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Editorial independence in an automated media system

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Abstract: 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. Recent policy initiatives such as the EU's Media Action Plan and Digital Services Act are now beginning to revisit the way law can enable the media to act independently in the context of new technological tools and actors. Fully understanding and addressing the challenges automation poses to editorial independence, however, first requires better normative insight into the functions editorial independence performs in European media policy. This article provides a normative framework of editorial independence's functions in European media policy and uses it to explore the new challenges posed by the automation of editorial decision-making.

Introduction

Faced with competition from platforms and a pressing need to convince audiences to pay attention and/or money, newsrooms have increasingly embraced automation. 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 (Beckett, 2019). This shift is partially driven by automation's expected commercial advantages in the form of increased efficiency, clicks, and subscriptions (Newman, 2019). However, automation also enables organisations to adapt their editorial role to a changing media system. By personalising news distribution, for example, media organisations can deliver more diverse news to each member of the audience (Möller et al., 2018).

Despite its increasing commercial and editorial necessity, the media's reliance on technology has far-reaching implications for the way the media fulfils its role in society. Editorial control, which has long been a necessarily human activity, is now ceded in whole or in part to algorithms (Diakopoulos, 2019, p. 28). This creates new tensions regarding 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 that develop and fund them. Media organisations, especially those that are smaller or local, can come to require the services of external data and software providers to automate editorial decision-making. And the media as an institution is faced with new dependencies on the metrics and distribution tools offered by platforms to reach and understand their audience (Bell, 2018; Bodó, 2019). 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 play 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. This in turn is important to ensure pluralism and prevent the emergence of a dominant actor in the media system. 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 has thus been 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 large actors, including the state, and has played an important role in safeguarding its own independence. Nevertheless, media policy has traditionally played an important role in creating the conditions for editorial independence (Bennett & Strange, 2015; Ooster, 2015). Policy initiatives increasingly revisit how the conditions for editorial independence can be adapted to the pressures the media's technological transformation introduced, arguing COVID-19's financial impact has exacerbated and accelerated existing trends (CoE, 2019; European Commission, 2020a, 2020b). 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 article 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. To draw on earlier lessons from the literature and identify common pressures on the media's editorial independence, the article focuses on the automation of editorial control in general rather than a specific technology. It uses the term 'automated editorial decision-making' to refer to the processes in which technology informs, supports, or replaces human control over content production, publication, and organisation.

The analysis is grounded in article 10 of the European Convention on Human Rights (ECHR), as further concretised through case law of the European Court of Human Rights (ECtHR) and Council of Europe (CoE) recommendations. The latter are non-binding but authoritative, as they reflect a consensus among the 47 member states that make up the CoE. They can thereby provide overarching guidance on the way in which abstract or fragmented principles such as editorial independence should be understood in new situations (McGonagle, 2019). The article aims to analyse the arguments for editorial independence that 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 determine how edi-

torial independence's functions are challenged by the automation of editorial decision-making.

The following sections will (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 these are impacted by trends identified in journalism studies literature, and (3) explore how these trends combine to challenge policy's traditional understanding of editorial independence and the new policy initiatives that aim to safeguard it.

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 (Brogi et al., 2020; Jagland, 2017; Karppinen & Moe, 2016). 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 include the commercial and political pressures that are also mainstays in media policy discussions, as well as the influence of sources, media routines, and journalists' own stances (Reich & Hanitzsch, 2013). This open approach to independence also made it possible to quickly incorporate the influences associated with the automation of editorial decision-making. Journalism studies research that 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 that influence these choices, as they often lack the skills and resources necessary to develop 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 the actors such as engineers, marketing departments, data providers, and external software companies that influence how these algorithms are developed and used (Bodó, 2019; Zamith, 2018).

Third parties' important role in automated editorial decision-making has reignited an old discussion over the meaning of editorial independence. This discussion revolves around the argument that it is difficult to imagine a media system, automated or not, that is not influenced by outside forces. As long as the media relies on advertisers or the audience to pay for journalism, for example, it will be subject

to market pressures. Nor is it necessarily negative that the media is influenced by its environment. Schudson's argument that a media system that is invulnerable to outside pressure would become isolated from society has proven especially influential (Schudson, 2005). 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 (Ananny, 2018; Bennett & Strange, 2015; Karppinen & Moe, 2016).

Though rarely explicitly discussed in these terms, the idea that journalism should not be fully independent is baked into 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 question: 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, art. 10 ECHR firstly provides individuals with a subjective right against state interference. The state is thus 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, and it prevents the state from (for example) pressuring the media to not express a particular political view, including through financial or organisational means (Bennett & Strange, 2015). At the same time, art. 10 ECHR imposes a positive 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 (Oster, 2015). This requires states to take action in the sphere between individuals. In a limited number of cases the ECHR has recognised the right of individual journalists to invoke their freedom of expression rights in a dispute with their employer (*Frăsilă and Ciocîrlan v. Romania*, 2012, para. 62; *Wojtas-Kaletka v. Poland*, 2009, paras 42–52). More generally, the ECtHR emphasises states' obligation to put in place the conditions for a pluralistic media system. In that context the ECtHR has also consistently argued member states must prevent groups from obtaining a dominant position that would allow them to restrict the media's editorial freedom (Arena et al., 2016). The CoE has furthermore expanded on the way states' positive obligations to put in place 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 (CoE, 2019; European Parliament, 2018).

To properly understand how the means by which policy protects editorial indepen-

dence are challenged, it is first necessary to engage with the underlying question of why media policy aims to secure editorial independence. Writing from a US and first amendment perspective, Ananny especially has argued that the infrastructures through which the media forms relationships with others should be evaluated by what kinds of publics they create (Ananny, 2018). 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 (CoE, 2011). The following section will develop four perspectives on the functions of editorial independence in European media policy, and assess the challenges the automation of editorial decision-making poses from these different perspectives.

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

Policy frameworks often point to 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 need to prevent external actors from exercising 'undue influence' on the media. Concretely, this is often used to refer to influence that is used to manipulate the audience for commercial or political purposes, for example in the form of undisclosed influence from advertisers. Arguments that 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 that 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 that 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% instead of 40% of the media market, the change in ownership creates a dangerous concentration of power in the media system that threat-

ens the media's ability to function as a separate institution in a democratic society. Conversely, individual arguments focus on influences that 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. However, 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 will expand on each perspective and the way it is challenged by the risks identified in journalism studies literature on automated editorial decision-making.

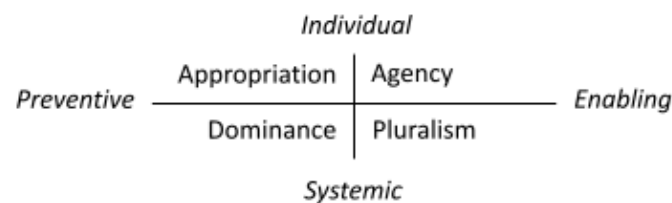


FIGURE 1: Normative perspectives on editorial independence in European media policy (source: elaborated by author).

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 influence on individuals' and public opinion (Heijkant et al., 2019). This influence is valuable to any number of third parties. Editorial independence policy has traditionally 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 (CoE, 2011, para. 65; Gibbons, 1998, p. 35; Oster, 2015, p. 85). However, other actors also have an interest in the media's ability to influence the minds of individuals. Editorial independence policy has traditionally been especially concerned with commercial influences on editorial content. For audiovisual content, the Audiovisual Media Services Directive (AVMSD) prohibits sponsorship and product placement for news and current affairs programmes, or if it affects how other content is produced and organised (Gibbons & Katsirea, 2012). Preventing the manipulation of the media's audience is not only a question 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 on 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 (*RLvS Verlagsgesellschaft mbH v. Stuttgarter Wochenblatt GmbH*, 2013).

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 readers are more likely to buy their product (Turow, 2012). A lack of algorithmic transparency could moreover make such commercial influence difficult for the public to detect (Diakopoulos, 2019). In the example above, commercial influence on the way content is distributed would be difficult to detect for outsiders and potentially circumvent obligations such as those in art. 9-11 AVMSD, which focus on making advertisements and commercial influences on the production of content more recognisable (see on the regulation of commercial communications and choice architectures more generally Sax, 2021, p. 183). 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 that can be exposed to online behavioural advertising (Boerman et al., 2017). 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 that the next section will explore.

Another category of concern focuses on situations in which the media makes editorial decisions based on third-party data (Carlson, 2015). As the New York Times puts it in its explanation on data journalism "More 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” (Cook, 2019). Though the way in which data is used in editorial decision-making changes, 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 (Stalph, 2018). Similar concerns arise with regard to other technologies that make editorial decisions based on third-party data, such as news personalisation and automated journalism (Diakopoulos, 2019, p. 120; Zamith, 2019).

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 that personalisation technologies are used to further increase state control through government influence on their design or access to the data they collect (Makhortykh & Bastian, 2020; Wijermars, 2021). In this sense, strong safeguards for editorial independence can be seen as necessary to responsibly develop targeting and tracking technologies in general.

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 a democratic society by providing information which serves public values. Specifically, such arguments highlight the need for the media to 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 they believe citizens should know, as opposed to information that is the most profitable to provide. The agency perspective assumes special importance in contentious situations, where independent media can have a stabilising effect by providing reliable information (CoE, 2019; Oster, 2015 p. 33; Gibbons 1998, p. 35-36).

An agency perspective on editorial independence requires the state to act as a

buffer, and ensure the media has the ability to act without having to rely on others that 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 that 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 that sustain independent journalism; CoE, 2019; *Animal Defenders International v United Kingdom*, 2013; van Dijck et al., 2018).

The automation of editorial decision-making further complicates the role of editors in the newsroom. As the extensive discussion on audience metrics has again emphasised, technology in newsrooms can often favour specific editorial values (Zamith, 2018; Belair-Gagnon, Zamith, & Holton, 2020). When metrics selectively highlight what readers want as consumers rather than citizens, they create a pressure to make editorial choices that attract large audiences that are valuable to advertisers or the business department (Belair-Gagnon et al., 2020). Personalisation technologies that 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 (Bodó, 2019). Though it is possible to use these technologies 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 (Hindman, 2017; Zamith, 2018).

As editorial technology matures, it has been used to not only inform editorial decision-making, but also to automate various parts of the editorial process (Beckett, 2019). This puts the role of journalists on a spectrum, ranging from situations in which they 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 editors' reliance on the engineers who develop technologies that promote editorial values. However, the lack of algorithmic transparency also has the potential to remove many individual edi-

torial decisions from human oversight, and obscure which (third) party has shaped which part of the editorial algorithm (Zamith, 2019, p. 4).

Preventive/systemic: the dominance perspective

Editorial independence is also used to counteract concentrations of opinion power in the media system (CoE, 2018, para. 1.3). Like the next section's pluralism perspective, this perspective deals with influences that 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* (2001, para. 75), 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 that aimed to abuse its competitive advantage. Organisations that do have such an advantage can use it to limit the editorial freedom of other media organisations and overexpose citizens to their preferred viewpoints (Sjøvaag, 2014; Smith & Tambini, 2012). This affords them outsized influence over the formation of individual and public opinion, i.e. opinion power (Helberger, 2020). 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 that are based on a balance of power (Baker, 2006; CoE, 2011). By limiting powerful actors' influence over smaller organisations, editorial independence can function as a counterweight to concentrations of opinion power. However, to prevent dominant actors from emerging it is also necessary to disperse power across multiple independent organisations, for example by limiting cross-media ownership and preventing centralised control over distribution channels and content on which the media depends (Evens & Donders, 2016).

Though platforms are not the focus of this article, 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 (Bell, 2018; van Dijck et al., 2018). Through their control over the algorithms that shape the visibility of content online, a small number of platforms is increasingly able to determine how media content is distributed. These platforms can moreover decide how the media understands its audience on platforms by determining which metrics to make available (Bennett & Strange, 2015; Pickard, 2020). The nature of power concentrations, in other words, not only concerns control over what is published, but also control over the relationship between media organisations and their audiences (Helberger, 2018).

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 they do not control, smaller, commercial, and even public service media organisations (with their special obligation to remain independent and serve as a counterweight to powerful organisations) are unable to ignore platforms entirely. This reliance creates a pressure to tailor editorial decisions to the values that are presumed to be encoded in platforms' personalisation algorithm (Peterson-Salahuddin & Diakopoulos, 2020; van Es & Poell, 2020). The results can be seen in editorial decisions to pivot to video, or to produce large quantities of content and leave it to the platform to determine what to show to whom (van Dijck et al., 2018). 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.

Secondly and more fundamentally, the institutional dependency of the press complicates the ability of independent organisations to serve as a tool to counteract concentrations of opinion power. This function of editorial independence presumes 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 moreover is coloured by platforms' ability to connect media organisations to audiences across 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 (Bell, 2018; Bleyer-Simon et al., 2021, pp. 96, 115).

Looking forward, as algorithms are increasingly integrated in media organisations' internal content production and distribution processes, concentration of power over such technologies, source data, intellectual property rights can also become important indications of power in the media system. For the moment there is no dominant actor in these fields, and the market structure of audience metrics suggests editorial technologies may not need to become concentrated into a few hands. Moreover, especially public service media (PSM) and larger organisations are increasingly (collaborating in order to) develop their own technologies, sometimes as an explicit counterweight to platforms' services (van Es & Poell, 2020). Nevertheless, platforms' data, technological expertise, and financial advantage also place them in a good position to increasingly control the tools 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 (Fanta & Dachwitz, 2020).

Enabling/systemic: the pluralism perspective

Finally, editorial independence functions as a precondition for a pluralistic media system. There is a strong overlap between the pluralism and dominance perspectives. Indeed, ensuring pluralism is one way to prevent dominance (*VgT Verein gegen Tierfabriken v. Switzerland*, 2001, para. 73). But where the dominance perspective uses editorial independence to protect the democratic process from concentrated power, the pluralism perspective uses it to ensure the public debate contains a wide variety of perspectives. Just preventing dominance does not automatically achieve this goal, since economic factors for instance can still leave certain voices underrepresented even in media systems where there is no single dominant actor (*Centro Europa 7 S.r.l. And Di Stefano v. Italy*, 2012, para. 30; Oster, 2015; Smith & Tambini, 2012). The pluralism perspective therefore sees editorial independence as one way to ensure pluralism. It is especially used as a precondition for the existence of different media organisations that can provide the perspectives of the different societal groups and political outlooks (CoE, 2018; *Frăsilă and Ciocîrlan v. Romania*, 2012, para. 64). This is commonly referred to as source pluralism (Loecherbach et al., 2020).

Source pluralism assumes that a diverse set of media organisations will produce diverse output with which different members of a heterogenous audience can engage (CoE, 2018; Sjøvaag, 2014). 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 that determine 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 (Helberger, 2018). This shift complicates editorial independence's function as a mechanism that 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 that reflects society and includes different societal actors engaged in criti-

cal debate. Exposing citizens to different independent voices that explicitly disagree with one another is valuable under this approach. Conversely, approaches that 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 (Loeberbach et al., 2020; Valcke et al., 2015).

Automated editorial decision-making also has the potential to complicate editorial independence's ability to safeguard source pluralism. To do so, independent organisations must exercise editorial control in a different way and offer different perspectives. This is in potential conflict with the efficiency that 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 that 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-making, rather than having to rely on more inherently distinct human editorial decision-making (Vogler et al., 2020). This trend moreover does likely not affect all types of organisations equally, but may be especially problematic for smaller media organisations without the resources to develop technologies inhouse (Beckett 2019).

Safeguarding editorial independence in an automated media system

Editorial independence's many functions create the risk of safeguarding a narrow version of the concept that leaves a number of public values unprotected. Protecting the media's independence from advertisers trying to manipulate the audience, for example, does not ensure 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 do face common challenges that 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 (Brogi et al., 2020). Ensuring a consistent and comprehensive protection of editorial independence thus first requires a broader view of the way 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 it faces in the context of automated edi-

torial decision-making. The following section explores common challenges to the four policy perspectives on editorial independence and reflects on the ways in which recent policy begins to address these challenges.

TABLE 1: Four perspectives on the changing role of editorial independence in the automated news system (source: elaborated by author).

	APPROPRIATION	AGENCY	DOMINANCE	PLURALISM
ROLE OF EDITORIAL INDEPENDENCE	Prevent outside influences from being laundered through editorial content.	Ensure 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	New opportunities to influence editorial content through input data.	New dependencies on (third-party) software developers that build tools that take or support editorial decisions.	Increasing dependency of the media on platform-controlled distribution algorithms	Advantages of editorial values that are easy to automate and optimise.
	New opportunities for commercial or political influence.	Changing distribution of influence between departments (e.g. editorial, technical, business).	Concentration of power over tools used by legacy media to take editorial decisions.	Homogenising influence of the use of the same input data or software on the values promoted by independent organizations.
	Hidden influences on algorithms or their input data due to a lack of algorithmic transparency.	Influence of values encoded in technology on journalistic decision-making		Unequal access to the ability to integrate automation for e.g. smaller media organizations.

At the most basic level, automation challenges editorial independence by changing the nature of influence on 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 it promotes. This problem is exacerbated when algorithms take a large number of

editorial decisions that cannot be individually reviewed. Editors and journalists must then rely on systems that flag individual decisions for editorial review or an analysis of the aggregate impact of the editorial decisions taken by an automated system (Diakopoulos, 2019).

In part, the challenges to editorial independence that 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 on automated decision-making can cause external influences to escape editorial oversight. However, editorial oversight is not only necessary to manage external influences on automated editorial decision-making, but also to ensure algorithms are implemented in a way that serves the editorial mission of the media organisation. Knowing how a news personalisation algorithm impacts the diversity of the audience's news diet, for example, allows for a meaningful discussion between editors and engineers over the way the algorithm should be adapted (Vrijenhoek et al., 2020). 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 approach set out by technology companies or platforms. Technologies such as recommender systems, for example, have been developed and implemented successfully by platforms and other technology companies. This track record makes it easy for media organisations that automate editorial decision-making to follow the approach already set out by other institutions (Napoli, 2019). Doing so, however, 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, also creates new dependencies. 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 understand how its content is consumed. However, also in a field such as data journalism, where the technology is relatively easy for journalists to control directly, the reporting relies heavily on data sets published and controlled by government institutions (Cushion et al., 2017; Stalph, 2018). In both cases, the media is confronted with a reliance on technology or data that is not neutral but ultimately shapes the

editorial values promoted by the news a media organisation provides to its audience. The control that other actors such as platforms, software providers, or government institutions exercise can however leave editors little room to negotiate the editorial values embedded in the data and technology they use. This is especially 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 and shifts 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 help overcome some of the obstacles that a lack of algorithmic transparency also imposes on outsiders' ability to assess automation's implications for editorial independence (Brogi et al., 2020). Art. 31(2) of the proposed DSA, for example, would give vetted researchers access to the data necessary to understand the systemic risks very large online platforms pose to media freedom. This is not only important to better understand 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 much broader than the influence of platforms. To fully understand how editorial independence is affected by the use of automated tools, it is also necessary to ensure 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 (Arena et al., 2016; Diakopoulos & Koliska, 2017).

At the same time, recent EU and CoE policy initiatives aim to steer the media's technological transformation and address the accompanying new pressures and structural dependencies (CoE, 2019; European Commission, 2020a, 2020b). 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 manage and process this data can be provided. Such an initiative could address some of the structural dependencies identified in this paper by making it easier for the media to develop its 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 that are able to influence these values. This of course includes the principles that traditionally limit political influence over mechanisms to support media, such as non-discriminatory access requirements (CoE, 2019). But it also requires policy to ensure the technology that is promoted can support the editorial values of different media organisations. Concretely, this entails 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 that 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 (CoE, 2019). The challenges to the conditions 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 just that – not matters for the IT department, but areas that have traditionally fallen under the responsibility of editors and journalists (Helberger et al., 2020). Their influence on the design process takes on added importance with regard to technologies that produce decisions that due to scale cannot be checked individually, such as personalisation systems. To continue to fulfil their role, media actors need the technological skills and tools necessary to evaluate how the technologies they use relate to editorial values. As the discussion on metrics has demonstrated, this requires a better understanding of whether, and if so how, specific technologies affect editorial values (Bernstein et al., 2020; CoE, 2019; Vrijenhoek et al., 2020). Diakopoulos, for example, argues media organisations can verify whether an algorithm lines up with their editorial mission by formulating and then testing a hypothesis on the way in which an algorithm impacts an editorial value (Diakopoulos, 2019). Such mechanisms can modernise existing procedural approaches to editorial independence that require media organisations to create agreements on the allocation of responsibility between business and editorial departments. In doing so, policy can not only ensure media actors have the skills and tools necessary to fulfil their role, but also the ability to essentially audit whether automated editorial decision-making lines up with their editorial values.

Conclusion

This article laid out a normative framework that 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 they use influence editorial values, as well as the homogenising impact of and structural dependencies on new technologies. These create opportunities for both 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 can and should create the conditions that allow an independent media to thrive. This not only involves the EU which continues to play a big role in the regulation of platform power and data processing, but especially also 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 perspectives. This is not only necessary to better understand the challenges to editorial independence, but also to recreate the balance between policy measures that require and enable editorial independence, and the media's role in safeguarding its own independence. This requires further insights into the way 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 light of the structural and appropriation concerns identified in this article, this understanding must include commercial and local media organisations in addition to the quality and public service media that are often the focus of qualitative research. When grounded in the normative functions 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.

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