This concern is largely absent from discussions about self-driving cars, where information which allows an accurate judgment of their safety is prioritised. That is, specific information which is relatively trivial in one context may be vital in another.

Not only do different contexts prioritise different purposes of transparency, the same aim can also be understood and attained differently depending on the context. The role of trust in the algorithms which power self-driving cars and news personalisation again demonstrates this difference. Both kinds of algorithms benefit from being perceived as trustworthy, as individuals have to be willing to be vulnerable to the potential negative consequences of relying on them without being able to control or monitor them.³⁶⁶ However, because they can impact individuals' lives in very different ways, they expose users to very different vulnerabilities. Definitions of trust in the media typically focus on the media's task to select the relevant facts and topics to report to users.³⁶⁷ This type of trust is irrelevant in the context of self-driving cars. Similarly, different characteristics of the trustee can also be relevant to varying degrees depending on the context. If the risk of relying on an algorithm is high, trust in its ability to perform well is of great importance. Conversely, if an algorithm can perform well on a low-risk task, while at the same

³⁶⁶ Kevin Anthony Hoff and Masooda Bashir, 'Trust in Automation: Integrating Empirical Evidence on Factors That Influence Trust' (2015) 57 *Human Factors* 407.

³⁶⁷ Matthias Kohring and Jörg Matthes, 'Trust in News Media: Development and Validation of a Multidimensional Scale' (2007) 34 *Communication Research* 231; Katherine M Grosser, 'Trust in Online Journalism' (2016) 4 *Digital Journalism* 1036.

time exploiting another vulnerability of the person who uses it, trust in its integrity can become highly relevant.³⁶⁸

Finally, different contexts involve divergent regulatory constraints which determine the scope and content of transparency obligations. In the context of news personalisation, the freedom of expression must particularly be balanced with the right to data protection to minimise conflicts between the rights. To that end, article 85 GDPR requires Member States to provide for derogations from certain provisions of the GDPR, including those which constitute the right to an explanation, insofar as strictly necessary to safeguard the freedom of expression.³⁶⁹ For example, under certain conditions, journalists may need to be exempted from the obligation to disclose their identity or notify data subjects about the source from which their personal data was obtained, in order to continue to be able to conduct investigative journalism.³⁷⁰ Explaining news personalisation may also create new tensions with the freedom of expression, for example when counterfactual explanations instruct individuals not to read certain stories, creating potential chilling effects. Conversely, as is set out in section 5.3, the right to an explanation can also alleviate the tension between the freedom of expression and the right to data protection by enabling users to better assess news recommendations on their merit, and helping them to make more informed choices in respect of the information which they consume. Whether one of data protection law's transparency requirements promotes the freedom of expression, or restricts it to such an extent that an exemption for the media is strictly necessary depends on what specific information is disclosed, and potential conflicts are highlighted throughout the chapter as they arise. In general, however, the impact of an explanation of news personalisation on the freedom of expression is limited compared to other elements of data protection law, as it stops short of directly limiting the media's ability to gather or publish information, merely requiring an explanation of the way in which content already produced is disseminated to individual members of the audience. This reduces the likelihood that exemptions from the right to an explanation for media organisations which use news personalisation, are strictly necessary to safeguard the freedom of expression.³⁷¹

³⁶⁸ An algorithm may use innocuous data for one task, while at the same time inferring sensitive data which can be sold to third parties. For the differentiated impact of privacy violations on the elements of perceived trustworthiness, see Gaurav Bansal and Fatemeh Mariam Zahedi, 'Trust Violation and Repair: The Information Privacy Perspective' (2015) 71 *Decision Support Systems* 62.

³⁶⁹ *Satamedia* [2008] CJEU ECLI:EU:C:2008:727 para. 56; Christopher Docksey, 'Four Fundamental Rights: Finding the Balance' (2016) 6 *International Data Privacy Law* 195, 204; GDPR recital 153.

³⁷⁰ David Erdos, 'European Union Data Protection Law and Freedom of Expression: Fundamentally off Balance' (2016) 65 *International & Comparative Law Quarterly* 139, 144; Dominic Broy and others, 'Journalism and Media Privilege' (European Audiovisual Observatory 2017) 2017–2 <<https://rm.coe.int/journalism-and-media-privilege-pdf/1680787381>> accessed 28 April 2019; *Buivids* (n 76); *IPI* [2013] CJEU ECLI:EU:C:2013:715.

³⁷¹ With regard to the overarching discussion that EU data protection law affords too little weight to the freedom of expression, see Maja Brkan, 'The Unstoppable Expansion of the EU Fundamental Right to Data Protection: Little Shop of Horrors?' (2016) 23 *Maastricht Journal of European and Comparative Law* 812.

In short, this chapter argues that the concrete disclosures compelled by the right to an explanation must be identified by analysing not only its text and legislative history, but also the way in which its aims must be understood in a specific context. The following sections explore what a contextual approach to the right to an explanation might look like with regard to news personalisation. Section 5.3 therefore expands on the way in which the purposes of the right to an explanation should be understood in the media. Section 5.4 analyses what information is traditionally considered meaningful or suitable to achieve these goals in media law and literature, and adapt these discussions to the algorithmic context.

5.3. The goals of the right to an explanation in context

Before exploring the aims of GDPR, what can and cannot be expected of the right to an explanation should be clarified. Algorithmic as well as media transparency can advance goals which fall outside the scope of the right to an explanation, such as the improvement of user satisfaction, the promotion of social cohesion, or the monitoring of media concentrations.³⁷² As these aspects are not intended in the right to an explanation, they cannot guide a teleological interpretation of the right. Conversely, accountability, agency, and – to a lesser extent – trust heavily feature in the policy and literature discussions on the right to an explanation.³⁷³ The following sections draw on insights from media law and literature to explore how these objectives of the right to an explanation should be understood in the context of news personalisation algorithms.

5.3.1. Accountability

The combination of algorithms' increasingly influential role in everyday life and their potential for intended or unintended negative effects has fuelled increasing calls for algorithmic accountability. Accountability's status as a principle of data protection law reflects this focus. Under article 5(2) GDPR, the principle requires that controllers not only adhere to the other principles of data protection law, but also that they be able to demonstrate such compliance. The recitals expand on this point, noting that users must for example be able to obtain information regarding the logic and consequences of processing so as to verify that it is occurring lawfully.³⁷⁴

³⁷² For a general overview of the goals of explanations in recommender systems, see Nava Tintarev and Judith Masthoff, 'Explaining Recommendations: Design and Evaluation' in Francesco Ricci, Lior Rokach and Bracha Shapira (eds), *Recommender Systems Handbook* (Springer 2015) <http://link.springer.com/10.1007/978-1-4899-7637-6_10>; CoE, 'Recommendation on Pluralism' (n 124).

³⁷³ Sandra Wachter, Brent Mittelstadt and Chris Russell, 'Counterfactual Explanations Without Opening the Black Box: Automated Decisions and the GDPR' (2018) 31 *Harvard Journal of Law & Technology* 842.

³⁷⁴ Recital 63 GDPR

While transparency and accountability are sometimes used interchangeably, it is important to distinguish the two.³⁷⁵ Transparency is an essential part of the process which may lead to accountability, as transgressors cannot be held accountable for deeds which cannot be discovered.³⁷⁶ However, transparency is not sufficient to produce accountability by itself. The information recipient should be able to process and act on the information, and the accountable party should be vulnerable to the pressure which the information recipient can exert.³⁷⁷

Whether vulnerability to outside pressure is desirable takes on a special meaning for the news media due to the importance of a free press to democratic society. Accountability can be in conflict with the freedom of the press, especially where political interference restricts the press' ability to inform the public. The accountability mechanisms through which responsible conduct can be compelled, must therefore be tailored to the unique position of the press.³⁷⁸ This is reflected in media accountability's focus on the pressure which the market, other professionals, and the public can exert.³⁷⁹ These parties cannot prohibit specific editorial choices, but can opt not to use types of news personalisation which they do not perceive to be in their interest, or push a media organisation towards acting in the interest of its audience or the public. In so doing, they can provide a form of algorithmic accountability which stops short of prescribing which editorial choices news organisations may or may not make, limiting the likelihood that an exemption is strictly necessary under article 85 GDPR.

Understanding the specific nature of accountability in the media is necessary to understand how transparency can enable accountability in the context of news personalisation. Moreover, media law and literature contain a number of well-developed insights into the relationship between transparency and accountability which can inform the interpretation of the right to an explanation in the context of news personalisation. Firstly, instruments such as ethics codes and editorial guidelines can clarify the norms

³⁷⁵ Maayan Perel and Niva Elkin-Koren, 'Black Box Tinkering. Beyond Transparency in Algorithmic Enforcement' (2017) 69 Florida Law Review 181; Edwards and Veale (n 341) 41; Tal Zarsky, 'Transparent Predictions' [2013] University of Illinois Law Review 1503, 1533.

³⁷⁶ For accountability mechanisms which do not rely on transparency, see Joshua A Kroll and others, 'Accountable Algorithms' (2016) 165 University of Pennsylvania Law Review 633.

³⁷⁷ Ananny and Crawford (n 324); Stephen JA Ward, 'The Magical Concept of Transparency' in David Craig Lawrie Zion (ed), *Ethics for Digital Journalists Emerging Best Practices* (Routledge 2014) 49 <<https://www.taylorfrancis.com/books/e/9781135114237/chapters/10.4324%2F9780203702567-10>>.

³⁷⁸ Lisa H Newton, Louis Hodges and Susan Keith, 'Accountability in the Professions: Accountability in Journalism' (2004) 19 Journal of Mass Media Ethics 166, 166, 173.

³⁷⁹ Denis McQuail, *Media Accountability and Freedom of Publication* (Oxford University Press, USA 2003) 204; Vaira Vīķe-Freiberga and others, 'A Free and Pluralistic Media to Sustain European Democracy' (High Level Group on Media Freedom and Pluralism 2013) <https://ec.europa.eu/digital-single-market/sites/digital-agenda/files/HLG_Final_Report.pdf>; J LH Bardoel and LSJ D'Haenens, 'Media Responsibility and Accountability. New Conceptualizations and Practices' (2004) 29 Communications: The European Journal of Communication Research 5; Kasper Welbers and others, 'News Selection Criteria in the Digital Age: Professional Norms versus Online Audience Metrics' (2016) 17 Journalism: Theory, Practice & Criticism 1037.

which media organisations intend to be accountable for upholding.³⁸⁰ This facilitates a broader debate on the appropriateness of these values, as well as the media's success in upholding them. Secondly, the media can justify individual moral decisions in the editorial process.³⁸¹ This can be as simple as explaining why a source remains anonymous, or more extensive, like explaining why a media organisation focuses its attention on certain topics. Transparency subsequently enables the audience to give input by allowing them to pull back their support for a news organisation if they are particularly dissatisfied with its editorial decisions, or to give direct feedback on (the reasoning behind) editorial decisions. Article 22(3) GDPR takes a similar approach to user input on automated decision-making by giving users a right to withdraw their consent or contest a decision, but not an independent right to have it changed. While this may provide users with an insufficient level of protection in certain contexts, it dovetails nicely with the concept of media accountability.

5.3.2. Agency

Transparency is also advanced as a way to ensure individuals are not subjected to algorithms they cannot influence and that only see them as an incomplete set of statistics, as opposed to full-fledged individuals. Mendoza and Bygrave identify the decrease in an individual's influence over the algorithms which impact him as a key concern that led to the inclusion of the precursor of the right to an explanation in the data protection directive.³⁸² Similarly, the CoE's recommendation on profiling, referred to in the Commission's proposal for article 22 GDPR, notes the risk that profiling techniques place individuals in predetermined categories or negatively affect their rights and dignity.³⁸³ The right to an explanation's facilitation of the exercise of fundamental rights reflects the GDPR's role as an instrument which not only protects the right to data protection, but also enables the exercise of other rights.³⁸⁴

When automated decision-making is used to personalise the news which an individual gets to see, the right that is put most immediately at risk is the right to receive information. There is a strong connection between this right and individual transparency in the media, as illustrated by in the influential 'rule of transparency' formulated by journalism scholars Kovach and Rosenstiel in 2001: "What does my audience

³⁸⁰ Richard Van Der Wurff and Klaus Schönbach, 'Between Profession and Audience: Codes of Conduct and Transparency as Quality Instruments for off-and Online Journalism' (2011) 12 Journalism studies 407; Ward (n 378) 48.

³⁸¹ Van Der Wurff and Schönbach (n 381) 417.

³⁸² Mendoza and Bygrave (n 349).

³⁸³ CoE, 'Recommendation of the Committee of Ministers to Member States on the Protection of Individuals with Regard to Automatic Processing of Personal Data in the Context of Profiling' (Council of Europe 2010) CM/Rec(2010)13 <https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805cdd00>.

³⁸⁴ See on this goal in relation to the right to an explanation Selbst and Powles (n 345); Manon Oostveen and Kristina Irion, 'The Golden Age of Personal Data: How to Regulate an Enabling Fundamental Right?' in Mor Bakhoum and others (eds), *Personal Data in Competition, Consumer Protection and Intellectual Property Law*, vol 28 (Springer Berlin Heidelberg 2018) <http://link.springer.com/10.1007/978-3-662-57646-5_2> accessed 28 February 2019.

need to know to evaluate this information for itself? And is there anything in our treatment of it that requires explanation?”³⁸⁵ The AVMSD similarly emphasises that individuals must be able to know who provides the information which shapes their opinions, as such information is “directly linked to the freedom of expression”.³⁸⁶ CoE recommendations also highlight the importance of providing individuals with information allowing them to access a wide variety of sources and analyse this information for themselves, including with regard to the automatic processes which regulate the flow of online information.³⁸⁷

This focus on transparency’s ability to enable individuals to access and evaluate different ideas reflects the right to receive information’s function as a mechanism allowing individuals to develop themselves and find the truth by weighing competing perspectives.³⁸⁸ The extent to which every individual engages in this process is, of course, doubtful.³⁸⁹ It is however impossible if they are only given the bare facts of a story, or when the only information they have about the inner workings of an algorithm is that it aims to present relevant content. After all, relevance can mean many different things depending on for whom and for what purpose it is defined.³⁹⁰ Further information concerning the sources, the methods of reporting, and potential biases of the publication is required to allow the audience to form an opinion on whether the content is produced in accordance with journalistic ethics and whether they can rely on it.³⁹¹

³⁸⁵ Bill Kovach and Tom Rosenstiel, *The Elements of Journalism : What Newspeople Should Know and the Public Should Expect* (Crown 2001); Patrick Lee Plaisance, ‘Transparency: An Assessment of the Kantian Roots of a Key Element in Media Ethics Practice’ (2007) 22 *Journal of Mass Media Ethics* 187, 203.

³⁸⁶ The matter has received increased attention in the revision of the AVMSD, which directly ties ownership transparency to the exercise of the freedom of expression, and has a stronger focus on the disclosure of the identity of individuals who own the media organisation. AVMSD 2018 recital 15-16, article 5.

³⁸⁷ CoE, ‘Recommendation on Pluralism’ (n 124); CoE, ‘Recommendation of the Committee of Ministers to Member States on the Protection of Human Rights with Regard to Search Engines’ (Council of Europe 2012) CM/Rec(2012)3 <https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805caa87>; CoE, ‘Recommendation of the Committee of Ministers to Member States on Media Pluralism and Diversity of Media Content’ (Council of Europe 2007) CM/Rec(2007)2 <https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805d6be3> para III.2.

³⁸⁸ Sarah Eskens, Natali Helberger and Judith Möller, ‘Challenged by News Personalisation: Five Perspectives on the Right to Receive Information’ (2017) 9 *Journal of Media Law* 259; Brent Daniel Mittelstadt, ‘Auditing for Transparency in Content Personalization Systems’ (2016) 10 *International Journal of Communication* 4991, 4994.

³⁸⁹ Michael Karlsson and Christer Clerwall, ‘Transparency to the Rescue?’ (2018) 19 *Journalism Studies* 1923.

³⁹⁰ Gillespie (n 202).

³⁹¹ Konstantin Nicholas Dörr and Katharina Holnbuchner, ‘Ethical Challenges of Algorithmic Journalism’ (2017) 5 *Digital Journalism* 404; Turilli and Floridi (n 341); Van Der Wurff and Schönbach (n 381) 417; L Hitchens, ‘Commercial Content and Its Relationship to Media Content: Commodification and Trust’ in Monroe E Price and Libby Verhulst, Stefaan G. Morgan (eds), *Routledge handbook of media law* (Routledge 2013) 94 <<https://www.routledge.com/Routledge-Handbook-of-Media-Law/Price-Verhulst-Morgan/p/book/9780415683166>>.

5.3.3. Trust

Finally, transparency is argued to increase trust in algorithmic decision-making.³⁹² Trust allows individuals to rely on others in situations where they are unsure whether the other party will exploit their vulnerabilities. As such, it is rather useful for individuals who aim to use algorithms without fully understanding them. Conversely, being perceived as untrustworthy can diminish an algorithm's success regardless of its actual accuracy or compliance with legal and ethical principles. While trust is a commonly featured objective in discussions of algorithmic transparency as well as the GDPR and the EU's digital market strategy, it has thus far received limited attention in the context of the right to an explanation.³⁹³

Trust in the media is typically defined in relation to the media's function, as by Grosser in the following manner: 'the willingness of the recipient to be vulnerable to the journalistic system's selection and communication of current information.'³⁹⁴ Transparency is expected to lower the threshold for trust by allowing users to more accurately assess the likelihood that their vulnerability will be exploited. This allows for the repeated interactions through which long-term trust may be built.³⁹⁵ Some overlap exists between the role which transparency plays in trust and enabling users to exercise their right to receive information. In both fields, transparency is used to allow users to form a more accurate judgment of the other party, and the information with which they are provided. There are two important differences, however. Firstly, the right to receive information is concerned with allowing individuals to assess their news diet in a broad sense. Conversely, a single news organisation (such as a trade magazine) can still be perceived as trustworthy even if it only covers certain topics.

Secondly, trust is a psychological process, and therefore functions more as a heuristic than the exercise of the right to receive information. As a result, trust in the media may be affected by factors unrelated to the media's ability to correctly communicate current information. A particularly salient issue in the context of news personalisation is the role of privacy. Research indicates that tracking can negatively impact trust, especially if it violates consumer's privacy norms and reminds them of this fact with highly

³⁹² Brent Daniel Mittelstadt and others, 'The Ethics of Algorithms: Mapping the Debate' (2016) 3 *Big Data & Society* <<https://doi.org/10.1177/2053951716679679>> accessed 20 September 2018; Bruno Lepri and others, 'Fair, Transparent, and Accountable Algorithmic Decision-Making Processes' [2017] *Philosophy & Technology* 1; Marco Tulio Ribeiro, Sameer Singh and Carlos Guestrin, "'Why Should I Trust You?': Explaining the Predictions of Any Classifier', *Proceedings of the 22nd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining* (Association for Computational Linguistics 2016) <<http://arxiv.org/abs/1602.04938>>.

³⁹³ David Wright and others, 'Privacy, Trust and Policy-Making: Challenges and Responses' (2009) 25 *Computer Law & Security Review* 69; Neil M Richards and Woodrow Hartzog, 'Taking Trust Seriously in Privacy Law' (2016) 19 *Stanford Technology Law Review* 431.

³⁹⁴ Grosser (n 368) 1040; Kohring and Matthes (n 368) 240.

³⁹⁵ See also Kim (n 358).

personalised cues.³⁹⁶ While privacy concerns typically do not translate directly into a lower use of the service,³⁹⁷ they may have an indirect impact on the media by spilling over into the level of trust in the way in which the media organisation informs its audience. Do individuals trust an organisation to tell them the truth while simultaneously finding the organisation creepy for tracking every article they read? This is an empirical question which appears to have gone unanswered so far. The fact that privacy violations affect an organisation's perceived integrity indicates that this may be the case; being perceived to lack integrity reflects on the perceived trustworthiness of an actor in a broader sense than simply being perceived to lack a certain ability, which is more restricted to a single area in which another party cannot perform adequately.³⁹⁸

Naturally, personalisation may also affect trust in the media directly due to the changes in the way in which the media selects what information to show to individuals. Fears over filter bubbles remain prevalent and could decrease trust in personalising media organisations, regardless of whether such fears are justified. Conversely, personalisation could also improve the media's ability to inform individuals by allowing it to tailor the information provided to each individual's prior knowledge.³⁹⁹ There is indeed some evidence that suggests users prefer algorithms to human editors.⁴⁰⁰

It should be noted that more trust is not necessarily better from a policy perspective. Rather, the key point is that individuals are able to correctly assess another party's trustworthiness.⁴⁰¹ Transparency can play a role in this process by correcting the uncertainties or misconceptions preventing users from trusting parties which they otherwise would trust (and vice versa). Indeed, certain kinds of information, such as how the system arrives at a recommendation or why a recommendation was made, have been shown to improve trust in recommender systems.⁴⁰² In line with policy desires, this effect appears to be predicated

³⁹⁶ On highly personalised cues' impact on feelings of vulnerability, see Elizabeth Aguirre and others, 'Unraveling the Personalization Paradox: The Effect of Information Collection and Trust-Building Strategies on Online Advertisement Effectiveness' (2015) 91 *Journal of Retailing* 34, 41.

³⁹⁷ Spyros Kokolakis, 'Privacy Attitudes and Privacy Behaviour: A Review of Current Research on the Privacy Paradox Phenomenon' (2017) 64 *Computers & Security* 122; Tom Evens and Kristin Van Damme, 'Consumers' Willingness to Share Personal Data: Implications for Newspapers' Business Models' (2016) 18 *International Journal on Media Management* 25.

³⁹⁸ Bansal and Zahedi (n 369).

³⁹⁹ Möller and others (n 8).

⁴⁰⁰ Nic Newman and others, 'Reuters Institute Digital News Report 2017' (Reuters Institute for the Study of Journalism 2017) 15 <https://reutersinstitute.politics.ox.ac.uk/sites/default/files/Digital_News_Report_2017_web_0.pdf>.

⁴⁰¹ Frank B Cross, 'Law and Trust' (2004) 93 *Georgetown Law Journal* 1457.

⁴⁰² Peter A Hancock and others, 'A Meta-Analysis of Factors Affecting Trust in Human-Robot Interaction' (2011) 53 *Human Factors: The Journal of the Human Factors and Ergonomics Society* 517.

on users seeing the system as more competent after learning more about it.⁴⁰³ The available research on the effects of transparency on trust in recommender systems more typically concerns eCommerce than news recommenders, however.⁴⁰⁴ As a result, transparency may affect trust in news recommenders in different and as of yet unknown ways.

This uncertain relationship between transparency and the objectives of the right to an explanation is inherent in the use of emerging technologies in new contexts. However, the disclosures which are suitable to safeguard the goals of the right to an explanation in such contexts not necessarily have to be built from scratch. Literature on media transparency already contains a wealth of research regarding the individual transparency mechanisms which are suitable to further the aims explored above. The following section adapts this research to the automated decision-making processes covered by the GDPR.

5.4. A conceptual framework of algorithmic transparency in the media

5.4.1. Current approaches to media and algorithmic transparency frameworks

Transparency covers a wide range of information which could be used to safeguard accountability, agency, and trust. Literature on media transparency law and ethics overall categorises this information in similar ways. Groenhart and Evers for example, categorise traditional media transparency instruments into actor -, source -, and process transparency. Actor transparency refers to the parties who are able to influence editorial decisions. Source transparency covers the parties who provide the information on which a story is based, as well as the source material itself. Process transparency concerns the editorial process, including the mechanisms and justifications of editorial decisions.⁴⁰⁵

⁴⁰³ Henriette Cramer and others, 'The Effects of Transparency on Trust in and Acceptance of a Content-Based Art Recommender' (2008) 18 *User Modeling and User-Adapted Interaction* 455; Weiquan Wang and Izak Benbasat, 'Recommendation Agents for Electronic Commerce: Effects of Explanation Facilities on Trusting Beliefs' (2007) 23 *Journal of Management Information Systems* 217; Fatih Gedikli, Dietmar Jannach and Mouzhi Ge, 'How Should I Explain? A Comparison of Different Explanation Types for Recommender Systems' (2014) 72 *International Journal of Human Computer Studies* 367.

⁴⁰⁴ For an exception, see Maartje ter Hoeve and others, 'Do News Consumers Want Explanations for Personalized News Rankings?' <<http://scholarworks.boisestate.edu/fatrec/2017/1/8>> accessed 4 November 2020. The study found that newsreaders wanted explanations for individual decisions, but it found no effect on click-through rates; The authors speculate that this is the case because users did not pay attention to the explanations.

⁴⁰⁵ Some categorisations omit source transparency or include a category for reader interaction entitled interactive, dialogue, or participatory transparency. The model of Groenhart & Evers, which omits this latter category, is better suited to the right to an explanation, as interactive transparency does not cover disclosures but rather concerns mechanisms allowing readers to act on the information which they have learned. H Groenhart and H Evers, 'Media Accountability and Transparency – What Newsrooms (Could) Do' in S Fengler and others (eds), *Journalists and media accountability: An international study of news people in the digital age* (Peter Lang 2014); Klaus Meier and Julius Reimer, 'Transparenz Im Journalismus' (2011) 56 *Publizistik* 133; David Domingo and Heikki Heikkilä, 'Media Accountability Practices in Online News Media', *The Handbook of Global Online Journalism* (Wiley-Blackwell 2012) <<http://doi.wiley.com/10.1002/9781118313978.ch15>>; Michael Karlsson, 'Rituals of Transparency' (2010) 11 *Journalism Studies* 535; HP Groenhart and JH Bardoel, 'Conceiving the Transparency of Journalism: Moving towards a New Media Accountability Currency' (2012) 12 *Studies in Communication Sciences* 6.

Categorisations of algorithmic transparency commonly centre on the data which is used in decision-making, how this data is processed, and its output.⁴⁰⁶ Integrating the two categorisations produces the model for algorithmic media transparency shown in Figure 2. On the one hand, media transparency contains aspects which are affected by algorithms, but which are not traditionally part of the discussion on the right to an explanation. On the other hand, algorithms shape the way in which traditional editorial processes are carried out, or introduce new aspects. The following section expands on these interactions between algorithmic and media transparency, and the resulting required disclosures in the context of the right to an explanation.

⁴⁰⁶ The categorisation is analysed in most concrete terms by Diakopoulos and Koliska (n 153) 9; Zarsky (n 376) 1521; Danielle Keats Citron and Frank Pasquale, 'The Scored Society: Due Process for Automated Predictions' (2014) 89 *Washington Law Review* 1, 20.

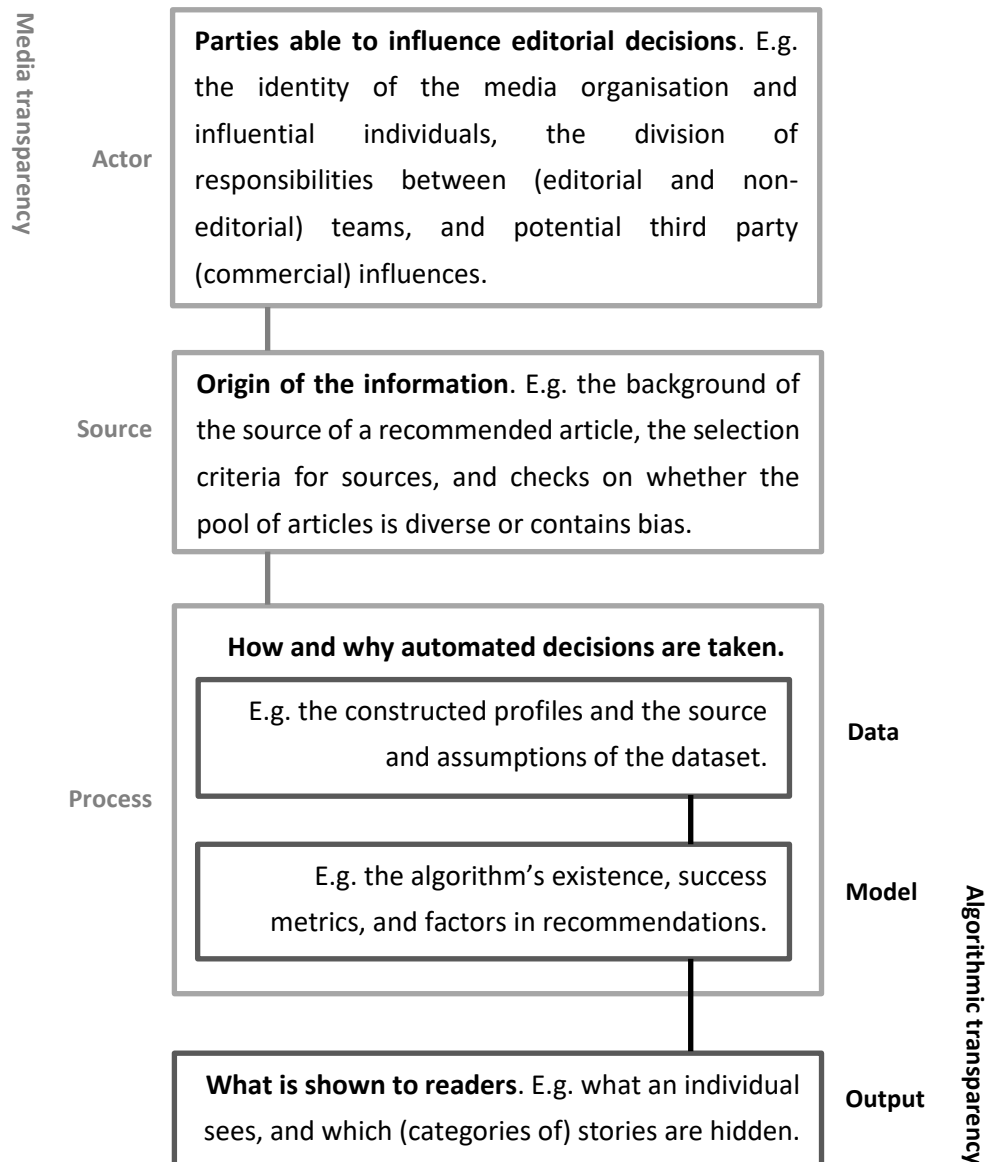


Figure 2. An analytical framework of the disclosures which constitute algorithmic transparency in the media.

5.4.2. Actor transparency

Actor transparency instruments inform the audience about those inside and outside the organisation who may be able to influence editorial decisions. At the organisational level, it involves disclosure of not only the identity of the company, but also information regarding its ownership, and parties which have a financial interest in the organisation.⁴⁰⁷ In the media, such information is expected to allow users to access diverse sources and make more informed decisions about the information with which they are

⁴⁰⁷ Domingo and Heikkilä (n 406); Groenhart and Evers (n 406).

provided.⁴⁰⁸ Similarly, the law requires that users are informed when third parties pay for editorial content to promote certain products. Additionally, self-regulatory instruments such as ethics codes inform users of the ethical standards which media organisations hold themselves to, and enable criticism when they fail to live up to these standards.⁴⁰⁹ Transparency can also provide individuals with a more fine-grained view of media organisations. The public may for example be informed of the division of responsibilities within an organisation, and the background of those who contribute to a specific story or who can exercise significant influence over editorial choices.⁴¹⁰ Such disclosures can conflict with the freedom of expression, as anonymity can promote the free flow of ideas by protecting authors from personal retaliation.⁴¹¹ While large media organisations which have the resources to implement news personalisation rarely rely on such anonymity and increasingly embrace transparency instead, the possibility for exceptions must be maintained.

The implementation of news personalisation often requires organisational changes which affect this division of responsibilities. While writing and selecting articles are editorial tasks, journalists and editors typically lack the funding and expertise necessary to build the personalisation algorithms which automate such tasks. As a result, personalisation creates new roles within an organisation and requires collaboration between editors, engineers, and publishers.⁴¹² This can change or obscure the persons who are able to exert influence over (and have final responsibility for) the editorial decisions in news personalisation. Disclosing any such changes prevents users from (potentially mistakenly) assuming that the editorial staff remains fully in control of the editorial decisions in news personalisation. The New York Times, for example, outlines the role of its editorial staff in the design of its news personalisation systems. In

⁴⁰⁸ It is a staple of Recommendations by the Council of Europe. In national law, it typically results from non-media law sources. CoE, 'Recommendation of the Committee of Ministers to Member States on Measures to Promote Media Transparency' (Council of Europe 1994) R (94) 13 <<https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=09000016804c1bdf>> ; CoE, 'Recommendation on Pluralism' (n 124); Council of the European Union, 'Conclusions of the Council and of the Representatives of the Governments of the Member States, Meeting within the Council, on Media Freedom and Pluralism in the Digital Environment (2014/C 32/04)' (2014) <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52014XG0204%2802%29>> para. 13; Izabela Korbiel and Katharine Sarikakis, 'Between Two (in)Competencies: A Critical View on Media Ownership Regulation in the EU' (2017) 13 MCP Intellect Limited International Journal of Media & Cultural Politics 183.

⁴⁰⁹ Groenhart and Bardoel (n 406) 8; Domingo and Heikkilä (n 406) 278.

⁴¹⁰ Arthur S Hayes, Jane B Singer and Jerry Ceppos, 'Shifting Roles, Enduring Values: The Credible Journalist in a Digital Age' (2007) 22 Journal of Mass Media Ethics 262; Ward (n 378) 51; H Heikkilä and others, 'Innovations in Media Accountability and Transparency' in S Fengler and others (eds), *Journalists and media accountability: An international study of news people in the digital age* (Peter Lang 2014) 58; Groenhart and Bardoel (n 406) 8; CoE, 'Recommendation of the Committee of Ministers to Member States on Media Pluralism and Diversity of Media Content' (n 388) para III; Bardoel and D'Haenens (n 380). Such information also allows other professionals in the media system to hold each other accountable. This accountability falls outside the scope of the right to an explanation, however, as it focuses on allowing individuals to hold organisations accountable.

⁴¹¹ *Delfi v. Estonia* (n 21) para. 147.

⁴¹² Bodó (n 10); Matthew S Weber and Allie Kosterich, 'Coding the News' (2018) 6 Digital Journalism 310, 323.

explaining how its recommendation process works, the organisation emphasises that the editorial team advises engineers on how personalisation fits into the Times' editorial mission, determines what news content is to be used for personalisation, and incorporates feedback from readers.⁴¹³

Personalisation can also be influenced by outside parties. The clearest example of such a case is when a media organisation rents out space on its site to third party algorithms which recommend third party content, like those of Outbrain or Taboolah. This kind of news personalisation comes close to online behavioural advertising and the related transparency requirements regarding the commercial nature of the provided information, and typically carries a 'sponsored by' label. However, intermediate versions of outside influence are also possible. A company might allow the marketing department influence over the design of a recommender system, or might simply use (a modified version of) a third-party algorithm to recommend its articles. None of these situations are inherently problematic. However, unless the third party and any payments are disclosed, users are confronted with a third-party system taking editorial decisions which they would logically assume to be taken by the media organisation in line with its editorial standards.⁴¹⁴

Finally, personalisation affects the values for which an actor holds himself accountable for. Not in the sense that values like newsworthiness or diversity lose their relevance, but by changing the way in which they can be furthered or safeguarded. Ethics codes, mission statements, and policy documents have traditionally provided insight into how the media and individual organisations believe this should occur. As more editorial tasks are automated, it is becoming increasingly important that the media also provides insight into the ethical standards which it considers essential to guide the use of algorithms. Failing to clarify such norms would hamper accountability in the light of the media's relative freedom to regulate its own behaviour, as it is difficult to hold a media organisation accountable to a non-existent standard. Conversely, should a media organisation outline their values, this would allow users to object in a way which is most likely to resonate with the former.

5.4.3. Source transparency

Source transparency traditionally concerns (the interests of) the sources supplying the information on which an article is based. With the digitalisation of the news removing space constraints, directly linking to the full source material also became more common.⁴¹⁵ Such disclosures allow individuals to take the

⁴¹³ New York Times, 'Personalization' (*New York Times Help*) <<https://help.nytimes.com/hc/en-us/articles/360003965994-Personalization>> accessed 8 July 2021.

⁴¹⁴ See similarly in the context of transparency in the algorithms which rank search results, CoE, 'Recommendation on Search Engines' (n 388).

⁴¹⁵ Of course, where the source material is another article, this is also a matter of giving credit where it is due. Hayes, Singer and Ceppos (n 411); Heikkilä and others (n 411) 59.

sources' potential interests into account, check whether the media selected all the relevant facts, or simply investigate further to satisfy their curiosity.⁴¹⁶

News personalisation makes use of some third-party sources of information. Traditional media organisations increasingly draw on information and statistics provided by other parties to automatically generate (personalised) niche articles; intermediaries use the articles created by traditional media organisations to fill their personalised news feeds.⁴¹⁷ The controversies surrounding fake news have prompted calls for users to be better informed regarding the identity and intentions of the source behind articles recommended to them on platforms. In response, many recent projects research what information is necessary to ensure that media consumers do not trust information from inaccurate sources. Preliminary results indicate that users quickly forget the source of the information gained; current projects aim to be more direct in providing third party labels which indicate whether a story is trustworthy.⁴¹⁸ While this may prove to be more effective, government regulation which establishes criteria by which particular sources are labelled as (un)trustworthy could cause significant issues related to freedom of expression. Simply disclosing the factors by which an algorithm assesses a particular source and determines whether (or how much) it will be recommended, may prove to be a less problematic, albeit less effective proxy. This would also avoid the potential conflicts with the media's right to the confidentiality of their sources which a blanket requirement to disclose the source of information might cause. This right is vital to the media's continued ability to act as a public watchdog.⁴¹⁹

In addition to information on individual sources and articles, disclosures on the aggregate pool of information news personalisation can prove useful, as these ingredients determine what news personalisation is and is not able to do for their users. If the available articles only reflect one viewpoint, for example, individuals will not be able to get a diverse news diet even if they are able to instruct the algorithm to provide it. Transparency regarding the types of articles which the personalisation algorithm is able to show individuals, therefore gives them the opportunity to determine how using it will affect their news diet. Concretely, this could require that media organisations outline the steps taken (if any) to ensure that the information which news personalisation draws on, fits into their editorial mission. For example, organisations could disclose the existence of any monitoring of the pool of articles itself (e.g., for bias or diversity), ex ante or ex post selection criteria for potential contributors, or assurances that

⁴¹⁶ Society of Professional Journalists, 'SPJ Code of Ethics' (2014) <<https://www.spj.org/ethicscode.asp>> accessed 3 September 2018.

⁴¹⁷ T Montal and Z Reich, 'I, Robot' (2017) 5 You, Journalist. Who is the Author? Digital Journalism 829.

⁴¹⁸ See for instance the indicators developed by 'The Trust Project' (*Santa Clara University's Markkula Center for Applied Ethics*, 2018) <<https://thetrustproject.org/>>; High level Group on fake news and online disinformation, 'A Multi-Dimensional Approach to Disinformation: Report of the Independent High Level Group on Fake News and Online Disinformation' (European Commission 2018) 23.

⁴¹⁹ Broy and others (n 371).

certain particularly important content will not be personalised. The latter would allow individuals to use personalisation in the knowledge that they are not at risk of missing out on vital information.

Finally, content personalisation makes it possible that each individual is presented with a different version of the same story. This touches on a central component of trust in the media, namely their ability to select the relevant facts of a story to communicate to the audience. A manner in which media organisations have addressed the suspicions of their audience with regard to this issue in the past, has been by including links to the full source material on which an article is based, and disclosing sources' interests. Similarly, consumers of a personalised story could be provided with a way to access a version containing all the information which it could have used, and reasons for why particular pieces of information were omitted in the version initially provided to them.

5.4.4. Process transparency

Process transparency concerns the disclosure, explanation, and justification of editorial choices, in relation to both broader issues like topic selection and small-scale decisions in specific stories.⁴²⁰ Several instruments are used to enable this kind of transparency. Newsroom blogs or livestreamed editorial meetings can give individuals a detailed account of the reasons behind broader and particularly significant editorial decisions. Conversely, smaller editorial decisions (like the anonymisation of a source) are increasingly woven into the news story itself.

Much of the discussion on algorithmic transparency fits into this category. When media organisations implement news personalisation, they use information about a member of the audience to automatically take editorial decisions regarding the selection, arrangement, and production of news content. The simplest disclosure, and the one which is seemingly most common in privacy notices, contains the information that this process is taking place at all. Informing users of the existence of automated-decision-making is of course also explicitly required by articles 13-15 GDPR. The common phrasing that a news site contains personalised content is too broad to be of any use, however. Individuals can only start to determine how news personalisation affects them if they know which parts of the site are personalised.⁴²¹ Analogously, disclosing that the newspaper includes advertisements or opinion pieces does not help readers if the opinion section, advertisements, and news stories themselves are indistinguishable.

Disclosing which of a particular user's characteristics the algorithm takes into account (and how they are weighted) would address the risk which has motivated the Commission to regulate automated processing in the original data protection directive, namely that decisions will be taken on the basis of users' 'data

⁴²⁰ Groenhart and Evers (n 406); Meier and Reimer (n 406); Ward (n 378); Society of Professional Journalists (n 417).

⁴²¹ However, labelling algorithmically produced content is not yet the norm. Montal and Reich (n 418).

shadow’ without their knowledge. It also lets individuals know how their actions influence the algorithm, and what they could read to give their news diet a different shape. However, in the light of the substantial number of recommendations made by news personalisation algorithms, explaining individual decisions is unlikely to be an effective way of advancing these goals. Providing more general information about the manner in which the algorithm converts an individual’s data into recommendations would save users from having to develop an understanding of these matters from explanations of individual decisions. Dashboards which allow users to see and adjust what data is used, could allow them to easily put this understanding into practice.

Counterfactual explanations face similar context-specific barriers.⁴²² News recommendations are not binary decisions; a multitude of other articles could have been recommended, for which the user would have had to provide different input data. Of course, users can be informed of the changes which they can make to ensure that a specific type of article will not be recommended in the future. Doing so in the context of news personalisation is problematic, however, as the changes users can make, will often concern their reading behaviour. Instructing them to refrain from reading certain articles creates the risk of chilling effects, especially if it leads readers to fear that they will be inundated with articles on a topic which they are not generally interested in after clicking on a headline which had sparked their curiosity.

Explaining the ethical basis of editorial decisions is an important aspect of media transparency to ensure the accountability of media organisations as well as to promote trust and understanding on the part of the audience. The extent to which editorial values are reflected in the success metrics of a news personalisation algorithm therefore appears particularly important. While the role of editorial values in personalisation algorithms often remains unclear (this is after all part of the problem), for some organisations they do not appear to play a role at all. For example, DeVito’s analysis of patents, press releases, and SEC filings indicates that Facebook’s news curation is based on criteria which bear little resemblance to traditional news values, such as a user’s social relationships or preferences.⁴²³ Legacy European media organisations also use personalisation to promote different values, ranging from the commercial (e.g., to maximise the time spent on a site) to the editorial (e.g., to better deliver news to niche audiences).⁴²⁴

In short, personalisation algorithms can promote a wide range of objectives, not all of which resemble traditional news values, and each of which will shape an individual’s news diet in a different way. Transparency about the specific objective(s) of a personalisation algorithm would allow users to

⁴²² On the usefulness of counterfactual explanations, see generally Wachter, Mittelstadt and Russell (n 374).

⁴²³ DeVito (n 11); Weber and Kosterich (n 413) 322.

⁴²⁴ Bodó (n 10).

distinguish between editorial and non-editorial applications of news personalisation. It would also correct some misconceptions on the basis of which individuals currently evaluate news personalisation, such as the public often continuing to perceive algorithms as inherently objective or neutral despite the research above showing that algorithms are used to advance concrete objectives.⁴²⁵ By contrast, for news organisations which use personalisation to advance traditional media ethics, but whose audience remains suspicious of the new technology, transparency about the values built into their algorithms could distinguish them from more commercial organisations like Facebook.

5.4.5. Output transparency

Media transparency typically does not focus on information in the post-publication phase. This is unsurprising, since what is published offline is transparent by default: if this information fails to reach users, this is a circulation issue rather than a transparency one. However, stories online can be changed post-publication to include new information or correct errors. Disclosing such changes is an increasingly common way to ensure transparency even post-publication.⁴²⁶

This need for post-publication transparency is magnified by personalisation. When a media organisation personalises its output, it inherently affects each individual in a unique way. A personalising news provider may be able to offer in-depth, niche stories to a reader interested in government corruption, but not to one interested in climate change. Individuals' (inferred) preferences may also expose them to a different and less diverse collection of stories.⁴²⁷ That is, a single personalisation algorithm may pose different risks to different individuals. Moreover, because the same news provider shows each member of its audience a unique collection of information, they cannot draw on their knowledge of others (i.e., a news providers' reputation) to assess the risks of a particular personalisation algorithm. This cuts off an avenue of information which users typically rely on to evaluate media organisations, creating problems for even the most media-literate news consumers.

Different types of information can be used to address this problem. The extent to which these are required by the right to an explanation is problematised by the future oriented language of 'envisaged consequences', and the need not to interpret 'suitable measures' in an overly extensive way. The narrowest interpretation is that users must be informed of the primary consequence of personalisation

⁴²⁵ This danger was already flagged during the drafting process of the provisions on automated decision-making in the DPD. Mendoza and Bygrave (n 349) 84; Min Kyung Lee, 'Understanding Perception of Algorithmic Decisions: Fairness, Trust, and Emotion in Response to Algorithmic Management' (2018) 5 *Big Data & Society* 1.

⁴²⁶ Kalyani Chadha and Michael Koliska, 'Newsrooms and Transparency in the Digital Age' (2015) 9 *Journalism Practice* 215; Karlsson (n 406).

⁴²⁷ Eytan Bakshy, Solomon Messing and LA Adamic, 'Exposure to Ideologically Diverse News and Opinion on Facebook' (2015) 348 *Science* 1130; Mario Haim, Andreas Graefe and Hans-Bernd Brosius, 'Burst of the Filter Bubble?' (2018) 6 *Digital Journalism* 330.

that certain (types of) information will be filtered out. This is inherent in personalisation, however, and as a result does not provide individuals with any information they do not already gain from the disclosure of the existence of profiling. To be of added value, the information provided must therefore at least give some indication as to which stories will likely be filtered out, or how the algorithm will perform. As a concrete example, news organisations could inform individuals that their algorithm has been known to steer its users towards more extreme content, or show that their algorithm outperforms human curation in terms of diversity.⁴²⁸

Articles 13-15 and 22 GDPR also mean to give data subjects information as to how their rights and interests are at risk, however.⁴²⁹ Information about an algorithm's impact on the general population is only useful to further this goal to the extent that it overlaps with the impact on the data subject. To get to the heart of the problem, information on the consequences of personalisation would have to be personalised much like the proposed explanations of specific decisions. Such transparency could be provided in two ways. The first is to inform individuals directly of the information which has been filtered out of their news diet. Tintarev, Rostami and Smyth have developed a method to visualise users' profiles so as to allow them to identify blind spots in their consumption of the available content.⁴³⁰ Alternatively, individuals could be informed of the most important stories which they may have missed, or be provided with access to a non-personalised version of the site. The provision of such information would also dovetail with CoE recommendations which aim to promote the findability of content.⁴³¹

The second way is to disclose the differences between a user's personalised news diet and that prior to personalisation (or, if this is not available, that of the average or a comparable member of the audience). This way, personalisation's impact on for instance the diversity of individuals' personal news diet could be revealed to them. For sites personalising news in a way which is radically different from what members of their audience believe it to be, such disclosures might be especially important if they draw attention to unknown negative or positive effects of the algorithm.

5.5. Conclusion

This chapter has argued that the concrete disclosures required by the right to an explanation should be identified by analysing the context of the algorithm which is to be explained. Such an approach matches the specific disclosures which comprise the right to an explanation to its goals. It also promotes a more

⁴²⁸ Derek O'Callaghan and others, 'Down the (White) Rabbit Hole The Extreme Right and Online Recommender Systems' (2015) 33 Social Science Computer Review 459; Möller and others (n 8).

⁴²⁹ Article 29 Working Party (n 349) 20, 26.

⁴³⁰ Nava Tintarev, Shahin Rostami and Barry Smyth, 'Knowing the Unknown : Visualising Consumption Blind-Spots in Recommender Systems', *Proceedings of the 33rd Annual ACM Symposium on Applied Computing - SAC '18* (ACM Press 2018).

⁴³¹ CoE, 'Recommendation on Pluralism' (n 124) para 2.3.

consistent legal approach to explainability which takes into account sector-specific tensions between the right to an explanation and other values, such as the freedom of expression in the case of news personalisation. In order to operationalise the context-specific approach, the chapter identified the limits of the right to an explanation, drew on insights from media law and literature to determine how its goals should be understood in the context of news personalisation, and outlined which concrete disclosures are suitable to advance these goals in this context.

Stronger collaboration between supervisory and regulatory authorities would facilitate the operationalisation of this approach, and prevent the emergence of conflicting or overlapping approaches to algorithmic transparency.⁴³² Data protection authorities are well-placed to create an approach to algorithms which is consistent and comprehensive on a general level, but do not need to recreate existing wisdom on the risks likely to be triggered in specific contexts. Sector-specific supervisors and regulators already possess much of the expertise necessary to understand how values within their fields can be put at risk, and how individual transparency can be used to mitigate such risks. Drawing on this expertise promotes efficiency and consistency.

Of course, not all disclosures discussed in the chapter are relevant for each personalisation algorithm for the simple reason that not all personalisation algorithms are subject to the same risks. Not all personalisation algorithms are influenced by third parties, for example. However, in the light of their prominence in the media, particular importance should be afforded to the role of editorial values in personalisation algorithms. Additionally, evidence about the manner in which news personalisation affects any individual could prove to be a particularly useful way to promote trust, accountability, and agency. It directly provides data subjects with information which they would otherwise have to infer from other disclosures, and answers the question in which they are likely to be most interested: how will using this algorithm affect me?

⁴³² European Data Protection Supervisor, 'EDPS Opinion 3/2018 on Online Manipulation and Personal Data' (European Data Protection Supervisor 2018) 3 <https://edps.europa.eu/sites/edp/files/publication/18-03-19_online_manipulation_en.pdf>.

6. Enabling individuals to trust news personalisation

6.1. Introduction

Trust in technology is intuitively appealing.⁴³³ It implies that individuals do not need to fully understand or control a technology in order to rely on it, something which is especially useful in respect of notoriously complex technologies such as AI. Trust is accordingly framed as a prerequisite for the economic success of technology in general, and the ability of organisations which use it to fulfil their societal role in particular.⁴³⁴ To those ends, a number of recent policy initiatives, including the Commission's proposed Digital Services Act (DSA) and AI Act, highlight the need for regulation which increases trust in the online environment.⁴³⁵

The relationship between regulation and trust is complicated, however. Simply focusing on the need to increase trust shifts attention away from the need to ensure that the technology is actually trustworthy, and puts the emphasis on the need for individuals to accept technology.⁴³⁶ Securing the trustworthiness of technology, for example through rules on the data which it uses or banning its use for subliminal manipulation, has accordingly been an important part of the legal debate.⁴³⁷ Ensuring trustworthiness, however, does not automatically lead to trust - individuals must also be able to determine whether they

⁴³³ This chapter is based on the following article: Max van Drunen, Brahim Zarouali and Natali Helberger, 'Recommenders You Can Rely on: A Legal and Empirical Perspective on the Transparency and Control Individuals Require to Trust News Personalisation' (2022) 13 JIPITEC <<http://www.jipitec.eu/issues/jipitec-13-3-2022/5562>>. With the exception of changes made to standardise the dissertation's reference style and further revisions required by the journal before the article was accepted, the content remains unchanged.

⁴³⁴ High level Group on fake news and online disinformation (n 419) 11; European Commission, 'White Paper On Artificial Intelligence - A European Approach to Excellence and Trust' (European Commission 2020) COM(2020) 65 final 11 <https://ec.europa.eu/info/sites/info/files/commission-white-paper-artificial-intelligence-feb2020_en.pdf>.

⁴³⁵ Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC 2020 [COM/2020/825 final]; Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain union legislative acts 2021 [COM/2021/206 final].

⁴³⁶ Onora O'Neill, *A Question of Trust* (Cambridge University Press 2002); Damian Tambini, 'Media Freedom, Regulation, and Trust: A Systemic Approach to Information Disorder' (Council of Europe 2020) 18.

⁴³⁷ European Commission, 'White Paper On Artificial Intelligence - A European Approach to Excellence and Trust' (n 435) 2; Richards and Hartzog (n 394); Balázs Bodó, 'Mediated Trust: A Theoretical Framework to Address the Trustworthiness of Technological Trust Mediators' [2020] *New Media & Society* 1.

can trust technology. Transparency, especially concerning the need for algorithmic explainability, has played a dominant role in this context.⁴³⁸

How the regulatory approach to trust in technology relates to the perspective of the individuals who interact with technology remains underexplored. Legal discussions instead highlight why trust in technology is important, how technological transformations challenge trust, and what role legal measures should play in safeguarding it.⁴³⁹ At the same time, existing empirical literature regarding trust in technology remains disconnected from normative discussions over why and how regulation should enable trust.⁴⁴⁰ In the face of this disconnect between legal and empirical discussions on trust in technology, regulation has to promote trust without taking into account the perspectives of the individuals who actually place their trust in it. This limits our understanding of how the legal approach to trust can be concretised in a manner which supports both normative objectives as well as individuals' needs.

This chapter aims to bridge the gap between theoretical conceptions of trust and the role of law in safeguarding trust, and the actual effects of different legal measures on trust. To that end, it explores, from the perspective of individuals, how trust should be safeguarded through explainability and control measures. Rather than approaching trust and its normative background in the abstract, the chapter zooms in on a specific technology, namely news personalisation. Personalisation is used by online platforms to determine what information is shown to which individual, and is also one of the most important applications of AI in the traditional news media.⁴⁴¹ By focusing on news personalisation the chapter aims to account for the context-specific challenges which arise when decision-making is automated in a specific field such as the media. The underlying assumption is that trust in technology, and the reasons why regulation should promote it, are shaped by the specific task which technology is relied on to perform.

Section 6.2 defines trust in the context of news personalisation, and analyses the reasons why and ways in which media regulation has been used to promote trust. Sections 6.3 and 6.4 connect this analysis to

⁴³⁸ ter Hoeve and others (n 405); Alejandro Barredo Arrieta and others, 'Explainable Artificial Intelligence (XAI): Concepts, Taxonomies, Opportunities and Challenges toward Responsible AI' (2020) 58 *Information Fusion* 82; Gianclaudio Malgieri, 'Automated Decision-Making in the EU Member States: The Right to Explanation and Other "Suitable Safeguards" in the National Legislations' (2019) 35 *Computer Law & Security Review* 1.

⁴³⁹ Sonia Livingstone, 'Tackling the Information Crisis: A Policy Framework for Media System Resilience' (LSE Truth, Trust & Technology Commission 2018) <<http://www.lse.ac.uk/media-and-communications/assets/documents/research/T3-Report-Tackling-the-Information-Crisis-v6.pdf>> accessed 15 June 2020; Brian O'Neill, 'Trust in the Information Society' (2012) 28 *Computer Law & Security Review* 551; Helen Nissenbaum, 'Securing Trust Online: Wisdom or Oxymoron?' (2001) 81 *Boston University International Law Review* 31.

⁴⁴⁰ This is at least the case within the specific context of the impact of technology on trust in news, which is the focus of this chapter Donghee Shin, 'Why Does Explainability Matter in News Analytic Systems? Proposing Explainable Analytic Journalism' (2021) 22 *Journalism Studies* 1047; Barredo Arrieta and others (n 439).

⁴⁴¹ Beckett (n 5).

the way in which individuals form trust in technology. The sections draw on a conceptual framework of algorithmic transparency in the context of news personalisation to develop and report the results a survey which gauges what transparency, control, and (self-)regulation individuals need to trust organisations which use personalisation to inform them.⁴⁴² The chapter concludes by outlining how regulation can enable individuals to trust organisations that use personalisation to inform them.

6.2. Theoretical framework

6.2.1. Trust and its role in law

This paper defines trust as the willingness to be vulnerable to the actions of another based on positive expectations about their actions.⁴⁴³ Although it has been notoriously difficult to reach a consensus about the exact meaning of trust, this definition contains three commonly used elements which are important to understand this chapter's approach to trust and its relation to law and the media. First, trust is relational: it involves one party (the trustor) placing trust in another (the trustee). The exact nature of this 'another' is quite flexible. Literature on trust in the media traditionally focused on trust in the media as an institution, specific types of media (such as print or broadcasting), or a specific organisation, journalist, or message.⁴⁴⁴ Research into the impact of automation (or more recently, AI) on trust in media is incorporated into these existing approaches. Studies have for example explored the manner in which trust in media organisations is shaped by their data collection practices, whether individuals are willing to trust automatically produced articles, or to what extent individuals are willing to trust specific types of media which heavily rely on automation, such as social media.⁴⁴⁵ AI is therefore not treated as a new object of trust, but as another factor which can influence how individuals trust the party that informs them. That is also the manner in which this chapter approaches trust.

⁴⁴² van Drunen, Helberger and Bastian (n 336).

⁴⁴³ Caroline Pauwels and Ike Picone, 'The Tussle with Trust: Trust in the News Media Ecology' (2012) 28 *Computer Law & Security Review* 542, 543; Jesper Strömbäck and others, 'News Media Trust and Its Impact on Media Use: Toward a Framework for Future Research' (2020) 44 *Annals of the International Communication Association* 139, 148; JD Lee and KA See, 'Trust in Automation: Designing for Appropriate Reliance' (2004) 46 *Human Factors: The Journal of the Human Factors and Ergonomics Society* 50; Lisa M PytlikZillig and Christopher D Kimbrough, 'Consensus on Conceptualizations and Definitions of Trust: Are We There Yet?', *Interdisciplinary Perspectives on Trust* (Springer International Publishing 2016).

⁴⁴⁴ Strömbäck and others (n 444).

⁴⁴⁵ Robin Steedman, Helen Kennedy and Rhianne Jones, 'Complex Ecologies of Trust in Data Practices and Data-Driven Systems' (2020) 23 *Information, Communication & Society* 817; Newman (n 5); Jannick Kirk Sørensen, Hilde Van den Bulck and Sokol Kosta, 'Stop Spreading The Data: PSM, Trust, and Third-Party Services' (2020) 10 *Journal of Information Policy* 474; Andreas Graefe and Nina Bohlken, 'Automated Journalism: A Meta-Analysis of Readers' Perceptions of Human-Written in Comparison to Automated News' (2020) 8 *Media and Communication* 50.

Second, trust involves vulnerability. Trust only comes into play when there is something at stake, and the possibility exists that the trustor's vulnerability will be exploited.⁴⁴⁶ Vulnerability also tailors trust definitions to specific contexts. Trust in the media typically centres on the media's editorial function, that is, whether it can be expected to provide reliable information.⁴⁴⁷ Operationalisations of trust in media capture different aspects of this editorial function, such as accuracy, comprehensiveness, and fairness.⁴⁴⁸ Part of the way news personalisation impacts trust is by changing the way in which individuals are informed. Instead of an editor deciding what information the audience should see, each individual is given their own selection of articles by a personalisation algorithm controlled by editors, engineers, and/or business departments.⁴⁴⁹

Vulnerability is also the element which can make trust such a hollow concept for legal literature. The need to prevent vulnerabilities from being exploited is nothing new in law, which already contains a wide range of values and mechanisms to do exactly that. These include specific values such as the right to receive information and privacy, as well as more overarching concepts such as autonomy.⁴⁵⁰ Trust does not have any added analytical value in legal discussions if it is simply used to refer to the need to protect these values. The danger of trust being used in this way is exacerbated by the lack of a consensus on its precise definition. This ambiguity makes it possible to use trust as a rhetorical tool to refer to the need for technology, individuals, or institutions to act in line with an undetermined set of values every reader can fill in for themselves.

Trust is not only about one party being vulnerable to another, however. The third element of the definition above captures that trust is about an individual's willingness to be vulnerable based on a positive expectation about the trustee's actions. Trust thereby allows individuals to deal with the uncertainty on whether their vulnerability will be exploited. It does not require that every vulnerability is removed from an interaction, or that individuals engage in a fully rational cost-benefit analysis.⁴⁵¹ Instead, trust functions as a heuristic which allows individuals to avoid such a complex analysis. Affective approaches to trust emphasise the role of emotion in this process, such as a feeling of security, while cognitive approaches highlight individuals can also more consciously draw on information in their trust judgments, such as a

⁴⁴⁶ Annette Baier, 'Trust and Antitrust' (1986) 96 *Ethics* 231.

⁴⁴⁷ Strömbäck and others (n 444) 148; Thomas Hanitzsch, Arjen Van Dalen and Nina Steindl, 'Caught in the Nexus: A Comparative and Longitudinal Analysis of Public Trust in the Press' (2018) 23 *The International Journal of Press/Politics* 3.

⁴⁴⁸ Kohring and Matthes (n 368); Grosser (n 368); Strömbäck and others (n 444) 142.

⁴⁴⁹ Bodó (n 10); Neil Thurman and others, 'My Friends, Editors, Algorithms, and I' (2019) 7 *Digital Journalism* 447, 459; Efrat Nechushtai and Seth C Lewis, 'What Kind of News Gatekeepers Do We Want Machines to Be? Filter Bubbles, Fragmentation, and the Normative Dimensions of Algorithmic Recommendations' (2019) 90 *Computers in Human Behavior* 298.

⁴⁵⁰ Eskens, Helberger and Möller (n 389).

⁴⁵¹ Guido Möllering, *Trust: Reason, Routine, Reflexivity* (Elsevier 2006).

website's presentation. It is important to note that these two approaches are not mutually exclusive; like many other decisions, trust is likely influenced by both affective and cognitive factors.⁴⁵²

In here also lies trust's added value for law. Trust captures an essential manner in which individuals determine whether they will interact with the technologies, individuals, and organisations around them. Trust facilitates these interactions by giving individuals a fast way to assess whether their vulnerability will be exploited if they rely on another party. Simply reducing the level of vulnerability, for example through rules which secure individuals' data protection and information rights, is not necessarily enough to enable individuals to trust. Individuals must also be able to assess an organisation's trustworthiness, or be able to limit their vulnerability if they are not able to trust another party completely. When legal debates ignore this function which trust plays in daily life, the risk is created that individuals are not able to trust other individuals, organisations, or technologies, and are less able to interact with them as a result. This creates an issue when law aims to promote public values which enable individuals to interact with others, for example by receiving information from the media or privately informing themselves about controversial issues. From a legal perspective, trust accordingly functions as a bridge between regulatory efforts which aim to secure public values (such as privacy or freedom of expression) and the actions which these regulatory efforts intend to enable individuals to take (such as receiving information which shapes their opinions, or interacting with others without chilling effects).

6.2.2. Why media regulation is used to promote trust

At the most basic level, trust is relevant to legal discussions because of its ability to facilitate interactions. Societies are built on cooperative relationships, and individuals interact more easily when they are able to trust each other.⁴⁵³ However, law's interest in facilitating interactions is of course selective. There is no legal value in promoting individuals' trust in actors who will exploit that trust, nor the kind of trust which leads to interactions that run counter to public values, such as that which is necessary for cartels or criminal organisations to function.⁴⁵⁴ In the technological and media context of news personalisation, two goals in particular shape the kind of trust law aims to promote.⁴⁵⁵

⁴⁵² Möllering (n 452).

⁴⁵³ Robert D Putnam, 'Bowling Alone: America's Declining Social Capital' in Lane Crothers and Charles Lockhart (eds), *Culture and Politics: A Reader* (Palgrave Macmillan US 2000) <https://doi.org/10.1007/978-1-349-62965-7_12> accessed 29 October 2020.

⁴⁵⁴ Maria Bigoni and others, 'Trust, Leniency, and Deterrence' (2015) 31 *The Journal of Law, Economics, and Organization* 663.

⁴⁵⁵ Mark E Warren, 'What Kinds of Trust Does a Democracy Need? Trust from the Perspective of Democratic Theory' in Sonja Zmerli and Tom WG van der Meer (eds), *Handbook on Political Trust* (Elgar 2017) <<https://www.elgaronline.com/view/edcoll/9781782545101/9781782545101.00013.xml>>; O'Neill, *A Question of Trust* (n 437).

Economic goals feature particularly prominently in the broader legal discussion on the need for trust in AI. In the words of the Commission, ‘lack of trust is a main factor holding back a broader uptake of AI.’⁴⁵⁶ A lack of trust is thereby framed as an economic inefficiency preventing individuals from using AI which is able to provide valuable services. Trust’s role as a precondition for acceptance has a long history. Some of the earliest research into trust in the media focused on the impact of perceived trustworthiness on the acceptance of a message.⁴⁵⁷ Literature on trust in personalisation systems often continues to take a rather short-term approach to promoting trust, sometimes simply operationalising trust as the acceptance of the system or its recommendations.⁴⁵⁸ AI policy emphasises the need for a more long-term acceptance of AI, for which the technology needs to earn trust and be consistently trustworthy.⁴⁵⁹

The necessity of trust in media law discussions is primarily driven by arguments which focus on the media’s role in democratic society. The media’s ability to play this role is not only based on its ability to collect and distribute information, but also on the audience’s willingness to absorb and act on this information. In an information environment where individuals are not able to determine which organisations they can trust, the media cannot fulfil its function as a public watchdog or source of information.⁴⁶⁰ Similarly, citizens cannot fulfil their role in the democratic process unless they are able to trust media organisations. Citizens rely on the media to provide them with information which they do not have the time, resources, or access to obtain themselves. Conversely, a lack of trust severely limits the information which citizens can use to take part in the political process. In other words, the media’s ability to fulfil its role in society presumes that citizens are able to trust the media.⁴⁶¹

The democratic and economic perspectives on trust in the media can complement one another. Both focus on ensuring that a media organisation earns the trust of its audience by doing what it is relied on to do. Economic perspectives focus on the financial value of this interaction. Although this aspect is not the focal point of media law discussions, the need to create a media system in which quality journalism is

⁴⁵⁶ European Commission, ‘White Paper On Artificial Intelligence - A European Approach to Excellence and Trust’ (n 435) 9.

⁴⁵⁷ Carl I Hovland and Walter Weiss, ‘The Influence of Source Credibility on Communication Effectiveness*’ (1951) 15 *Public Opinion Quarterly* 635.

⁴⁵⁸ Jonathan L Herlocker, Joseph A Konstan and John Riedl, ‘Explaining Collaborative Filtering Recommendations’, *Proceedings of the 2000 ACM conference on Computer supported cooperative work* (ACM 2000); Ingrid Nunes and Dietmar Jannach, ‘A Systematic Review and Taxonomy of Explanations in Decision Support and Recommender Systems’ (2017) 27 *User Modeling and User-Adapted Interaction* 393.

⁴⁵⁹ High-Level Expert Group on Artificial Intelligence, ‘Ethics Guidelines for Trustworthy AI’ (European Commission 2019) 4 <https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=60419>; European Commission, ‘White Paper On Artificial Intelligence - A European Approach to Excellence and Trust’ (n 435) 1.

⁴⁶⁰ Tambini (n 437); Thomas Gibbons, ‘Building Trust in Press Regulation: Obstacles and Opportunities’ (2013) 5 *Journal of Media Law* 202, 210; Benjamin Toff and others, ‘What We Think We Know and What We Want to Know: Perspectives on Trust in News in a Changing World’ (Reuters Institute for the Study of Journalism 2020) 5.

⁴⁶¹ CoE, ‘New Notion of Media’ (n 16) para 53.

financially sustainable and disinformation is not, is increasingly emphasised.⁴⁶² Trust has a part to play in this context, given the relationship between trust and media use - as well as media scepticism and use of non-mainstream sources.⁴⁶³ The broader literature on media transparency accordingly highlights the importance of trust for the financial health of the media.⁴⁶⁴

Regulation's ability to secure trust in the context of the media is limited precisely because of the centrality of trust to the ability of media organisations to fulfil their democratic role. Regulation requiring media organisations to act in a trustworthy way would of course allow for political interference in the manner in which the media and citizens interact. Media regulation has therefore established only limited minimum norms regarding editorial responsibility, concerning among others an obligation to protect children from harmful content and a prohibition on subliminal advertising.⁴⁶⁵ As the next section explores further, regulation aims to create the conditions under which individuals can form trust in the media instead, for example through transparency norms which allow individuals themselves to evaluate the trustworthiness of media organisations or media content.

6.2.3. How media regulation promotes trust through transparency and control options

Transparency and control can make it easier for individuals to determine whether they will trust another party by allowing them to be less uncertain and vulnerable. At least from a conceptual perspective, this could prevent individuals from placing as much trust in others as they otherwise would. After all, transparency and control reduce the level of uncertainty and vulnerability which make trust possible. A similar argument is sometimes made with regard to the general relationship between law and trust. By requiring individuals and companies not to (for example) violate individuals' privacy, law arguably takes away their ability to demonstrate their trustworthiness voluntarily.⁴⁶⁶

The concern that legal measures displace trust inherently only applies when individuals would have placed trust even without e.g. transparency or control. However, as the section above argued, regulation is used to enable individuals to trust precisely in situations where they would otherwise feel too uncertain or too vulnerable to do so. That is, media regulation lowers the bar for trust, making it easier for individuals to place trust in a wider variety of actors. Although this may limit the trust individuals would have placed in

⁴⁶² European Commission, 'Tackling Online Disinformation: A European Approach' (n 287); CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89).

⁴⁶³ Strömbäck and others (n 444) 146.

⁴⁶⁴ B Vanacker and G Belmas, 'Trust and the Economics of News' (2009) 5 Journal of Mass Media Ethics 110.

⁴⁶⁵ AVMSD 2018 articles 6a, 9(1)(b), 28b. Public Service Media have a special (and for certain public service media organisations such as the BBC, legal) obligation to act as a trusted source of information. Ofcom, 'Operating Licence for the BBC's UK Public Services' (2020) s 1.24.3 <https://www.ofcom.org.uk/__data/assets/pdf_file/0017/107072/bbc-operating-licence.pdf>.

⁴⁶⁶ See on these arguments e.g. Nissenbaum (n 440) 121.

trustworthy actors without legal measures being in place, this limitation must be seen in the context of the wider group of actors individuals are enabled to trust. Furthermore, the empirical evidence (at least in the context of the media) however indicates transparency and control generally do have a positive (albeit small) impact on trust. There are a wide variety of potential reasons for this, including the possibility that individuals see transparency and control as a signal that a company is trustworthy, or are unaware of the fact a company is only transparent because it is legally required to do so.⁴⁶⁷

The first way in which media regulation promotes trust is by aligning expectations. By forcing parties to make their assumptions explicit and clarify how they fulfil their roles, media regulation can prevent unintended trust violations.⁴⁶⁸ In the context of the media, this way of promoting trust is strongly intertwined with the right to receive information, and more specifically its focus on enabling individuals to seek out a wide range of information. Regulation has traditionally facilitated the exercise of this right by ensuring the availability of information about the media organisation itself, thereby allowing individuals to evaluate how a media organisation fits into their media diet.⁴⁶⁹ Article 5 of the AVMSD, for example, intends to make it easier for individuals to determine who is responsible for the content of the media service which shapes their opinion.⁴⁷⁰ Personalisation can reduce the usefulness of this information, given that a media organisation shows each individual a different collection of news items. At the same time, personalisation creates the opportunity to better suits the expectations of the individual who places trust in the media. Not only is it possible to show each individual which (types of) articles have been shown to them specifically, personalisation also allows individuals to control the news they receive more directly and ensure that personalisation functions in a way which better aligns the goals of the media organisation with their own. Article 29 DSA, which regulates the recommender systems used by very large online platforms, aims to engage with these factors by better enabling individuals to understand and influence the parameters of the recommender systems which determine how information is prioritised for them.⁴⁷¹

⁴⁶⁷ See e.g. Caroline Fisher and others, 'Improving Trust in News: Audience Solutions' (2020) 0 Journalism Practice 1, 7; Toff and others (n 461) 16; Bernadette Uth, Laura Badura and Bernd Blöbaum, 'Perceptions of Trustworthiness and Risk: How Transparency Can Influence Trust in Journalism' in Bernd Blöbaum (ed), *Trust and Communication: Findings and Implications of Trust Research* (Springer International Publishing 2021) <https://doi.org/10.1007/978-3-030-72945-5_3> accessed 9 July 2021.

⁴⁶⁸ CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89) 5; Daryl Koehn, 'Should We Trust in Trust?' (1996) 34 American Business Law Journal 183.

⁴⁶⁹ Eskens, Helberger and Möller (n 389); CoE, 'Recommendation on Pluralism' (n 124).

⁴⁷⁰ AVMSD 2018 recital 16, article 5.

⁴⁷¹ Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC (n 436) articles 25, 29, recital 62. Very large online platforms are defined as online platforms with 45 million or more EU users.

Secondly, transparency can enable and channel scepticism. By providing additional information and contextual cues, media regulation enables news consumers to assess themselves whether they can trust reporting.⁴⁷² Although this can involve explanations of individual editorial decisions, media regulation has generally focused on higher level explanations. Concretely, it especially involves information on the organisation providing the information, and whether editorial content is actually an advertisement.⁴⁷³ In doing so, regulation enables trust judgments regarding specific content or sources. Yet, key from a trust-perspective is that individuals are thus not expected to discount or doublecheck everything which they read, but rather that they can make broader trust judgments and rely on reporting until explanations trigger their scepticism.⁴⁷⁴

Scepticism is at first glance incompatible with trust. However, media regulation prevents individuals from having to adopt generalised scepticism to the media as a whole by enabling individuals to distinguish between the trustworthiness of different pieces of media content.⁴⁷⁵ For example the distinction between commercial and editorial content allows individuals to accept that while a media organisation may be influenced by external commercial pressures, these pressures are limited to the types of content labelled as advertising.⁴⁷⁶ Distinctions in self-regulatory ethics codes, such as the duty to clearly separate news and opinion, fulfil a similar function. Without such distinctions, individuals would be forced to adopt a more generalised scepticism to all reporting by a media organisation. Explanations of the different forces behind different content channel this scepticism, and thereby safeguard trust in the media organisation as a whole.⁴⁷⁷

Finally, media regulation can enable trust repair. As citizens increasingly question journalists' authority, it is not enough to put out responsibly produced content and assume that it will earn the trust of readers. It is also necessary to address questions as to journalistic authority by highlighting the accountability mechanisms with which the media organisation tries to prevent, detect, disclose, and address (perceived) violations of individuals' trust.⁴⁷⁸ At the most basic level, this includes transparency on the norms to which media organisations consider themselves held, and acknowledgments when their reporting fails to live up to such norms. More recent work also emphasises the importance of providing the audience with a way to act on these explanations by providing criticism and feedback.⁴⁷⁹ Through these accountability

⁴⁷² O'Neill, *A Question of Trust* (n 437).

⁴⁷³ Onora O'Neill, 'Trust and Accountability in a Digital Age' (2020) 95 *Philosophy* 3.

⁴⁷⁴ Fisher and others (n 468) 7.

⁴⁷⁵ Lara Fielden, *Regulating for Trust in Journalism: Standards Regulation in the Age of Blended Media* (University of Oxford, Reuters Institute for the Study of Journalism 2011) 117.

⁴⁷⁶ Hitchens (n 392) 102.

⁴⁷⁷ Warren (n 456).

⁴⁷⁸ O'Neill, 'Trust and Accountability in a Digital Age' (n 474).

⁴⁷⁹ Monzer and others (n 49).

processes, a more responsible media system can be incentivised.⁴⁸⁰ Going a step further, individuals could also be given the option to (temporarily) assume more control over the manner in which a media organisation recommends news to them to create a space in which trust can be repaired. In this way, the media can limit the negative impact of (perceived) trust violations by giving the audience the opportunity to voice their scepticism and showing how these concerns are taken into account.⁴⁸¹

6.2.4. Surveying individuals' perspective on trust and law

Media regulation has a strong interest in enabling individuals to trust news personalisation and a wide array of measures which have traditionally supported individuals' trust in the media. Increasingly, policy efforts, such as the DSA as well as the various EU disinformation codes, begin to reinvent the role which law can play to safeguard trust in the light of the technological changes in the online media environment. What remains unclear, however, is to what extent regulatory initiatives aiming to promote trust in the media in the context of technological change are in line with the way in which individuals form trust. This aspect is crucial because it is ultimately the individuals themselves who determine whether they do or do not trust. If regulation is expected to actually promote the trust necessary for individuals and the media to fulfil their role in democratic society, it needs to take into account the perspective of the individuals who place this trust in the media.

To that end, sections 6.3 and 6.4 report on the methodology and results of the survey exploring the transparency and control items which individuals find significant when it comes to their trust in organisations using personalisation to inform them. The items (see Table 3) were developed from a conceptual framework of algorithmic transparency obligations in the context of the media. The framework combines algorithmic transparency and media transparency literature to distinguish between disclosures concerning the organisation which operates the personalisation algorithm, the sources shown, the data used, the algorithm itself, and the output.⁴⁸² For the purposes of this survey, the framework was expanded with a number of control options serving as counterparts to the transparency items,⁴⁸³ as well as recent regulatory measures put forward in the context of trust in platform and disinformation discussions.⁴⁸⁴ The first set of research questions explores how important these transparency and control measures are to individuals when it comes to their trust in organisations which use personalisation to inform them.

⁴⁸⁰ High level Group on fake news and and online disinformation (n 419) 25.

⁴⁸¹ Gibbons (n 461) 212; European Commission, 'White Paper On Artificial Intelligence - A European Approach to Excellence and Trust' (n 435) 23.

⁴⁸² van Drunen, Helberger and Bastian (n 336).

⁴⁸³ This is sometimes referred to as interactive transparency in media transparency discussions Karlsson (n 406); Domingo and Heikkilä (n 406).

⁴⁸⁴ High-Level Expert Group on Artificial Intelligence (n 460); European Commission, 'Tackling Online Disinformation: A European Approach' (n 287); CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89).

RQ1a: how important are legal transparency measures to individuals' trust in organisations that use news personalisation to inform them?

RQ1b: how important are legal control measures to individuals' trust in organisations that use news personalisation to inform them?

RQ2: is there a difference between the importance of transparency and control measures to individuals' trust?

News personalisation has the potential to impact individuals' trust in the organisations which use it because it changes the way in which the audience is informed.⁴⁸⁵ This would mean that the use of personalisation further limits the media's ability to fulfil its role in society by reducing the number of individuals with high trust in the media. It is therefore important to know how news personalisation can be explained to or made controllable for individuals who already trust the media. At the same time, considerable policy and research attention is devoted to the need to prevent a decrease in trust. Research into analogue media indicates transparency is unlikely to restore the trust of individuals who have already lost trust in the media, given that the transparency is provided by an untrustworthy party.⁴⁸⁶ Conversely, control options may not face the same challenge because they allow an individual to limit the media's influence over their news diet.⁴⁸⁷ In order to explore to what extent the tested transparency and control measures are suitable to enable individuals with high and low trust in the media respectively to trust organisations which personalise their news, the research asks the following questions:

RQ3a: is the extent to which individuals find transparency measures important related to their existing trust in the media?

RQ3b: is the extent to which individuals find control measures important related to their existing trust in the media?

Similarly, the importance attached to transparency of and control over personalisation algorithms may depend on an individual's existing level of algorithmic literacy. Individuals first have to know what personalisation is and how it might affect them to gain an interest in better understanding or controlling a personalisation algorithm.⁴⁸⁸ Knowing what information and control measures (if any) are important to

⁴⁸⁵ Monzer and others (n 49).

⁴⁸⁶ Michael Karlsson, 'Dispersing the Opacity of Transparency in Journalism on the Appeal of Different Forms of Transparency to the General Public' (2020) 21 *Journalism Studies* 1795.

⁴⁸⁷ Monzer and others (n 49) 1153.

⁴⁸⁸ Motahhare Eslami and others, 'I Always Assumed That I Wasn't Really That Close to [Her]', *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems - CHI '15* (ACM Press 2015) <<http://dl.acm.org/citation.cfm?doid=2702123.2702556>>; Emilee Rader, Kelley Cotter and Janghee Cho,

individuals with high algorithmic literacy may indicate which types of measures will become more important as public awareness of the personalisation algorithms used by platforms grows.⁴⁸⁹ This chapter thus aims to explore the following questions:

RQ4a: is the extent to which individuals find transparency measures important related to their algorithmic literacy?

RQ4b: is the extent to which individuals find control measures important related to their algorithmic literacy?

Finally, law's ability to safeguard trust entails more than empowering individuals to protect themselves through transparency and control measures. An important way in which law protects trust is by prohibiting certain forms of behaviour, effectively reducing individuals' level of vulnerability. The AI Act, which prohibits the use of certain AI systems deemed to be high risk, is an important recent example of this approach. Along similar lines, (self)-regulation of the media can limit unacceptable practices and provide individuals with further protection and certainty.⁴⁹⁰ In other words, there can also be a role for further-reaching measures, either in the form of legal obligations or self-regulation to protect the legitimate interests and rights of users and society.

RQ5a: how important are measures in (self-)regulation to individuals' trust in organisations that use news personalisation to inform them?

RQ5b: is there a relationship between the importance of self-regulation and the importance of transparency to individuals' trust in organisations that use news personalisation to inform them?

RQ5c: is there a relationship between the importance of self-regulation and the importance of control to individuals' trust in organisations that use news personalisation to inform them?

6.3. Methodology

The survey (Annex A) was distributed among a representative sample of the Dutch population. The total sample size was $N = 1009$. Representativeness was achieved based on age, gender, education, and region. The data collection was carried out by the research company IPSOS. The overall response rate was 27 per cent. The data collection took place between 15 and 20 April 2021 (5 days). The mean age of the sample

'Explanations as Mechanisms for Supporting Algorithmic Transparency', *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems - CHI '18* (ACM Press 2018) <<http://dl.acm.org/citation.cfm?doid=3173574.3173677>> accessed 4 November 2020.

⁴⁸⁹ Rader, Cotter and Cho (n 489); Brahim Zarouali, Sophie C Boerman and Claes H de Vreese, 'Is This Recommended by an Algorithm? The Development and Validation of the Algorithmic Media Content Awareness Scale (AMCA-Scale)' (2021) 62 *Telematics and Informatics* <<https://www.sciencedirect.com/science/article/pii/S0736585321000460>> accessed 7 July 2021.

⁴⁹⁰ CoE, 'New Notion of Media' (n 16) para. 53; Gibbons (n 461) 216.

was 48.17 ($SD = 16.68$ years), ranging from 18 to 89 years old. Half of the sample consisted of women (50 per cent). All respondents who successfully completed the survey received an incentive from the research company. A demographic overview of the sample is presented in Table 2.

	Percentage (%)	Frequency (N)
<i>Age categories ($M_{age} = 48.17$, $SD_{age} = 16.68$)</i>		
18-34 years	26.76	270
35-54 years	32.80	331
55+ years	40.44	408
<i>Gender</i>		
Women	50.45	509
Men	49.55	500
<i>Education</i>		
Low	16.65	168
Moderate	39.94	403
High	43.41	438
<i>Region</i>		
North	8.52	86
East	22.60	228
South	25.77	260
West	29.83	301
Three large cities (Amsterdam, Rotterdam & The Hague)	13.28	13.28

Table 2. Demographic characteristics of the sample.

6.4. Results

To answer RQ1a and RQ1b, we asked respondents to indicate how important a number of concrete transparency and control measures were to their trust in media organisations which use news personalisation to inform them. Answer options ranged from 1 (*not important at all*) to 7 (*very important*). The measures and associated mean values can be found in Table 3. It can be concluded that all transparency and control measures are perceived to be important by the respondents. The mean scores are relatively high (all between 5-6, with 7 being the maximum score). This highlights that people find all the transparency and control measures in the context of the media organisation, the data, the algorithm, and the output to be relatively important.

To provide an answer to RQ2, we calculated the average score of all the transparency and control items from Table 3. The average mean score of transparency is $M = 5.47$; the average mean score for control

was 5.54. A t-test shows that there is a significant difference between these two values, meaning that people find control to be slightly more important than transparency: $t(1008) = -4.46, p < .001$. In addition, a Pearson correlation test shows that transparency and control are highly correlated to each other ($r = .90, p < .001$). This means that the importance of transparency goes hand in hand with the importance of control measures.

To answer RQ3a and RQ3b, we conducted correlation analyses between individuals' existing media trust and perceived importance of transparency and control measures. Results indicate a weak positive correlation between media trust and control ($r = 0.10, p < .01$). The exact same pattern for transparency: a weak positive relationship with media trust ($r = .12, p < .001$). These findings mean that people who have a higher media trust, also find control and transparency to be slightly more important.

To answer RQ4a and RQ4b, we ran correlation tests between people's algorithmic literacy and perceived importance of transparency and control in news personalisation. Algorithmic literacy was measured based on items derived from a study of Zarouali, Boerman, and de Vreese.⁴⁹¹ The correlation between algorithmic literacy and transparency was $r = .39 (p < .001)$; between algorithmic literacy and control $r = .35 (p < .001)$. These correlation coefficients indicate a moderate positive relationship. This means that people with a higher algorithmic literacy tend to perceive transparency and control measures as more important as well.

To answer RQ5a, we asked respondents to indicate the importance of (self-)regulation at each of the five stages of the model. The average mean score of the importance of (self-)regulation to individuals' trust is $M = 5.33$. Finally, in answering RQ5b and RQ5c, we again ran correlation tests. We found that there is a strong positive relationship between the importance of (self-)regulation and the importance of control measures ($r = .78, p < .001$); the exact same strong positive correlation was also found between regulation and transparency ($r = .78, p < .001$). This indicates that the perceived importance of (self-)regulation is very much associated with people's perceived importance of transparency and control measures in news personalisation.

⁴⁹¹ Zarouali, Boerman and de Vreese (n 490).

Items	Mean
The media organisation	
<i>Transparency</i>	
It is clear to what extent journalists and editors determine the way news is personalised.	5.36
It is clear whether commercial parties such as advertisers influence the way news is personalised.	5.48
It is clear to what extent the media organisation uses algorithms from other companies to personalise the news.	5.38
<i>Control</i>	
The ability to choose between the personalisation algorithms of different companies on a website.	5.25
The source of the articles	
<i>Transparency</i>	
It is clear what the identity of the source of a recommended article is.	5.62
It is clear whether the source of a recommended article adheres to journalistic norms established by traditional media companies.	5.53
It is clear whether a recommended article comes from a government institution.	5.60
It is clear whether a recommended article is produced automatically or written by a human.	5.53
<i>Control</i>	
The ability to choose from which sources you will receive news.	5.64
The ability to choose to only receive news from sources that adhere to journalistic norms established by traditional media companies.	5.56
The data	
<i>Transparency</i>	
It is clear what data is collected about you to personalise news.	5.75
It is clear for which other goals the collected data is used.	5.77
It is clear whether the collected data is shared with other parties.	5.80
<i>Control</i>	
The ability to choose what data about you is used to personalise the news.	5.85
The ability to delete the data used to personalise news for you.	5.87

The algorithm

Transparency

It is clear why a specific article is recommended.	5.31
It is clear which factors have the most impact on the way news is personalised.	5.27
It is clear what goal the media organisation tries to achieve by personalising the news.	5.35

Control

The ability to turn news personalisation off.	5.94
The ability to indicate that a specific type of news article should be recommended more or less.	5.39
The ability to choose which factors have the most influence on the way news is personalised.	5.36
The ability to choose which goals the personalisation algorithm aims to achieve.	5.39

The output

Transparency

It is clear which parts of the site are personalised.	5.42
It is clear what type of news (for example, entertainment, politics, sport) has been recommended to you more often.	5.23
It is clear which important articles have not been recommended to you.	5.24

Control

The ability to choose to always see important articles.	5.68
The ability to see which sources or articles have not been recommended.	5.37
The ability to give feedback on the way news personalisation works.	5.22

Table 3: overview of all transparency and control items with their respective mean values.

6.5. Discussion

Trust is a psychological process which law aims to enable for normative purposes. This chapter has argued that doing so successfully in the face of technological change first requires us to determine for which purposes law intends to promote trust in the organisations relying on technology. Section 6.2 has therefore explored why and how media regulation seeks to promote trust. It argued that the kind of trust which is necessary for individuals and the organisations informing them to fulfil their role in democratic society is central in media regulation. Media regulation is used to promote this trust by aligning their expectations, facilitating a healthy scepticism, and enabling trust repair. However, knowing why and how regulation should promote trust is not sufficient. In order to actually promote trust, media regulation must also take into account the way in which individuals determine who to trust. In short, the normative and individuals' perspective on trust need to align.

This research reveals that individuals find the transparency and control items suitable for the kind of trust which law aims to promote, important when they decide whether to trust an organisation using news personalisation to inform them. Moreover, there is only a weak relationship between existing trust in the media and the importance individuals attach to transparency and control items. Enabling individuals to trust organisations which use personalisation to inform them is therefore essential for both individuals who already trust the media as well as those who have lost trust in the media.

The differences between the value individuals attach to the various transparency and control items are relatively small. When it comes to transparency, individuals found information about the data which is used and the source of the articles which are recommended, to be somewhat more relevant to their trust than other measures with which they were presented, such as information about the factors which have the most impact on how personalisation algorithms determine what news individuals see. The former, information about data processing, is regulated extensively in data protection law. The latter, information about the source of the information which individuals see, has traditionally been an important aspect of media regulation.⁴⁹² Measures adapting such information obligations to the online media environment are beginning to emerge in a fragmented fashion in self-regulation as well as EU and national law. Among others the proposed AI Act and German Medienstaatsvertrag require that automatically generated content is labelled as such.⁴⁹³ The results from the empirical research indicate that such information (whether a piece of content was produced automatically, by a government institution, or by a media organisation which adheres to journalistic norms) is important to individuals' trust in organisations using personalisation to inform them. Concretising and harmonising measures which entitle individuals to such information, would not only ensure that individuals are provided with information relevant to their trust, but also that this occurs in an easily recognisable and understandable format.

However, individuals are not merely interested in knowing more; this research demonstrates that the ability to exercise control over the way in which news is personalised, is more important to individuals' trust than transparency. Half of all respondents indicate that the ability to stop personalisation is very important to their trust in organisations using the technology to inform them. Furthermore, the ability to modify how personalisation works, for example by choosing from which sources to receive news or to always see important articles, is also important to individuals' trust.

⁴⁹² AVMSD 2018 recital 16, article 5; O'Neill, 'Trust and Accountability in a Digital Age' (n 474) 15; CoE, 'Recommendation on Pluralism' (n 124).

⁴⁹³ Medienstaatsvertrag 2020 article 18(3); Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain union legislative acts (n 436) article 52(3); 'EU Code of Practice on Disinformation' (European Commission 2018) <https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=54454> article I, II.D.

On an abstract level, individuals' demand for control is in line with the goals which law aims to achieve by having established algorithmic transparency obligations. The goal is not simply to provide more information to individuals, but also to enable individuals to choose what news to read, to hold organisations accountable, or to trust the use of news personalisation.⁴⁹⁴ Control options let individuals act on the information with which they are provided more directly. At the same time, research shows that individuals gain a better understanding of the manner in which a system functions by seeing how their control results in different outcomes.⁴⁹⁵ Our research similarly indicated a strong relationship between the importance individuals attach to transparency and control. In short, control and transparency are intertwined.

In practice, existing regulation focuses on informing individuals, but only gives them limited opportunities to exercise the control which they find more important to be able to trust organisations using news personalisation to inform them. On the positive side, article 22 GDPR regulating automated decision-making as well as article 29 of the DSA proposal regulating the recommender systems used by very large online platforms, aim to give individuals more control by enabling them to stop the use of profiling.⁴⁹⁶ As the findings from this research confirm, such obligations align with individuals' perspective on what they need to trust the use of news personalisation. However, neither provision provides individuals with a clear-cut right to stop news personalisation. Article 22 GDPR is subject to multiple exemptions relating to for example whether news personalisation is based on consent or a contract, or involves decisions with legal or similarly significant effect. Moreover, the GDPR does not regulate how the option to stop news personalisation should be offered to users, only requiring organisations to facilitate the exercise of the right provided under article 22.⁴⁹⁷ Article 29 DSA does demand that very large online platforms make any options to modify the parameters of the recommender system or stop profiling easily accessible on their online interface. However, it leaves platforms free to decide which options to stop or modify profiling (if any) to offer.

The freedom article 29 DSA leaves to platforms reflects a broader challenge. Enabling individuals to find and access information has traditionally been an important aspect of media regulation. More recent policy

⁴⁹⁴ van Drunen, Helberger and Bastian (n 336).

⁴⁹⁵ S Shyam Sundar, 'Rise of Machine Agency: A Framework for Studying the Psychology of Human–AI Interaction (HAI)' *Journal of Computer-Mediated Communication* 82 <<https://academic.oup.com/jcmc/advance-article/doi/10.1093/jcmc/zmz026/5700811>> accessed 22 January 2020.

⁴⁹⁶ Sarah Eskens, 'A Right to Reset Your User Profile and More: GDPR-Rights for Personalized News Consumers' (2019) 9 *International Data Privacy Law* 153; Helberger and others, 'Regulation of News Recommenders in the Digital Services Act' (n 81).

⁴⁹⁷ Art. 12(2) GDPR; Bastian and others (n 45); Luciana Monteiro Krebs and others, 'Tell Me What You Know: GDPR Implications on Designing Transparency and Accountability for News Recommender Systems', *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems* (ACM 2019) <<http://doi.acm.org/10.1145/3290607.3312808>> accessed 21 May 2019.

initiatives increasingly emphasise the importance of also empowering individuals to access news in the digital media environment.⁴⁹⁸ Nonetheless, individuals still have few legal rights entitling them to exercise more direct control over the personalisation algorithms which are increasingly key in navigating the online media environment. Our research indicates the importance of enabling individuals to directly adapt personalisation to function in a way which better aligns with what they would trust it to do. Concretely, this could involve enabling individuals to choose which goals the personalisation algorithm aims to achieve, or to choose between personalisation algorithms offered by different organisations.⁴⁹⁹

Neither control nor transparency are sufficient. The existence of (self-)regulatory norms regarding the way in which personalisation functions, is also critical for trust. The need for such regulation is an essential part of the criticism against individual-oriented transparency and control measures. A focus on empowering individuals can shift policy attention away from the responsibilities which organisations using personalisation bear themselves.⁵⁰⁰ This creates the risk that individuals' involvement replaces rather than complements platforms' and the media's responsibility for the use of news personalisation. The results above indicate that empowering individuals is not enough to create the conditions which can lead to trust. Instead, there was a strong relationship between a demand for more transparency and control, and a demand for (self-)regulation in order to support trust. Determining whether technology is trustworthy is therefore not only an individual concern, or individuals' responsibility. Indeed, policymakers need to both enable individuals to ensure that organisations using news personalisation do what they trust them to do and adapt the regulatory mechanisms with which regulation has traditionally safeguarded trust.⁵⁰¹ In that process, attention should be paid to the factors which individuals have indicated to be relevant to their trust, including information about the influence of advertisers and other commercial interests on the way in which personalisation operates, or the ability of editors to exercise control over personalisation.⁵⁰²

Similarly, information about the data collected to make personalisation possible, and the other purposes for which it is used or actors with whom it is shared, is relatively important to individuals' trust in whether organisations will inform them appropriately. Especially the latter two factors are not directly related to

⁴⁹⁸ Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC (n 436) recital 62; CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89) para. 10, 12; CoE, 'Recommendation on Pluralism' (n 124) paras 10, 2.3.

⁴⁹⁹ Harambam and others (n 70); Ian Brown, 'Interoperability as a Tool for Competition Regulation' [2020] OpenForum Academy <<https://euagenda.eu/upload/publications/ian-brown-interoperability-for-competition-regulation.pdf>>; 'The Trust Project' (n 419); Reporters Without Borders, 'Journalism Trust Initiative' (3 April 2018) <<https://www.journalismtrustinitiative.org/>>.

⁵⁰⁰ Ananny and Crawford (n 324).

⁵⁰¹ van Dijck, Poell and de Waal (n 117) 30, 159.

⁵⁰² Tobias Eberwein, Susanne Fengler and Matthias Karmasin, *The European Handbook of Media Accountability* (Routledge 2019) <<https://www.routledge.com/The-European-Handbook-of-Media-Accountability/Eberwein-Fengler-Karmasin/p/book/9781472457660>>.

the way in which media organisations inform individuals. As a result, when individuals determine whether they can trust an organisation using algorithms to inform them, they apparently also consider whether that organisation protects them from other risks which feature prominently in the public debate on technology.⁵⁰³ Ensuring that the norms in data protection law which already entitle individuals to this information are effectively applied is consequently also an important aspect of ensuring trust when the media uses technology to inform its audience.⁵⁰⁴ This especially holds true for public service media, which have a special obligation to act as a trusted source of information.⁵⁰⁵

Looking forward, exploring the role which general safeguards such as data protection play in supporting trust in different contexts, is particularly important. This allows us to determine what role, if any, there is for overarching safeguards as regards trust in horizontal legal frameworks such as the GDPR or AI Act. At the same time, it enables an analysis of the extent to which regulatory safeguards for trust need to take account of the specific context in which technology is employed. This is not only important to address the contextual nature of trust, it is also necessary to explore to what extent trust-supporting measures such as individuals' control can be integrated in a way which respects values such as media freedom and editorial independence. Further exploring the differences and similarities in the relationship between trust and regulation in different contexts is therefore key to creating a comprehensive and consistent regulatory approach to trust in organisations using technology.

⁵⁰³ Steedman, Kennedy and Jones (n 446); Bansal and Zahedi (n 369).

⁵⁰⁴ Bastian and others (n 45); Paul C Bauer and others, 'Did the GDPR Increase Trust in Data Collectors? Evidence from Observational and Experimental Data' (2021) 0 Information, Communication & Society 1.

⁵⁰⁵ Sørensen, Van den Bulck and Kosta (n 446).

7. Conclusion

7.1. News personalisation as a challenge to editorial control

News personalisation changes the way in which the public is informed by making it possible to show each individual different information depending on their characteristics. News personalisation thereby allows media organisations and platforms to take an old principle of effective communication, the need to take your audience into account, and apply it to the way in which they inform specific individuals. Bearing in mind the individual information recipient's characteristics is especially important in a digital media environment, where the screens through which this information is accessed can be small and the amount of available information is overwhelming. As such, personalisation is an increasingly important way in which both media organisations and platforms determine what information individuals will see.⁵⁰⁶

The number of recommendations necessary to show each individual different information make it impossible for a traditional editor to exercise oversight over what is on each individual's personalised frontpage. Instead, control over the information individuals which will see has to be exercised at a different level. It involves, for example, decisions about the way in which a personalisation algorithm is designed to achieve its goals, what articles it can recommend, and which parts of the site are not personalised. These decisions are not only (or even necessarily) taken by editors and journalists. News personalisation is also influenced by the engineers who build the algorithm, the business departments which fund it, the product owners managing the site on or app in which it is used, and the audience whose actions influence the recommendations which they and others see. Especially on social media platforms, which focus on recommending information uploaded by users with algorithms developed by engineers for commercial purposes, little room is left for traditional editorial judgment.⁵⁰⁷ However, the trends outlined above also change the way in which the legacy media can exercise editorial control.⁵⁰⁸

These changes in the exercise of editorial control challenge the way in which media law safeguards editorial responsibility. This dissertation has defined editorial control as the influence over the information contained in a content item, what content is made available to the public, and how this content is organised.⁵⁰⁹ This control has traditionally been tied to editorial responsibility through a simple logic. The ability to exert influence over the way in which content is produced, published, and organised,

⁵⁰⁶ Gillespie (n 7); Beckett (n 5).

⁵⁰⁷ This dissertation has focused on platforms that organise media content they allow their users to make available to the public. See in further detail section 4.2.

⁵⁰⁸ Section 1.3 summarises how media organisations and platforms exercise control over personalisation. Sections 2.3, 3.5, and 4.2 go into more detail.

⁵⁰⁹ Section 1.2.1.

allows an actor to determine what information the audience is exposed to. In turn, this impacts the values which media law aims to safeguard, such as whether the audience is exposed to information which is diverse, can be used to hold powerful actors accountable, and is not libellous. As a result, actors who exercise editorial control bear editorial responsibility for the way in which they do so. The objective in assigning such responsibility is not only to hold the individual editor or journalist accountable for violations of media law. It is also to ensure the practical effect of media law by targeting the party that can mitigate or prevent this impact. This can result in a centralised approach to editorial responsibility focusing on the actor who has the most power to determine how editorial control is exercised. This power manifests itself through, for example, the ability to choose the editorial direction of a paper, give instructions to editorial staff, or exercise control over the most important parts of the editorial process.

News personalisation challenges this traditional approach to editorial responsibility. It allows a wide range of old and new actors (such as users, platforms, engineers, and business departments) to influence how news is distributed, while at the same time changing the way in which editors and journalists can exercise editorial judgment. These challenges to the exercise of editorial control are especially problematic because news personalisation raises complex new questions about the way in which organisations should inform their audiences. For example: how should organisations prevent their personalisation algorithms from recommending content to an individual which is harmful to them? To what extent should the media use personalisation to simply provide individuals with information which is relevant to their interests, work, or social life? How should media companies use personalisation to expose individuals to different viewpoints during war?⁵¹⁰ Answering these questions requires editorial judgment. To influence whether and how this judgment is exercised, media law must adapt its approach to editorial responsibility.

This dissertation has focused on the way in which law can influence the conditions under which (actors within) media organisations and platforms implement and use news personalisation, rather than the way in which news personalisation challenges specific editorial values. It has explored the following research question:

How should editorial responsibility be safeguarded in the context of news personalisation?

The law has played two distinct roles in this analysis. First and foremost, law is of course used to establish responsibilities. In that context, the dissertation has primarily focused on the manner in which media law, and the AVMSD in particular, differentiates between the responsibilities of media service providers which exercise editorial control, and video-sharing platforms which exercise organisational control. Additionally, policymakers can stimulate or require self-regulation. This self-regulation, such as the editorial statutes

⁵¹⁰ Vrijenhoek and others (n 149); Komatsu and others (n 71); Bastian, Makhortykh and Dobber (n 65).

outlining the journalistic rights and responsibilities required under the Dutch Media Act, can be adapted to ensure that media actors exercise editorial control in the context of personalisation.⁵¹¹ Secondly, law is used to enable actors in the media system to effectively fulfil their role and potentially assume responsibility. In particular, article 10 ECHR imposes a positive obligation on states to enable pluralism, and the effective exercise of free expression. Media law and policy contain a wide range of tools with which states can fulfil this obligation, ranging from media concentration regulations to funding for public service media and subsidies.⁵¹² Additionally, the dissertation has emphasised how provisions in horizontal legal frameworks governing profiling and recommender systems in the DSA and GDPR, can be used and improved to better enable individuals to understand and control what information personalisation algorithms show them.⁵¹³

The research question has been analysed through three sub-questions which focus on the roles and responsibilities of three central actors in the news personalisation process: the media organisations and platforms employing news personalisation algorithms, and the users whose explicitly stated and inferred preferences directly influence the news which a personalisation algorithm selects for them. The sub-questions are:

- How can media law promote the conditions under which the media can exercise editorial control in the context of news personalisation?
- How does platforms' control over the organisation of content on their service relate to the traditional concept of editorial control, and what are the implications of the differences between the two forms of control for the allocation of responsibility on platforms?
- How should the individuals who use news personalisation be enabled to fulfil their role in the news personalisation process?

Section 7.2 summarises the answers provided to each of these three sub-questions. Section 7.3 concludes with an outlook.

⁵¹¹ Mediawet articles 2.88, 3.5; Commissariaat voor de Media (n 216); Myrna McGregor, 'Responsible AI at the BBC: Our Machine Learning Engine Principles' (*BBC R&D*, May 2021) <<https://www.bbc.co.uk/rd/publications/responsible-ai-at-the-bbc-our-machine-learning-engine-principles>> accessed 5 August 2021.

⁵¹² Damian Tambini, 'Reconceptualizing Media Freedom', *Regulating Big Tech* (Oxford University Press 2021) <<https://oxford.universitypressscholarship.com/10.1093/oso/9780197616093.001.0001/oso-9780197616093-chapter-17>> accessed 26 January 2022.

⁵¹³ GDPR articles 22, 13(2)(f), 14(2)(g) and 15(1)(h); Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC (n 436) article 29.

7.2. The roles and responsibilities of the media, platforms, and individuals in the context of news personalisation

7.2.1. Media organisations

Chapters 2 and 3 explored the conditions under which the media can exercise editorial control in the context of news personalisation. These chapters assume that a media organisation in principle continues to be fully responsible for its editorial output, regardless of whether this output is created by its journalists and editors, or through an algorithm created by its software engineers.⁵¹⁴ However, this continued responsibility at the organisational level obscures the challenges which news personalisation creates for editors' and journalists' ability to exercise editorial control within media organisations.

News personalisation firstly challenges media actors' ability to exercise editorial oversight over the way in which personalisation algorithms impact on editorial values. The amount of recommendations personalisation algorithms generate makes it difficult for editors to exercise oversight over what sets of articles individual readers see. At the same time, a lack of algorithmic transparency challenges their ability to understand (and then influence) the design of the personalisation algorithms currently used to take editorial decisions. Moreover, editors and journalists cannot employ personalisation algorithms by themselves. Rather, they have to rely on a wide range of actors to use personalisation algorithms to inform the audience, including software engineers or companies, product owners, business departments, and the social media platforms which increasingly invest in digital innovation projects in the media.⁵¹⁵

Editorial independence has traditionally been a key concept with which states have ensured that media actors can continue to exercise editorial judgment, and limited their dependencies on non-media actors.⁵¹⁶ Chapter 2 therefore put forward a normative framework outlining why editorial independence is important in European media law, and how it is challenged by news personalisation.⁵¹⁷ Editorial independence is firstly valued because of what it prevents: it limits commercial and political manipulation of the audience as well as concentrations of power in the media system as a whole. Additionally, editorial independence is valued because of what it enables: it is a precondition for the media to determine how it will contribute to the public interest, and enables pluralism by ensuring that different voices are represented in the public debate.

⁵¹⁴ Lewis, Sanders and Carmody (n 56); Helberger and others, 'A Freedom of Expression Perspective on AI in the Media' (n 81) s 4.

⁵¹⁵ Fanta and Dachwitz (n 62); Pickard (n 131).

⁵¹⁶ See section 2.2 on states' obligation to ensure editorial independence under article 10 ECHR. See section 3.2 and 3.5.1 on the interaction between legal and journalistic perspectives on editorial independence.

⁵¹⁷ Section 2.3 outlines four perspectives on the functions of editorial independence in European media law.

Chapters 2 and 3 used interviews with editors and journalists and a literature review to better understand the way in which news personalisation challenges editorial independence's different functions, and identified three types of measures which can address personalisation's challenges.⁵¹⁸ The first are *structural* measures. The automation of editorial decision-making can challenge editorial independence's role as a precondition for pluralism and a safeguard against new concentrations of power by creating new dependencies on for example platforms and technology providers, and by advantaging large media organisations and editorial values which are easier to automate. Addressing these challenges requires states to update the transparency regulations which allow society to know how power is exercised in the media system. Traditionally, these regulations focused on identifying the manner in which power could be exercised and concentrated through media ownership. As the media increasingly automates its editorial decision-making, it becomes more important to also identify (for example) who funds and influences the development of automated editorial decision-making technologies, to what extent different media rely on (the same) external software providers, and how these forms of control relate to the media's increasing reliance on platforms' content distribution algorithms to reach an audience. However, transparency is not enough to safeguard editorial independence. In order to ensure that media organisations can retain their independence in a media system where automation is increasingly central, this dissertation suggests that states must also redress and prevent power imbalances which may result from the automation of editorial decision-making. This can involve, for example, ensuring that automated tools are accessible for smaller media organisations as well, or promoting the availability of different personalisation algorithms so that media organisations can choose to use automation in a way which aligns with their editorial values.⁵¹⁹

The second measure is *organisational* in nature. It addresses the need to ensure that editorial departments continue to have the power to determine how editorial values are realised when they collaborate with software engineers and business departments to implement personalisation algorithms. This power is challenged when editorial departments are only involved late in the design process or are represented by employees with a lower level of seniority than their counterparts from business and technical departments. Chapter 2 and 3 argued for a procedural approach, in which (self-)regulation recognises the need to secure editorial oversight of the way in which algorithms impact on editorial values, and the need to safeguard editorial departments' power to influence the editorial decisions involved in using such algorithms. Such decisions concern, for example, the extent to which personalisation algorithms are used, the type of content which they recommend, the values which they promote, and the way in which they are evaluated.

⁵¹⁸ See Table 1 for an overview of the potential challenges automation poses to editorial independence. Sections 2.3 and 3.5 explore these challenges in more depth.

⁵¹⁹ See section 2.4-2.5 and 3.6 for further detail on the ways in which states can secure editorial independence in an automated media system.

The third measure is *technical*. It concerns the need to ensure that editors and journalists actually have the capacity to influence the way in which personalisation algorithms function. This capacity is hindered when a lack of algorithmic transparency prevents editorial departments from knowing how personalisation algorithms affect editorial values, and how they can be designed to better realise said values. Investment in the skills which media actors require to better understand how algorithms impact on editorial values, as well as metrics which provide more concrete information about the way in which a specific personalisation algorithm impacts on editorial values, can support media actors' ability to control how personalisation algorithms should be used. The interviews also signalled the emergence of new professional roles, such as intermediaries with technical and editorial expertise who can manage collaboration between editorial and technical departments.

The organisational and technical measures fit into a broader trend towards a procedural approach in algorithmic and platform governance. This approach aims to ensure that organisations exercise oversight over the impact of their algorithms by requiring them to create mechanisms with which they detect and subsequently address the risks posed by the algorithms which they use.⁵²⁰ The risk assessment obligations for very large online platforms in the DSA and data protection impact assessments in the GDPR are prominent examples.⁵²¹ However, attention for the procedures through which technologies are employed, is also an important aspect of the way in which the media adapts its ethics codes to the automation of editorial decision-making. The BBC's machine learning principles emphasise how and when engineering and data science teams should reach out to the editorial department to ensure editorial oversight.⁵²²

Going forward, these parallel trends toward a more procedural approach to responsibility for the use of automated decision-making in legacy media and platform regulation should not be assessed in isolation. This is firstly necessary to ensure coherence between the parts of media law which regulate platforms' use of technology, and those that regulate the media's use of technology. Naturally, as the next section argues in further depth, clear differences exist between the kinds of control platforms and the media exercise and the kinds of automated editorial decision-making they use – with platforms relatively more

⁵²⁰ Mark Bunting, 'From Editorial Obligation to Procedural Accountability: Policy Approaches to Online Content in the Era of Information Intermediaries' (2018) 3 *Journal of Cyber Policy* 165; Barrie Sander, 'Freedom of Expression in the Age of Online Platforms: The Promise and Pitfalls of a Human Rights-Based Approach to Content Moderation' (2019) 43 *Fordham International Law Journal* 939; Evelyn Douek, 'Governing Online Speech: From "Posts-as-Trumps" to Proportionality and Probability' (2021) 121 *Columbia Law Review* 759; Torben Klaus, 'Graduating from "New-School" – Germany's Procedural Approach to Regulating Online Discourse' (2022) 0 *Information, Communication & Society* 1.

⁵²¹ GDPR article 35; Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC (n 436) articles 26-27.

⁵²² McGregor (n 513).

involved in automated content moderation and less in automated content production. Similarly, there are differences in the values which platforms and the media are expected to safeguard. Media organisations are guided by a wide range of editorial values, including objectivity and independence, while platform governance focuses on more limited standards relating to (for example) the need to prevent dissemination of illegal content.⁵²³ However, both face a similar challenge to the need to exercise oversight over the impact of the algorithms which they use, especially when they use a similar technology such as personalisation. Likewise, both arguably have a responsibility to safeguard values such as diversity and non-discriminatory access to information in the context of news personalisation.⁵²⁴ In order to understand if and where the media's and platforms' use of technology should be regulated differently, it is first necessary to determine how the challenges which they face relate to one another. Doing so requires us to combine insights from the procedural approaches to the responsibilities of platforms and the media.

Combining insights on the ways in which the media and platforms can exercise oversight over algorithms' impact on editorial values is also a question of efficiency. Procedural approaches tend to refer to broad values and interests which should be safeguarded when technologies are employed. For example, the DSA refers to the need to mitigate systemic risks which recommender systems pose to fundamental rights such as the freedom of expression.⁵²⁵ To determine which measures are suitable to address these risks, however, it is necessary to become much more concrete. More specifically, it is necessary to determine which specific aspects of freedom of expression are (or are not) impacted by the use of a recommender system, adapt recommender systems' design to address these impacts, and evaluate how these changes influence the information to which individuals are exposed. This is a complex task, requiring a combination of normative insights, technical research, and data analysis. The concrete measures required to safeguard a value such as freedom of expression are likely to differ depending on the recommender system and the context in which it is employed. However, the insights on the way in which editorial values can be integrated in algorithmic design and the tools used to study algorithms' impact on editorial values, may be useful regardless of whether those algorithms are used to control content produced by a platform's users or a media company's employees.

7.2.2. Platforms

Chapter 4 has explored how platforms' control over media content on their service relates to the traditional concept of editorial control, and what the implications of the differences between the two

⁵²³ Deuze (n 164); Bastian, Helberger and Makhortykh (n 80); Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC (n 436) article 26; 'EU Code of Practice on Disinformation' (n 494).

⁵²⁴ Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC (n 436) article 26; Charter articles 11, 21.

⁵²⁵ Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC (n 436) article 26.

forms of control are for the allocation of responsibility on platforms. Incorporating platforms' control into the legal concepts used to assign (editorial) responsibility has been a struggle.⁵²⁶ The AVMSD traditionally only applied to media service providers controlling what content is published *and* how this content is organised. At the same time, article 14 ECD provided a liability exemption for hosting providers as long as they would remain passive or neutral.⁵²⁷ Both required companies which fell within their scope to prevent the publication of content which violated legal norms.

It is at this stage uncontroversial that platforms are not neutral. They exercise significant influence over the information to which their users are exposed, including with the use of personalisation algorithms. However, platforms' control over what content their users upload (and as a result, what content platforms show to the public) is limited. For example, although Facebook has a strong incentive to keep full control over the advertising on its platform, it would be difficult for the company to ensure that no user uploads a news programme violating the ban on product placement which article 11(2) AVMSD imposes on traditional media service providers. Conversely, media organisations generally exercise relatively strong control over all aspects of the editorial process. They can therefore use their control over one aspect of the editorial process, such as content production, to mitigate risks in other aspects of the editorial process, such as content recommendation. As several editors emphasised in the interviews conducted for chapter 3, part of the way in which legacy media organisations exercise control over personalisation is by exclusively recommending articles which have been produced through their own editorial processes. As long as The Guardian does not produce content which promotes self-harm, it does not have to worry that its personalisation algorithm steers its readers toward content which promotes self-harm.⁵²⁸ This safeguard is not available to platforms. Other stakeholders have a larger influence over the way in which information is distributed. These stakeholders include the uploaders who make information available, as well as the users who influence what news they see through their explicit feedback and inferred preferences. This places platforms in a fundamentally different position compared to legacy media, even when both perform a similar editorial activity such as news personalisation.

⁵²⁶ See the way in which successive Council of Europe policy documents have qualified platforms: 'players who assume an active role in mass communication editorial processes'(new notion of media); 'platforms have become major distributors of news and have progressively assumed curatorial or editorial-like functions' (declaration on the financial sustainability of quality journalism) '[t]he activities of intermediaries differ from those of traditional media outlets in respect of the provision of news' Recommendation on Pluralism). CoE, 'New Notion of Media' (n 16) paras 6, 63; CoE, 'Declaration on the Financial Sustainability of Quality Journalism' (n 89) para 9; CoE, 'Recommendation on Pluralism' (n 124) para 7.

⁵²⁷ The liability exemption is subject to other conditions which are not relevant to this paragraph. The neutrality/passivity criterion was developed by the CJEU on the basis of ECD recital 42; *Cyando* [2021] CJEU ECLI:EU:C:2021:503. In *Cyando*, the CJEU explicitly clarified a matter which it had earlier implied: The use of algorithmic content recommendation does not automatically cause a service to lose safe harbour protections.

⁵²⁸ This example does not follow from the interviews, which were anonymised.

The 2018 AVMSD revision introduced the concept of organisational control in order to bring video-sharing platforms under the scope of EU media law. In contrast to media service providers, which are defined as controlling publication and organisation, the AVMSD defines platforms as only controlling the organisation of user-generated content and programmes. This distinction is reflected in the manner in which the AVMSD justifies why platforms should bear responsibility. Where the AVMSD justifies media organisations' responsibility by pointing to the impact of their own editorial choices about what content they show the audience, the AVMSD emphasises that platforms' responsibility results from the fact that they facilitate the user interactions which ultimately impact on individuals and society.⁵²⁹ Reflecting the different nature of the control exercised by platforms and the media, the AVMSD generally does not require platforms to comply with the obligations imposed on traditional media service providers.⁵³⁰ Platforms are instead incorporated into the AVMSD by creating a new set of concepts and obligations specifically designed for them. Concretely, the AVMSD not only requires platforms to change the way in which they exercise organisational control (for example by limiting the accessibility of harmful content for minors), but also to change how their users can fulfil their role (for example by enabling and requiring uploaders to declare whether their video is sponsored).⁵³¹

Chapter 4 has argued that the AVMSD's newly introduced concept of organisational control and the corresponding obligations move away from centralised responsibility by accounting for users' impact on the way in which public values can be realised on platforms. Rather than requiring platforms to ensure that the content on their service complies with the norms in media law, the AVMSD emphasises platforms' responsibility with regard to the way they facilitate how their users influence public values. The chapter has drawn on the concept of cooperative responsibility to help identify and answer questions about the way in which the AVMSD's new approach to responsibility should be understood and operationalised. Cooperative responsibility highlights that platforms have a responsibility for their own conduct as well as for the way in which they enable other actors on their service to impact public values.⁵³²

In the abstract, the AVMSD accounts for users' role in realising public values on platforms by emphasising platforms' responsibility for facilitating their users' impact and requiring them to change how their users can exercise their influence. However, it fails to fully engage with the implications of its shift away from centralised responsibility. Accounting for the influence which users exercise on platforms not only involves giving users more tools with which they can exercise their influence differently, it also requires that the conditions under which users can assume responsibility are put in place, and that platforms' own

⁵²⁹ AVMSD 2018 recital 7. See for further detail section 4.2.

⁵³⁰ This is the case with the exception of advertising which platforms market, sell, or arrange themselves. AVMSD 2018 article 28b(2).

⁵³¹ See section 4.3 for an analysis of the editorial and organisational control.

⁵³² Helberger, Pierson and Poell (n 238).

responsibilities can be adapted as users' capabilities and practices change. By paying insufficient attention to what a proper allocation of responsibility between platforms and users should be, the AVMSD creates the risk that users are again expected to assume responsibility for platforms' impact without the conditions being in place which would allow them to exercise their influence in a different manner. The AVMSD mitigates this risk by including mechanisms with which media authorities, civil society, and users can contest the operationalisation and allocation of responsibility on platforms. Yet, doing so requires us to fully recognise the implications of the AVMSD's departure from centralised responsibility, and the role which individual users play.⁵³³

7.2.3. Individuals

Finally, the dissertation has explored how individual news consumers should be enabled to fulfil their role in the context of personalisation. Individuals have traditionally played an important role in media law. The freedom of expression concerns caused by direct regulation of the way in which the media informs the public, have led policymakers to put greater emphasis on empowering news consumers. This is traditionally achieved in particular through transparency measures which aim to enable individuals to critically evaluate content, for example by providing information about its source. Additionally, policymakers aim to ensure that a wide range of information is available for individuals to choose between.⁵³⁴

This focus on the transparency and availability of content is increasingly out of step with the role which individuals assume when they are targeted by personalisation algorithms. In this context, individuals are not passive recipients. Rather, the preferences inferred from their reading and viewing behaviour and explicit choices (to the extent that they are provided with control options) directly influence what news they will get to see in the future. As a result, the same source provides (subgroups of) individuals with a different, and potentially less diverse or informative, set of articles than other members of the audience. The scale of personalisation algorithms moreover means that editors no longer review which combination of articles is shown to a specific individual. In general, although the actors who control a personalisation algorithms' design determine what news is shown, an individual is the only one who sees and can correct the specific selection of news articles which the personalisation algorithm creates for them.

Of course, individuals rarely exercise direct oversight over the way in which their news is personalised; a sizable amount of the audience remains unaware that personalisation is even taking place on websites

⁵³³ See section 4.4 for an analysis of the obligations established in the AVMSD.

⁵³⁴ CoE, 'Recommendation on Pluralism' (n 124) para 2.3, 2.7, 4.

such as Facebook.⁵³⁵ Accordingly, the role which individuals can be expected to assume in the media system by exercising control over personalisation algorithms or even holding media organisations accountable, should not be overestimated. There are well-known limits to individuals' ability and motivation to recognise, process, and act on information.⁵³⁶ When legislators ignore these limits, they risk providing individuals with information which they will not pay attention to and control tools which they will not use. This is especially problematic where legislation does not also regulate how companies use personalisation, but expects individuals to protect themselves.

These limits to user empowerment do however not mean that the role individuals (can) play in the context of news personalisation should be disregarded. Individuals already have a direct impact on news distribution through their actions in the context of news personalisation. Disregarding the part which law can play in helping individuals fulfil their role leaves individuals to exercise their influence without being aware of it, or only with the information and control options which platforms and media companies voluntarily provide. Conversely, the more individuals can be made aware of the ways in which they influence the news which they and others see online, the less regulatory models have to grapple with a media system consisting of users who have influence, but cannot be expected to assume any responsibility for the way in which they exercise it.

Transparency has traditionally played an important role in empowering individuals in media law. However, existing transparency measures in media law focus on providing information about the source of, or commercial influences on information, and hardly engage with the impact of personalisation on individuals' exposure to information. The dissertation has put forward a conceptual framework of transparency measures (Figure 2) to concretise the discussion on how law should be used to enable individuals to fulfil their role in the personalisation process. The framework draws on media and algorithmic transparency literature to distinguish between transparency measures about the organisation which develops the personalisation algorithm, the source of the recommended articles, the personal data which is used, the functioning of the algorithm, and the output.⁵³⁷ Chapter 5 has analysed how this framework relates to the existing horizontal algorithmic transparency provisions governing profiling technologies in the GDPR. An argument was made for a contextual interpretation of these provisions, under which the concrete disclosures required differ depending on what individuals need to be able to exercise their rights or to hold companies accountable in a specific context. When the algorithm to be

⁵³⁵ Anne-Britt Gran, Peter Booth and Taina Bucher, 'To Be or Not to Be Algorithm Aware: A Question of a New Digital Divide?' (2020) 0 Information, Communication & Society 1; Eslami and others (n 489); Zarouali, Boerman and de Vreese (n 490).

⁵³⁶ Jutta Haider and Olof Sundin, 'Information Literacy Challenges in Digital Culture: Conflicting Engagements of Trust and Doubt' [2020] Information, Communication & Society 1; Tomljenović (n 317).

⁵³⁷ See section 5.4 for the conceptual framework of transparency in the context of personalisation.

explained, is used to personalise the news, information about the role of editorial values in its design and its impact on users' news diet is particularly relevant.⁵³⁸

Chapter 6 has argued that, in order to effectively enable individuals to fulfil their role in the news personalisation process, determining what information they should know is not sufficient. Individuals' own information needs must be taken into account as well. Chapter 6 therefore explored what individuals find important when they determine whether they can trust organisations which use personalisation to inform them. Trust is an increasingly essential concept in the literature on the (regulation of) technology as well as the media. It covers an important way in which individuals determine whether they will interact with others. Trust facilitates these interactions by allowing individuals to quickly assess, generally without conscious deliberation, whether they can rely on another party. When law ignores this role of trust in daily life, it risks providing individuals with information or control options which individuals find irrelevant when they determine whether to rely on the media organisations, technologies, or information they encounter.

To ascertain how law can be used to create the conditions which would allow individuals to trust organisations using personalisation to inform them, the framework described above was used to develop a survey exploring what factors individuals find important when they decide whether to trust organisations in the context of news personalisation.⁵³⁹ The results of the survey have showed that transparency is relevant to individuals' trust, but less so than the ability to exercise control over news personalisation. Regulations such as the GDPR and DSA however focus on providing individuals with more information about the parameters and logic of personalisation algorithms. Control should take a more central place in legal discussions to enable individuals to trust personalisation and act on the information with which they are provided. The analysis indicates that giving individuals the ability to reject personalisation, or choose what goals a personalisation algorithm promotes, is especially important. Yet, the results also showed a strong relationship between individuals' desire for more transparency and control, and their support for (self-) regulation of the way in which personalisation is used. In order to secure trust, transparency and control measures should therefore complement rather than replace norms regarding the use of news personalisation algorithms.⁵⁴⁰

7.3. Outlook

Creating the mechanisms with which editorial responsibility can be imposed more effectively will trigger new questions about the norms which should apply to personalisation. That is the goal: to ensure there is a process through which personalisation's challenges to editorial values can be identified, contested, and addressed. However, to actually address these challenges media law has to shift its focus. More

⁵³⁸ See section 5.2.2 and 5.3 on a contextual interpretation of the right to an explanation.

⁵³⁹ See section 6.2 for an analysis of the relationship between trust and law

⁵⁴⁰ See section 6.5 for a discussion of the way in which law can be used to promote trust in news personalisation.

specifically, norms designed to ensure the responsible production and publication of information must be adapted to a media system in which control over the way content is organised, increasingly determines to what information individuals are exposed.

Responsibility for the organisation of information is of course not a completely new phenomenon in media law. The ECtHR regularly considers whether a potentially libellous story was published on the frontpage, where a large audience would see it, or in press archives instead.⁵⁴¹ Nevertheless, two factors require more attention for the way in which editorial values can be realised in relation to the organisation of content. First, the amount of available information means that the way in which information is organised, as opposed to what is published, increasingly determines to what information the audience is exposed. Second, organisation has become more fine-grained. Consequently, organisation also increasingly determines whether specific individuals or groups stand a real chance of being exposed to information which might be diverse, informative, harmful or helpful to them.

The adaptation of editorial norms to the growing importance of the organisation of content is already relatively well-developed in certain areas of media law literature. Discussions on diversity have increasingly complemented content and source diversity (which focus on the diversity of the information that is produced and published) with exposure diversity (which focuses on the diversity of the information to which individuals are exposed).⁵⁴² However, although diversity has been central to discussions on value sensitive design in the context of personalisation so far, the shift to content organisation creates challenges for other editorial values as well. For example, to what extent does the media have a responsibility not to recommend a damaging story about an individual to the frontpage of everyone living in the same town or working in the same field? What concrete measures do platforms have to take to mitigate risks that their recommender systems produce new inequalities in the access to information?⁵⁴³

In answering these questions, it is useful to return to the rationale behind editorial responsibility. Ultimately, media actors' responsibility for the way in which they produce, publish, and organise content rests on their ability to influence the information to which individuals are exposed. Control over content production and publication was an effective and easy-to-measure proxy for control over the information to which the audience was exposed as long as there were relatively few actors who produced and published information. The decreasing importance of control over publication means that it is necessary

⁵⁴¹ *M.L. and W.W. v. Germany* (n 22) paras 112–113; *Stoll v. Switzerland* (n 17) para 150; *Belpietro v. Italy* (n 27).

⁵⁴² Philip M Napoli, 'Exposure Diversity Reconsidered' (2011) 1 *Journal of Information Policy* 246; Natali Helberger, 'Exposure Diversity as a Policy Goal' (2012) 4 *Journal of Media Law* 65; Vrijenhoek and others (n 149); Loecherbach and others (n 141).

⁵⁴³ Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC (n 436) articles 26(2)(b) and 27(1)(a).

to (1) pay more direct attention to the way in which individuals' exposure to information relates to the rationale of specific editorial values, and (2) consider the different forms of control with which an actor can influence the information to which individuals are exposed. The first element requires normative research. However, translating this research into specific responsibilities for organisational control also necessitates better insights into the concrete ways in which organisational control is exercised, how individuals are affected, and how personalisation algorithms can be designed in a way which promotes editorial values. These questions cannot be answered by legal researchers in a vacuum. Adapting media law to a media system in which control over the organisation of content is ever more essential, also requires insights from media scholars, communication scientists, and computer scientists.

References

Literature

Adar E and others, 'PersaLog: Personalization of News Article Content', *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems* (ACM Press 2017) <<https://doi.org/10.1145/3025453.3025631>> accessed 30 November 2020

Aguirre E and others, 'Unraveling the Personalization Paradox: The Effect of Information Collection and Trust-Building Strategies on Online Advertisement Effectiveness' (2015) 91 *Journal of Retailing* 34

Ananny M, *Networked Press Freedom: Creating Infrastructures for a Public Right to Hear* (MIT press 2018)

—, 'The Partnership Press: Lessons for Platform-Publisher Collaborations as Facebook and News Outlets Team to Fight Misinformation' (Tow Center for Digital Journalism 2018) <<https://doi.org/10.7916/D85B1JG9>> accessed 16 April 2020

Ananny M and Crawford K, 'Seeing without Knowing: Limitations of the Transparency Ideal and Its Application to Algorithmic Accountability' (2016) 20 *New Media & Society* 973

Angelopoulos C, 'Study on Online Platforms and the Commission's New Proposal for a Directive on Copyright in the Digital Single Market' [2017] University of Cambridge Repository <<https://www.repository.cam.ac.uk/handle/1810/275826>> accessed 5 June 2019

Appelgren E and Nygren G, 'Data Journalism in Sweden' (2014) 2 *Digital Journalism* 394

Arena A and others, 'Media Ownership: Market Realities and Regulatory Responses' (Council of Europe 2016) <<https://rm.coe.int/media-ownership-market-realities-and-regulatory-responses/168078996c>>

Arena A and others, *Self- and Co-Regulation in the New AVMSD* (Observatoire Européen de l'Audiovisuel 2019) <<https://rm.coe.int/iris-special-2019-2-self-and-co-regulation-in-the-new-avmsd/1680992dc2>> accessed 26 January 2022

Ausserhofer J and others, 'The Datafication of Data Journalism Scholarship: Focal Points, Methods, and Research Propositions for the Investigation of Data-Intensive Newswork' (2020) 21 *Journalism* 950

Baack S, 'Practically Engaged: The Entanglements between Data Journalism and Civic Tech' (2018) 6 *Digital Journalism* 673

Baier A, 'Trust and Antitrust' (1986) 96 *Ethics* 231

Baker CE, *Media Concentration and Democracy: Why Ownership Matters* (Cambridge University Press 2006)

Bakshy E, Messing S and Adamic LA, 'Exposure to Ideologically Diverse News and Opinion on Facebook' (2015) 348 *Science* 1130

- Bansal G and Zahedi FM, 'Trust Violation and Repair: The Information Privacy Perspective' (2015) 71 *Decision Support Systems* 62
- Barata J, 'New EU Rules on Video-Sharing Platforms: Will They Really Work?' (*Center for internet and Society*, 18 February 2019) <<http://cyberlaw.stanford.edu/blog/2019/02/new-eu-rules-video-sharing-platforms-will-they-really-work>> accessed 10 June 2019
- Bardoel JLH and D'Haenens LSJ, 'Media Responsibility and Accountability. New Conceptualizations and Practices' (2004) 29 *Communications: The European Journal of Communication Research* 5
- Barredo Arrieta A and others, 'Explainable Artificial Intelligence (XAI): Concepts, Taxonomies, Opportunities and Challenges toward Responsible AI' (2020) 58 *Information Fusion* 82
- Barzilai-Nahon K, 'Toward a Theory of Network Gatekeeping: A Framework for Exploring Information Control' (2008) 59 *Journal of the American Society for Information Science and Technology* 1493
- Bastian M and others, 'Explanations of News Personalisation across Countries and Media Types' (2020) 9 *Internet Policy Review* 1
- Bastian M, Helberger N and Makhortykh M, 'Safeguarding the Journalistic DNA: Attitudes towards the Role of Professional Values in Algorithmic News Recommender Designs' (2021) 9 *Digital Journalism* 1
- Bastian M, Makhortykh M and Dobber T, 'News Personalization for Peace: How Algorithmic Recommendations Can Impact Conflict Coverage' (2019) 30 *International Journal of Conflict Management* 309
- Bauer PC and others, 'Did the GDPR Increase Trust in Data Collectors? Evidence from Observational and Experimental Data' (2021) 0 *Information, Communication & Society* 1
- BBC, 'Instagramification' (*BBC Taster*, 2019) <<https://www.bbc.co.uk/taster/pilots/instagramification>> accessed 11 March 2021
- Beckett C, 'New Powers, New Responsibilities. A Global Survey of Journalism and Artificial Intelligence' (LSE 2019) <<https://blogs.lse.ac.uk/polis/2019/11/18/new-powers-new-responsibilities/>>
- Belair-Gagnon V, Zamith R and Holton AE, 'Role Orientations and Audience Metrics in Newsrooms: An Examination of Journalistic Perceptions and Their Drivers' (2020) 8 *Digital Journalism* 347
- Bell E, 'The Dependent Press. How Silicon Valley Threatens Independent Journalism' in M Moore and Damian Tambini (eds), *Digital Dominance. The Power of Google, Amazon, Facebook and Apple* (Oxford University Press 2018)
- Bennett J and Strange N (eds), *Media Independence: Working with Freedom or Working for Free?* (Routledge 2015)
- Bernstein A and others, 'Diversity, Fairness, and Data-Driven Personalization in (News) Recommender System' (Schloss Dagstuhl - Leibniz-Zentrum für Informatik 2020) <<https://drops.dagstuhl.de/opus/volltexte/2020/11986/>>

Bhat PI, *Empirical Legal Research: Nature, Features, and Expanding Horizons* (Oxford University Press) <<https://oxford.universitypressscholarship.com/view/10.1093/oso/9780199493098.001.0001/oso-9780199493098-chapter-10>> accessed 20 May 2021

Bigoni M and others, 'Trust, Leniency, and Deterrence' (2015) 31 *The Journal of Law, Economics, and Organization* 663

Bleyer-Simon K and others, 'Monitoring Media Pluralism in the Digital Era: Application of the Media Pluralism Monitor in the European Union, Albania, Montenegro, Republic of North Macedonia, Serbia & Turkey in the Year 2020' (European University Institute 2021) <https://cadmus.eui.eu/bitstream/handle/1814/71970/CMPF_MPM2021_final-report_QM-09-21-298-EN-N.pdf?sequence=1&isAllowed=y>

Bodó B, 'Selling News to Audiences – A Qualitative Inquiry into the Emerging Logics of Algorithmic News Personalization in European Quality News Media' (2019) 7 *Digital Journalism* 1054

—, 'Mediated Trust: A Theoretical Framework to Address the Trustworthiness of Technological Trust Mediators' [2020] *New Media & Society* 1

—, 'Tackling the Algorithmic Control Crisis -the Technical, Legal, and Ethical Challenges of Research into Algorithmic Agents' (2017) 19 *Yale Journal of Law and Technology* <<http://digitalcommons.law.yale.edu/yjolt> <http://digitalcommons.law.yale.edu/yjolt/vol19/iss1/3>>

Boerman SC, Kruikemeier S and Zuiderveen Borgesius FJ, 'Online Behavioral Advertising: A Literature Review and Research Agenda' (2017) 46 *Journal of Advertising* 363

Borges-Rey E, 'Unravelling Data Journalism' (2016) 10 *Journalism Practice* 833

Brkan M, 'The Unstoppable Expansion of the EU Fundamental Right to Data Protection: Little Shop of Horrors?' (2016) 23 *Maastricht Journal of European and Comparative Law* 812

—, 'AI-Supported Decision-Making under the General Data Protection Regulation', *Proceedings of the 16th international conference on Artificial intelligence and law* (ACM 2017) <<https://doi.org/10.1145/3086512.3086513>>

Brogi E and others, *Monitoring Media Pluralism in the Digital Era: Report 2020*. (European University Institute 2020) <<https://data.europa.eu/doi/10.2870/21728>> accessed 6 January 2021

Brown I, 'Interoperability as a Tool for Competition Regulation' [2020] *OpenForum Academy* <<https://euagenda.eu/upload/publications/ian-brown-interoperability-for-competition-regulation.pdf>>

Broy D and others, 'Journalism and Media Privilege' (European Audiovisual Observatory 2017) 2017–2 <<https://rm.coe.int/journalism-and-media-privilege-pdf/1680787381>> accessed 28 April 2019

Bucher T and Helmond A, 'The Affordances of Social Media Platforms', *The SAGE handbook of social media* (Sage Publications 2017)

Bunting M, 'From Editorial Obligation to Procedural Accountability: Policy Approaches to Online Content in the Era of Information Intermediaries' (2018) 3 *Journal of Cyber Policy* 165

- Burgess J and Green J, *YouTube: Online Video and Participatory Culture* (Polity Press 2018)
- Burrell J, 'How the Machine "Thinks": Understanding Opacity in Machine Learning Algorithms' (2016) 3 *Big Data & Society* <<https://doi.org/10.1177/2053951715622512>> accessed 20 September 2018
- Burroughs B, 'YouTube Kids: The App Economy and Mobile Parenting' (2017) 3 *Social Media + Society* 1
- Cabrera Blázquez FJ and others, 'The Legal Framework for Video-Sharing Platforms' (European Audiovisual Observatory 2018) <<http://book.coe.int/usd/en/european-audiovisual-observatory/7690-iris-plus-the-legal-framework-for-video-sharing-platforms.html>> accessed 3 January 2019
- Carlson M, 'The Robotic Reporter: Automated Journalism and the Redefinition of Labor, Compositional Forms, and Journalistic Authority' (2015) 3 *Digital journalism* 416
- Casey B, Farhangi A and Vogl R, 'Rethinking Explainable Machines: The GDPR's "Right to Explanation" Debate and the Rise of Algorithmic Audits in Enterprise' (2019) 34 *Berkeley Technology Law Journal* 143
- Castendyk O, Dommering E and Scheuer A, *European Media Law* (Kluwer Law International BV 2008)
- Chadha K and Koliska M, 'Newsrooms and Transparency in the Digital Age' (2015) 9 *Journalism Practice* 215
- Chakraborty A and others, 'Optimizing the Recency-Relevance-Diversity Trade-Offs in Non-Personalized News Recommendations' (2019) 22 *Information Retrieval Journal* 447
- Chavannes R and Castendyk O, 'Article 1 (Definitions)' in Oliver Castendyk, Egbert Dommering and Alexander Scheuer (eds), *European Media Law* (Kluwer Law International 2008)
- Cherubini F and Nielsen RK, 'Editorial Analytics: How News Media Are Developing and Using Audience Data and Metrics' (Reuters Institute for the Study of Journalism 2016) <<https://www.digitalnewsreport.org/publications/2016/editorial-analytics-2016/>> accessed 2 April 2019
- Cheruiyot D, Baack S and Ferrer-Conill R, 'Data Journalism Beyond Legacy Media: The Case of African and European Civic Technology Organizations' (2019) 7 *Digital Journalism* 1215
- Christians CG and others, *Normative Theories of the Media: Journalism in Democratic Societies* (University of Illinois Press 2009) <<https://experts.illinois.edu/en/publications/normative-theories-of-the-media-journalism-in-democratic-societies>> accessed 29 January 2020
- Citron DK and Pasquale F, 'The Scored Society: Due Process for Automated Predictions' (2014) 89 *Washington Law Review* 1
- Coddington M, 'Clarifying Journalism's Quantitative Turn: A Typology for Evaluating Data Journalism, Computational Journalism, and Computer-Assisted Reporting' (2015) 3 *Digital Journalism* 331
- Conlen M and others, 'How Full Are Hospital I.C.U.s Near You?' *New York Times* (15 December 2020) <<https://www.nytimes.com/interactive/2020/us/covid-hospitals-near-you.html>>

Cook LR, 'How We Helped Our Reporters Learn to Love Spreadsheets' *New York Times* (12 June 2019) <<https://open.nytimes.com/how-we-helped-our-reporters-learn-to-love-spreadsheets-adc43a93b919>> accessed 14 May 2020

Covington P, Adams J and Sargin E, 'Deep Neural Networks for YouTube Recommendations', *Proceedings of the 10th ACM Conference on Recommender Systems* (ACM Press 2016) <<http://dx.doi.org/10.1145/2959100.2959190>>

Cramer H and others, 'The Effects of Transparency on Trust in and Acceptance of a Content-Based Art Recommender' (2008) 18 *User Modeling and User-Adapted Interaction* 455

Cross FB, 'Law and Trust' (2004) 93 *Georgetown Law Journal* 1457

Cushion S, Lewis J and Callaghan R, 'Data Journalism, Impartiality And Statistical Claims: Towards More Independent Scrutiny in News Reporting' (2017) 11 *Journalism Practice* 1198

Deuze M, 'What Is Journalism? Professional Identity and Ideology of Journalists Reconsidered' (2005) 6 *Journalism* 442

DeVito MA, 'From Editors to Algorithms' (2017) 5 *Digital Journalism* 753

Diakopoulos N, *Automating the News: How Algorithms Are Rewriting the Media* (Harvard University Press 2019)

Diakopoulos N and Koliska M, 'Algorithmic Transparency in the News Media' (2017) 5 *Digital Journalism* 809

Dierickx L, 'News Automation, Materialities, and the Remix of an Editorial Process' [2021] *Journalism* <<https://doi.org/10.1177/14648849211023872>> accessed 30 September 2021

Docksey C, 'Four Fundamental Rights: Finding the Balance' (2016) 6 *International Data Privacy Law* 195

Domingo D and Heikkilä H, 'Media Accountability Practices in Online News Media', *The Handbook of Global Online Journalism* (Wiley-Blackwell 2012) <<http://doi.wiley.com/10.1002/9781118313978.ch15>>

Dörr KN and Hollnbuchner K, 'Ethical Challenges of Algorithmic Journalism' (2017) 5 *Digital Journalism* 404

Douek E, 'Governing Online Speech: From "Posts-as-Trumps" to Proportionality and Probability' (2021) 121 *Columbia Law Review* 759

Dourish P and Gómez Cruz E, 'Datafication and Data Fiction: Narrating Data and Narrating with Data' (2018) 5 *Big Data & Society* <<https://doi.org/10.1177/2053951718784083>> accessed 28 October 2021

Eberwein T (ed), *Mapping Media Accountability: In Europe and Beyond* (Herbert von Halem Verlag 2011)

Eberwein T, Fengler S and Karmasin M, *The European Handbook of Media Accountability* (Routledge 2019) <<https://www.routledge.com/The-European-Handbook-of-Media-Accountability/Eberwein-Fengler-Karmasin/p/book/9781472457660>>

Edwards L and Veale M, 'Slave to the Algorithm: Why a Right to an Explanation Is Probably Not the Remedy You Are Looking For' (2017) 16 Duke Law & Technology Review 18

Erdos D, 'European Union Data Protection Law and Freedom of Expression: Fundamentally off Balance' (2016) 65 International & Comparative Law Quarterly 139

ERGA, 'ERGA Report on Territorial Jurisdiction in a Converged Environment' (ERGA 2016) ERGA(2016)08

—, 'A Framework for Effective Co-Regulation of Video Sharing Platforms' (ERGA 2018) <<http://erga-online.eu/wp-content/uploads/2018/11/ERGA-2018-09-SG4-Framework-for-Effective-CR-of-VSPs.pdf>> accessed 3 January 2020

—, 'ERGA Analysis & Discussion Paper to Contribute to the Consistent Implementation of the Revised Audiovisual Media Services (AVMS) Directive: Towards the Application of the Revised Directive by National Regulatory Authorities (NRAs)' (ERGA 2018) <<http://erga-online.eu/wp-content/uploads/2018/11/ERGA-2018-08-SG3-Analysis-and-Discussion-Paper.pdf>> accessed 10 June 2019

—, 'Children in Audiovisual Media Services - The Effectiveness of Age Verification and Media Literacy' (ERGA 2019) <https://erga-online.eu/wp-content/uploads/2019/05/ERGA-Academy-2018-Workshop-PoM-Effectiveness-of-age-verification-and-media-literacy_03-10-2018.pdf>

Eskens S, 'A Right to Reset Your User Profile and More: GDPR-Rights for Personalized News Consumers' (2019) 9 International Data Privacy Law 153

—, 'The Fundamental Rights of News Users: The Legal Groundwork for a Personalised Online News Environment' (University of Amsterdam 2021)

Eskens S, Helberger N and Möller J, 'Challenged by News Personalisation: Five Perspectives on the Right to Receive Information' (2017) 9 Journal of Media Law 259

Eslami M and others, 'I Always Assumed That I Wasn't Really That Close to [Her]', *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems - CHI '15* (ACM Press 2015) <<http://dl.acm.org/citation.cfm?doid=2702123.2702556>>

Eurobarometer, 'Media Use in the European Union: Report.' (European Commission 2020) <<http://op.europa.eu/en/publication-detail/-/publication/c2fb9fad-db78-11ea-adf7-01aa75ed71a1/language-en>> accessed 28 April 2021

Evens T and Donders K, 'Mergers and Acquisitions in TV Broadcasting and Distribution: Challenges for Competition, Industrial and Media Policy' (2016) 33 Telematics and Informatics 674

Evens T and Van Damme K, 'Consumers' Willingness to Share Personal Data: Implications for Newspapers' Business Models' (2016) 18 International Journal on Media Management 25

Facebook, 'Facebook Gets a Facelift' (*Facebook*, 5 September 2006) <<https://www.facebook.com/notes/facebook-app/facebook-gets-a-facelift/2207967130/>> accessed 1 October 2020

—, 'Combatting Misinformation on Instagram' (*Facebook*, 16 December 2019) <<https://about.fb.com/news/2019/12/combatting-misinformation-on-instagram/>> accessed 17 December 2019

—, 'Facebook Response to the European Commission Communication on Covid-19 Disinformation' (Facebook 2021) <<https://ec.europa.eu/newsroom/dae/redirection/document/75741>>

Fahlquist JN, 'Moral Responsibility for Environmental Problems—Individual or Institutional?' (2009) 22 *Journal of Agricultural and Environmental Ethics* 109

Fanta A and Dachwitz I, 'Google, the Media Patron. How the Digital Giant Ensnarers Journalism.' (Otto Brenner Foundation 2020) <<https://osf.io/3qbp9>> accessed 6 April 2021

Fanta A and Rudl T, 'Leaked document: EU Commission mulls new law to regulate online platforms' (*Netzpolitik*, 16 July 2019) <<https://netzpolitik.org/2019/leaked-document-eu-commission-mulls-new-law-to-regulate-online-platforms/>> accessed 3 January 2020

Farkas E, 'An Improved Timeline for Consumers and Brands' (*Twitter*, 10 February 2016) <https://blog.twitter.com/en_us/a/2016/an-improved-timeline-for-consumers-and-brands.html> accessed 28 April 2021

Fielden L, *Regulating for Trust in Journalism: Standards Regulation in the Age of Blended Media* (University of Oxford, Reuters Institute for the Study of Journalism 2011)

Fisher C and others, 'Improving Trust in News: Audience Solutions' (2020) 0 *Journalism Practice* 1

Fletcher R, Kalogeropoulos A and Nielsen RK, 'More Diverse, More Politically Varied: How Social Media, Search Engines and Aggregators Shape News Repertoires in the United Kingdom' [2021] *New Media & Society* 1

Gedikli F, Jannach D and Ge M, 'How Should I Explain? A Comparison of Different Explanation Types for Recommender Systems' (2014) 72 *International Journal of Human Computer Studies* 367

Gibbons T, *Regulating the Media* (2nd edition, Sweet & Maxwell Uk 1998)

—, 'Building Trust in Press Regulation: Obstacles and Opportunities' (2013) 5 *Journal of Media Law* 202

Gibbons T and Katsirea I, 'Commercial Influences on Programme Content: The German and UK Approaches to Transposing EU Rules on Product Placement' (2012) 4 *Journal of Media Law* 159

Gillespie T, 'The Relevance of Algorithms' in Tarleton Gillespie, Pablo J Boczkowski and Kirsten A Foot (eds), *Media technologies: Essays on communication, materiality, and society* (MIT Press 2014)

—, *Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media* (Yale University Press 2018)

Goanta C and Ranchordas S, 'The Regulation of Social Media Influencers: An Introduction', *The Regulation of Social Media Influencers* (Elgar 2019)

<<https://www.elgaronline.com/view/edcoll/9781788978279/9781788978279.xml>> accessed 17 February 2020

Goodman B and Flaxman S, 'European Union Regulations on Algorithmic Decision-Making and a "Right to Explanation"' (2016) 38 AI Magazine 50

Google, 'EU & COVID-19 Disinformation Google Report, March 2021' (Google 2021) <<https://ec.europa.eu/newsroom/dae/redirection/document/75108>>

Gorwa R, 'The Platform Governance Triangle: Conceptualising the Informal Regulation of Online Content' (2019) 8 Internet Policy Review <<https://policyreview.info/articles/analysis/platform-governance-triangle-conceptualising-informal-regulation-online-content>> accessed 10 November 2019

Graefe A and Bohlken N, 'Automated Journalism: A Meta-Analysis of Readers' Perceptions of Human-Written in Comparison to Automated News' (2020) 8 Media and Communication 50

Gran A-B, Booth P and Bucher T, 'To Be or Not to Be Algorithm Aware: A Question of a New Digital Divide?' (2020) 0 Information, Communication & Society 1

Gray J, Chambers L and Bounegru L, *The Data Journalism Handbook: How Journalists Can Use Data to Improve the News* (O'Reilly Media, Inc 2012)

Groenhart H and Evers H, 'Media Accountability and Transparency – What Newsrooms (Could) Do' in S Fengler and others (eds), *Journalists and media accountability: An international study of news people in the digital age* (Peter Lang 2014)

Groenhart HP and Bardoel JLH, 'Conceiving the Transparency of Journalism: Moving towards a New Media Accountability Currency' (2012) 12 Studies in Communication Sciences 6

Grosser KM, 'Trust in Online Journalism' (2016) 4 Digital Journalism 1036

Haider J and Sundin O, 'Information Literacy Challenges in Digital Culture: Conflicting Engagements of Trust and Doubt' [2020] Information, Communication & Society 1

Haim M, Graefe A and Brosius H-B, 'Burst of the Filter Bubble?' (2018) 6 Digital Journalism 330

Hallin DC and Mancini P, *Comparing Media Systems. Three Models of Media and Politics* (Cambridge University Press 2004) <<https://www.cambridge.org/core/books/comparing-media-systems/B7A12371782B7A1D62BA1A72C1395E43>>

Hamada B and others, *Editorial Autonomy: Journalists' Perceptions of Their Freedom* (Columbia University Press 2019) <<https://www.degruyter.com/document/doi/10.7312/hani18642-007/html>> accessed 13 May 2021

Hamada BI, 'Determinants of Journalists' Autonomy and Safety: Evidence from the Worlds of Journalism Study' (2021) 0 Journalism Practice 1

Hancock PA and others, 'A Meta-Analysis of Factors Affecting Trust in Human-Robot Interaction' (2011) 53 Human Factors: The Journal of the Human Factors and Ergonomics Society 517

Hanitzsch T, Van Dalen A and Steindl N, 'Caught in the Nexus: A Comparative and Longitudinal Analysis of Public Trust in the Press' (2018) 23 *The International Journal of Press/Politics* 3

Hanson N, 'Making a Personalised, Data-Driven Documentary' (*BBC R&D*, 21 February 2020) <<https://www.bbc.co.uk/rd/blog/2019-07-personalised-documentary-data-instagramification>> accessed 15 March 2021

Harambam J and others, 'Designing for the Better by Taking Users into Account: A Qualitative Evaluation of User Control Mechanisms in (News) Recommender Systems', *Proceedings of the 13th ACM Conference on Recommender Systems - RecSys '19* (ACM Press 2019) <<http://dl.acm.org/citation.cfm?doid=3298689.3347014>> accessed 27 September 2019

Harambam J, Helberger N and van Hoboken J, 'Democratizing Algorithmic News Recommenders: How to Materialize Voice in a Technologically Saturated Media Ecosystem' (2018) 376 *Philosophical Transactions of the Royal Society A* 1

Hayes AS, Singer JB and Ceppos J, 'Shifting Roles, Enduring Values: The Credible Journalist in a Digital Age' (2007) 22 *Journal of Mass Media Ethics* 262

Heald DA, 'Varieties of Transparency' in Christopher Hood and David Heald (eds), *Transparency: The Key to Better Governance?: Proceedings of the British Academy 135* (Oxford University Press 2006)

Heijkant L van den and others, 'Intermedia Agenda-Setting in a Policy Reform Debate' (2019) 13 *International Journal of Communication* 23

Heikkilä H and others, 'Innovations in Media Accountability and Transparency' in S Fengler and others (eds), *Journalists and media accountability: An international study of news people in the digital age* (Peter Lang 2014)

Helberger N, 'Exposure Diversity as a Policy Goal' (2012) 4 *Journal of Media Law* 65

—, 'Profiling and Targeting News Readers – Implications for the Democratic Role of the Digital Media, User Rights and Public Information Policy. Project No. 638514' (*European Research Council*, 2015) <<https://cordis.europa.eu/project/id/638514>> accessed 7 August 2021

—, 'Policy Implications From Algorithmic Profiling and the Changing Relationship Between Newsreaders and the Media' (2016) 23 *Javnost - The Public* 188

—, *Challenging Diversity—Social Media Platforms and a New Conception of Media Diversity* (Oxford University Press 2018)

—, 'On the Democratic Role of News Recommenders' (2019) 7 *Digital Journalism* 993

—, 'The Political Power of Platforms: How Current Attempts to Regulate Misinformation Amplify Opinion Power' (2020) 8 *Digital Journalism* 842

—, 'Implications of AI-Driven Tools in the Media for Freedom of Expression' (Council of Europe 2020)

—, 'A Freedom of Expression Perspective on AI in the Media' (2020) 11 *European Journal of Law and Technology* <<https://ejlt.org/index.php/ejlt/article/view/752>> accessed 23 February 2021

—, 'Regulation of News Recommenders in the Digital Services Act: Empowering David against the Very Large Online Goliath' [2021] *Internet Policy Review* <<https://policyreview.info/articles/news/regulation-news-recommenders-digital-services-act-empowering-david-against-very-large>> accessed 21 July 2021

Helberger N and others, 'News Personalization Symposium Report' (IViR) <<http://personalised-communication.net/wp-content/uploads/2018/05/Report-2018-Amsterdam-News-Personalisation-Symposium-1.pdf>>

Helberger N, Karppinen K and D'Acunto L, 'Exposure Diversity as a Design Principle for Recommender Systems' (2018) 21 *Information, Communication & Society* 191

Helberger N, Pierson J and Poell T, 'Governing Online Platforms: From Contested to Cooperative Responsibility' (2018) 34 *The Information Society* 1

Herlocker JL, Konstan JA and Riedl J, 'Explaining Collaborative Filtering Recommendations', *Proceedings of the 2000 ACM conference on Computer supported cooperative work* (ACM 2000)

High level Group on fake news and online disinformation, 'A Multi-Dimensional Approach to Disinformation: Report of the Independent High Level Group on Fake News and Online Disinformation' (European Commission 2018)

High-Level Expert Group on Artificial Intelligence, 'Ethics Guidelines for Trustworthy AI' (European Commission 2019) <https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=60419>

Hildén J, 'The Public Service Approach to Recommender Systems: Filtering to Cultivate' [2021] *Television & New Media* <<https://doi.org/10.1177/15274764211020106>> accessed 3 June 2021

Hindman M, 'Journalism Ethics and Digital Audience Data' in Pablo J Boczkowski and others (eds), *Remaking the News: Essays on the Future of Journalism Scholarship in the Digital Age* (MIT Press 2017)

—, *The Internet Trap* (Princeton University Press 2018) <<https://press.princeton.edu/books/hardcover/9780691159263/the-internet-trap>> accessed 17 February 2020

Hitchens L, 'Commercial Content and Its Relationship to Media Content: Commodification and Trust' in Monroe E Price and Libby Verhulst, Stefaan G. Morgan (eds), *Routledge handbook of media law* (Routledge 2013) <<https://www.routledge.com/Routledge-Handbook-of-Media-Law/Price-Verhulst-Morgan/p/book/9780415683166>>

Hoff KA and Bashir M, 'Trust in Automation: Integrating Empirical Evidence on Factors That Influence Trust' (2015) 57 *Human Factors* 407

Hovland CI and Weiss W, 'The Influence of Source Credibility on Communication Effectiveness*' (1951) 15 *Public Opinion Quarterly* 635

Husovec M, *Injunctions Against Intermediaries in the European Union: Accountable But Not Liable?*, vol 41 (Cambridge University Press 2017)

Ibrus I and Rohn U, 'Sharing Killed the AVMSD Star: The Impossibility of European Audiovisual Media Regulation in the Era of the Sharing Economy' (2016) 5 Internet Policy Review <<https://policyreview.info/articles/analysis/sharing-killed-avmsd-star-impossibility-european-audiovisual-media-regulation-era>> accessed 31 October 2018

Jagland T, 'State of Democracy, Human Rights and the Rule of Law' (Council of Europe 2017)

Kaminski ME, 'The Right to an Explanation, Explained' (2019) 34 Berkeley Technology Law Journal 189

Karlsson M, 'Rituals of Transparency' (2010) 11 Journalism Studies 535

—, 'Dispersing the Opacity of Transparency in Journalism on the Appeal of Different Forms of Transparency to the General Public' (2020) 21 Journalism Studies 1795

Karlsson M and Clerwall C, 'Transparency to the Rescue?' (2018) 19 Journalism Studies 1923

Karppinen K and Moe H, 'What We Talk About When Talk About "Media Independence"' (2016) 23 Javnost - The Public 105

Kim TW, 'Informational Privacy, A Right to Explanation, and Interpretable AI', *IEEE Privacy-Aware Computing 2018* (IEEE Xplore 2018) <<https://ieeexplore.ieee.org/document/8511831>>

Kincaid J, 'YouTube Leanback Brings Personalized Channels To Your TV' (*TechCrunch*, 2 December 2010) <<https://social.techcrunch.com/2010/12/01/youtube-leanback-brings-personalized-channels-to-your-tv/>> accessed 28 April 2021

Kitchin R, 'Thinking Critically about and Researching Algorithms' (2017) 20 Information, Communication & Society 14

Klafkowska-Wasniowska H, 'Soccer or Football: The Level Playing Field Idea for the European Single Market in the Audiovisual Media Services' (2018) 26 Michigan State International Law Review 296

Klausa T, 'Graduating from "New-School" – Germany's Procedural Approach to Regulating Online Discourse' (2022) 0 Information, Communication & Society 1

Klimkiewicz B, 'Community and Minority Media: The Third Sector in European Policies and Media Pluralism Monitor' [2021] Research Handbook on EU Media Law and Policy <<https://www.elgaronline.com/view/edcoll/9781786439321/9781786439321.00028.xml>> accessed 7 January 2022

Klinger U and Svensson J, 'The End of Media Logics? On Algorithms and Agency' (2018) 96 New Media & Society 60

Koehn D, 'Should We Trust in Trust?' (1996) 34 American Business Law Journal 183

Kohring M and Matthes J, 'Trust in News Media: Development and Validation of a Multidimensional Scale' (2007) 34 *Communication Research* 231

Kokolakis S, 'Privacy Attitudes and Privacy Behaviour: A Review of Current Research on the Privacy Paradox Phenomenon' (2017) 64 *Computers & Security* 122

Komatsu T and others, 'AI Should Embody Our Values: Investigating Journalistic Values to Inform AI Technology Design', *Proceedings of the 11th Nordic Conference on Human-Computer Interaction: Shaping Experiences, Shaping Society* (ACM 2020) <<https://dl.acm.org/doi/10.1145/3419249.3420105>> accessed 4 May 2021

Korbiel I and Sarikakis K, 'Between Two (in)Competencies: A Critical View on Media Ownership Regulation in the EU' (2017) 13 *MCP Intellect Limited International Journal of Media & Cultural Politics* 183

Kovach B and Rosenstiel T, *The Elements of Journalism : What Newspeople Should Know and the Public Should Expect* (Crown 2001)

Krebs LM and others, 'Tell Me What You Know: GDPR Implications on Designing Transparency and Accountability for News Recommender Systems', *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems* (ACM 2019) <<http://doi.acm.org/10.1145/3290607.3312808>> accessed 21 May 2019

Kroll JA and others, 'Accountable Algorithms' (2016) 165 *University of Pennsylvania Law Review* 633

Kuczerawy A, *Intermediary Liability and Freedom of Expression in the EU: From Concepts to Safeguards* (Intersentia 2018) <<https://intersentia.com/en/intermediary-liability-and-freedom-of-expression-in-the-eu-from-concepts-to-safeguards.html>> accessed 15 July 2019

Kuklis L, 'European Regulation of Video-Sharing Platforms: What's New, and Will It Work?' (*Media@LSE*, 29 November 2018) <<https://blogs.lse.ac.uk/medialse/2018/11/29/european-regulation-of-video-sharing-platforms-whats-new-and-will-it-work/>> accessed 26 November 2019

—, 'AVMSD and Video-Sharing Platforms Regulation: Toward a User-Oriented Solution?' (*LSE Media Policy Project*, 28 May 2019) <<https://blogs.lse.ac.uk/mediapolicyproject/2019/05/28/avmsd-and-video-sharing-platforms-regulation-toward-a-user-oriented-solution/>> accessed 10 June 2019

Kunert J and Thurman N, 'The Form of Content Personalisation at Mainstream, Transatlantic News Outlets: 2010–2016' (2019) 13 *Journalism Practice* 759

Lambrecht I, Verdoodt V and Bellon J, 'Platforms and Commercial Communications Aimed at Children: A Playground under Legislative Reform?' (2018) 32 *International Review of Law, Computers & Technology* 58

Ledwich M and Zaitsev A, 'Algorithmic Extremism: Examining YouTube's Rabbit Hole of Radicalization' (2020) 25 *First Monday* <<https://firstmonday.org/ojs/index.php/fm/article/view/10419>> accessed 3 March 2020

Lee JD and See KA, 'Trust in Automation: Designing for Appropriate Reliance' (2004) 46 *Human Factors: The Journal of the Human Factors and Ergonomics Society* 50

Lee MK, 'Understanding Perception of Algorithmic Decisions: Fairness, Trust, and Emotion in Response to Algorithmic Management' (2018) 5 *Big Data & Society* 1

Lenaerts K and Gutierrez-Fons JA, 'To Say What the Law of the EU Is: Methods of Interpretation and the European Court of Justice' (2013) 20 *Columbia Journal of European Law* 3

Lepri B and others, 'Fair, Transparent, and Accountable Algorithmic Decision-Making Processes' [2017] *Philosophy & Technology* 1

Levin JA, 'The "network" -- Tomorrow's "Newspaper"' *Christian Science Monitor* (24 February 1981) <<https://www.csmonitor.com/1981/0224/022448.html>> accessed 23 October 2020

Lewis SC, Sanders AK and Carmody C, 'Libel by Algorithm? Automated Journalism and the Threat of Legal Liability' (2018) 96 *Journalism & Mass Communication Quarterly* 60

Lewis SC and Westlund O, 'Actors, Actants, Audiences, and Activities in Cross-Media News Work' (2015) 3 *Digital Journalism* 19

Livingstone S, 'Tackling the Information Crisis: A Policy Framework for Media System Resilience' (LSE Truth, Trust & Technology Commission 2018) <<http://www.lse.ac.uk/media-and-communications/assets/documents/research/T3-Report-Tackling-the-Information-Crisis-v6.pdf>> accessed 15 June 2020

Loecherbach F and others, 'The Unified Framework of Media Diversity: A Systematic Literature Review' (605) 8 *Digital Journalism* 1

Makhortykh M and Bastian M, 'Personalizing the War: Perspectives for the Adoption of News Recommendation Algorithms in the Media Coverage of the Conflict in Eastern Ukraine' [2020] *Media, War & Conflict* 1

Malcorps S, 'News Website Personalisation: The Co-Creation of Content, Audiences and Services by Online Journalists and Marketers' (2019) 16 *Journal of Media Business Studies* 230

Malgieri G, 'Automated Decision-Making in the EU Member States: The Right to Explanation and Other "Suitable Safeguards" in the National Legislations' (2019) 35 *Computer Law & Security Review* 1

Malgieri G and Comand  G, 'Why a Right to Legibility of Automated Decision-Making Exists in the General Data Protection Regulation' (2017) 7 *International Data Privacy Law* 243

Mayring P, 'Qualitative Inhaltsanalyse' in G nter Mey and Katja Mruck (eds), *Handbuch Qualitative Forschung in der Psychologie* (VS Verlag f r Sozialwissenschaften 2010) <https://doi.org/10.1007/978-3-531-92052-8_42> accessed 2 August 2021

McGonagle T, 'The Council of Europe and Internet Intermediaries: A Case Study of Tentative Posturing' in Rikke Frank J rgensen (ed), *Human Rights in the Age of Platforms* (The MIT Press 2019) <<https://direct.mit.edu/books/book/4531/Human-Rights-in-the-Age-of-Platforms>> accessed 12 March 2020

McGonagle T and van Loon A, 'Jurisdiction over Broadcasters in Europe: Report on a Round-Table Discussion & Selection of Background Materials' (European Audiovisual Observatory 2002)

McGregor M, 'Responsible AI at the BBC: Our Machine Learning Engine Principles' (*BBC R&D*, May 2021) <<https://www.bbc.co.uk/rd/publications/responsible-ai-at-the-bbc-our-machine-learning-engine-principles>> accessed 5 August 2021

McNair B, 'Journalism and Democracy' in K Wahl-Jorgensen and T Hanitzsch (eds), *The handbook of journalism studies* (Routledge 2009)

McQuail D, *Media Accountability and Freedom of Publication* (Oxford University Press, USA 2003)

Meier K and Reimer J, 'Transparenz Im Journalismus' (2011) 56 *Publizistik* 133

Meijer IC, 'What Does the Audience Experience as Valuable Local Journalism?: Approaching Local News Quality from a User's Perspective', *The Routledge Companion to Local Media and Journalism* (Routledge 2020)

Mendoza I and Bygrave LA, 'The Right Not to Be Subject to Automated Decisions Based on Profiling' in TE Synodinou and others (eds), *EU Internet Law* (Springer International Publishing 2017) <http://link.springer.com/10.1007/978-3-319-64955-9_4>

Meyer R, 'How Many Stories Do Newspapers Publish Per Day?' (*The Atlantic*, 26 May 2016) <<https://www.theatlantic.com/technology/archive/2016/05/how-many-stories-do-newspapers-publish-per-day/483845/>> accessed 25 February 2021

Mittelstadt BD, 'Auditing for Transparency in Content Personalization Systems' (2016) 10 *International Journal of Communication* 4991

—, 'The Ethics of Algorithms: Mapping the Debate' (2016) 3 *Big Data & Society* <<https://doi.org/10.1177/2053951716679679>> accessed 20 September 2018

Möller J and others, 'Do Not Blame It on the Algorithm: An Empirical Assessment of Multiple Recommender Systems and Their Impact on Content Diversity' (2018) 21 *Information, Communication & Society* 959

—, 'Explaining Online News Engagement Based on Browsing Behavior: Creatures of Habit?' (2020) 38 *Social Science Computer Review* 616

Möllering G, *Trust: Reason, Routine, Reflexivity* (Elsevier 2006)

Montal T and Reich Z, 'I, Robot' (2017) 5 *You, Journalist. Who is the Author?* *Digital Journalism* 829

Monzer C and others, 'User Perspectives on the News Personalisation Process: Agency, Trust and Utility as Building Blocks' (2020) 8 *Digital Journalism* 1142

Moore M and Tambini D (eds), *Digital Dominance: The Power of Google, Amazon, Facebook, and Apple* (Oxford University Press 2018)

Nagy P and Neff G, 'Imagined Affordance: Reconstructing a Keyword for Communication Theory' (2015) 1 Social Media + Society 1

Napoli PM, *Audience Evolution: New Technologies and the Transformation of Media Audiences* (Columbia University Press 2010)

—, 'Exposure Diversity Reconsidered' (2011) 1 Journal of Information Policy 246

—, 'Social Media and the Public Interest: Governance of News Platforms in the Realm of Individual and Algorithmic Gatekeepers' (2015) 39 Telecommunications Policy 751

—, *Social Media and the Public Interest: Media Regulation in the Disinformation Age* (Columbia University Press 2019)

Napoli PM and Caplan R, 'Why Media Companies Insist They're Not Media Companies, Why They're Wrong, and Why It Matters' (2017) 22 First Monday <<https://journals.uic.edu/ojs/index.php/fm/article/view/7051>> accessed 31 October 2018

Nechushtai E and Lewis SC, 'What Kind of News Gatekeepers Do We Want Machines to Be? Filter Bubbles, Fragmentation, and the Normative Dimensions of Algorithmic Recommendations' (2019) 90 Computers in Human Behavior 298

—, 'What Kind of News Gatekeepers Do We Want Machines to Be? Filter Bubbles, Fragmentation, and the Normative Dimensions of Algorithmic Recommendations' (2019) 90 Computers in Human Behavior 298

New York Times, 'New York Times Archive 01/01/2020 to 31/12/2020' *New York Times* <<https://www.nytimes.com/search?dropmab=true&endDate=20210630&query=&sort=newest&startDate=20200701>>

—, 'Personalization' (*New York Times Help*) <<https://help.nytimes.com/hc/en-us/articles/360003965994-Personalization>> accessed 8 July 2021

Newman N, 'Journalism, Media, and Technology Trends and Predictions 2018' (2018) <<https://reutersinstitute.politics.ox.ac.uk/our-research/journalism-media-and-technology-trends-and-predictions-2018>>

—, 'Journalism, Media and Technology Trends and Predictions 2020' (Reuters Institute for the Study of Journalism 2019) <https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2020-01/Newman_Journalism_and_Media_Predictions_2020_Final.pdf>

—, 'Reuters Institute Digital News Report 2017' (Reuters Institute for the Study of Journalism 2017) <[https://reutersinstitute.politics.ox.ac.uk/sites/default/files/Digital News Report 2017 web_0.pdf](https://reutersinstitute.politics.ox.ac.uk/sites/default/files/Digital%20News%20Report%202017%20web_0.pdf)>

—, 'Reuters Institute Digital News Report 2018' (Reuters Institute for the Study of Journalism 2018)

Newton LH, Hodges L and Keith S, 'Accountability in the Professions: Accountability in Journalism' (2004) 19 Journal of Mass Media Ethics 166

Nissenbaum H, 'Securing Trust Online: Wisdom or Oxymoron?' (2001) 81 Boston University International Law Review 31

Noble SU, *Algorithms of Oppression: How Search Engines Reinforce Racism* (2018)

Nooren P and others, 'Should We Regulate Digital Platforms? A New Framework for Evaluating Policy Options' (2018) 10 Policy & Internet 264

Nunes I and Jannach D, 'A Systematic Review and Taxonomy of Explanations in Decision Support and Recommender Systems' (2017) 27 User Modeling and User-Adapted Interaction 393

O'Callaghan D and others, 'Down the (White) Rabbit Hole The Extreme Right and Online Recommender Systems' (2015) 33 Social Science Computer Review 459

Ombelet P-J, Kuczerawy A and Valcke P, 'Employing Robot Journalists', *Proceedings of the 25th International Conference Companion on World Wide Web* (ACM Press 2016) <<https://dl.acm.org/citation.cfm?id=2890093>> accessed 2 October 2018

O'Neill B, 'Trust in the Information Society' (2012) 28 Computer Law & Security Review 551

O'Neill O, *A Question of Trust* (Cambridge University Press 2002)

—, 'Trust and Accountability in a Digital Age' (2020) 95 Philosophy 3

Oostveen M and Irion K, 'The Golden Age of Personal Data: How to Regulate an Enabling Fundamental Right?' in Mor Bakhoum and others (eds), *Personal Data in Competition, Consumer Protection and Intellectual Property Law*, vol 28 (Springer Berlin Heidelberg 2018) <http://link.springer.com/10.1007/978-3-662-57646-5_2> accessed 28 February 2019

Oster J, *Media Freedom as a Fundamental Right* (Cambridge University Press 2015) <<http://ebooks.cambridge.org/ref/id/CBO9781316162736>> accessed 21 May 2019

—, *European and International Media Law* (Cambridge University Press 2016)

Parasie S, 'Data-Driven Revelation?' (2015) 3 Digital Journalism 364

Parasie S and Dagiral E, 'Data-Driven Journalism and the Public Good: "Computer-Assisted-Reporters" and "Programmer-Journalists" in Chicago' (2013) 15 New Media & Society 853

Parcu PL and Brogi E, *Research Handbook on EU Media Law and Policy* (Edward Elgar Publishing 2021)

Pariser E, *The Filter Bubble: What The Internet Is Hiding From You* (Penguin 2011)

Pauwels C and Picone I, 'The Tussle with Trust: Trust in the News Media Ecology' (2012) 28 Computer Law & Security Review 542

Penney JW, 'Internet Surveillance, Regulation, and Chilling Effects Online: A Comparative Case Study' (2017) 6 Internet Policy Review <<https://doi.org/10.14763/2017.2.692>>

Perel M and Elkin-Koren N, 'Black Box Tinkering. Beyond Transparency in Algorithmic Enforcement' (2017) 69 Florida Law Review 181

Peterson-Salahuddin C and Diakopoulos N, 'Negotiated Autonomy: The Role of Social Media Algorithms in Editorial Decision Making' (2020) 8 Media and Communication 27

Petre C, 'The Traffic Factories: Metrics at Chartbeat, Gawker Media, and The New York Times' (Tow Center for Digital Journalism 2015) <<https://doi.org/10.7916/D80293W1>> accessed 12 September 2019

Pickard V, 'Restructuring Democratic Infrastructures: A Policy Approach to the Journalism Crisis' (2020) 8 Digital Journalism 704

Plaisance PL, 'Transparency: An Assessment of the Kantian Roots of a Key Element in Media Ethics Practice' (2007) 22 Journal of Mass Media Ethics 187

Poell T, Nieborg D and Dijck J van, 'Platformisation' (2019) 8 Internet Policy Review <<https://policyreview.info/concepts/platformisation>> accessed 19 December 2019

Poindexter PM, Heider D and McCombs M, 'Watchdog or Good Neighbor?: The Public's Expectations of Local News' (2006) 11 Harvard International Journal of Press/Politics 77

Putnam RD, 'Bowling Alone: America's Declining Social Capital' in Lane Crothers and Charles Lockhart (eds), *Culture and Politics: A Reader* (Palgrave Macmillan US 2000) <https://doi.org/10.1007/978-1-349-62965-7_12> accessed 29 October 2020

PytlíkZillig LM and Kimbrough CD, 'Consensus on Conceptualizations and Definitions of Trust: Are We There Yet?', *Interdisciplinary Perspectives on Trust* (Springer International Publishing 2016)

Rader E, Cotter K and Cho J, 'Explanations as Mechanisms for Supporting Algorithmic Transparency', *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems - CHI '18* (ACM Press 2018) <<http://dl.acm.org/citation.cfm?doid=3173574.3173677>> accessed 4 November 2020

Rader E and Gray R, 'Understanding User Beliefs About Algorithmic Curation in the Facebook News Feed', *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (ACM Press 2015) <<http://dl.acm.org/citation.cfm?doid=2702123.2702174>>
<<http://dl.acm.org/citation.cfm?id=2702123.2702174>>

Raza S and Ding C, 'News Recommender System: A Review of Recent Progress, Challenges, and Opportunities' [2021] Artificial Intelligence Review 1

Reich Z and Hanitzsch T, 'Determinants of Journalists' Professional Autonomy: Individual and National Level Factors Matter More Than Organizational Ones' (2013) 16 Mass Communication and Society 133

Reporters Without Borders, 'Journalism Trust Initiative' (3 April 2018) <<https://www.journalismtrustinitiative.org/>>

Ribeiro MT, Singh S and Guestrin C, "'Why Should I Trust You?": Explaining the Predictions of Any Classifier', *Proceedings of the 22nd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining* (Association for Computational Linguistics 2016) <<http://arxiv.org/abs/1602.04938>>

Richards NM and Hartzog W, 'Taking Trust Seriously in Privacy Law' (2016) 19 Stanford Technology Law Review 431

Russell FM, 'The New Gatekeepers' (2019) 20 Journalism Studies 631

Sander B, 'Freedom of Expression in the Age of Online Platforms: The Promise and Pitfalls of a Human Rights-Based Approach to Content Moderation' (2019) 43 Fordham International Law Journal 939

Savin A, 'Regulating Internet Platforms in the EU - The Emergence of the "Level Playing Field"' (2018) 34 Computer Law & Security Review 1215

Sax M, 'Between Empowerment and Manipulation: The Ethics and Regulation of for-Profit Health Apps' (University of Amsterdam 2021)

Schmid T, Braam L and Mischke J, 'Gegen Meinungsmacht – Reformbedürfnisse Aus Sicht Eines Regulierers' [2020] Multimedia und Recht 19

Schrepel T, 'Platforms or Aggregators: Implications for Digital Antitrust Law' (2021) 12 Journal of European Competition Law & Practice 1

Schudson M, 'Autonomy from What' (2005) 214 Bourdieu and the journalistic field 214

Schulz W, 'Approaches to Independence' in Wolfgang Schulz, Peggy Valcke and Kristina Irion (eds), *The Independence of the Media and its Regulatory Agencies* (Intellect 2014) <<https://www.press.uchicago.edu/ucp/books/book/distributed/I/bo15571080.html>> accessed 14 April 2020

Schulz W and Heilmann S, 'IRIS Special: Editorial Responsibility' (European Audiovisual Observatory 2008) <<https://rm.coe.int/1680783c0e>>

Selbst A and Powles J, 'Meaningful Information and the Right to Explanation' (2017) 7 International Data Privacy Law 233

Shin D, 'Why Does Explainability Matter in News Analytic Systems? Proposing Explainable Analytic Journalism' (2021) 22 Journalism Studies 1047

Silver D, 'The News Media and the FOIA' (2016) 21 Communication Law and Policy 493

Singer JB, 'Contested Autonomy: Professional and Popular Claims on Journalistic Norms' (2007) 8 Journalism studies 79

—, 'User-Generated Visibility: Secondary Gatekeeping in a Shared Media Space' (2014) 16 New Media & Society 55

Sirén-Heikel S and others, 'Unboxing News Automation: Exploring Imagined Affordances of Automation in News Journalism' (2019) 1 Nordic Journal of Media Studies 47

Sjøvaag H, 'The Principles of Regulation and the Assumption of Media Effects' (2014) 11 Journal of Media Business Studies 5

Smith RC, 'Determining Regulatory Competence for Audiovisual Media Services in the European Union' (2011) 3 *Journal of Media Law* 263

Smith RC and Tambini D, 'Measuring Media Plurality in the United Kingdom: Policy Choices and Regulatory Challenges' (2012) 4 *Journal of Media Law* 35

Sørensen JK, 'PSB Goes Personal: The Failure of Personalised PSB Web Pages' (2013) 29 *MedieKultur: Journal of media and communication research* 28 p.

—, 'Public Service Media, Diversity and Algorithmic Recommendation', *CEUR Workshop Proceedings* (Aalborg University 2019)

Sørensen JK, Van den Bulck H and Kosta S, 'Stop Spreading The Data: PSM, Trust, and Third-Party Services' (2020) 10 *Journal of Information Policy* 474

Splendore S, 'Quantitatively Oriented Forms of Journalism and Their Epistemology' (2016) 10 *Sociology Compass* 343

Stalpl F, 'Classifying Data Journalism' (2018) 12 *Journalism Practice* 1332

Steedman R, Kennedy H and Jones R, 'Complex Ecologies of Trust in Data Practices and Data-Driven Systems' (2020) 23 *Information, Communication & Society* 817

Strömbäck J and others, 'News Media Trust and Its Impact on Media Use: Toward a Framework for Future Research' (2020) 44 *Annals of the International Communication Association* 139

Sundar SS, 'Rise of Machine Agency: A Framework for Studying the Psychology of Human–AI Interaction (HAI)' *Journal of Computer-Mediated Communication* <<https://academic.oup.com/jcmc/advance-article/doi/10.1093/jcmc/zmz026/5700811>> accessed 22 January 2020

Tabary C, Provost A-M and Trottier A, 'Data Journalism's Actors, Practices and Skills: A Case Study from Quebec' (2016) 17 *Journalism* 66

Taekema S, 'Theoretical and Normative Frameworks for Legal Research: Putting Theory into Practice' [2018] *Law and Method* <<https://www.bjutijdschriften.nl/tijdschrift/lawandmethod/2018/02/lawandmethod-D-17-00010>> accessed 17 May 2021

Tambini D, 'Media Freedom, Regulation, and Trust: A Systemic Approach to Information Disorder' (Council of Europe 2020)

—, 'Reconceptualizing Media Freedom', *Regulating Big Tech* (Oxford University Press 2021) <<https://oxford.universitypressscholarship.com/10.1093/oso/9780197616093.001.0001/oso-9780197616093-chapter-17>> accessed 26 January 2022

ter Hoeve M and others, 'Do News Consumers Want Explanations for Personalized News Rankings?' <<https://scholarworks.boisestate.edu/fatrec/2017/1/8>> accessed 4 November 2020

'The Trust Project' (*Santa Clara University's Markkula Center for Applied Ethics*, 2018)
<<https://thetrustproject.org/>>

Thompson DF, 'Moral Responsibility of Public Officials: The Problem of Many Hands' (1980) 74 *American Political Science Review* 905

—, 'Responsibility for Failures of Government: The Problem of Many Hands' (2014) 44 *The American Review of Public Administration* 259

Thurman N and others, 'My Friends, Editors, Algorithms, and I' (2019) 7 *Digital Journalism* 447

Thurman N, Lewis SC and Kunert J, 'Algorithms, Automation, and News' (2019) 7 *Digital Journalism* 980

Thurman N and Schifferes S, 'The Future of Personalization at News Websites: Lessons from a Longitudinal Study' (2012) 13 *Journalism Studies* 775

Thurman NJ, 'Making "The Daily Me": Technology, Economics and Habit in the Mainstream Assimilation of Personalized News' (2011) 12 *Journalism* 395

Tintarev N and Masthoff J, 'Explaining Recommendations: Design and Evaluation' in Francesco Ricci, Lior Rokach and Bracha Shapira (eds), *Recommender Systems Handbook* (Springer 2015)
<http://link.springer.com/10.1007/978-1-4899-7637-6_10>

Tintarev N, Rostami S and Smyth B, 'Knowing the Unknown: Visualising Consumption Blind-Spots in Recommender Systems', *Proceedings of the 33rd Annual ACM Symposium on Applied Computing - SAC '18* (ACM Press 2018)

Toff B and others, 'What We Think We Know and What We Want to Know: Perspectives on Trust in News in a Changing World' (Reuters Institute for the Study of Journalism 2020)

Tomljenović R, 'Regulatory Authorities for Electronic Media and Media Literacy Comparative Analysis of the Best European Practices' (2018) <<https://rm.coe.int/regulatory-authorities-for-electronic-media/1680903a2a>> accessed 1 April 2019

Tong J, 'Journalistic Legitimacy Revisited' (2018) 6 *Digital Journalism* 256

Turilli M and Floridi L, 'The Ethics of Information Transparency' (2009) 11 *Ethics and Information Technology* 105

Turow J, 'Audience Construction and Culture Production: Marketing Surveillance in the Digital Age': (2005) 597 *The ANNALS of the American Academy of Political and Social Science* 103

—, *The Daily You* (Yale University Press 2012)

Twitter, 'Twitter Report: Staying Safe and Informed on Twitter during COVID-19' (Twitter 2021)
<<https://ec.europa.eu/newsroom/dae/redirection/document/75109>>

Uth B, Badura L and Blöbaum B, 'Perceptions of Trustworthiness and Risk: How Transparency Can Influence Trust in Journalism' in Bernd Blöbaum (ed), *Trust and Communication: Findings and Implications*

of Trust Research (Springer International Publishing 2021) <https://doi.org/10.1007/978-3-030-72945-5_3> accessed 9 July 2021

Valcke P and Ausloos J, 'Television on the Internet: Challenges for Audiovisual Media Policy in a Converging Media Environment' in Yu-li Liu and Robert G Picard (eds), *Policy and Marketing Strategies for Digital Media* (Routledge 2014)

Valcke P and Lambrecht I, 'The Evolving Scope of Application of the AVMS Directive' [2021] *Research Handbook on EU Media Law and Policy* <<https://www.elgaronline.com/view/edcoll/9781786439321/9781786439321.00022.xml>> accessed 5 January 2022

Valcke P, Sukosd M and Picard R, *Media Pluralism and Diversity: Concepts, Risks and Global Trends* (Springer 2015)

van Breda BC, 'Profiling in de AVG: nieuwe regels, voldoende bescherming?' [2017] *Computerrecht* <<https://www.navigators.nl/document/id2261c6083ed0470689cb260c6f1fcf7b/computerrecht-profiling-in-de-avg-nieuwe-regels-voldoende-bescherming>> accessed 25 June 2021

Van Der Wurff R and Schönbach K, 'Between Profession and Audience: Codes of Conduct and Transparency as Quality Instruments for off-and Online Journalism' (2011) 12 *Journalism studies* 407

van Dijk J, Poell T and de Waal M, *The Platform Society : Public Values in a Connective World* (Oxford University Press 2018) <<https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=1901418&site=ehost-live&scope=site>> accessed 13 February 2019

van Drunen MZ, 'The Post-Editorial Control Era: How EU Media Law Matches Platforms' Organisational Control with Cooperative Responsibility' (2020) 12 *Journal of Media Law* 166

van Drunen MZ, 'Editorial Independence in an Automated Media System' (2021) 10 *Internet Policy Review* <<https://policyreview.info/articles/analysis/editorial-independence-automated-media-system>> accessed 7 October 2021

van Drunen MZ, Helberger N and Bastian M, 'Know Your Algorithm: What Media Organizations Need to Explain to Their Users about News Personalization' (2019) 9 *International Data Privacy Law* 220

van Es K, 'YouTube's Operational Logic: "The View" as Pervasive Category' (2019) 21 *Television & New Media* 223

van Es K and Poell T, 'Platform Imaginaries and Dutch Public Service Media' (2020) 6 *Social Media + Society* 1

Vanacker B and Belmas G, 'Trust and the Economics of News' (2009) 5 *Journal of Mass Media Ethics* 110

Veale M and Edwards L, 'Clarity, Surprises, and Further Questions in the Article 29 Working Party Draft Guidance on Automated Decision-Making and Profiling' (2018) 34 *Computer Law & Security Review* 398

Vendil Pallin C, 'Internet Control through Ownership: The Case of Russia' (2017) 33 *Post-Soviet Affairs* 16

Verne J, 'In the Year 2889' [1889] Forum 262

Vīke-Freiberga V and others, 'A Free and Pluralistic Media to Sustain European Democracy' (High Level Group on Media Freedom and Pluralism 2013) <https://ec.europa.eu/digital-single-market/sites/digital-agenda/files/HLG_Final_Report.pdf>

Vogler D, Udris L and Eisenegger M, 'Measuring Media Content Concentration at a Large Scale Using Automated Text Comparisons' (2020) 21 Journalism Studies 1459

Vrijenhoek S and others, 'Recommenders with a Mission: Assessing Diversity in News Recommendations', *Proceedings of the 2021 Conference on Human Information Interaction and Retrieval* (ACM 2021) <<http://arxiv.org/abs/2012.10185>> accessed 12 January 2021

Wachter S, Mittelstadt B and Floridi L, 'Why a Right to Explanation of Automated Decision-Making Does Not Exist in the General Data Protection Regulation' (2017) 7 International Data Privacy Law 76

Wachter S, Mittelstadt B and Russell C, 'Counterfactual Explanations Without Openings the Black Box: Automated Decisions and the GDPR' (2018) 31 Harvard Journal of Law & Technology 842

Wang W and Benbasat I, 'Recommendation Agents for Electronic Commerce: Effects of Explanation Facilities on Trusting Beliefs' (2007) 23 Journal of Management Information Systems 217

Ward SJA, 'Journalism Ethics from the Public's Point of View' (2005) 6 Journalism Studies 315

—, 'The Magical Concept of Transparency' in David Craig Lawrie Zion (ed), *Ethics for Digital Journalists Emerging Best Practices* (Routledge 2014) <<https://www.taylorfrancis.com/books/e/9781135114237/chapters/10.4324%2F9780203702567-10>>

Warren ME, 'What Kinds of Trust Does a Democracy Need? Trust from the Perspective of Democratic Theory' in Sonja Zmerli and Tom WG van der Meer (eds), *Handbook on Political Trust* (Elgar 2017) <<https://www.elgaronline.com/view/edcoll/9781782545101/9781782545101.00013.xml>>

Washington Post, 'The Washington Post to Debut AI-Powered Audio Updates for 2020 Election Results' *Washington Post* (13 October 2020) <<https://www.washingtonpost.com/pr/2020/10/13/washington-post-debut-ai-powered-audio-updates-2020-election-results/>> accessed 23 November 2020

Weber MS and Kosterich A, 'Coding the News' (2018) 6 Digital Journalism 310

Weinand J, *Implementing the EU Audiovisual Media Services Directive: Selected Issues in the Regulation of AVMS by National Media Authorities of France, Germany and the UK* (Nomos Verlag 2018)

—, 'The Revised Audiovisual Media Services Directive 2018 – Has the EU Learnt the Right Lessons from the Past?' (2018) 82 UFITA 260

Welbers K and others, 'News Selection Criteria in the Digital Age: Professional Norms versus Online Audience Metrics' (2016) 17 Journalism: Theory, Practice & Criticism 1037

Wijermars M, 'Russia's Law "On News Aggregators": Control the News Feed, Control the News?' [2021] Journalism 1

Wiley SK, 'The Grey Area: How Regulations Impact Autonomy in Computational Journalism' [2021] *Digital Journalism* <<https://www.tandfonline.com/doi/abs/10.1080/21670811.2021.1893199>> accessed 29 March 2021

Woods L, 'Video-Sharing Platforms in the Revised Audiovisual Media Services Directive' (2018) 23 *Communications Law* 127

—, 'The Carnegie Statutory Duty of Care and Fundamental Freedoms' (Carnegie UK trust 2019) <<https://www.carnegieuktrust.org.uk/blog/the-statutory-duty-of-care-and-fundamental-freedoms/>>

—, 'The Duty of Care in the Online Harms White Paper' (2019) 11 *Journal of Media Law* 6

Wright D and others, 'Privacy, Trust and Policy-Making: Challenges and Responses' (2009) 25 *Computer Law & Security Review* 69

Wu S, Jr ECT and Salmon CT, 'When Journalism and Automation Intersect: Assessing the Influence of the Technological Field on Contemporary Newsrooms' (2019) 13 *Journalism Practice* 1238

Xu J, 'Machine Learning and Reader Input Help Us Recommend Articles' (*New York Times Open*, 14 January 2021) <<https://open.nytimes.com/we-recommend-articles-with-a-little-help-from-our-friends-machine-learning-and-reader-input-e17e85d6cf04>> accessed 4 May 2021

York JC and Zuckerman E, 'Moderating the Public Sphere' [2019] *Human Rights in the Age of Platforms* 137

YouTube, 'Continuing Our Work to Improve Recommendations on YouTube' (*Official YouTube Blog*, 25 January 2019) <<https://youtube.googleblog.com/2019/01/continuing-our-work-to-improve.html>> accessed 3 January 2020

Zamith R, 'Quantified Audiences in News Production' (2018) 6 *Digital Journalism* 418

—, 'Algorithms and Journalism', *Oxford Research Encyclopedia of Communication* (OUP 2019) <<https://oxfordre.com/view/10.1093/acrefore/9780190228613.001.0001/acrefore-9780190228613-e-779>> accessed 20 June 2019

Zarouali B, Boerman SC and de Vreese CH, 'Is This Recommended by an Algorithm? The Development and Validation of the Algorithmic Media Content Awareness Scale (AMCA-Scale)' (2021) 62 *Telematics and Informatics* <<https://www.sciencedirect.com/science/article/pii/S0736585321000460>> accessed 7 July 2021

Zarsky T, 'Transparent Predictions' [2013] *University of Illinois Law Review* 1503

Zuboff S, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (Profile Books 2019)

Regulation

Charter of Fundamental Rights of the European Union 2012

European Convention on Human Rights 1950

Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (ECD) 2000

Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) 2002

Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council (UCPD) 2005

Directive 2010/13/EU of the European Parliament and of the Council of 10 March 2010 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (AVMSD) 2010

Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of changing market realities (AVMSD 2018) 2018

Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (Electronic Communications Code) 2018 (321)

Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC (Copyright Directive) 2019

Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (GDPR) 2016

Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services (P2B Regulation) 2019

Proposal for a Directive of the European Parliament and of the Council amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services in view of changing market realities 2016 [COM(2016) 287 final]

Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain union legislative acts 2021 [COM/2021/206 final]

Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC 2020 [COM/2020/825 final]

‘EU Code of Practice on Disinformation’ (European Commission 2018)
<https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=54454>

Mediawet 2008

Medienstaatsvertrag 2020

SPJ Code of Ethics 2014

Case law

Animal Defenders International v United Kingdom [2013] ECtHR 48876/08

Axel Springer v Germany (no 2) [2014] ECtHR 48311/10

Belpietro v Italy [2013] ECtHR 43612/10

Bergens Tidende and others v Norway [2000] ECtHR 26132/95

Centro Europa 7 S.r.l and Di Stefano v Italy [2012] ECtHR 38433/09

Communist Party of Russia and Others v Russia [2012] ECtHR 29400/05

Couderc and Hachette Filipacchi Associés [2015] ECtHR 40454/07

Delfi v Estonia [2015] ECtHR 64569/09

Dupate v Latvia [2020] ECtHR 18068/11

Editorial Board of Pravoye Delo and Shtekel v Ukraine [2011] ECtHR 33014/05

ES v Austria [2018] ECtHR 38450/12

Flux v Moldova (No 2) [2007] ECtHR 31001/03

Frăsilă and Ciocîrlan v Romania [2012] ECtHR 25329/03

Fuentes Bobo v Spain [2000] ECtHR 39293/98

Gündüz v Turkey [2003] ECtHR 35071/97

Jersild v Denmark [1994] ECtHR 15890/89

Lindon, Otchakovsky-Laurens and July v France [2007] ECtHR 21279/02, 36448/02

Magyar Jeti ZRT v Hungary [2018] ECtHR 11257/16

Magyar Kétfarkú Kutya Párt v Hungary [2020] ECtHR 201/17

Medžlis Islamske Zajednice Brčko and Others v Bosnia and Herzegovina [2017] ECtHR 17224/11

ML and WW v Germany [2018] ECtHR 60798/10 and 65599/10

Payam Tamiz v United Kingdom [2017] ECtHR 3877/14

Purcell and others v Ireland [1991] ECtHR 15404/89

Saliyev v Russia [2010] ECtHR 35016/03

Sekmadienis Ltd v Lithuania [2018] ECtHR 69317/14

Sigma Radio Television v Cyprus [2011] ECtHR 32181/04 and 35122/05

Stoll v Switzerland [2007] ECtHR 69698/01

Sürek v Turkey (No 2) [1999] ECtHR 26682/95

Vejdeland v Sweden [2012] ECtHR 1813/07

VgT Verein gegen Tierfabriken v Switzerland [2001] ECtHR 24699/94

Wirtschafts-Trend Zeitschriften-Verlagsgesellschaft m.bH (no 3) v Austria [2006] ECtHR 66298/01 and 15653/02

Wojtas-Kaleta v Poland [2009] ECtHR 20436/02

Arkady Romanovich Rotenberg v Council [2016] CJEU ECLI:EU:T:2016:689

Baltic Media Alliance [2019] CJEU ECLI:EU:C:2019:566

Baltic Media Alliance [2019] CJEU, AG opinion ECLI:EU:C:2019:154

Buivids [2019] CJEU ECLI:EU:C:2019:122

Cyando [2021] CJEU ECLI:EU:C:2021:503

Eva Glawischnig-Piesczek [2019] CJEU ECLI:EU:C:2019:821

Google France [2010] CJEU ECLI:EU:C:2010:159

IPI [2013] CJEU ECLI:EU:C:2013:715

l'Oréal v eBay [2011] CJEU ECLI:EU:C:2011:474

RLvS Verlagsgesellschaft mbH v Stuttgarter Wochenblatt GmbH [2013] CJEU ECLI:EU:C:2013:669

SABAM v Netlog [2012] CJEU ECLI:EU:C:2012:85

Satamedia [2008] CJEU ECLI:EU:C:2008:727

UPC Telekabel Wien [2014] CJEU ECLI:EU:C:2014:192

Miami Herald Publishing Co v Tornillo [1974] United States Supreme Court 418 U.S. 241

Soft law

Article 29 Working Party, 'Guidelines on Automated Individual Decision-Making and Profiling for the Purposes of Regulation 2016/679 (WP251 Rev.01)' (2018)
<http://ec.europa.eu/newsroom/article29/item-detail.cfm?item_id=612053>

—, 'Guidelines on Transparency under Regulation 2016/679 (WP260 Rev.01)' (2018)
<http://ec.europa.eu/newsroom/article29/item-detail.cfm?item_id=622227>

CoE, 'Recommendation of the Committee of Ministers to Member States on Measures to Promote Media Transparency' (Council of Europe 1994) R (94) 13
<<https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=09000016804c1bdf>>

—, 'Recommendation of the Committee of Ministers to Member States on Media Pluralism and Diversity of Media Content' (Council of Europe 2007) CM/Rec(2007)2
<https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805d6be3>

—, 'Recommendation of the Committee of Ministers to Member States on the Protection of Individuals with Regard to Automatic Processing of Personal Data in the Context of Profiling' (Council of Europe 2010) CM/Rec(2010)13 <https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805cdd00>

—, 'Recommendation of the Committee of Ministers to Member States on a New Notion of Media' (Council of Europe 2011) CM/Rec(2011)7
<https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805cc2c0>

—, 'Recommendation of the Committee of Ministers to Member States on Public Service Media Governance' (Council of Europe 2012) CM/Rec(2012)1
<https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805cb4b4>

—, 'Recommendation of the Committee of Ministers to Member States on the Protection of Human Rights with Regard to Search Engines' (Council of Europe 2012) CM/Rec(2012)3
<https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805caa87>

—, ‘Recommendation of the Committee of Ministers to Member States on the Protection of Human Rights with Regard to Social Networking Services’ (Council of Europe 2012) CM/Rec(2012)4 <https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805caa9b>

—, ‘Recommendation of the Committee of Ministers to Member States on the Processing of Personal Data in the Context of Employment’ (Council of Europe 2015) CM/Rec(2015)5 <https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016805cdd00>

—, ‘Recommendation of the Committee of Ministers to Member States on Media Pluralism and Transparency of Media Ownership’ (Council of Europe 2018) CM/Rec(2018)1 <https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=0900001680790e13>

—, ‘Recommendation of the Committee of Ministers to Member States on the Roles and Responsibilities of Internet Intermediaries’ (2018) CM/Rec(2018)2 <https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=0900001680790e14>

—, ‘Draft Recommendation of the Committee of Ministers to Member States on Promoting a Favourable Environment for Quality Journalism in the Digital Age (7th Draft)’ (Council of Europe 2019) <<https://rm.coe.int/msi-joq-2018-rev7-e-draft-recommendation-on-quality-journalism-finalis/168098ab76>>

—, ‘Declaration by the Committee of Ministers on the Financial Sustainability of Quality Journalism in the Digital Age’ (Council of Europe 2019) Decl(13/02/2019)2 <https://search.coe.int/cm/pages/result_details.aspx?objectid=090000168092dd4d> accessed 9 June 2019

Commissariaat voor de Media, ‘Beleidsregels Classificatie Commerciële Mediadiensten Op Aanvraag 2011’ (2011) BWBR0030512 <<https://www.cvdm.nl/wp-content/uploads/2013/08/Beleidsregels-classificatie-commerci%C3%A5le-mediadiensten-op-aanvraag-2011.pdf>> accessed 9 June 2019

—, ‘Het Redactiestatuut Bij Aanbieders van Audiovisuele Mediadiensten’ (2021) <<https://www.cvdm.nl/actueel/beleid-nodig-voor-inhoud-redactiestatuten>>

Council of the European Union, ‘Comments from the Slovak Republic on Articles 11-27 of the Draft General Data Protection Regulation’ (Council of the European Union 2014) 14147/12 ADD 1 <<http://data.consilium.europa.eu/doc/document/ST-14147-2012-ADD-1/en/pdf>>

—, ‘Conclusions of the Council and of the Representatives of the Governments of the Member States, Meeting within the Council, on Media Freedom and Pluralism in the Digital Environment (2014/C 32/04)’ (2014) <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52014XG0204%2802%29>>

European Commission, ‘Green Paper Preparing for a Fully Converged Audiovisual World: Growth, Creation and Values’ (European Commission 2013) COM(2013) 231 final <<https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0231:FIN:EN:PDF>>

—, ‘Public Consultation on the Regulatory Environment for Platforms, Online Intermediaries, Data and Cloud Computing and the Collaborative Economy’ (2016) <<https://ec.europa.eu/digital-single->

market/en/news/public-consultation-regulatory-environment-platforms-online-intermediaries-data-and-cloud/> accessed 16 April 2019

—, ‘Ex-Post REFIT Evaluation of the Audiovisual Media Services Directive 2010/13/EU’ (European Commission 2016) COM(2016) 287 final <<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016SC0170&from=EN>> accessed 9 June 2019

—, ‘Tackling Online Disinformation: A European Approach’ (European Commission 2018) COM(2018) 236 final <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0236>> accessed 20 February 2020

—, ‘White Paper On Artificial Intelligence - A European Approach to Excellence and Trust’ (European Commission 2020) COM(2020) 65 final <https://ec.europa.eu/info/sites/info/files/commission-white-paper-artificial-intelligence-feb2020_en.pdf>

—, ‘Europe’s Media in the Digital Decade: An Action Plan to Support Recovery and Transformation’ (European Commission 2020) COM(2020) 784 final <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0784>> accessed 15 December 2020

—, ‘On the European Democracy Action Plan’ (2020) COM(2020) 790 final <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A790%3AFIN&qid=1607079662423>> accessed 16 December 2020

European Data Protection Supervisor, ‘EDPS Opinion 3/2018 on Online Manipulation and Personal Data’ (European Data Protection Supervisor 2018) <https://edps.europa.eu/sites/edp/files/publication/18-03-19_online_manipulation_en.pdf>

European Parliament, ‘Resolution on Media Pluralism and Media Freedom in the European Union’ (2018) 2017/2209(INI) <https://www.europarl.europa.eu/doceo/document/TA-8-2018-0204_EN.html> accessed 14 April 2020

—, ‘legislative resolution of 17 April 2019 on the proposal for a regulation of the European Parliament and of the Council on preventing the dissemination of terrorist content online’ (2019) [P8_TA-PROV(2019)0421]

European Parliament Committee on the Internal Market and Consumer Protection, ‘Opinion of the Committee on the Internal Market and Consumer Protection for the Committee on Culture and Education on the Proposal for a Directive of the European Parliament and of the Council Amending Directive 2010/13/EU on the Coordination of Certain Provisions Laid down by Law, Regulation or Administrative Action in Member States Concerning the Provision of Audiovisual Media Services in View of Changing Market Realities’ (European Parliament 2016) 2016/0151(COD) <[http://www.europarl.europa.eu/RegData/commissions/imco/avis/2016/589291/IMCO_AD\(2016\)5892_91_EN.pdf](http://www.europarl.europa.eu/RegData/commissions/imco/avis/2016/589291/IMCO_AD(2016)5892_91_EN.pdf)> accessed 17 February 2020

Ofcom, 'Guidance Notes on Who Needs to Notify an On-Demand Programme Service to Ofcom' (Ofcom 2015)

<https://www.ofcom.org.uk/__data/assets/pdf_file/0028/71839/guidance_on_who_needs_to_notify.pdf> accessed 9 June 2019

—, 'Operating Licence for the BBC's UK Public Services' (2020)

<https://www.ofcom.org.uk/__data/assets/pdf_file/0017/107072/bbc-operating-licence.pdf>

Annex A - Survey conducted for chapter 6

The questionnaire below was translated from the Dutch version originally shown to participants.

What is news personalisation?

News personalisation is a technology that is used to automatically show a different selection of news articles to each reader. You can see a good example in the image below. Here, NU.nl uses news personalisation to show readers "recommended articles" on part of its site.

Two things are essential to make news personalisation possible: data and algorithms.

- 1) First, **data** has to be collected from the readers, such as their reading behaviour (preferences and interests) or location.
- 2) Based on that data, **algorithms** are then used to recommend articles to readers.



Questionnaire

The media organisation

We now want to learn more about your trust in news personalisation. The following questions are about the different parties that can influence the way news is personalised.

How important are the following conditions for you to trust an organisation that uses news personalisation to inform you? (1: not important at all – 7: very important)?

Transparency:

- It is clear to what extent journalists and editors determine the way news is personalised.
- It is clear whether commercial parties such as advertisers influence the way news is personalised.
- It is clear to what extent the media organisation uses algorithms from other companies to personalise the news.

Control:

- The ability to choose between the personalisation algorithms of different companies on a website.

The source of the articles

An algorithm can recommend news from different sources. Nu.nl, for example, only recommends its own articles. Conversely, Google News recommends articles from multiple media outlets, and Facebook recommends the articles its users upload.

How important are the following conditions for you to trust an organisation that uses news personalisation to inform you? (1: not important at all – 7: very important)?

Transparency:

- It is clear what the identity of the source of a recommended article is.
- It is clear whether the source of a recommended article adheres to journalistic norms established by traditional media companies.
- It is clear whether a recommended article comes from a government institution.
- It is clear whether a recommended article is produced automatically or written by a human.

Control:

- The ability to choose from which sources you will receive news.

- The ability to choose to only receive news from sources that adhere to journalistic norms established by traditional media companies.

Data

To personalise news, data about you must be collected. This data is used to determine which news articles you are shown.

How important are the following conditions for you to trust an organisation that uses news personalisation to inform you? (1: not important at all – 7: very important)?

Transparency:

- It is clear what data is collected about you to personalise news.
- It is clear for which other goals the collected data is used.
- It is clear whether the collected data is shared with other parties.

Control:

- The ability to choose what data about you is used to personalise the news.
- The ability to delete the data used to personalise news for you.

Algorithm

In addition to your data, other information is also used to recommend articles. For example, how recent an article is, or what the subject is.

How important are the following conditions for you to trust an organisation that uses news personalisation to inform you? (1: not important at all – 7: very important)?

Transparency:

- It is clear why a specific article is recommended.
- It is clear which factors have the most impact on the way news is personalised.
- It is clear what goal the media organisation tries to achieve by personalising the news.

Control:

- The ability to turn news personalisation off.
- The ability to indicate that a specific type of news article should be recommended more or less.
- The ability to choose which factors have the most influence on the way news is personalised.
- The ability to choose which goals the personalisation algorithm aims to achieve.

The news offer

Because of news personalisation you will see some articles more, and some articles less.

How important are the following conditions for you to trust an organisation that uses news personalisation to inform you? (1: not important at all – 7: very important)?

Transparency:

- It is clear which parts of the site are personalised.
- It is clear what type of news (for example, entertainment, politics, sport) has been recommended to you more often.
- It is clear which important articles have not been recommended to you.

Control:

- The ability to choose to always see important articles.
- The ability to see which sources or articles have not been recommended.
- The ability to give feedback on the way news personalisation works.

Closing questions

Knowledge about and trust in news personalisation

The following questions are about your awareness of the use of algorithms in the media. There are no right or wrong answers, this is not a test. We are interested in your own opinion. Please indicate to what extent you are aware of the following statements:

1. Algorithms are used to recommend posts to me on Facebook.
2. Algorithms show other people different posts than the ones I see.
3. Algorithms are used to customise certain posts on Facebook.
4. Algorithms are used to prioritise certain posts over other posts on Facebook.

Likert scale from 1 (completely unaware) to 7 (fully aware).

How much do you trust the media? (1: not at all to 7: very much).

Use of information and control

- How likely is it that you will pay attention to information about news personalisation, provided it is easy to see and understand? (1: not likely at all – 7: very likely)
- How likely is it that you will exercise control over how news is personalised, provided this control is easy to exercise? (1: not likely at all – 7: very likely)

Regulation of news personalisation

- Whose job is it to make sure you can control news personalisation?
 - The government.
 - The media.
 - The platforms such as Facebook and Google
 - The organisation that personalises news.
 - Nobody.
- Whose job is it to make sure you can get information about news personalisation?
 - The government.
 - The media.
 - The platforms such as Facebook and Google.
 - The organisation that personalises news.
 - Nobody.
- How important are the following conditions to enable you to trust an organisation that uses news personalisation to inform you? (1: not important at all – 7: very important)
 - The existence of (self-) regulation about the parties that influence the way in which news is personalised.
 - The existence of (self-)regulation about the sources of news articles that are recommended.
 - The existence of (self-) regulation about the way in which the collected data is used.
 - The existence of (self-) regulation about the functioning of the algorithm that personalises news.
 - The existence of (self-) regulation about the type of news that is recommended.

Annex B - Author contributions

The explanations below outline the role of each co-author of the papers on which chapters 3, 5, and 6 are based. Chapters 2 and 4 are based on single-authored papers. However, each paper has benefited from the insights and feedback of individuals not listed as authors, in particular prof. dr. N. Helberger, dr. J.P. Quintais, dr. M.B. Bastian, dr. B. Bodó, and prof. dr. T. McGonagle.

Chapter 3

Authors of the original publication: Max van Drunen, Denise Fechner.

Max van Drunen and Denise Fechner conceptualised the article. Max van Drunen conducted and transcribed the majority of the interviews. Denise Fechner coded and analysed the interviews. The introduction, theoretical framework, and discussion were written by Max van Drunen. The methodology and results were written by Denise Fechner, with Max van Drunen providing substantial input on the structure and language of the results.

Chapter 5

Authors of the original publication: Max van Drunen, Natali Helberger, Mariella Bastian.

Max van Drunen, Natali Helberger and Mariella Bastian conceptualised the article. Max van Drunen researched and wrote the article. Natali Helberger and Mariella Bastian provided substantial feedback on several iterations of the article.

Chapter 6

Authors of the original publication: Max van Drunen, Brahim Zarouali, Natali Helberger.

Max van Drunen and Natali Helberger conceptualised the article. Max van Drunen developed the questionnaire, which was revised through brainstorm and review sessions with Brahim Zarouali and Natali Helberger. Brahim Zarouali analysed the data and wrote the methodology and results section. The results were interpreted through brainstorming sessions with all three authors. Max van Drunen wrote the introduction, theoretical framework and discussion.

Summary

News personalisation allows platforms and traditional media organisations to provide different information to each member of the audience. This is a natural solution to a problem that both platforms and traditional media encounter in a digital media system. There is more content available on the sites of platforms and media organisations that audience members can consume. A frontpage or app moreover does not have the space to show individuals even a small amount of the news they could read. And finally the audience consists of different individuals with different information needs. News personalisation promises to solve the problem that arises when a company has a wide variety of content and users by matching each member of the audience to the news they prefer or need to read. As such, it is an increasingly influential technology that navigates individuals through a high-choice media environment.

Determining what news an individual should see, however, involves nuanced editorial judgment. The literature has highlighted personalisation's negative impact on editorial values when the need for this judgment is ignored: polarisation, filter bubbles, chilling effects, and new inequalities in access to information have all featured prominently in the policy and public debate. Personalisation enables these dangers by making it possible for platforms and media organisations to act on the detailed information about individuals and their reading habits that became available when news consumption moved online. At the same time, this information about the individual also allows for personalisation to be used to promote editorial values. Whether a perspective is new, a story is informative, or a framing is understandable is different for each individual, depending on their background knowledge, interests, and information needs. Personalisation can help the media account for these differences and thereby allow it to provide news that is more diverse, informative, or likely to be read and understood.

While news personalisation raises new questions about the way in which individuals should be informed, it also upends the editorial processes through which these questions have traditionally been resolved. The number of recommendations needed to give each individual a personalised newsfeed makes meaningful oversight by editors or journalists over the individual editorial decisions taken by news personalisation algorithms impossible. Moreover, a wide variety of actors both in and outside the newsroom is able to influence what news a personalisation algorithm shows to which people. Within the newsroom, the design of the algorithm is not only influenced by editors and journalists, but also by engineers, product managers, commercial departments, or third-party software developers providing off the shelf solutions. Especially on platforms, which focus on recommending user-uploaded content with algorithms developed by engineers for commercial purposes, little room is left for traditional editorial judgment. Finally, on both platforms and legacy media users have a more direct impact on the news they receive through their

expressed or inferred preferences. Personalisation's impact on editorial values is, in short, the result of a complex network of actors.

This dissertation explores the roles and responsibilities of these actors by asking how editorial responsibility should be safeguarded in the context of news personalisation. In doing so, it focuses on the ways in which law can shape the conditions under which media organisations and platforms implement news personalisation, rather than personalisation's impact on specific editorial values. Issues such as the changing position of journalistic actors, the difficulty of encoding editorial values into algorithms that take editorial decisions, and a changing relationship with the audience ultimately determine whether news personalisation helps media and platforms fulfil their role in democratic society. The dissertation analyses these issues through 5 chapters that focus on the legacy media (chapters [2](#) and [3](#)), platforms (chapter [4](#)), and individual news recipients (chapters [5](#) and [6](#)). Each chapter is based on an open access article that is available through the links in the previous sentence, and is referred to at the beginning of each chapter.

Chapter 1 first introduces the two main concepts in the research question, editorial responsibility and news personalisation, and outlines how the dissertation will explore the relationship between the two. It starts by defining editorial control as the influence over the information a content item contains, what content is available to the public, and how this content is organised (section 1.2.1). Exercising such control allows an actor to determine to what information the audience is exposed. This in turn impacts the values media law aims to safeguard, such as whether the audience is exposed to information that is diverse, holds powerful actors accountable, and is not libellous or a hidden form of advertising. As a result, media actors bear editorial responsibility for the way in which they exercise editorial control. The need to ensure the practical effect of media law and prevent violations from occurring has resulted in a centralised approach to editorial responsibility where, for efficiency purposes, actors are required to contractually allocate responsibility to one party or responsibility is allocated to the actor that has the most influence on the editorial process (section 1.2.2). News personalisation challenges the existing approach to editorial responsibility by changing the way in which editorial control is exercised. It removes editors and journalists from individual editorial decisions, and shifts their judgment to the way personalisation algorithms are deployed. It allows a wide range of old and new actors, including engineers, business departments, and individuals, to determine what news an individual is exposed to. And finally, it enables platforms to impact what news the audience is exposed to while exercising very little control over two central elements of the editorial process, namely the production and publication of news (section 1.3).

Chapters 2 and 3 focus on the legacy media's editorial independence. Chapter 2 highlights how the media has increasingly grown to rely on automated decision-making to produce and distribute news. This trend challenges our understanding of editorial independence by transforming the role of human editorial

judgment and creating new dependencies on external software and data providers, engineers, and platforms. Editorial independence is a key concept with which media policy regulates the media's relationships with outside actors and ensures it continues to have the capacity to exercise editorial judgment. The chapter provides a normative framework of editorial independence's functions in European media policy (Table 1, section 2.3). It argues editorial independence is firstly valued because of what it prevents: it limits commercial and political manipulation of the audience as well as concentrations of power in the media system as a whole. Secondly, editorial independence is valued because of what it enables: it is a precondition for the media to determine how it will contribute to the public interest, and enables pluralism by enabling different voices to be represented in the public debate. The chapter then explores how these functions are challenged by the automation of editorial decision-making, and what role policy can play to address these challenges (section 2.4).

Chapter 3 explores the relationship between legal and journalistic perspectives on editorial independence. It aims to bridge the journalism studies literature that has explored how automation challenges the way editors and journalists fulfil their role in newsrooms and society, and the policy discussion that is revisiting how the conditions for editorial independence can be created in a media system where automation is increasingly important. To do so, this chapter explores the interaction between legal and journalistic perspectives on the concept of editorial independence (section 3.3). It then reports the results of interviews with editors and journalists involved in data journalism and news personalisation on the way they retain and conceptualise editorial independence, including in relation to the normative framework developed in chapter 2 (section 3.5). It finds excellent potential for a complementary relationship between policy and journalistic perspectives on editorial independence. However, the challenges posed by automation fall outside the mechanisms through which this relationship has traditionally been operationalised (section 3.6).

Chapter 4 focuses on platforms' organisational control, how it relates to editorial control, and what the implications are for the allocation of responsibility on platforms. Organisational control was introduced in the 2018 revision of the Audiovisual Media Services Directive (AVMSD) in order to bring video-sharing platforms into the scope of European media law. In contrast to media service providers' editorial control over content publication and organisation, the AVMSD defined platforms' control as the organisation of user-generated content and programmes. The AVMSD's justification for platforms' responsibility reflects this change. Where the AVMSD justifies media organisations' responsibility by pointing to their impact, the AVMSD emphasises platforms' responsibility results from facilitating the user interactions that ultimately impact public values (section 4.2). Reflecting the different nature of the control exercised by platforms and the media, platforms are not only required to change the way they exercise organisational control (for example by limiting the accessibility of harmful content for minors), but also to change the

way they enable users to fulfil their role (for example by enabling and requiring uploaders to declare whether their video is sponsored) (section 4.3). The dissertation argued the AVMSD thereby moves away from centralised, and towards cooperative responsibility for platforms. The concept of cooperative responsibility, developed by Helberger, Pierson, and Poell, highlights platforms not only have a responsibility for their own conduct, but also for the way in which they enable other actors on their service to impact public values. The dissertation distinguishes between two ways in which the AVMSD operationalised this approach to responsibility: a front-end comprising tools through which users can directly influence the visibility of content, and a back-end through which more specific choices and the allocation of responsibility between platforms and other stakeholders can be contested by users, media authorities, and civil society (section 4.4).

Chapters 5 and 6 focus on the information and control options provided to individuals. Chapter 5 explores how the general algorithmic transparency discussion surrounding the GDPR's right to an explanation can and should be contextualised to account for the specific challenges that arise when editorial decision-making is automated. It first provides an account of the scope and limits of the right itself, and highlights three goals the right serves, namely trust, agency, and accountability. It then analyses how these goals should be understood in the context of news personalisation (section 5.3). Finally, it draws on insights from media law and literature to develop a conceptual framework of transparency measures that can support these goals in the context of automated editorial decision-making (Figure 2, section 5.4).

Chapter 6 explores which transparency and control measures are suitable to enable individuals to trust news personalisation. The need to ensure trust in the face of technological change is important to both horizontal policy proposals such as the Digital Services Act and AI Act, as well as context-specific specific efforts surrounding for example disinformation. In these policy discussions, however, trust's definition and relation to policy often remains ambiguous. The chapter therefore explores why and how law aims to promote the trust necessary to enable individuals and the media organisations that use news personalisation to inform them to fulfil their role in democratic society. Specifically, it analyses how transparency and control measures facilitate scepticism, align expectations, and enable trust repair (section 6.2). However, knowing why and how law should promote trust is not sufficient. To actually promote trust, it is also necessary to take the perspective of the individuals who place trust into account. To that end, the chapter develops a survey based on the framework put forward in chapter 5. The results indicate individuals have a strong interest in finding out whether they can trust organisations that personalise the news they see, and find the information suitable for the kind of trust law aims to promote important when making that determination. The ability to control how news is personalised is slightly more important than the ability to better understand news personalisation. The chapter therefore argues

giving individuals meaningful control over news personalisation, by determining when to stop it and what values its alternative should promote, should be more central to the algorithmic transparency and trust in technology discussion (section 6.5).

Chapter 7 restates the research question and approach of the dissertation, summarises how chapters 2-6 have answered it, and concludes with an outlook. Creating the mechanisms with which editorial responsibility can be imposed more effectively will raise new questions about the norms that should apply to personalisation. That is the goal: to ensure there is a process through which personalisation's challenges to editorial values can be identified and addressed. Addressing these challenges requires media law to shift its focus. More specifically, it has to adapt norms designed for publishers and broadcasters to a media system in which the way content is organised increasingly determines what information individuals are exposed to.

Samenvatting

Nieuwspersonalisatie stelt platforms en de traditionele media in staat om elk individu andere informatie te laten zien. Dit is een oplossing voor een probleem waar zowel platforms als traditionele mediabedrijven in het digitale mediasysteem tegenaanlopen. Er is meer content beschikbaar op de sites van platforms en mediaorganisaties dan de gemiddelde persoon kan lezen of bekijken. Bovendien is de hoeveelheid nieuws dat individuen op een voorpagina of app kan worden getoond beperkt. En tot slot bestaat het publiek uit verschillende individuen, ieder met verschillende informatiebehoeftes. Nieuwspersonalisatie belooft het probleem op te lossen dat ontstaat wanneer een dienst veel verschillende content en veel verschillende gebruikers heeft door iedere individuele gebruiker het nieuws te laten zien dat hij wil of zou moeten lezen. Het is daarmee een belangrijkere technologie die individuen in een mediaomgeving met een overvloed aan informatie de weg wijst.

Bepalen welk nieuws individuen moeten zien vereist echter genuanceerde redactionele beslissingen. De bestaande literatuur heeft benadrukt hoe personalisatie een negatieve impact op redactionele waarden kan hebben wanneer de noodzaak van dergelijke beslissingen genegeerd wordt: polarisatie, filterbubbels, *chilling effects* en nieuwe ongelijkheden in de toegang tot informatie zijn allen uitgebreid aan bod gekomen in het beleids- en publieke debat. Personalisatie creëert deze gevaren door het voor platforms en mediaorganisaties de gedetailleerde informatie over individuen en hun leesgewoonten die verzameld kan worden wanneer nieuws online geconsumeerd wordt te gebruiken. Deze informatie kan echter ook gebruikt worden voor personalisatie die redactionele waarden ondersteunt. Of een perspectief nieuw, een verhaal informatief, of een schrijfwijze begrijpelijk is, verschilt namelijk voor elk individu, afhankelijk van hun achtergrondkennis, interesses en informatiebehoeftes. Personalisatie kan de media helpen om rekening te houden met deze verschillen, en daarmee nieuws aanbieden dat diverser en informatiever is voor de lezer, of simpelweg meer wordt gelezen en beter wordt begrepen.

Terwijl nieuwspersonalisatie nieuwe vragen oproept over de manier waarop individuen moeten worden geïnformeerd, verandert het ook de redactionele processen waarmee deze vragen traditioneel zijn beantwoord. Het aantal aanbevelingen dat nodig is om elke lezer een gepersonaliseerde set artikelen te geven maakt toezicht door redacteuren of journalisten op de individuele aanbevelingen die algoritmes doen onmogelijk. Bovendien kunnen veel verschillende actoren, zowel binnen als buiten de redactiekamer, invloed uitoefenen over het personalisatiealgoritme dat nieuws toont. Binnen de redactiekamer wordt het ontwerp van het algoritme niet alleen beïnvloed door redacteuren en journalisten, maar ook door softwareontwikkelaars, productmanagers, commerciële afdelingen, of externe technologiebedrijven die kant-en-klare algoritmes aanbieden. Vooral op platforms, die zich

richten op het aanbevelen van door gebruikers geüploade content met algoritmes die door softwareontwikkelaars zijn ontworpen voor commerciële doeleinden, blijft weinig ruimte over voor traditionele redactionele waarden. Ten slotte hebben gebruikers' expliciet aangegeven of afgeleide voorkeuren op zowel platforms als traditionele media een directere invloed op het nieuws dat zij ontvangen. De impact van personalisatie op redactionele waarden is kortom het resultaat van een complex netwerk van actoren.

Dit proefschrift onderzoekt de rollen en verantwoordelijkheden van deze actoren door te vragen hoe redactionele verantwoordelijkheid gewaarborgd zou moeten worden in de context van nieuwspersonalisatie. Het richt zich daarmee op de manier waarop het recht de voorwaarden waaronder mediaorganisaties en platforms nieuwspersonalisatie gebruiken kan beïnvloeden, in plaats van de impact van personalisatie op specifieke redactionele waarden. Kwesties als de veranderende positie van journalistieke actoren, de moeilijkheid om redactionele waarden te coderen in algoritmes die redactionele beslissingen nemen, en een veranderende relatie met het publiek bepalen uiteindelijk of nieuwspersonalisatie media en platforms helpt hun rol in de democratische samenleving te vervullen. Deze kwesties worden in deze dissertatie behandeld in 5 hoofdstukken die focussen op de traditionele media (hoofdstukken [2](#) en [3](#)), platforms (hoofdstuk [4](#)), en individuele nieuwsgebruikers (hoofdstukken [5](#) en [6](#)). Elk hoofdstuk is gebaseerd op een open access artikel dat via de link in de hoofdstuknummers in de vorige zin beschikbaar is, en waarnaar aan het begin van het betreffende hoofdstuk verwezen wordt.

Hoofdstuk 1 introduceert eerst de twee kernconcepten in de onderzoeksvraag, redactionele verantwoordelijkheid en nieuwspersonalisatie, en schetst hoe het proefschrift de relatie tussen beide zal onderzoeken. Het begint door 'redactionele controle' te definiëren als de invloed op de informatie die een stuk inhoud bevat, welke stukken gepubliceerd worden, en hoe deze worden georganiseerd (sectie 1.2.1). Door zulke controle uit te oefenen, kan een actor bepalen aan welke informatie het publiek wordt blootgesteld. Dit heeft op zijn beurt invloed op de waarden die het mediarecht wil waarborgen, zoals of het publiek wordt blootgesteld aan informatie die divers is, machtige actoren verantwoordelijk houdt, en niet lasterlijk of een verborgen vorm van reclame is. De media draagt daardoor redactionele verantwoordelijkheid voor de wijze waarop redactionele controle wordt uitgeoefend. Om het praktische effect van het mediarecht te waarborgen en schendingen te voorkomen wordt een gecentraliseerde benadering van redactionele verantwoordelijkheid genomen, waarbij actoren uit oogpunt van efficiëntie verplicht worden om contractueel verantwoordelijkheid toe te wijzen aan één partij, of verantwoordelijkheid wordt toegewezen aan de actor die de meeste invloed heeft op het redactionele proces (sectie 1.2.2). Nieuwspersonalisatie verandert de manier waarop redactionele controle wordt uitgeoefend, en creëert daarmee een probleem voor de toewijzing van redactionele verantwoordelijkheid. Het verschuift de invloed van redacteurs en journalisten weg van individuele

redactionele beslissingen en naar de manier waarop personalisatiealgoritmes worden ingezet. Het stelt bovendien een breed scala aan oude en nieuwe actoren, waaronder ontwikkelaars, commerciële bedrijfsafdelingen en individuen, in staat om te bepalen aan welk nieuws een persoon wordt blootgesteld. En ten slotte stelt het platforms in staat om invloed uit te oefenen op het nieuws waaraan het publiek wordt blootgesteld, zonder controle uit te oefenen over twee centrale elementen van het redactionele proces, namelijk de productie en publicatie van nieuws (sectie 1.3).

Hoofdstukken 2 en 3 richten zich op de redactionele onafhankelijkheid van de traditionele media. **Hoofdstuk 2** laat zien hoe de media in toenemende mate zijn gaan vertrouwen op geautomatiseerde besluitvorming om nieuws te produceren en te verspreiden. Door de rol van menselijk redactioneel oordeel te veranderen en nieuwe afhankelijkheden op externe software- en gegevensproviders, technici en platforms te creëren daagt deze trend ons begrip van redactionele onafhankelijkheid uit. Redactionele onafhankelijkheid is een sleutelbegrip waarmee de relaties van de media met externe actoren worden gereguleerd en het vermogen van de media om redactionele beslissingen te nemen gewaarborgd blijft. Het hoofdstuk biedt een normatief kader voor de functies van redactionele onafhankelijkheid in het Europese mediabeleid (tabel 1, sectie 2.3). Het betoogt dat redactionele onafhankelijkheid in de eerste plaats belangrijk is door wat het voorkomt: het beperkt commerciële en politieke manipulatie van het publiek en machtsconcentraties in het mediasysteem. Ten tweede is redactionele onafhankelijkheid belangrijk door wat het mogelijk maakt: het is een voorwaarde voor mediabedrijven om te bepalen hoe zij zullen bijdragen aan het publieke belang, en maakt pluralisme mogelijk door verschillende stemmen in het publieke debat te laten vertegenwoordigen. Het hoofdstuk onderzoekt vervolgens hoe deze functies worden uitgedaagd door de automatisering van redactionele besluitvorming, en analyseert welke rol mediabeleid kan spelen in de aanpak van deze uitdagingen (sectie 2.4) .

Hoofdstuk 3 onderzoekt de relatie tussen juridische en journalistieke perspectieven op redactionele onafhankelijkheid. Het slaat een brug tussen twee discussies. Ten eerste de literatuur in mediastudies waarin is onderzocht hoe automatisering nieuwe uitdagingen creëert voor de manier waarop redacteuren en journalisten hun rol in redacties en de samenleving vervullen. Ten tweede de juridische literatuur waarin in het licht van automatisering de manier waarop de voorwaarden voor redactionele onafhankelijkheid kunnen worden gecreëerd in een mediasysteem opnieuw worden onderzocht. Het hoofdstuk zet eerst uiteen hoe juridische en journalistieke perspectieven op redactionele onafhankelijkheid op elkaar inwerken (sectie 3.3). Vervolgens wordt het normatieve kader dat in hoofdstuk 2 is ontwikkeld gecontrasteerd met interviews met redacteuren en journalisten die betrokken zijn bij datajournalistiek en nieuwspersonalisatie (sectie 3.5). Het hoofdstuk ontdekt goed potentieel voor een complementaire relatie tussen juridische en journalistieke perspectieven op redactionele

onafhankelijkheid. Automatisering creëert echter nieuwe uitdagingen voor de manier waarop deze relatie kan worden geoperationaliseerd (sectie 3.6).

Hoofdstuk 4 analyseert platforms' organisatorische controle, hoe het zich verhoudt tot redactionele controle, en wat de implicaties zijn voor de verdeling van de verantwoordelijkheid voor platforms. Organisatorische controle werd geïntroduceerd in de herziening van de richtlijn audiovisuele mediadiensten in 2018 (AVMSD) om videoplatforms onder het toepassingsgebied van de Europese mediawetgeving te brengen. In tegenstelling tot de redactionele controle van mediabedrijven over publicatie *en* organisatie, definieerde de AVMSD de controle van platforms als het organiseren van door gebruikers gegenereerde inhoud en programma's. De rechtvaardiging van de AVMSD voor de verantwoordelijkheid van platforms weerspiegelt deze verandering. Waar het de verantwoordelijkheid van mediaorganisaties rechtvaardigt door te wijzen op hun impact, benadrukt de AVMSD de verantwoordelijkheid van platforms het resultaat is van het faciliteren van gebruikersinteracties die uiteindelijk impact hebben op publieke waarden (sectie 4.2). Gezien de verschillen tussen de controle die wordt uitgeoefend door platforms en de media, worden platforms niet alleen verplicht om de manier waarop zij organisatorische controle uitoefenen te veranderen (bijvoorbeeld door de toegankelijkheid van schadelijke inhoud voor minderjarigen te beperken), maar ook om de manier waarop gebruikers hun rol kunnen vervullen aan te passen (bijvoorbeeld door *uploaders* te laten aangeven of hun video gesponsord is; sectie 4.3). Daarmee stapt de AVMSD voor platforms af van gecentraliseerde verantwoordelijkheid, en naar coöperatieve verantwoordelijkheid. Het concept 'coöperatieve verantwoordelijkheid', ontwikkeld door Helberger, Pierson en Poell, benadrukt dat platforms niet alleen een verantwoordelijkheid hebben voor hun eigen gedrag, maar ook voor de manier waarop ze andere actoren op hun dienst in staat stellen om publieke waarden te beïnvloeden. Het proefschrift maakte onderscheid tussen twee manieren waarop de AVMSD deze benadering van verantwoordelijkheid operationaliseert: een *front-end* met middelen waarmee gebruikers de zichtbaarheid van content direct kunnen beïnvloeden, en een *back-end* waarmee specifieke keuzes en de toewijzing van verantwoordelijkheid tussen platforms en andere belanghebbenden kunnen worden betwist door gebruikers, media-autoriteiten en maatschappelijke organisaties (sectie 4.4).

Hoofdstukken 5 en 6 richten zich op de informatie en controlemechanismen voor individuen. Hoofdstuk 5 onderzoekt hoe de algemene algoritmische transparatiediscussie rond het recht op uitleg in de AVG moet worden aangepast aan de context waarin algoritmes gebruikt worden. Op deze manier kunnen de specifieke uitdagingen die zich voordoen wanneer redactionele besluitvorming wordt geautomatiseerd worden aangepakt. Het hoofdstuk geeft een overzicht van de reikwijdte van het recht op uitleg, en belicht vervolgens drie doelen die het recht dient: vertrouwen, autonomie en verantwoording. Vervolgens wordt geanalyseerd hoe deze doelen moeten worden begrepen in de context van nieuwspersonalisatie (sectie

5.3). Tot slot gebruikt het hoofdstuk inzichten uit het mediarecht en de literatuur om een conceptueel kader van transparantiemaatregelen te ontwikkelen die deze doelen kunnen ondersteunen in de context van geautomatiseerde redactionele besluitvorming (figuur 2, sectie 5.4).

Hoofdstuk 6 onderzoekt welke transparantie- en controlemaatregelen geschikt zijn om individuen in staat te stellen nieuwspersonalisatie te vertrouwen. De noodzaak om vertrouwen te waarborgen in het licht van technologische veranderingen speelt in zowel horizontale beleidsvoorstellen (zoals de voorgestelde wet inzake digitale diensten en de voorgestelde wet op de artificiële intelligentie) als sectorale initiatieven rond bijvoorbeeld desinformatie een belangrijke rol. In deze beleidsdiscussies blijft de definitie van vertrouwen en de relatie tot het recht echter vaak vaag. Het hoofdstuk onderzoekt daarom waarom en hoe het recht het soort vertrouwen kan stimuleren dat nodig is voor individuen en de mediaorganisaties die nieuwspersonalisatie gebruiken om hen te informeren om hun rol in de democratische samenleving te vervullen. Het hoofdstuk analyseert met name hoe transparantie en controlemaatregelen scepsis vergemakkelijken, verwachtingen op één lijn brengen, en herstel van vertrouwen mogelijk maken (sectie 6.2). Weten waarom en hoe het recht vertrouwen moet bevorderen, is echter niet genoeg. Om vertrouwen daadwerkelijk te bevorderen, moet ook rekening worden gehouden met het perspectief van de personen die vertrouwen in de media of platforms plaatsen. Daartoe ontwikkelt het hoofdstuk een vragenlijst op basis van het kader dat in hoofdstuk 5 is ontwikkeld. De resultaten geven aan dat individuen er sterk in geïnteresseerd zijn om erachter te komen of ze organisaties kunnen vertrouwen die het nieuws dat ze zien personaliseren. Ook vinden zij de informatie die passend is voor het soort vertrouwen dat via het recht gestimuleerd wordt belangrijk voor hun vertrouwen. De mogelijkheid om te bepalen hoe nieuws wordt gepersonaliseerd is iets belangrijker dan de mogelijkheid om personalisatie beter te begrijpen. Het hoofdstuk betoogt daarom dat het verzekeren van controle, bijvoorbeeld door individuen te laten bepalen wanneer personalisatie moet worden gestopt en welke waarden het bevordert, centraal moet worden gesteld in de discussie over algoritmische transparantie en vertrouwen in technologie (sectie 6.5). Deze individuele controle kan echter niet worden gezien als vervanging van regulering.

Hoofdstuk 7 herhaalt de onderzoeksvraag en aanpak van het proefschrift, vat samen hoe de hoofdstukken 2-6 deze hebben beantwoord, en sluit af met een vooruitblik. Het creëren van de mechanismen waarmee redactionele verantwoordelijkheid beter kan worden opgelegd zal nieuwe vragen opwerpen over de normen die moeten gelden voor personalisatie. Dat is het doel: ervoor zorgen dat er een proces is waarmee de impact van personalisatie op redactionele waarden kan worden geïdentificeerd en aangepakt. Om deze impact daadwerkelijk aan te gaan, moet het mediarecht zijn focus verleggen: het moet normen die zijn ontworpen voor uitgevers en omroepen aanpassen aan een mediasysteem waarin de manier waarop inhoud is georganiseerd in toenemende mate bepaalt aan welke informatie individuen worden blootgesteld.