Challenges of a platform press: Algorithmic accountability and transparency in news media

An analysis of current news media policies in the Netherlands and Germany

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ABSTRACT

This thesis explores current news media policies regarding algorithmic accountability on third-party platforms and notions of a digital public sphere in Germany and the Netherlands and aims to give suggestions of how they might be adapted to conform to current changes. Algorithmic curation processes active on platforms shape the way users assimilate information and are therefore possibly shaping public opinion. As of today, those procedures are mostly happening concealed from the user, raising the question of accountability on platforms. Thus, the question of how actors such as media companies, public institutions, and governmental institutions can redefine their media policies in the context of a platform press is asked in this paper. A thematic analysis of expert interviews with professionals working in the media industry, researchers, journalists and activists exposed actions that could be considered in the frames of professional responsibility, public responsibility, the political frame and the market frame of accountability. Main findings of this paper concerning media companies are the need for making journalistic processes transparent when they are active on platforms, due to an abundance of otherwise unaccounted content and strengthening institutional authenticity outside of the platform eco-system. To weaken monopolistic structures, political actors should consider breaking-up platforms and subsidize the creation of alternatives to the established actors. Doing so would provide consumers with a choice and possibly diminish the power a few platforms have right now. The digital space platforms occupy is subject to several national laws, making it difficult to effectively impose guidelines on platforms. Furthermore, media literacy should be promoted not only by public institutions but also by private actors. Currently, consumers are not equipped to utilize publishing tools provided by platforms and are mostly unaware of the consequences algorithms have on the content they receive. Finally, a clear account of the effects platforms have on public opinion has yet to be established in order to advance research on this topic. An ideal digital public sphere is possible to a certain extent, but always with the limitations of the traditional model and not within the current options available for users.

KEYWORDS: accountability, algorithms, platforms, journalism, media literacy, public sphere

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1. Introduction

After Facebook revealed that at least two governments exploited their platform during presidential election campaigns in 2016 and 2017, numerous debates about how much influence algorithmically curated platforms have on public opinion were sparked (Weedon, Nuland, & Stamos, 2017). A survey conducted by the Pew Research Center in December of 2016 revealed that 23% of U.S. adults "have ever shared a fake political news story online" (Barthel, Mitchell & Holcomb, 2016, p. 7). This raises concerns about what the role of social media is in a world shaped by hyper information, where the power of the so-called "Fourth Estate" is rapidly changing into the "networked Fourth Estate (Benkler, 2011). With foresight, Benkler (2011) addressed this matter in 2011 when he coined the term while addressing the WikiLeaks release of 2010, suggesting "the need to resolve a major potential vulnerability— the ability of private infrastructure companies to restrict speech without being bound by the constraints of legality …". Speech is not restricted per se in the sphere of social media. It is, however, not equally accessible to every user. Facebook, for example, does filter and promote topics it deems to be more interesting for its users (Hern, 2016).

Companies such as Facebook, that are acting within a mostly unregulated space, are challenging the relationship of media and the public by utilizing new, interactive forms of communication. People are no longer only the receiver of information, but also the contributors, transforming the relationship between sender and audience. Search engines, social media, and media conglomerates utilize algorithms to help users make sense of the immense amounts of content created every day (Diakopoulos, 2016). Using those engines increases the amount of information that is available to the public when compared to relying on opinion found in, for example, local newspapers (Flaxman, Goel, & Rao, 2016). As van Cuilenburg & McQuail (2003) argue: whoever has access to communication and its benefits like information and channels of contact, is also close to exercising power.

Traditionally, news media preselect information that they deem to be important for the public. One of the normative expectations of media, however, is to inform about political issues, events, and actors (McQuail, 2013). This normative obligation, however, is not legally defined in a free society, like most countries of Western Europe are, as the media are not run by society nor work on behalf of it (McQuail, 2013). Other normative expectations such as expressing different voices, helping public opinion or disseminating information are all in a public interest.

Electronic media has become of growing importance in the last decades. Always regarded as essential infrastructure and strategically critical in Europe, the state decided to not leave the industry to the free market (Cuilenburg & McQuail, 2003). Electronic media were "scarcely regarded as consumer goods and services" and "were also generally regarded as either 'non-political' or outside the scope of democratic debate" (Cuilenburg & McQuail, 2003, p.188). With the transition from the classical news cycle to the concept of 24-hour news and usage of the internet as a tool of public communication, the structure of the media debate has become more open (Riddell, & Peter, 2014). Here, ministers and advisers have much less control over the media debate. The short-messaging service Twitter, for example, has been proven to successfully predict election results in Italy and France (Ceron et al, 2014), and provides researchers with a valuable tool to analyze socially mediated and networked commentary and conversations during elections, scandals and political crises (Elmer, 2012). The relevance for discourse in the public sphere these algorithms already have manifests itself in society by constituting something that can be challenged or something that must be accounted for.

An example for this possible institutionalization of the algorithm was the debate following the removal of the Occupy Wall Street movement hashtag from Twitter (Gillespie, 2011, as cited in Napoli, 2006). After public outrage, the company offered insights into the working of its algorithm and explained that the trending hashtags are not just based on most used terms, but are also influenced by checking if the term is rising rapidly in popularity and the relation between retweets and tweets (Gillespie, 2011, as cited in Napoli, 2006). This also serves as an illustrative case of how the public can act on the principle of accountability and demand explanation of such incidents. Still, the fact that the Occupy Wall Street was extremely visible on the public agenda of the media landscape at the time initially enabled the public eye to take notice of this event. Usually, the workings of algorithms are not disclosed to the public, apparently for reasons of competitive advantage and fear of manipulation by competitors (Diakopoulos, 2014).

1.1. Relevance of research question

If new media channels such as Facebook, Twitter, and blogging have increased the power of the public to form, steer and create political discourse, who is making sure that checks and balances are constantly being applied? In the case of classical journalism, a set of guidelines is supposed to ensure that journalists do not abuse their power of profession to

harm the public. A meta-study by Laitila (1995) identifies six common codes of journalistic conduct in 31 European countries set by the corresponding journalistic association. These include a "truthfulness in gathering and reporting information" and the execution and defense of "freedom of expression and comment" (Laitila, 1995, p.543). These codes represent guidelines for journalists working independently and for print and most established online media. Díaz-Campo et al. (2015) analyzed the journalistic codes of ethics in 99 countries around the world. They concluded that among 31 codes that have been written or revised since 2001, and thereby amidst the rise of new media and ICTs, only 9 have added sections on the internet and the new forms of communication that emerged with it. Even those 9 countries did not include every topic that is an important mode of new communication. User-generated content is only addressed in Canada and the Netherlands, whereas the linking to other sites is only part of Canada's, Luxembourg's and Norway's code of ethics (Díaz-Campo et al., 2015).

If content posted on platforms such as Facebook, Twitter and on weblogs is accordingly not subject to any form of policy or even self-regulation, who can be held accountable for unreliable, harmful or unethical texts? Curating user's News Feeds on Facebook, for example, could affect assumptions users make about their relationships on this network, as the feed is not a true portrayal of their communication habits but considers interaction and partialities the algorithms gather during usage (Eslami, 2014). Another issue that should be taken into consideration is the nature of these companies. Are they just tech-giants providing a platform for its users to interact through sharing, commenting and creating content or are they media companies actively creating and editing what people see when they use their services?

The *Online Media Self-Regulation Guidebook,* published by the office of the representative on freedom of media, which is part the OSCE (Organization for Security and Co-operation in Europe), calls for self-regulation instead of legal regulation to increase online accountability, because it offers "more flexibility than state regulation", effectively calling journalists to aid in the struggle for information supremacy in digital media (Mijatovic, 2013, p.5).

1.2. Effects of the "filter bubble"

Pariser (2011) coined the term "filter bubble" to describe the phenomenon of only being exposed to viewpoints similar to one's own in social media. When people are no longer part of the general discourse on political topics, the concept of democracy is endangered.

Democracy has always been concerned "with the principle of publicity in the realm of law or the state" and "with the participation of citizens in the process of discussion and decision-making" (Gimmler, 2001). Especially the concept of deliberative democracy relies heavily on open discussion, citizen participation and a working public sphere (Gimmler, 2001). McQuail (2013) also stresses the role of media in the public sphere and states that, when it is organized appropriately, open, free and diverse, media can be the "most important intermediary institutions of the civil society" (p. 180). Furthermore, Moeller, Trilling, Helberger et al. (2016) argue that a limited set of relevant topics central to a diverse discourse is a critical part of the public sphere and coherent modern democracies.

Public sphere in the context of electronic communication as it is mentioned here is defined by Habermas as a space where "people can take affirmative or negative positions on issues" (Habermas, 2006, p.9). He adds that "public communication acts as a hinge between informal opinion-formation and the institutionalized process of will formation" (Habermas, 2006, p.9). Anything that might hinder citizens of participating in a discourse that is open for everybody or clouded by unreliable or false information is therefore hazardous for a deliberative democracy.

In the changing field of journalism in the digital age, the need for informed citizens is not eliminated and ethical journalism is the "only guarantor of reliable and useful information to ensure prosperous democracy" (White, 2013). Especially in a time where the internet is an increasingly popular news source for politics (Mitchell et al., 2014). Research on selective exposure is still in its infancy, yet there are sources that claim the effects of the "filter bubble" should not be of concern presently because the technology is simply not mature enough (Zuiderveen Borgesius, Trilling, Möller et al, 2016). These studies, however, focus solely on the US party system. European countries, most of which are not based on a two-party system, are missing in the academic discourse yet.

There is, however, research that claims being exposed to a variety of political views enables citizens to make informed decisions and increases the propensity to vote (Bakshy et al., 2015; Lassen, 2005). Also, socially endorsed articles shared on social networks expose users to different ideologies and diverse information (Messing & Westwood, 2014). In an analysis of German and Italian Twitter users, researchers found that people tend to stay in their own social networks, which would strengthen echo chambers and hinder the challenging of their views (Vaccari et al., 2016). Their research also suggests, that politically active users on Twitter are able to reach less involved users, as they are less likely to be part of homophilic networks. This becomes especially relevant when evaluating power relations. Simultaneously,

when voters are engaged in cross-cutting conversation, that is discourse involving contrasting opinions, there seems to be less political participation (Bakshy et al., 2015). Messing & Westwood (2014. p 17) found that using social media is "expected to increase users' exposure to a variety of news and politically diverse information". Simply put, there are contradicting studies advocating both sides of the spectrum. What seems to be the most prominent issue in this matter is that, even though effects might be small or research on the effects contradicting, there are still measurable, which make them susceptible to drastically increase in size if changes are made to the algorithm or user behavior changes (Lazer, 2015).

1.3. Algorithmic decision making on platforms

Additionally, there is little research on the motivations behind the workings of these algorithms (Herrera, 2014). There are algorithms making decisions for us today and most of them are unregulated (Diakopoulos, 2016). Are companies employing those tools interested in steering political opinions in a certain direction or is providing unbiased information their only purpose? Busch and Sheperd (2014), for example, claim that Twitter pays little attention to its role as an actor serving public responsibility and media diversity. Even if such companies set themselves to operate on behalf of normative expectations, are standards a company might strive for even enforceable when the gross of interaction is, although admittedly moderated by algorithms, still created by its users? After all, algorithms are only made up of program code. Their power rises and falls with the context they are used in and the people who design them. Accordingly, Helberger, Kleinen-von Königslöw, and van der Noll (2015) stress the fact that regulations regarding the gatekeeping character of these intermediaries should always take into account the dynamic relationship between user and gatekeeper, as users are not only subject to being gated, but also wield a considerable amount of power by choosing alternatives and ceasing use. Barzilai-Nahon addresses this issue in her framework of network gatekeeping and observes this relationship between gated and gatekeeper through exchange of information, alternatives that the gated can choose from and political power of the gated induced by a direct connection with the gatekeeper (Barzilai-Nahon, 2008).

Benkler (2006) described the underlying power concept of a controlled flow of information by comparing it to a pipe that serves as the sole information channel for a user. One is manipulated by an operator, the other is not. In this scenario, all decisions made based upon information that is transmitted through the controlled pipe are a "function of the choices

of the controller of the pipe" (Benkler, 2006, p. 120). He also points out that in the case of numerous available channels of communication and the awareness of each of the channels' structural state, the influencing function of the channel is rendered useless.

Some parallels to the assertive power the press had in mid-century and, going further back, mass propaganda had on citizens are proposed by van Cuilenburg & McQuail (2003). They argue that any policy setting boundaries to prevent history from repeating itself will have three central concepts: freedom of communication, access and control/accountability.

1.4. Research questions

Agenda setting in news media is more than just informing the public about current issues and debates. By selectively reporting only about certain themes, news media are able to put these topics in the focus of our attention (McCombs, 1993). Far from a normative approach, media then acts a gatekeeper. A meta-analysis of communication journals suggests that agenda-setting is one of the most frequent tools in mass communication (Bryant & Miron, 2004). To put it differently: What media talk about is more likely to be regarded as important issues by the public. This agenda-setting function is even described to not only tell us what we think about certain topics, but also how we think about them (McCombs, 2016). Additionally, "the way an object on the agenda is framed can have measurable behavioral consequences" (McCombs, 2016, p.63). These could be, for example, influencing public opinion to benefit a certain entity or steer opinion in a certain direction.

Furthermore, agenda setting consequently narrows down our choice of information and restrains us from experiencing ideas or content that might provide us with a different perspective on certain subjects. Yet, the concept of filter bubbles is not something born in the digital age, as social norms and organizational practices have been acting in similar ways since the beginning of civilization (Lazer, 2015). The workings of these digital mechanisms, the ways people use social media and the effects this has on opinion and discourse are simply not researched thoroughly enough yet. Ultimately, the bulk of power to expose oneself to a variety of opinions is still in the user's hand (Bakshy, Messing, & Adamic, 2015).

At the same time, scholars are recognizing the lack of guidelines regarding this domain and are calling for ethical behavior when granting algorithms to such power over decisions that are shaped by the public sphere and suggest to also include recent developments such as the increasing importance of the user-platform relationship

(Diakopoulos, 2016; Helberger et al. 2015; Lazer 2015). Based on this, the following research question is proposed:

> *RQ: How can media companies, public institutions and governmental institutions redefine or adapt news related media policies in accordance with algorithmic accountability on platforms and normative expectations of the public sphere?*

The public itself, public institutions, as well as private and governmental establishment are constantly interacting with each other and are all essential in creating and maintaining a space for public discussion. To further clarify practical implications that each party involved might consider, the research question is divided into three sub-questions addressing each stakeholder separately:

> *SQ1: How can media companies redefine or adapt news related media policies in accordance with algorithmic accountability on platforms and normative expectations of the public sphere?*

> *SQ2: How can governmental institutions redefine or adapt news related media policies in accordance with algorithmic accountability on platforms and normative expectations of the public sphere?*

> *SQ3: How can public institutions redefine or adapt news related media policies in accordance with algorithmic accountability on platforms and normative expectations of the public sphere?*

1.5. Structure of thesis

Based on an adapted accountability framework proposed by McQuail (2010) and Bardoel & d'Haenens (2004a) , the concept of public sphere coined by Habermas (1989) and proposed models to assess algorithmic accountability (Diakopoulos, 2014, 2016), credibility in digital journalism (Hayes et al., 2007) and citizen journalism Usher (2016), this thesis aims to find firstly, practical implications for media companies to adapt accordingly to a media landscape influenced by platforms within a greater context of a digital public, and secondly,

give an overview of how media experts view current developments, issues, and chances when publishing on platforms.

By collecting and comparing insights from experts active in different fields such as research, activism and professional journalism, emerging patterns relevant to fields can be identified and applied to the models mentioned above. Since research of this topic and its societal relevance is still scarce, qualitative interviews will provide useful and more importantly, latest opinions of people working in the field. Rapidly changing practices employed by platforms caused by a fast-paced business environment are additional benefits this kind of research has in this case compared to other methods.

The five chapters of this thesis are structured in the following way: First, an overview of the societal relevance of platforms as a space for debate and opinion exchange and media companies publishing on them is presented, also relating to the concept of the filter bubble or echo chamber and the effects of algorithmic decision making on platforms. This chapter ends with the research questions. Second, the frameworks applied in this research will be adapted accordingly and discussed. As a ground frame, the model of the public sphere is linked with concepts of media and algorithmic accountability. In the methods part, an overview of the applied research methods, the interviewed experts, and the sampling criteria are introduced. Based on the framework, the operationalization used in the interviews is listed as well. Lastly, the results section will provide conclusions that can be drawn from the interview transcripts, identify emerging patterns and analyze how the issues mentioned by experts fit within the framework discussed in chapter 2. The last chapter will deal with limitations of this research, suggestions for further research and theoretical implications as well as a final interpretation of the results.

2. Theoretical framework

2.1. Public sphere as a ground frame

The public sphere, as defined by Habermas (1989), entails the space in which "private people come together as a public" (1989, p. 27). In this space, the public declares a sphere as their own where debates over the rules that govern relations are possible without interference from the public authorities. Print culture, newspapers, political journals, novels, and criticism are part of this sphere and serve as a channel for communication. State and society are divided, which serves as the context for the formation of the public sphere and the private realm. Inside this private realm, the "public sphere" was only inhabited by private people (Habermas, 1989). Complementing public authority, the public sphere "in the political realm evolved from the public sphere in the world of letters" (Habermas, 1989, p. 30). Castells (2007) identified global communication taking place inside mass media as the continuation of forming a public mind. In other words, social networking sites are the space where battles between power and counterpower are being fought.

Writing and exchanging letters as a practice of communication are seen as the starting point of public opinion since it enabled citizens to express their needs of society. Essentially, the public sphere is a space where the public makes use of their reason (Habermas, 1989). According to his theory, separation of the public and private sphere only emerged after the middle of the sixteenth century, when national and territorial power states manifested the role of the aristocratic society to be representative for the monarchy (Habermas, 1989). Today, globalization and communities detached from national boundaries challenge the traditional components defining a public sphere. In this sense, the legitimacy of the nation-state decreases, because "governance is global", while "governments remain national (Castells, 2007, p. 285). Secondly, capitalism detached state and society from another through the rising mercantile capitalism, which aggressively expanded the information flow and consolidated communication networks as a result of growing international markets (van Melton, 2001).

Borrowing from a Marxist view of state and the power relations that are applied to it, the modern state had the monopoly of force through institutions such as police and law, while society became the realm of private interest (van Melton, 2001). Habermas identified three important assumptions vital for the existence of the public sphere. Unlike decision making based on authority that was granted by a divine entity, in the public sphere, the only reason was the determining factor in a debate. Membership of the public

sphere was detached from rank but expected participating citizens to be educated, as opinions had to be read in books, journals and other printed forms of media (Habermas, 1989). Secondly, everything in the public sphere was subject to potential criticism as it let every product of culture be examined by society. Even institutions and individuals that were not traditionally included in such discourses were allowed to be dismantled publicly (van Melton, 2001). Lastly, secrecy was regarded as toxic and against the idea of a public sphere. This notion was completely contrasting the prevalent perception at that time, which regarded politics as something that should be conducted invisibly from the public because society was lacking the required authority and knowledge to partake in such manners (van Melton, 2001). Habermas quotes a decree issued by Prussian King Frederick II in his description, which defines a private person as somebody not capable of making judgments regarding laws, regulations etc., because of lacking knowledge of circumstances and motives (Habermas, 1989). Excluding the public from such debates would decrease rationality of governmental decisions. Public opinion could only be rational, however, if it was informed. A government that is acting privately, actively trying to shield the reasoning behind its decisions from the public could therefore not contribute to the informed public sphere. Instead, it had to be transparent and allow debates happening inside the public sphere to be openly accessible as well as free from censorship (Habermas, 1989).

The tenets of the public sphere assume that a society is able and willing to reflect on political debates and, if necessary, demand actions to preserve the basis of a free and democratic society. For Habermas, the critical reasoning of the public sphere was eventually suffocated by advertising, public relations and mass-consumer culture and the increasing power of corporations and unions (van Melton, 2001). Eroding boundaries between state and society promoted the invasion of the private sphere by those institutions that were acting more and more public, such as the aforementioned unions and corporations. According to Habermas (1989), the autonomy of the private sphere, that was exclusive to the family before, was then constantly under influence of the mass industry, public relations and the culture industry.

It is obvious that Habermas views the media of the industrial world as a system that is confirming the status quo instead of questioning it. Public sphere in the context of electronic communication is defined by Habermas as a space where "people can take affirmative or negative positions on issues" (Habermas, 2006, p.9). He adds that "public communication acts as a hinge between informal opinion-formation and the institutionalized process of will formation" (Habermas, 2006, p.9). Anything that might hinder citizens of participating in a

discourse that is not open for everybody or clouded by unreliable or false information is therefore potentially harmful to a deliberative democracy (Gimmler, 2001). McQuail (2013) also stresses the role of media in the public sphere and states that, when it is organized appropriately, open, free and diverse, media can be the "most important intermediary institutions of the civil society" (p. 180). Furthermore, Moeller, Trilling, Helberger et al. (2016) argue that a limited set of relevant topics central to a diverse discourse is a critical part of the public sphere and coherent modern democracies.

Public sphere in modern globalized networks is influenced by a "move towards cosmopolitan public spheres and a post-national politics (Garnham, 2007 p. 210). Debates happening on a global level are breaching national boundaries, creating a set of cosmopolitan public opinions. Just as social platforms like Facebook, Twitter and others are usually active in several markets across the globe, the impact as actors in the public sphere might also be globally relevant. One key element in this power relationship, however, is a political center at which challenges might be directed at. Garnham (2007) points out that, apart from the European Community, there is no real global political power center of this kind yet. Still, this second generation of internet democracy revolving around the networked citizen has the potential to connect former private spheres of political identity to several political spaces (Papacharissi, 2010).

A major force during the Enlightenment, the public sphere in the world of new media should consequently be able to demand a space that is guided by reason as well, accessible to those who seek to access it and free from censorship. Gatekeeping and curating practices induced by algorithms are relatively new phenomena considering the beginning of the press in the sixteenth-century. Yet, the issues surrounding a media industry increasingly shaped by decisions made not directly by humans but human-designed algorithms should be reason enough to assess how claims can be made towards the media controlling these platforms.

2.2. Critique of Habermas' model

There have been numerous scholars criticizing Habermas' concept for several reasons. For example, Fraser (1990) remarked that the separation of a public and a private sphere was only emphasizing the male-dominated networks of clubs and associations, who regarded themselves as a "universal class", effectively denying access to anybody who did not belong in those circles. Furthermore, claiming that a certain sphere is seemingly accessible to everybody who intends to participate is by definition a strategy of distinction from other institutions, and therefore contradicting (Fraser, 1990). Computer-mediated communication

can serve as space where minorities and subordinated groups can create their own discursive areas. However, these spaces might also be occupied by more dominant groups, similar to the public sphere (Geiger, 2016).

Eley (1994) argues, that Habermas defines the public sphere exclusively on the bourgeoisie and therefore constrained to only one social class when it should, in fact, include several. His argument is based on Habermas disregard for certain groups that shaped Europe and America in the nineteenth century but have no place in the public sphere (Eley, 1994). For Habermas, there was only one utopian ideal of debate, where discussion was open to everybody, everything belonging to the private sphere was omitted and differences in status were ignored (Fraser, 1990). The resulting discourse was, according to Habermas, public opinion.

Another aspect Mah (2000) mentions are the differing versions of how scholars define the space of the public sphere. He mentions that currently, historians usually talk about the public sphere in "'spatialized' terms – that is, as a domain that one can enter, occupy and leave" (Mah, 2000, p. 160). If these spatial spaces then can be occupied, they can also be used to block access from other groups to theses spaces. Benkler's concept of the networked information economy raises some interesting points in this context. He calls the "capacity to perceive the state of the world a fundamental requirement of self-direction (Benkler, 2006, p. 119). Adding to that, he stresses that the information environment we live in today is shaped by "the distribution of power within it to control information flows" (Benkler, 2006, p 119). The interaction of "technology, economic behavior, social patterns, and institutional structure or law" forms the way we perceive the world today. The autonomy of individuals is possibly threatened by anybody who may influence the flow of information at any of these points (Benkler, 2006).

2.3. Model of algorithmic accountability

Algorithmic accountability is currently not a pressing concern in journalist organizations and press councils in the western world and is only now emerging due to presidential elections where platforms might have played a significant role. At the same time, scholars are naming the lack of information about the ways in which the media industry is using algorithms (Diakopoulos, 2016; Heatherly et al., 2016; Lazer, 2015). When algorithms should be held accountable just like established print and online media are today, the framework of accountability has to be redefined accordingly. Diakopoulos (2014) mentions that journalists are already adopting their research methods to investigate algorithms and,

more importantly, define their power, mistakes, and biases. He calls this process "algorithmic accountability reporting". Dimensions proposed in his model are prioritization, classification, association, and filtering (Diakopoulos, 2014). In the context of news making and curating, these dimensions all have an effect of how the public perceives and makes sense of content.

Prioritization, for example, "serves to emphasize or bring attention to certain things at the expense of others" (Diakopoulos, 2014, p.400). Prominent uses of this decision are Google's search engine that sorts results based on a complex and opaque algorithm or Facebook's news feed, that personalizes each user's timeline to best fit his or her usage of the network (Eslami et al., 2015). In a way, prioritization then also grants the algorithm a function of agenda setting, although limited to each system where it is applied.

Classification sorts entities into different classes, by means of analyzing distinctive features of said entities (Diakopoulos, 2014). In response to the fake news scandal, Facebook fired part of its staff responsible for curating the trending topics team and replaced them with an algorithm supposed to detect and delete fake news from this time on (Solon, 2016). One could argue that an algorithm identifying unreliable news sources will certainly do a better job than a team of actual, real humans since the algorithms should not be misguided by sentiment or emotion. Yet, the procedures that automatically execute such classification indeed have biases. Because there is no objective or inherent set of measures for classification, the algorithm also has to learn what to class as reliable or unreliable, most likely from human training data, which is "often gathered from people who inspect thousands of examples and tag each instance according to its category" (Diakopoulos, 2014, p. 401). A method relying on human input is therefore also prone to corresponding bias.

Filtering is described as an action "including or excluding information according to various rules or criteria (Diakopoulos, 2014, p. 402). Similar to prioritization and often affected by it, this procedure is equally powerful in hiding certain information from a user while promoting other. Bozdag (2013) illustrated the workings of the Facebook algorithm as a mechanism providing different stories for users based on the interaction between people using the site. They exert power by "either over-emphasizing or censoring certain information" (Diakopoulos, 2014, p. 402). The concept of the "filter bubble" is also linked to this algorithmic function, as it argued that it interferes with the forming of a diverse and healthy perspective on issues (Pariser, 2011)

Concluding, Diakopoulos (2014) adds an important concept when he names the human influences each algorithm bears within its workings. "Criteria choices, training data, semantics, and interpretation" are all part of the code and algorithmic accountability,

therefore, needs to "take into account intent, including that of any group or institutional processes that may have influenced their design" (p. 402). Humans interpreting the output are thus also part of the process, which might reflect on any changes that can be made to an algorithm (Diakopoulos, 2014). Gatekeepers are as much present on these platforms as they are in traditional media because human factors are still involved (Bozdag, 2013). Examining systems of algorithmic decision making in the cultural context they have for digital media today would require not only understanding the function of the algorithms itself, but also the people creating them, the process of creating them and how they become part of everyday life (Beer, 2016; Kitchin, 2016).

2.4. Framework of algorithmic transparency

Based upon an algorithmic transparency workshop, consisting of 50 people from the news media and academia, that was held at Columbia University, Diakopoulos (2016) developed an algorithmic transparency standard consisting of five categories important to the disclosure of transparency.

The category of human involvement consists of the explaining of goals, purpose, and intent of an algorithm. These might include editorial goals or the underlying context that led to the creation of the algorithm (Diakopoulos, 2016). What is also important in this context is the question of who has control and oversight over a specific algorithm and can be held accountable. He claims that "involved individuals might feel a greater sense of public responsibility and pressure if their names are on the line (Diakopoulos, 2016, p. 60). Talking about data, one might ask what features does the quality of the data have? Is it accurate, complete and free from uncertainty? The validity of data might also change over time, which is an important aspect to take into consideration. What is the exact process of editing, collection, and transformation of data? (Diakopoulos, 2016)
The algorithmic model is also important. What are the variables used in the algorithm and how are they weighted? In the case of using training data, the data and corresponding dimensions should be described. What tools were used to model the algorithm? Why were the weightings chosen the way they are and what were the alternative models? What are "assumptions behind the model, and where did those arise? (Diakopoulos, 2016, p. 60).

To validate interferences made by algorithms, creators of said algorithms could benchmark against datasets to obtain values of error margins, accuracy rate and the number of false positive/negative results. Unfolded errors could then be examined regarding human or algorithmic involvement or even flaws in the data (Diakopoulos, 2016)

The category of algorithmic presence is concerned with the disclosure if an algorithm is indeed used at any given moment, especially in connection with personalization. Additionally, information about what is being displayed and what is being filtered could be revealed (Diakopoulos, 2016). Diakopoulos (2016) recognizes, that even if all the mentioned categories would be a mandatory disclosure for all actors using algorithms, the way this information might affect the user is still unclear.

2.5. Frames of accountability

When talking about accountability and responsibility in the context of media, both terms are often used interchangeably. Hodges (1986), defines them as follows: Responsibility deals with expectations that society might have of media, whereas accountability refers to the process of holding media accountable for meeting or not meeting those expectations. In other words: "Responsibility has to do with defining proper conduct; accountability with compelling it" (Hodges, 1896, p.14).

McQuail points out that "potential claims made against media on diverse grounds and the processes of accountability" vary accordingly (1997, p.515). He adds that the dimension of responsibility is always attached to the degree of compulsion, ranging from voluntary to completely compulsory. Hodges (1986) distinguished between four distinct types of responsibility: assigned, contracted, self-imposed and denied.

Assigned**:** these responsibilities mainly consist of regulation and law. As one of the basic principles of free societies is the freedom of the press, binding laws can only be found sporadically in these societies (McQuail, 1997). Contracted**:** Contracted responsibilities include everything that has been agreed upon between press and society. The quality of service is also included in this type of responsibility. Self-imposed**:** Professional codes of conducts for journalists and other forms of voluntary commitments that abide by ethical standards are included here. Finally, denied obligations entail instances where claims are made towards the media but not accepted (McQuail, 1997). Figure 1 shows the relationship of free media, accountability, and responsibility according to McQuail.
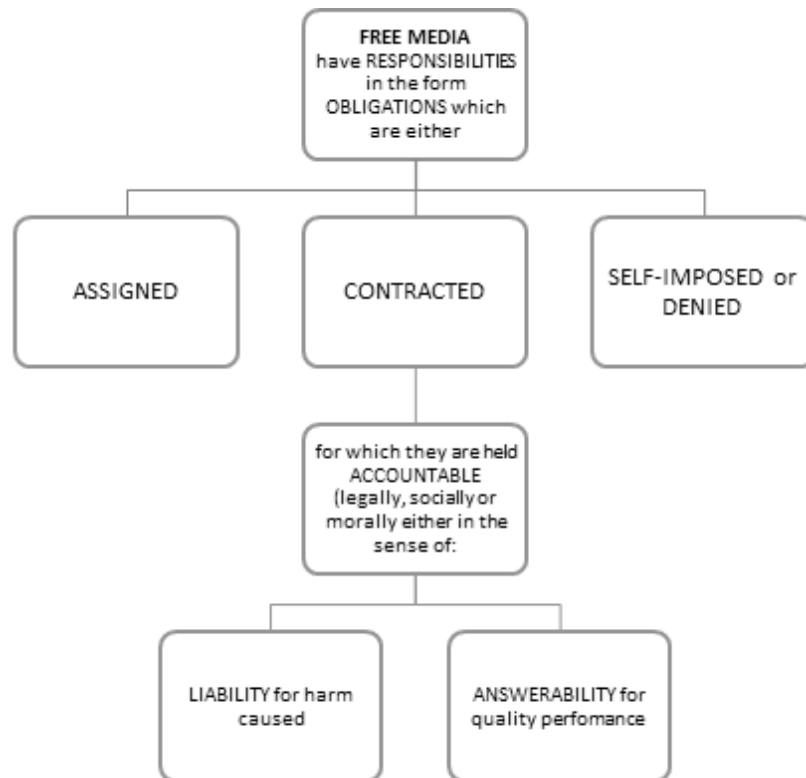
Fig.1. The relationship between media freedom, responsibility, and accountability (McQuail, 1997)

Accountability can be enforced through several means and is divided into four aspects: "being accountable to someone, for something (a task or consequence), on the basis of some criterion and with a varying degree strictness" (McQuail, 1997, p. 517). The two ways of enforcing obligations are described by McQuail as being based on liability and answerability. Liability here refers to enforced consequences that a publication might have and a softer, more compromising mode leaning towards answerability (Blatz, 1972). In a real-world context, liability would entail an opposing form of interaction, while answerability would indicate a willingness to engage in a debate or interaction that would eventually lead to an agreement (McQuail, 1997).

Bardoel and d'Haenens (2004a) observe that the last decade in media regulation has been marked by a transition from abstract thinking about responsibility to more practical interpretation, which would be a shift from responsibility to accountability in this case. They add that within that context the importance lies now more on answerability than on liability. Finally, they note that the debates revolving around those issues mainly occurs inside academic circles and among individuals that design policies, while missing media professionals for the most part (Bardoel, d'Haenens, 2004a).

Applying accountability requires at least two parties, one that is holding some entity accountable for something and one that is accountable to that entity. McQuail also defines two

other facets, which include being accountable based on some related criterion and a certain degree of strictness that is attached to each claim (McQuail, 1997). In the case of media, there is also internal and external accountability. Internal accountability, for example, deals with issues of autonomy for creators of media, such as journalists, writers or producers (McQuail, 2010). External accountability describes the "relationship between media and those affected by publication" (McQuail, 2010, p 209). The following figure 2 shows numerous stakeholders that might fall into this relationship:
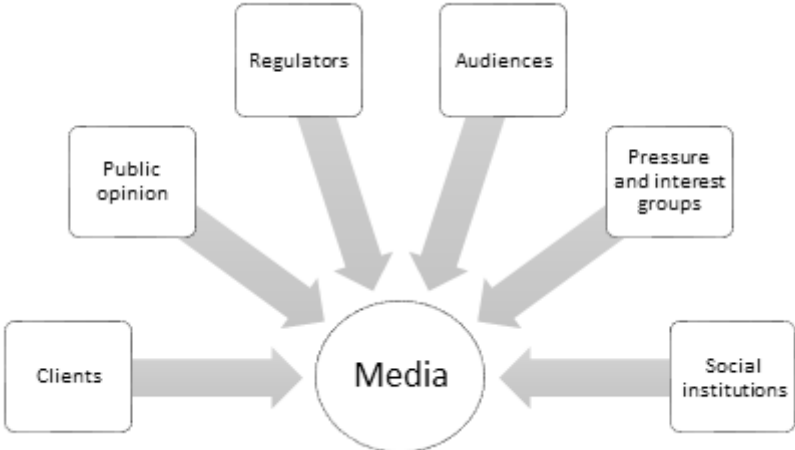
Figure. 2: Lines of accountability between media and external agents in relation to publication. (McQuail, 2010)

Due to the vast variety of actors, regulations, and claims partaking in the sphere of media, there are several frames of accountability that all focus on several aspects of media and its relationship with its stakeholders. McQuail defines those frames as "a frame of reference within which expectations concerning conduct and responsibility arise and claims are expressed. A frame also indicates or governs the ways in which such claims should be handled" (McQuail, 2010, p 210.) Bardoel, d'Haenens (2004b) and McQuail (2010) define four different frames of media accountability: political, market public and professional accountability, which are depicted in Table 1 below:

Table 1: Organization of social responsibility of the media (Bardoel, 2003)

Mechanism	Principle	Decision	Participation	Instrument	Effects
Market	Competition, companies	Demand and supply	Buying power, money	Market share, market research	Economic growth, flexibility, but: bias towards 'mainstream'
Politics	Hierarchy, bureaucracy	Law and regulation	Authority, force	Budget, annual review, contract/ charter	Social justice, but: slow, steering of 'content' problematic
Profession	Professionalism, ethics	Self-regulation	Education, 'peer review'	Reflection, code, Council for Journalism	Independence, but: lack of representativity
Public	Voluntarism, association, pressure groups	Discussion, dialogue	Commitment	Openness, feedback; hearing, ombudsperson	Shaping of public opinion, social capital, but: voluntarism

2.6. Political frame

The political frame of law and regulation is concerned with laws, policies, regulation, and laws involving media processes. Creating and maintaining conditions for "free and extensive intercommunication in society and to advance the public good" are its main goals (McQuail, 2010, p.210). Mechanism working in said frame are regulatory documents and formal rules that specify how provisions are implemented. Since this framework mainly deals with possible harm media inflicts to individuals or issues that media can be called to account on (McQuail, 2010). Assuming that society has certain normative expectations of media, such as enlarging the space for debate, circulate information and ideas as a basis for public opinion and extending the freedom and the diversity of publication (McQuail, 2010), one legitimate matter media can be called to be accountable for would be the maintaining of a healthy space for public debate, which includes the providing of reliable and unbiased news on current events, or reliable news.

Although such measures might seem viable at first, they ultimately run into danger of threatening the freedom of speech, and therefore the very basis of democracy. While this model seems to be the most effective one, Bardoel and d'Haenens (2004a) note that legal regulation in a democratic and constantly evolving society has the potential to reduce collective freedom. Furthermore, measures preventing the formation of media monopolies in the press and broadcasting industries while stimulating plurality of media content turned out to be rather ineffective in this framework (Bardoel & d'Haenens, 2004b). McQuail (2010) also states that law and regulation usually favors wealthy and powerful entities and are rather hard to implement, especially regarding content, and are hard to alter or abolish when, for example, technological change requires them to.

2.7. Market frame

The mechanisms regulating the market frame fall under the category of classic market-based such as demand and supply. In a perfectly free market, good behavior should thrive and substandard performance should be curbed, effectively eliminating all actors that play against the expectations of society. The quality of media is evaluated by the consumer and contains content and technical quality (McQuail, 2010). Possibly the biggest advantage of the market frame is the degree of freedom of outside regulation and control. In theory, this frame exists in complete contrast to the political frame, since all procedures taking place here are happening without any form of compulsion (McQuail, 2010). As seen in figure 2, there are several lines of media accountability encompassing not only clients but also regulators and public opinion. Mager (2012) argues, that users are actively consolidating algorithmic search engines by accepting them into their consumer practices. By being partly ignorant to how search engines and their data-driven results make use of consumers' behavior, users are contributing their part to ongoing equivocal business models. Yet, Mager also mentions that since consumers stabilize current practices of technology, they also have the potential to destabilize them (Mager, 2012). In this case, she is referring to Castells' (2007) notion of counter-power, which he defines as the process of social actors challenging and eventually changing power relations in society.

Lacking a true standard of quality and the grade of commercialization have been regarded as the biggest disadvantages of this framework. After all, media operating on a for-profit basis is required to increase its value constantly to please owners and investors. When only focusing on profitability, certain characteristics such as independence or quality of content might possibly not the most notable features a company cares about. Considering the

number of people active on platforms, publishers are forced to think about giving up parts of their role as a distributor in exchange for a greater audience reach (Goel & Somaiya, 2015). If platforms have enough resources to make established media reconsider their way of distributing their articles, what is the benchmark in this case and how does such a change affect user's engagement with content that might be more easily accessible?

Yet another important aspect here is the data superiority platforms have over content providers. To reach target audiences and to generate revenue, advertisements must be directed at a certain demographic. Since users spend most of their time on platforms, most of the data is also generated there (Bell & Owen, 2017). Whoever controls user data therefore also knows which type of content has which effect on behavior.

Public broadcasters, on the other hand, do not solely rely on ad-revenue. Here, the broadcasters were founded to serve society and the public in terms of contributing to public and individual opinion making, which is effectively supposed to promote to a democratic community. Privately owned media, however, is not able to evaluate their own actions in this context as this is not a relevant frame in terms of profitability. On a final note, McQuail (2010) mentions that markets are seldom perfect and susceptible to the formation of monopolies, which in turn hinders the realization of the advantages of a free market.

2.8. Public responsibility frame

Coming back to the notion of public responsibility, the framework, in this case, recognizes media organizations as social institutions fulfilling "certain important public tasks that go beyond making profits" (McQuail, 2010, p.212). Procedures taking place within this framework can consist of activities of certain groups such as media consumer organizations or public opinion surveys. "Public debate, review, and criticism often carried by the media … is an important means of informal control" (McQuail, 2010, p.212). The concept of media transparency, for example, describes instruments enabling media organizations to establish or maintain trust in journalism by showing online profiles of journalists or public mission statements (Eberwein, 2014). Platforms that were initially designed for people to connect are now widely being used as a source of information. Companies using those channels to reach their audience must be aware that the benchmarks for profitability and journalistic codes of conduct are possibly contradicting each other. Social networking sites aim to keep users on their website as long as possible, while credible news organizations want to provide their readers with articles upholding the standards of their profession. Here, the ideas of the market

frame and the public responsibility journalists are appointed to create a space where conflicting interests might threaten the basic idea of a public sphere.

The internet not only changed the relationship between media consumers and creators, but was also used as a means of creating several new media accountability instruments (MAIs) such as "journalist and citizen blogs, cyber-ombudspersons, or media criticism via Twitter and Facebook" (Eberwein, 2014, p. 424). These practices seem to not have significant impact currently, but partly bring attention to the problematic relationship between citizens and journalists (Baisnée, Domingo, Glowacki, Heikkilä, Kus, & Pies, 2012). The case of user comments being subject to the press council in Germany, for example, can be avoided if news outlets simply move their comment section to external platforms such as Facebook (Eberwein & Evers, 2011). The German press code only applies to comments that are published directly in the comment section belonging to a medium. Furthermore, the study of journalistic codes of ethics in 99 countries conducted by Díaz-Campo et al. (2015) came to congruent results, as only 9 of the 99 countries examined added sections about new media and ICTs since 2001.

Directly expressing the needs of society and a continuous interactive relationship between media and society are important key elements of this idea (McQuail, 2010). The voluntary character is at the same time a strong disadvantage, as this allows media to simply disregard the code measures of self-control and, in addition to that, the ongoing media concentration and progressing globalization undermine this model (McQuail, 2010). The corresponding normative theory based on the public interest or social responsibility model stresses the fact that the right of freedom of publication comes with obligations to the wider society, which goes beyond the pursuit of self-interest (McQuail, 2010). It is expected that media "will maintain high standards by self-regulation" while not ruling out government intervention (McQuail, 2010, p.184).

2.9. Professional responsibility

The frame of professional responsibility originates in the "self-respect and ethical development of professionals working in the media" (McQuail, 2010, p. 213). Actors here include journalists, advertisers or people working public relations, who then set their own standards of proper conduct in their field. Mechanisms of this frame usually involve a published set of principles or code of conduct adopted by members of a group and the procedures for hearing and judging complaints (McQuail, 2010). Although online and traditional journalists find themselves abiding by rules set by their peers, Allan and Matheson (2004) state that the location of an online journalist within a cultural hierarchy is quite

different from that of a print journalist only a decade ago. They argue, that the current role might be more shaped by a self-conception of providing citizens with knowledge that is possibly monopolized by elites rather than as a fiduciary monitor overseeing the actions of those in charge. This changing self-conception might therefore also affect the ground rules of professional responsibility that online journalists might apply to themselves. Due to the voluntary character and it being in the self-interest of the media, this system is likely to work and encourages both voluntary self-improvement and self-control (McQuail, 2010). Powerful media, however, is not strongly pressured to abide.

In digital publishing, platforms offering their channels only to a handful of publishers give them unprecedented power over their content while also silencing small or mid-sized companies. (Bell & Owen, 2017). Based on what features publishers are selected or on what themes their performance is measured on platforms, however, does not have to be disclosed. Furthermore, since the labor-intensive process of repurposing content for different platforms is simply not an available choice based on economic reasons, those platforms can effectively limit the reach of small and independent publishers at the cost of established mediums.

Other disadvantages are the close dependence of media itself and the fragmentary coverage (McQuail, 2010). In the case of media journalism shows the limitations of this approach. When commercial interests conflict with the notion of ethical reporting, for example. If a media company finds itself to have disregarded a code of conduct, they might refrain from publishing a statement dealing with any possible revisions, as a loss of credibility quite possibly also means a loss of advertising revenue (Eberwein, 2014).

Different frames of accountability exist and each of them has its own mechanisms, advantages, and disadvantages. Everything that concerns conduct and responsibility arises in this frame, including claims that are expressed and governance of ways in which these claims are handled (McQuail, 2010). While the political framework does carry a profound impact with it, it also the most scrutinized. Quickly changing procedures in the digital world and the omnipresent fear of censorship render it unfit in this case. Combining features of the market frame and the professional responsibility seems to be the most fitting choice here, due to the codependence of content creators and content distributors. Both systems rely on each other in terms of providing engaging and interesting content and providing journalist with the corresponding means of reaching their audience

2.10.   Journalistic codes of conduct in the Netherlands and Germany

In democracies, journalism's role in society is unique in the sense that its position is not based on elected officials or a social contract, but is rather constantly negotiated with the public. To retain its position and value for society, journalism is forced to have a "deep awareness of their primary responsibility to provide a good public service" (Bertrand, 1999, p. 4). Journalistic codes of conduct are supposed to provide journalists with a body of principles that are shaped by the professionals themselves and ideally include media user's needs expectations (Bertrand, 1999). Therefore, these codes are one way of ensuring that media professionals abide by the rules they set for themselves. A comparative study among journalists conducted by Fengler (2015) concluded that the surveyed journalists regard traditional and online instruments of media regulation as insufficient. This opinion is in stark contrast with that of industry professionals, who believe that "existing systems of media self-regulation work properly" (Fengler, 2015, p. 261). Nevertheless, even if journalists seem to think that such systems are not working properly yet, comparing press codes in both countries provides us with an overview to what extend digital media is included yet and how current regulations might apply in the context of algorithmic decision making.

Press councils in the Netherlands and in Germany were established in 1948 and 1973. The German code draws upon the freedom of the press mentioned in the Basic Law, which entails the "independence and freedom of information" as well as "the right of expression and criticism" (German Press Council, 2017). The code continues by stating that "publishers, editors, and journalists must in their work remain aware of their responsibility towards the public and their duty to uphold the prestige of the Press" (German Press Council, 2017). The Dutch code is similar in its phrasing, it does not, however, refer to statutes as the basis of their authority. It rather aims to provide a framework for self-regulation (Netherlands Press Council, 2015). According to the code, journalism should be "truthful and accurate, impartial and fair, verifiable and sound" (Netherlands Press Council, 2015, p.2). Interestingly, self-regulation is mentioned as being the "most effective way of providing a framework for and giving substance" to the matter of monitoring journalism (Netherlands Press Council, 2015, p.2).

2.10.1. The Dutch press code

The Dutch press code has been revised in 2015 to include issues that emerged with the digital age. By acknowledging the highly dynamic nature of the media landscape, the code emphasizes that its principles apply to "every medium and on every platform" journalism (Netherlands Press Council, 2015, p.1). Journalists must let the audience know what are facts,

assertions, and opinions in their publications. Furthermore, linking to information that third parties have authored must always be weighed against the added value this might bring to a publication (Netherlands Press Council, 2015). Encouraging such a practice makes sense in a digital landscape where not every source that is available online can be verified to comply with the guidelines set by the code. User-generated content in the form of comments is also addressed in the code by stating that the corresponding editorial office is responsible for such content. Additionally, the guidelines encourage the editorial office to release its terms for selection.

If content published is selected based on algorithmic choices, this would then also include explaining the workings of such processes. Moderating all the content created by users before they are published is not expected and editors may decide to remove responses that they deem unfit (Netherlands Press Council, 2015). Automated selection of what is to be removed and what is to stay visible online is part of a gatekeeping process. Of course, online discussions should keep to a civilized standard of conversation. Finally, the human moderator must draw a line and decide what he sees fit in every particular case. Teaching artificial intelligence to help filter out unwanted content merely extends the authority of a human moderator and is still subject to his bias.

2.10.2. The German press code

Just as the Dutch code, the German Press Council also decided to revise the German code in March 2015 to meet expectations of online coverage. Publications containing user-generated content fall under the responsibility of the channels that publish them. The code mentions that edited user-generated content should be compliant with journalistic principles. This type of content must also be marked as such (German Press Council, 2016). Publishing reader's letters can be done by only disclosing the author's pseudonym. Fake readers' letters are not to be published as this conflicts with the code (German Press Council, 2016). Concerning rectifications in online publications, the code states that such corrections must contain a link to the original content or, if it is included in the publication itself, it must be marked as such (German Press Council, 2016).

Interestingly, the German code clearly forbids the publication of fake reader's responses. There is, however, no further explanation based on what criteria users are deemed to be "fake" and if it is even possible to reliably identify such users. Also, the exclusion of comments on articles, blog posts, and other online published content seems to be contradicting, as both can be highly visible on social media sites and other content platforms

that allow users to contribute. The code seemingly only applies to user-generated content that is published by the press, as it "bears responsibility for all its publications" (German Press Council, 2016, p. 4). How to deal with content that is linked to a publication on a platform is not explicitly mentioned here.

2.10.3. Comparison of the codes

Concluding, both journalistic codes try to face challenges that arise with the increasingly blurred lines between user-generated content and the pieces authored by established journalists. Although they acknowledge that content might be selected by editors, there is no mentioning of possible methods used by moderators such as utilization of a simple word filter to more complex tools such as conversational pattern analytics. How can journalistic principles be upheld if algorithms play a significant part in applying them? What is the benchmark for identifying fake users and evaluating reliable user-generated content? All these issues are not addressed, yet become more and more important in the context of the internet as a place where deliberate discussions can be held.

2.11. Digital platforms in a deliberative democracy

Deliberative democracies are characterized by making decisions based on reason. The process of imposing laws on citizens must therefore always be guided by justification as to why certain decisions are being made (Thompson, 2008). Essential for a deliberative process is an ongoing debate that takes into consideration not only claims made by oneself but also by others and responding to those claims (Thompson, 2008). Political theorists grant deliberative democracy a virtue that sets it apart from other systems of decision making since deliberative democracies recognize "the moral agency of the participants" (Thompson, 2008, p. 498). Allan and Matheson (2004) argue that the digital revolution of journalism possibly threatens the very essence of deliberative democracies, which is the enhancement of knowledge about issues important for the public and their engagement with these issues.

By directly asking citizens to form an opinion on something, decision making is directly based on claims they make on something. Fearon (1998) projected the workings of an ideal deliberate decision process onto small group discussions and concluded that decisions made here are more likely to be free from bounded rationality and natural partiality. These characteristics are major topics in Habermas' concept of the public sphere. Issues, however, arise for broadcasters and media companies when they want to incorporate user-generated

content into their channels. Emotionally charged discussions taking place in an online environment might either enrich discussions by shifting attention to pressing matters or disturb political expression by adding distrust and polarization to the mix (Hasell & Weeks, 2016).

Still, citizen journalism is regarded as a valuable addition to professional journalism (Usher, 2016; Carlsson & Nilsson, 2015). At the same time, it also promotes unwanted behavior, which lets some news organizations believe that the majority of users are just not capable of being actively involved in journalistic media (Carlsson & Nilsson, 2015). According to Lewis (2012), journalists still struggle with balancing the claims they have over professional control and the wish for larger user participation. When actors detached from journalism act as creators in a normally professionalized and mostly regulated environment, who "decides what is credible, true, or even newsworthy in the first place? (Singer & Ashman, 2009, p. 233).

Usher (2016) proposes a model of how user-generated content can be assessed and, if suitable, amplified through established media channels. First, journalists either use content they find publicly accessible on the web or that has been sent to them after it was requested. A process called "routinized gatekeeping" then allows journalists to decide whether they want to use a particular piece of content (Usher, 2016). Decisions, in this case, are based on the immediate need for content, if the content abides by professional standards and if the content is norm-breaking, or unusual for journalists to publish by themselves (Usher, 2016). This process is, however, also strongly guided by choices of a few journalists and their standards for their profession. Adding to that, content chosen to be promoted through official channels might be visible based on algorithmic selection processes beforehand, which are not necessarily comprehensible to journalists.

Fishkin and Luskin (2005) conducted deliberative polls in the USA and identified five aspects crucial for a deliberative discussion: Firstly, arguments made should be based on accurate and factual claims. Secondly, all arguments should be counterbalanced with their respective opposite arguments. Thirdly, all participating individuals should conduct their discussion with consideration of others, that means a civil and respectful debate. Fourthly, arguments must have substance and considered based upon their benefits. Rank or status of individuals who form arguments is therefore not important. Lastly, the discussion should be exhaustive, meaning that all relevant points held by considerable numbers of the population shall receive attention (Fishkin and Luskin, 2005).

These five points also share certain characteristics with the public sphere, such as assigning greater value to merit than rank and ensuring that all relevant arguments should be heard and are based on factuality. Abstracting a digital public sphere from these thoughts where all these requirements are met, raises the question of how algorithmic gatekeeping and curation processes might be involved here, as they can potentially impact all five of the above-mentioned aspects. Considering the effect such selection processes might have on public opinion in the future, scholars agree about a need for greater public awareness of algorithmic processes (Eslami et al., 2015; Diakopoulos, 2016; Lazer, 2015).

2.12.   Journalistic credibility in digital media

Hayes, Singer, and Ceppos (2007) attended to the issue of credibility in the digital age and developed a set of questions that media users could use to determine if they could trust a certain news source. These questions are based upon three values of authenticity, accountability, and autonomy, which are also part of the algorithmic frameworks discussed earlier (Hayes et al., 2007).

Since institutional authenticity is much more effective in the realms of traditional media and journalists used to gain great parts of their authenticity through their employers, in digital journalism, they argue, users should ask themselves if a news platform is aggregating or producing original content (Hayes et al., 2007). Another important fact to consider is if information used to write articles was gathered first-hand or resourced from secondary sources.

Regarding accountability, Hayes argues that they are materialized in two forms: personal disclosure and evidentiary support. In more practical terms the user might want to inquire if a news source is transparent, meaning if information about the organization and staff are easily obtainable and if journalistic principles are published and obeyed (Hayes et al., 2007). Furthermore, if unnamed sources are used, users should find the reasons behind this.

The interactivity of online news invites all users to comment and contribute to a discourse. Therefore, as Hayes suggests, "a virtually infinite number of participants simultaneously serve as sources, audiences, and information providers" (Hayes et al., 2007, p. 274). An open discussion is thus part of an external mechanism offering oversight, even over bloggers who are not affiliated with any major news publication. Finally, a timely and correct reporting of errors is considered to affect autonomy.

2.13.   Challenges of a platform press

When publishing content is no longer key element of the press but controlled by third parties, Bell and Owen (2017) argue that the future media landscape will create two types of news organizations: one that is developing, managing and developing its own channels and audiences and one in which publishing is simply not part of the process that supports journalism anymore. They bring attention to four issues that journalism is facing: the question of how to hold platforms accountable for journalism if they are virtually dependent on them for funding, reach and distribution? How can "good journalism" be incentivized on the social web? How to deal with the issues arising with editing at scale, especially algorithms? And lastly, how is public policy and regulation supposed to ensure technology that not destabilizes but attends democracy (Bell and Owen, 2017). Similar concerns have been mentioned by Boczkowski (2002), when he points out that the division between advertising and editorial functions of the newsroom might be weaker in online newsrooms than in the traditional printing press.

Third party platforms are becoming increasingly unavoidable for media and news organizations if they want to reach a broad audience. There are different uses of the spaces that those digital platforms provide for their users. One of them can certainly be described as a digital public sphere, where different opinions, arguments, and viewpoints should ideally contribute to a discourse that has the potential to challenge current power relations if citizens feel they need for it. Criticisms of the public sphere as only being accessible to a certain kind of people are also applicable in the digital age, where not everybody is in possession of required technology or knowledge to contribute. Regardless, gatekeeping and selection processes present on these platforms and the pressure they put on the news and media organizations to abide by their standards raises ethical questions of how media companies should act under these circumstances.

3. Methodology

3.1. Qualitative Approach

Qualitative research was conducted in this thesis, as it seeks to add to the discourse of news media accountability in the context of new media. Regarding the fast-changing nature of new media and the high pace of innovation taking place in this field, expert interviews were able to provide an overview of current and urgent issues shaping the field that might not be institutionalized yet. Individual interviews give the researcher access to people's personal perspectives and are ideal for researching complex systems due to the depth and the focus on only one respondent at a time (Ritchie, 2013). Merely analyzing published content on that matter would dismiss the fact that the procedures and rituals dictating the workings of the news media are "often informal but exert great force by custom and application" (McQuail, 2010, p.181). The nature of this approach is deductive, as the theme development and coding are based on concepts that have been identified beforehand (Braun & Clarke, 2006). Policy-making processes are often determined by a network of closely connected elites, such as industry stakeholders, regulators and officials of public and private media, which makes interviewing experts in this field extremely suitable for this topic (Herzog, Ali, 2015)

3.2. Research design

To answer the research question and the corresponding sub-questions based on different accountability frames, expert interviews were conducted to gain in-depth explanations of current issues, conflicts, and opportunities regarding media policies on third-party platforms. When designing the interview guide, the researcher is always influenced by his or her personal "cultural endowment" and therefore subjective (Fielding et al., 2008). After the first draft was built, topics were sorted into clusters, rearranged and, if necessary, discarded. Adjusting the interview guide after the first participants can help to focus on things which might not appear to be of importance beforehand. The semi-structured interviews utilized here made it possible to adapt to the level the interviewee's comprehension and encourage respondents to "communicate underlying attitudes, beliefs, and values" (Fielding et al., 2008, 247-249).

3.3. Sampling

Selecting interviewees was based on a mix between purposive and snowball sampling. Because of the high-level of expertise required for participants, many of whom were requested to participate in this research declined based on a lack of time or even knowledge. The DPA (German Press Agency) and the German Press Council declined due to a shortage of resources to answer every request for research that reaches them. Similarly, the bpb (Federal Agency for Civic Education) did not feel like they could provide an advisor competent enough in this particular field. The Media Authority of North Rhine-Westphalia (LfM) stated that every employee who might be able to contribute in this research was already occupied in research projects at that time. The uncertainty and novelty that still surrounds everything related to algorithmic decision making in online content led some inquired institutions to believe that they are currently not familiar enough with this topic to contribute to this research.

Since the sampled experts in both countries were not equally split in their profession and therefore unsuited for a comparative analysis, this research will provide a collaborative account of opinions in both countries. The Netherlands and Germany have been classified as belonging to the democratic corporatist media model and both show a historically strong professionalization of journalism and an institutionalized self-regulation (Hallin & Mancini, 2004). Based on this, interviewees provided the researcher with a combined oversight of experts working as researchers, (freelance) journalists, activists and media professionals in medium to large media companies.

Important criteria on which interviewees were selected are for one, relevant experience as a journalist in an online setting; transdisciplinary research involving digital media, society, and politics; and research and activism involving algorithmic accountability in online media. These criteria are related to the issue and were identified as relevant to the research topic, which makes them suitable to apply purposive sampling (Ritchie, Lewis & Elam, 2003). Focusing only on these key characteristics, purposive sampling is able to provide the researcher with cases that extensively contain information relevant to a certain issue, which is media accountability in digital media in this case (Patton, 2002). Snowball sampling was used to, on the one hand, increase the chance of new participants agreeing to an interview and to be able to resort to backup interviewees in case others did not take place (Herzog & Ali, 2015).

Since algorithmic accountability and involves processes of decision making is at this point much more present in an academic context than in the media policies, researchers, and activists focusing on media accountability in this context and professional journalists that are

affected by or have to abide by these circumstances account for the majority of this sample. A growing demand for a greater public awareness of such workings by researchers also make activists an important part of the sample, as the field that is examining the interaction between social and computational code is yet to be created (Lazer, 2015). Additionally, media professionals working at the intersection of new media and traditional media were included in the sample, since they are the affected to the highest degree by the changing news media landscape.

3.4. Interviewed experts

Of the ten interviewed experts, five were located in Germany. Detailed descriptions of the German interviewees will be given below:

Expert 1: Clemens Apprich (Face-to-face interview, May 17th, 2017)
Dr. Clemens Apprich is a research associate at the Center for Digital Cultures at the Leuphania University Lüneburg. His research is focused on digital cultures, which includes the embeddedness of digital media in everyday culture. One of the topics he is interested in is the placement of political and economic aspects in digital cultures, including platform capitalism.

Expert 2: Marlis Prinzing (Skype-Interview, May 3rd, 2017)
Prof. Dr. Marlis Prinzing is a communication scholar and professor at the Hochschule Macromedia, University of Applied Sciences in Cologne. Prior she was a lecturer in media ethics at the University Fribourg, Switzerland and was acting as a project supervisor at the European Journalism Observatory in Lugano, Italy. Her research mostly involves media innovation in journalism and media ethics, also concerning third-party platforms.

Expert 3: David Pachali (Skype-Interview, May 16th, 2017)
David Pachali is a journalist for iRights.info, an online information platform for several fields of law in the digital world. He is mainly concerned with copyright issues, network policies, and internet regulation and has been active in this field for over 10 years. The platform iRights.info fosters collaboration between lawyers and journalist with the aim of making legal issues in the digital accessible for everybody and is promoting public debate about the effects of the internet on daily life.

Expert 4: Moritz Tschermak (Skype-Interview, May 17th, 2017)

Moritz Tschermak is a freelance journalist and blogger based in Berlin. He founded a watch blog observing the German tabloid magazines and writes regularly for the *BILDblog,* a watch blog, which is not only concerned with the Bild-Zeitung, Germany's biggest daily tabloid magazine, and its online presence, but also German media in general, such as radio and television.

Expert 5: Lorenz Matzat (Face-to-face interview, May 20th, 2017)

Lorenz Matzat is a political scientist and has been working as a journalist in the fields of media education and civic education for over 20 years. He co-founded a company providing data visualizations for journalists and has recently initiated AlgorithmWatch together with colleagues, an NGO observing and reviewing the effects algorithmic decision making has on society.

Interviewees based in the Netherlands will be introduced in the following part.

Expert 6: Margo Smit (Face-to-face interview, May 20th, 2017)

Margo Smit is the ombudsman for the Dutch public broadcaster NPO, which encompasses all journalistic content produced for television, radio and the internet. Currently, she is also vice chair of the European Center for Press and Media Freedom. Before that, she was a journalist for RTL Nieuws and director of the Vereniging van Onderzoeksjournalisten (Dutch-Flemish Association of Investigative Journalists).

Expert 7: Johan Groeneveld (Face-to-face interview, May 23rd, 2017)

Johan Groeneveld is editor in chief at ANP, the biggest press agency in the Netherlands. Prior to that, he was a guest lecturer for media training at The Hague University of Applied Sciences and Utrecht University and a member of the board editorial committee at the European Pressphoto Agency.

Expert 8: Florian Cramer (Face-to-face interview, May 24th, 2017)

Florian Cramer is an applied research professor at the creating010 center at the University of Applied Sciences Rotterdam. His research focus is concerned how art and design disciplines are changed through technological, cultural and global developments. Adding to that, he has

been working interdisciplinary in the field of media theory and criticism and has an amateur background in computer programming.

Expert 9: Lara Ankersmit (Skype interview, May 29th, 2017)
Lara Ankersmit is Head of Digital Media at NOS, the part of the Dutch public broadcasting system providing news and sports programs. Her team is responsible for all digital and mobile activities, such as the NOS website and the NOS apps. In 2015, she founded the NOS Lab, where she and her colleagues conduct media experiments trying to find innovative ways of reaching younger audiences and audiences that are not reached through NOS's established channels.

Expert 10: Rejo Zenger (Skype interview, June 19th)
Rejo Zenger is a researcher and campaigner at Bits of Freedom, a digital civil rights organization based in Amsterdam. He works with policy makers in the private and public sector to improve freedom of communication and digital rights by pointing out potential risks in digital communication from a technical perspective. For example, data privacy on platforms or safeguards against wiretapping.

3.5. Operationalization

Based on the framework of media and algorithmic accountability and transparency, the following operationalization was developed. Certain recurring themes are present in the network gatekeeping dimensions proposed by Barzilai-Nahon and the framework of algorithmic accountability by Diakopoulos. A digital public sphere and the involved requirements and conditions for participation in a space heavily influenced by platforms constitutes one of the main themes of the interview guide. Accountability embedded within the market frame, the professional responsibility frame, and public responsibility frame were identified beforehand as a suited framework and therefore form the remaining major themes of the guide. The theme of citizen journalism, in contrast to the institutionalized professional journalism, will be analyzed against the background of the latter, since none of the interviewees was active as a citizen journalist at the time of the interview. Instead, all of the interviewed experts with a background in journalism gained experience in a professional or institutionalized setting. The theme of media literacy in a digital media landscape, more specifically how to validate journalistic credibility is based on a framework proposed by Hayes, Singer, and Ceppos (2007). This approach, together with Diakopoulos' method of

assessing algorithms in a media environment, can be placed into an overarching theme of media literacy in new media.

Table: Operationalization for concepts

Theme	*Concept*	*Question*
Digital Public Sphere	**Accessibility:**	Is the digital public sphere accessible to everyone? Possible probes: • Third party platforms have increasing control over content. • How can news/media companies make the public aware if they want to continue being active on these platforms?
		• The public sphere was only constrained to a certain social class. • How can a digital space for discussion on third party platforms be accessible for everybody? • How can such a space contribute to a deliberative discussion?
	Power: *Benkler's concept of information control*	How can media companies adapt to the growing control that platforms have over information? Possible probes: • Those who control access points to information hold great power over individual's autonomy • Media companies are recreators, but not necessarily distributors anymore? • How should they react to that regarding their obligations as providing service to citizens?

	Power of consumer	How could consumers change the way platforms provide content for them? Possible probes: • How could consumers be encouraged to demand good journalism? • How could media companies be encouraged to practice good journalism on platforms? • How could incentives promoting good journalism within a market frame look like?
Media Accountability	*Who can be held accountable and how?*	How can media companies be held accountable for their content on third party platforms? Possible probes: • Media is only adapting to third-party platform requirements, on what terms can they be held accountable? • Where should discussions about such accountability issues be held? • In what frame should such measures be implemented?
	Extending accountability to new actors	How can platform providers be held accountable for their content? Possible probes: • Should they be regarded as media companies? • Should they feel accountable to media ethics? • How could they be reminded/forced/incentivized of their role in shaping opinion?

	Instruments of self-regulation in digital platforms	How can instruments of self-regulation be adapted to a platform press? Possible probes: • Online MAIs (citizen blogs, media criticism on social media) contribute to media accountability. • How could such instruments be applied to third party platforms?
Market frame	*Conflict of interest. Transparency*	How can media companies deal with the increasing dependence they have on platforms? Possible probes: • Media companies rely on platforms for funding and distribution • Hold platforms accountable when they are so dependent on them?
	Dependence of creators and publishers in digital journalism	How could platforms and media companies both profit from the interdependence of data and content? Possible probes • Platforms stockpile data • Third party platforms gather massive amounts of data that could benefit media companies. How could media companies and platform providers profit from this interdependence?
Algorithmic accountability	*Scaled journalism*	How can digital journalism react to editorial authority switching over to platforms? Possible probes:

		• Publishers use third party platforms to increase audience reach, granting those platforms editorial powers. • How can digital journalism react to that without compromising their own authority? What is the self-conception of online journalists compared to traditional journalists?
Public responsibility	*Press councils adapting to digital platforms?*	How could a digital press council work? Possible probes: • Press councils neglect most third-party platforms. • How could a digital press council possibly fill that gap? • What other measures could work here?
	Public broadcasters as independent actor/regulator?	How could public broadcasters act as independent actor/regulator regarding algorithmic decision making and transparency? Possible probes: • Public broadcasters do not rely on ad-revenue. • Have an official function to inform public. • How could MAIs take advantage of that or even contribute to algorithmic transparency?
Professional responsibility	*Professional responsibility in conflict with profitability.*	How does content influenced by platforms affect journalist professional responsibility and how can the public be made aware of that? Possible probes: • Journalists' professional responsibility might suffer when adapting to third-party standards.

		• How should media companies make the audience aware of such impediments if platforms have a say in selecting content?
	Algorithmic transparency	How can public awareness of algorithmic decision making be raised? Possible probes: • Algorithmic accountability reporting? Prioritization, classification, filtering, human influence • Consumers are not always aware of how algorithms shape what they see. • What are good practices in making users aware?
	Citizen journalism on third party platforms	What measures can be taken to make citizen journalism/journalists abide by journalistic standards? Possible probes; • Citizen journalism is regularly utilized by media companies and incorporated into their pieces. • When third party platforms are involved, how can gatekeeping processes be made transparent and used to increase accountability?

3.6. Data collection

All interviews followed a certain procedure at the beginning and end and were semi-structured otherwise. After giving interviewees an opportunity to ask questions about the research, they were asked to introduce themselves and briefly state their involvement with or interest in the research topic and occupation. The first question relating to the digital public sphere was asked to every interviewee and was followed by questions depending on in which direction the interview was taking. If required, probe questions were used to accompany the open ended main questions, when the researcher felt like the participants had trouble grasping the main concepts of the original question. Because participants in this research are active in different fields, such as academia or as professionals in the media sector, some themes were elaborated more comprehensively by some interviewees than by others. At the end of the interview, each participant was given the chance to give his or her general thoughts on the topic and mention issues that might not have been covered in the interview but which they still deem important. When consent was given, all interviews were recorded, as not recording bears the risk of losing data and disrupts the flow of the interview when the researcher pauses to write down notes (Hermanowicz, 2002).

Interviews were scheduled starting in February and were conducted in and May and June. When it was possible, interviewees were met face-to-face for the reason of interviews being easier to manage and control when conducted in a personal manner (Hermanowicz, 2002). Due to several scheduling conflicts on the interviewee's side and the fact that half of the interviewees were located in Germany, five interviews were conducted via video call service Skype. In accordance with the guidelines set by the Media and Communication programme, 10 experts were interviewed for this thesis, with each interview lasting 30-60 minutes and one exception of 85 minutes. A consent form was either send via e-mail to the participant or handed to them before the start of the face-to-face interviews. Verbatim transcription, which is the transcription of virtually all utterances by participant and researcher during the interview, was conducted shortly after interviewing in order to ensure the inclusion of all possible nuances in the description (Hermanowicz, 2002). This practice also allows the researcher to draw upon all possible analytic uses, as it may be not clear what the most significant points of the material will be while the transcription is being completed (Fielding, et al., 2008).

As mentioned before, interviews for this thesis were conducted in two countries, the Netherlands and Germany. To keep possible word misunderstandings to a minimum, most of the interviews were conducted in English. If the interviewee did not feel comfortable to talk in

English, the option of conversing in German was given to the participants. In this case, the interview guide was translated into German. Four of the 10 interviews were transcribed in German. Since diverse cultures assign different meanings to words, translation can influence meanings conveyed through spoken language (Patton, 2002). Translating and coding the German transcription into English was done with utmost consideration of such nuances, although most technical terms regarding platforms and algorithms in the German interviews were also addressed in English by the interviewees. Some interviewees agreed only to a shortened interview of 30 minutes instead of the proposed 45 minutes by the researcher. For reasons of being unavailable otherwise and the general difficulty of finding experts participating in this research, these shortened interviews were conducted regardless of this time constraint.

As interviewing policy makers possibly exposes the researcher to sensible data, it was necessary to send some interviewees transcripts and let them approve the data. Two interviews were conducted at The European Investigative Journalism & Dataharvest Conference on May 26th, 2017 in Mechelen, Belgium. As one of the key topics of this conference was algorithmic accountability it represented a suitable opportunity to get an impression of how algorithmic accountability and decision making is discussed by journalists working in major newspapers all over Europe.

3.7. Data analysis

Thematic analysis of the interview transcripts will serve as the strategy to reduce, segment and categorize data to finally reconstruct it in a way that "captures the important concepts within a data set" (Ayres, 2008, p. 867). Since this thesis is not developing a new theory derived from gathered data but rather uses a theoretical thematic analysis approach, coding was based on the theoretical framework from the outset. This approach is guided by the researchers' interest in a specific area or topic (Braun & Clarke, 2006). Coding the interview transcripts was accomplished with the identified framework in mind and concluded with an analysis of recurring patterns that are linked to certain models in the theoretical framework. To identify themes, data was decontextualized from its original source and "recontextualized into a theme" (Tesch, 1990, as cited in Ayres, 2008, p. 867). Yet, the complex relationships governing the data is often neglected to showcase relevant connections, which is further elaborated in the limitations chapter of this thesis (Maxwell & Margaret, 2014).

This thesis aims to identify measures different actors in media should take into consideration when acting within the expectations of the public sphere and practical implications for media companies in the current market. Academic discourse and institutional knowledge were in some parts contrasting with practical implications relevant to media companies. Yet, identifying these contrasts will presumably reveal relevant issues and hopefully serve as a starting point for future research or possible best practices for media companies in the digital sphere.

To conduct the coding after transcribing the interviews, text analysis software Atlas T.I. was used to develop a coding scheme, categories, and subcategories. Using qualitative analysis software is preferable to paper-based systems in terms of data-management capabilities and accountable practice of analysis (Mangabeira, Lee, Raymond & Fielding, 2004), since it makes the formation of coding schemes replicable for other researchers. Especially in qualitative research, utilizing software can greatly contribute to the coding process of substantial amounts of data such as interview transcripts, as codes can easily be reorganized, searched and replaced (Ayres, 2008). To improve readability of this thesis, quotes presented in the results section have been edited for clarity, which means the removal of interjections and, in some cases, correction of grammatical errors.

4. Results

In this chapter, each of the identified models in the theory part will be addressed separately, starting with a broader overview of how a digital public sphere is perceived on platforms and the general aspect of media accountability on platforms. Later, each frame of accountability will be discussed in more detail.

4.1. Digital public sphere on privatized platforms

The view on the accessibility of a digital public sphere was answered mostly consistently by all experts. Access is undeniably determined by a user's country of residence, the prevalent infrastructure there and his wealth. In addition to that, deciding factors are also technical knowledge, access to the internet and intellectual capability. Expert 1 fittingly asks if platforms even want to contribute to a public sphere. For him, platforms merely sort content and present it to users without conforming to the principle of actuality. Content accessed on a platform might as well be several days or weeks old, depending on the user's preferences and behavior.

Net neutrality was mentioned by Experts 3 and 10. Both were concerned that ongoing consolidation processes in the connected public sphere are influencing free flow of information and granting certain players opportunities of focusing public attention. They are, in this case, mentioning concerns described by Benkler's networked information economy, where he identifies those who have power over information flow also hold the power people's autonomy. Experts working as professionals in media companies (Expert 7, Expert 9) had a more optimistic view on the matter of entering this space, claiming that a public space for discussion is equally accessible to everyone.

Expert 1 also mentioned the concept of homophily as an effective way of describing the business model platforms utilize when employing curating algorithms to present their content. Homophily is a concept explaining that individuals tend to associate and form bonds with similar individuals. On a platform, this would mean that a certain degree of diversity is ultimately lost when users form networks with their friends and acquaintances who are inclined to share content that is either already popular in their network or is expected to resonate well with users somebody is already connected with.

It is obvious that all voices are not equally heard in a digital place for discussion that is curated by an inaccessible and non-transparent force. In this sense, new media is not much different from traditional media, where distributors decided which newspapers were on

display at which locations and editors created stories for the day in the newsroom that would later become news (Expert 8, 10).

What is different, however, is the fact that this new connected public is subject to different rules than traditional mass media (Expert 3). Virtually no cost of distribution allows even small and extraordinary voices to find an audience, if such an audience exists. At the same time, Expert 8 and10 are concerned about the current monopolistic structure a handful of platforms occupy in the digital space. A lack of diversity when choosing a platform does influence freedom of expression and freedom of communication, specifically considering the potential number of users that are affected by even a tiny change in the curation of platforms.

When Expert 8 asked his students how internet culture affected their creative field, they answered that for them, the space they called internet always requires registration. In other words, a truly accessible public sphere has been commercialized considerably in the last decades. The original idea of a revolutionizing channel for free and democratic debate the internet was supposed to provide for citizens has not endured, just like it did not reinvent the public sphere. There are differences in how Europeans and North Americans use platforms to exchange thoughts and opinions. Expert 8 and Expert 2 mention that Europe is still much more part of the old, traditional public sphere than the USA, where people tend to inform themselves about current issues on social media platforms instead of resorting to traditional media such as television or newspapers. Free speech on the American content is much more unregulated than in Europe and is still bound by certain rules, Expert 1 believes. Accepting platforms as a space of public discussion might happen soon, as Expert 1 described the slow forming of the traditional public sphere as a process that also took quite some time.

Because users choose a platform they want to be active on and because of the highly dynamic nature of digital innovation, the platforms we know today might become obsolete just as fast as they have gained popularity.

> There will always be new kinds of social media, where there will always be new kinds of platforms, which is not least caused by a form of youth culture seeking for free space unoccupied by adults, who at some point discover those free spaces and start regulating and coopting those spaces, which you could basically see on all social platforms (Expert 5).

Nevertheless, Expert 5 also believes that private platforms can be organized to create a new publicly accessible private public. If access is guaranteed for everybody and some form of

regulation is in place, privately organized platforms are much more effective and can provide citizens and state with a space for handling bureaucratic matters and suchlike.

Conditions such as wealth, knowledge and intellectual capabilities were identified as the most crucial factors deciding over participation in a digital public. In this sense, a proposed digital public sphere is comparable to the model of the traditional sphere coined by Habermas, where only citizens possessing a certain level of literacy and belonging to the bourgeoisie were allowed to take part in discussions. Yet, as institutions such as public places and the exchange of letters were considered to entail a kind of public character in some party, the space that is occupied by platforms today is completely privatized. Media professionals were more convinced of a truly open public sphere to everybody, while researchers and activists had a rather pessimistic opinion on accessibility of a digital public sphere.

The concept of homophily mentioned by Expert 1 is a stark contrast to the original notion of a public sphere that speaks to everybody and draws from a diversified set of opinions to spark debate, Yet, it corresponds with findings reported by Vaccari et al., (2016). When analyzing German and Italian Twitter users, he concluded that people on the platform tend to stay in their own echo chambers, amplifying their own beliefs. Previous points of critique seem to be still valid in the space platforms create for discussion today. The argument brought forward by Eley (1994), stating that the public sphere was mostly exclusive to a certain kind of class is still applicable. Where a citizen then had to be accepted in a certain circle of society to partake in discussion, today the deciding factors are wealth, access to infrastructure and intellectual capabilities, which are most likely closely related to one's social capital.

4.1.1. Effects of platform gatekeeping on public opinion

Selection of information steered by algorithms is not necessarily harmful, as long as it happens consciously and transparently. Furthermore, there is agreement on the fact that gatekeeping processes have an effect on user's opinion and shape the way they perceive their surroundings, although the extent to which this is affecting users is still up to debate.

> I don't know, first you would need to have an assessment of the situation that shows
> it [the effect on public opinion]. What is actually happening there? I think maybe that
> the second step is taken too fast before the first one. There is always a debate about the

power of platforms and so forth, without maybe actually having examined every case and how it actually is (Expert 3).

Also, bots mimicking real user behavior contribute a threat to debate on platforms, since they are usually deployed with a certain purpose (Expert 2). The fact that social media encourages speed over quality when it comes to journalism is observed by Expert 4, which is closely connected to the publishers need of increasing clicks and an expectation of instantly available content by the consumer (Expert 1). The private nature of for-profit platforms renders discussions to be undemocratic (Expert 5). Plus, the choices platforms make for their users are not visible to them (Expert 1,5,7,9).

The relationship between user and platform was an important topic for all experts. For example, platforms do have an influence on user's need, as Expert 6 points out:

If you, as a platform want to keep people using you, you have to adapt to their needs. So, they do. I just don't know whether those needs are kind of, steered into a certain direction by the companies, by the way they provide the platform, or they design the platform, so it's an interaction I guess, from the two.

Yet, power over opinion is only becoming relevant with the massive number of users that those platforms can reach and not with the technology they utilize.

The problem is not the power of the mediators, but the problem is the power. It doesn't really matter whether you would have a monopoly of one news medium. Let's say everyone would only watch CNN, then you would have the same problem, as now with the mediators. So, it's really a problem of scale, it's not necessarily a problem of the way which this medium works (Expert 8).

The fact that media has always been filtering content relates to the way humans make sense of information. Newspapers and their distributors are just as much gatekeepers as platforms and the filtering process is equally invisible to the public eye. The only difference between gatekeeping in new and traditional media is a public awareness of the involved mechanisms.

As humans beings you need filters. You need, it's a very bad way to say that but, you need discrimination. So, discrimination is always there. But what we have to do is

actually to get behind the interest about the algorithms and how they work. I don't mean like we all have to understand how the algorithms work, but I want to understand how things are actually filtered. And this should be up for debate. (Expert 1)

Expert 1 adds, that while editorial filtering follows a posteriori logic, meaning after an event has happened it is decided if it is newsworthy or not, algorithmic filtering is based on priori logic. Content that is shown is selected based on your past interests, which the algorithm predicts will also interest you in the future.

Again, experts agree in most parts on this topic. The possible danger of influencing public opinion is more prevalent than an actual acknowledgment of ongoing processes. Some experts are at the same time more skeptical of the true scope of influence platforms have, while also directly addressing the most recent developments of governments admitting involvement in steering public opinion on platforms such as Facebook. Others are more concerned with possible what-if scenarios of opinion manipulation.

Contrasting to the doubt some experts had regarding the influence platforms effectively have on the public, there is evidence that governments have exploited Facebook's platform to actively influence public opinion in at least two cases (Weedon, Nuland, & Stamos, 2017). Here, the platform was used as a tool to amplify a certain desired message. The filtering and prioritization processes are described in Diakopoulos (2014) framework. The RSS feed, as Expert 8 mentions, for example, is still supported by most online publications although it was first invented in 1999. This system of personalized filtering can be a powerful addition to the way users consume news online because it is completely transparent and user defined. Utilizing filtering processes knowingly would happen in accordance with Diakopoulos (2016) category of algorithmic presence as part of the algorithmic transparency and accountability models, also contributing to users knowledge of how this system prioritizes and filters content.

4.1.2. The role of platforms in the context of media content providers

Most experts agree on the dependency media companies enter when they start publishing on platforms, such as Facebook. Yet, platforms are also able to direct readership to small and medium-sized publications that would otherwise go mostly unnoticed (Expert 8,

Expert 5). Furthermore, platforms can also represent a chance for media companies to reclaim opportunities lost to third party providers.

Content is not selected by media professionals anymore but by algorithms. They are the editorial gatekeepers of new media.

> It is different right now, because you don't have a person in front of you, who you can talk to, and say: this is really important news, it has to be on the front page, or it has to be on the 8 o'clock news etc. Now you have an algorithm, which is changing all the time (Expert 8)

Not knowing what algorithms consider when making decisions makes it considerably harder to produce content that is popular on platforms. Media companies nowadays rely on platforms to increase their reach, which in turn is generating advertising revenue for them. Because the potential readership is too tempting to be left untouched, some media companies bet on platforms to support their business model (Expert 3). At the same time, different platforms require different packaging of news content, which in turn means a higher workload for media companies to adequately present their texts on every platform they are active on (Expert 8).

There is no consent on the issues of how media companies should react to the growing dependence platforms have over them. The opposing views are criticizing the media for clinging to the old model of being totally integrated. Instead, they should adapt to their role as publishers that are becoming more and more obsolete and face the progressing detachment of editorial staff and publisher. The power over distribution platforms have at the moment is much stronger than the channels owned by media companies. On the other side, experts argue that media companies should not make themselves dependent on platforms, as they are already starting to question the benefits of partnerships such as Facebook's Instant Articles feature. Rather, they should take control of distribution again and not give up on their editorial independence since it is a vital part journalistic integrity. This disagreement on such fundamental views is telling for the state the changing digital media landscape is in right now. Media companies are betting on platforms to be their savior while complaining about the dependence they have on them when it comes to monetizing their content.

Platforms are all occupied by a certain type of audience. Expert 6 and 4 believe that media companies trying to appeal to whatever audience they want to reach on that platform makes news mediation more effective than on channels that cater to a broader audience. However, the way platforms are designed to monetize the time a user spends on them might

also promote questionable editorial choices such as clickbait content and prominent usage of buzzwords. Media companies are in a dilemma: on the one hand, they cannot reach the audience on their own channels as effectively anymore, on the other hand, the potential power platforms have over the financial well-being of media companies is tremendous. Expert 4 mentions that, when, for example, Facebook's algorithms decide to classify a popular German satire medium as "fake news" suddenly, their entire economic base would be threatened.

Yet, there are isolated opinions that shed a more positive light onto the current situation. Expert 9 believes that the changing media landscape can also be a chance for innovations and a renaissance of connecting with consumers after a lengthy period of traditional media companies dominating the industry, while also neglecting their readers. Platforms can, according to Expert 5, also be a place for good journalism, if there is a kind of democratic regulation guiding actions on those platforms. Similarly to Expert 9, he also believes the emergence and manifestation of platforms were only possible because traditional media did not provide the services that users were looking for.

4.2. Media accountability on platforms

Experts believe that platforms and media companies are complying with regulations that are in place (Experts 3, 4) yet, they feel like there is a need a for an authority to set standards of new media regulation on both sides, platforms, and media companies. There is mostly agreement on the question if platforms should be held accountable for user-generated content, even if it appears in the context of an article published by a media outlet (Expert 4, 9, 10). Expert 3 sees platforms acting only as a channel, which would release them from any direct responsibility for content posted there. All experts working for already institutionalized media companies stated that they are accountable for content they post on platforms, referring to their obligation to act as professional and sincere entities. (Expert 7, Expert 9). They acknowledge, that the multinational character of platforms enables them to act within an uncertain space of regulatory responsibility, which in turn also effects media companies that are publishing on platforms (Expert 1, 2, 3, 4). If they do not act within standards they set for themselves, the measures that can be taken to hold them accountable are limited, to say the least. Self-regulating instruments are not seen as an effective way of holding media accountable for their actions on platforms:

There is [self-regulation]! But it's not like that really has an impact on the big picture. You can't tell people to write a blog, right? Or to be critical. (Expert 5)

There is confusion over how to define platforms regarding the services they provide. If they act like media companies, they should be held accountable to the same laws. If they are only regarded as a distribution channel for content provided by media companies, the responsibility they have for content is significantly reduced. Adding to that, regulations originating from a political framework are deemed to be inadequate for reasons of being too slow to adapt to changes and the high pace of disruption that is characteristic for tech companies. The abstract form of public platforms constitute cannot be governed by current laws, as Expert 5 states:

> It is just incredibly hard to [deal] with this complete dissimilarity to the physical world, namely just this non-decaying copying of things, that is the one thing, and that distance is not an issue.

The fact that digital content can be reproduced so easily presents a new challenge for any kind of regulation. As mentioned before, the number of users that platforms reach alone is reason enough to require regulation. Although there are privately organized groups trying to diffuse hateful and biased discussions of Facebook, for example, best practices on how to effectively moderate discussions are not existent yet (Expert 3).

Experts struggle with defining an explicit guideline of where and how media companies should react when publishing on platforms. While they hold themselves accountable for their content, the issue of dealing with user-generated content remains unresolved. Confusion revolving around the platform's definition of provider or distributor adds to the problem. The expert's stance on self-regulation is mostly congruent with Fengler's (2015) survey among journalists and media professionals. Experts working as media professionals believe they must be accountable for their content based on their professional responsibility, while the interviewed journalists stated that measures of self-regulation are not truly effective.

Views expressed on this topic regarding regulation echo the effects mentioned by Bardoel (2003) and McQuail (2010). The most concerning issues here are difficulties steering the content and the slow nature of measures taken in the frame of law. Adding to that, the voluntary nature of public instruments might be the biggest issue in this frame, as you cannot force people to be critical of something.

4.2.1. Algorithmic transparency

Most experts agree that there is a need for algorithmic processes to be transparent on platforms, although the reasons for this are quite diverse (Experts 1, 2, 3, 4, 6, 8). Contrasting to that Expert 10 voices concerns about the complexity of algorithms and the entailing difficulty when explaining the workings to the average consumer. Algorithms on platforms make decisions without being visible to the user, which most experts see as problematic (Experts 1, 4, 5, 8).

For journalists, it is interesting from a professional point of view to be able to see how content is selected. They would benefit from a view on the raw, unfiltered content and could make their own conclusions unbiased by the algorithm. Researchers and media professionals are more inclined to demand transparency as the first of step of reacting to a changing media environment, which would also include raising public awareness in consumers.

> If those algorithms generate effects that, so to say, put the public at a disadvantage the situation is different. Then you would have to say, at a point when it is not a private issue anymore, then you'd have to demand the change of algorithms and develop transparency (Expert 2).

Enabling journalists to change the mode in which they look at content would be a way to increase accountability in Hayes (2007) model when media publishes how data were collected and would represent a step in the direction of algorithmic transparency.

Depending on who demands algorithms to be transparent in journalistic processes, the responsibilities to comply with certain standards would either be assigned by regulation or law, contracted between agreements between press and society or self-imposed by journalists themselves. Involved stakeholders would be pressure groups, audiences, public opinion or even regulators. The frames in which such transparency could be achieved are public responsibility, professional responsibility, the political frame and the market frame, which will be discussed in more detail below.

4.2.2. Public responsibility

Public responsibility develops out of a public need for something, which is why the first step at this point is to raise public awareness about the workings of algorithms. As

mentioned above, it is contracted between press and society when both parties agree on the importance of certain issues. In this case: algorithms. The interviewed experts active in the field of research and in a professional setting notice a slow but steady increase in academia and public debate, although there is still a lack of technical knowledge regarding algorithms even under media scholars (Experts 1, 4, 5, 9)

> We are even lacking it in scholarship. I mean how many people who are in media studies, can actually write a piece of code or know what an algorithm is? So, this is a huge problem. (Expert 8).

Expert 1 goes even so far as to propose declaring algorithms part of public data, drawing a comparison of platforms to impenetrable fortresses that cannot be encouraged to share the mechanics behind algorithms otherwise. This, of course, would be radical action and certainly conflict with capital interests of the company. Raising awareness is only part of the process. Critical interest is also necessary to understand algorithms.

> [Certain people think] what Facebook is showing me is representative of the reality of my social surroundings, or, the reality of the world. Well, you should have a certain critical interests for the workings on Facebook to ask yourself what is happening there and this discussion will then, I think, not reach all the people (Expert 4).

Not only algorithms but also the media itself should always be under critical investigation of consumers (Expert 10). Expert 3 adds that some users might not even be interested in the workings behind a filtering process, provided they are pleased by the results:

> I'd say that this is a nice idea, for now, and I think it's good and I would also like to know more about that. Ultimately people will most likely, or most users just want to be presented with the best results (Expert 3).

When asked what role the public broadcasters occupy in promoting a debate about algorithmic decision making, opinions are divided. Experts 5 and 8 believe, that public broadcasters are not able to react accordingly to the change in media consumption:

Well, I am very skeptical towards public broadcasters, because in their organization they are not able to react somehow to the media change, they are not allowed to some extent and because of regulation simply because of their role [they cannot] (Expert 5).

Expert 8 has a similar view and sees public broadcasters still operating in the public sphere of the 1960s and 1970s. On the contrary, Expert 1 and Expert 9 feel like the public broadcasters are trying to start a debate about issues revolving around algorithms and digital platforms by reporting more prominently about them. Expert 9, who is working for a Dutch broadcaster, adds that they are just starting to utilize platforms when compared to the experience private media companies have in that field. Expert 8, who has experience with both the German and the Dutch system of public broadcasting believes that the Dutch system is superior in terms of organization because of its bottom-up structure. In theory, this could also be used to create a kind of participative community or explore new financing models for non-profit journalism.

Interviewed experts in Germany do not hold its public broadcasting system in high regard, also when it comes to adapting to a changing media environment. Bureaucratic structures are considered to be standing in the way of innovation. There is agreement on the public broadcaster's role of raising awareness about issues that arise with a connected public, also regarding algorithms and its effects on media companies. Experts in both countries agree that the public broadcasting institutions neglected to publish on the internet when private media companies were already exploring new channels.

More research dedicated to the workings and effects of algorithms would, as the interviewees believe, add to a public debate about algorithms, a crucial step for creating an awareness for algorithmic accountability in media, as Beer (2016) and Kitchin (2016) also mention. When pressure groups and audiences the demand greater involvement of public broadcasters in a changing media environment, they commit to serve the need voiced by society. Yet, one of the drawbacks mentioned by Bardoel (2003) is the completely voluntary obligation to do so. Even if users would be enlightened in the workings of algorithms, there are no references yet of how users would react. Diakopoulos (2016) also mentions this, when he states that even when theoretically every aspect of an algorithmic process is transparent and comprehensible for the user, the effect this knowledge has on him or her remains unclear. Yet, consensus among scholars investigating algorithms is strongly in favor of an increased transparency to benefit the public (Lazer, 2015: Diakopoulos, 2016; Herrera, 2014)

4.2.3. Professional responsibility

Focusing on transparent journalism that shows users how content was produced and why it is published through a certain channel, as well as missing incentives for good journalism on platforms are the main themes in this part. Accountability originating in this frame is self-imposed by professionals working the field of journalism. Experts 2, 6 and 7 believe that media must be more transparent in showing how they produce their content, which would also have a positive impact on journalistic integrity. This is especially important considering the status journalism has in a time when information can flow freely regardless of truth and accuracy (Expert 1). For Expert 7, the only solution for media companies to counteract this is being transparent in the way they produce news:

> The answer is a transparent process of journalism, integrity. Show your audience, how we operate, why we make decisions we make, where our reports are based on, etc., and be as transparent as possible about it, that's, I think, that is very important (Expert 7).

Furthermore, Expert 7 and Expert 5 also believe that producing good news requires a certain degree of professionalization. Expert 6 mentions the changing media landscape also requires journalists to adapt their practices and use the information abundance to their advantage. Algorithms can also be used to improve articles through software. For example, checking a collection of sources automatically (Expert 5). At the same time, fact checking is costly and therefore sometimes neglected, as Expert 3 mentions.

Algorithms have replaced editors as the new gatekeepers, as Expert 9 claims. The way platforms are designed might lead to a more prominent use of editorial choices such as clickbait journalism or the increased intentional use of buzzwords (Experts 4, 8, 10). Yet, when Expert 9 was asked if she believes that platforms have an influence on the journalistic quality of content, she stated that media companies have been producing content fitting for a tabloid as much as before the rise of new media. The only difference is that, due to the social character of platforms, this kind of content is just more visible than it was before.

Social media platforms can contribute to more appealing articles that speak to a wider audience and make complicated topics accessible to users as Expert 2 point out:

… and at this point social media is actually very helpful, because it contributes and forces you to think about which posing of a question, which form of linguistic clarity appeals to the audience, and what I can use to spread any rumors, to speech any easy content I can use as well to spread relevant content.

It remains unclear to what extent journalists and media companies active on platforms can actually influence the way they present their content on these channels when non-transparent selection is carried out in the background without involving the content creators to adjust accordingly (Expert 9).

Again, agreement on an increased attention to integrity by disclosing journalistic processes is mentioned among most experts. Noteworthy here is that all experts who are explicitly promoting transparency in journalism were either researchers in journalism or speaking on behalf of other journalists that they were overseeing or responsible for. Experts are concerned about how algorithms prioritize, classify a certain kind of content, and filter what some users can see and what others cannot. All of these effects are mentioned by Diakopoulos (2014) in his model for algorithmic accountability model. If platforms do not unveil how their content is selected, at least journalists can be transparent on their side by showing exactly what led them to publish a certain article under certain circumstances. Instruments here include the reflection of operating principles and journalistic codes, for example (Bardoel, 2003).

A spread of false and irresponsibly checked information when news becomes interchangeable and disposable was mentioned by Hayes, Singer, and Ceppos (2007). In their model of journalistic credibility on digital platforms, it is important to check sources for disclosure and evidentiary support, they argue. A perceived over-visibility of content with questionable journalistic quality is mentioned by an expert. The question of how to promote quality journalism on platforms that rely on shareable content to generate profit was addressed by Bell and Owen (2017) as well.

4.2.3.1.   *Journalistic codes of conduct*

Considering the codes of conduct issued in Germany and Netherlands, only the Dutch code advises journalists that its principles apply on every platform. Still, experts in Germany and the Netherlands (Experts 3, 4, 10) do not believe that the current model of press council is an effective way of holding journalists and the associated institutions accountable. This is

mostly based on the belief that sanctions are not binding but on a voluntary basis (Expert 4). Also, Expert 8 believes the councils are simply not adapting to the current times

The lack of clear recommendations of how to deal with user-generated content published in the current press codes in both countries is an illustration of the uncertainty the established institutions of self-regulation have when it comes to platforms and the fast pace at which this type of medium is evolving (Eberwein & Evers, 2011). Correspondingly, Fengler (2015) found that journalists across Europe assign only medium or weak effectiveness to press councils.

4.2.3.2. *Digital press council*

A proposed digital press council was not seen a viable solution for experts in both countries to act as an additional authority alongside the already established council. However, the need for an authority establishing guidelines on how to deal with digitality in general and with the capacity to perform audits was regarded as a valuable measure to increase accountability. Again, distrust in a digital of the traditional council was voiced because imposed sanctions are mostly without effect (Expert 4, Expert 3). A theoretical digital authority mentioned by Experts 1, 2, 5, 10, could, for example, issue guidelines on what to publish and what not to publish on platforms, that are currently not covered in the traditional press code, aiding users in deciding when it is appropriate to use live streaming or upload pictures (Expert 2). Still, if journalists question the effectiveness of guidelines already in place for professionals, it is not automatically guaranteed that users would willingly adapt to recommended guidelines.

An abundance of digital content was recognized by Experts 1 and 5, which is closely related to the digital nature of platforms. There was no agreement, however, if platforms should be held accountable for user-generated content. Expert 4 and 9 believe that platforms, such as Facebook, have a certain responsibility for content that is published and accessible to others, while Expert 3 mentioned that platforms are not responsible for such data. He believes that it is more a question of enforcing rules that are already in place and of those rules becoming active when there is an actual complaint.

Adding to that, Expert 8 trusts that the press council is based upon the idea of a clear separation between professional journalism and non-professional journalism. The press codes mentioned in the framework are struggling to keep up with current development and the digital environment. As mentioned earlier, there is also uncertainty if such an authority would

have any effect on defamatory comments on platforms, especially when platforms are only considered to be distributors and not content providers momentarily.

The idea of an institutionalized authority on digital issues receives general approval by experts. Speaking out for a formalized authority is in contrast with Fengler's (2015) comparative journalists' survey. She found that European journalists assume that such systems of regulation are open to political abuse and therefore endanger freedom of the press. Yet, journalists were also not satisfied with current instruments of self-regulation. As an alternative, Fengler proposes state-funded incentives to companies involved in media accountability activities. Experts interviewed for this research were also concerned about the funding of journalism in the digital age, leading to the next and most important approach in this analysis: the market frame.

4.2.4. Accountability in a political frame

The most apparent themes here were a proposed split-up of big platforms and the incentivization of creating new platforms by the private sector. Four of the 10 interviewed experts believe that capitalist interests stand in the way of transparency and two would consider state induced measures to dismantle current power structures. Platforms do not want to share their trade secrets because their actions are steered by shareholder interests.

> The logic of shareholder value and so forth, they can't do much differently. Because they always have to explain their actions to shareholders and their shares, why are they doing something, and they are constantly afraid of being sued if they decrease the company's value (Expert 5).

Experts 1 proposes breaking up big platforms with the help of the state and making the infrastructure including algorithms a public good and Expert 10 adds that state legislated splitting up might be the only option to prevent platforms from becoming too powerful. He also suggests that incentivizing the creation of new platforms would add to more diversity for users and as a result distribute potential power over public debate over several companies. Breaking up and subsidizing platforms are measures happening in close connection with politics and are therefore also be regarded as actions of a political framework since state intervention would be required.

While Expert 5 also recognized a growing number of people demanding just that, he is skeptical towards the efficacy of such an action based on the decentralized nature of platforms

that could easily regroup under a different name. Similar to the act of abandoning one abstract public space and simply occupying another, in this case under a different brand (Mah, 2000). Suggested measures here are fairly radical and would require massive intervention by the state. Softer measures such as formal rules and regulatory statutes are not mentioned. Although a very effective frame, actions taken here have been proven to be ineffective when it comes to preventing the formation of media monopolies (Bardoel & d'Haenens, 2004b). Furthermore, incentivizing other parties to join the platform economy might spark competition at first but is also prone to favoring wealthy and powerful entities (McQuail, 2010). Also, as mentioned by one expert, laws and regulation usually do not keep up with technological change (McQuail, 2010). A more viable solution was developed within the market frame and will be discussed in the next chapter.

4.2.5. Accountability in a market frame

Strengthening institutional credibility outside the platform eco-system through direct or community based subscription models was found to be most apparent theme in this frame. Most of the experts propose the traditional model of gaining authenticity and integrity in journalism through brand association. After all, trust in media can't be regulated (Expert 1) but should develop over time when everybody can become a journalist by simply claiming to be one (Expert 8). Expert 6 and 4 believe that editorial integrity is vital for media companies and individuals publishing on platforms and Expert 2 accuses media companies of neglecting to show their consumers how to recognize quality journalism for years. Good journalism needs proper funding to make sure that certain processes like fact-checking and proof-reading are performed (Expert 1, Expert 5). The dilemma media companies are in right now is summarized by Expert 5:

> The media crisis is rather an advertisement crisis because the symbiosis originated in the times before the internet, where there was exactly a symbiosis between advertising industry and print [media], which is now virtually in the process of dissolving completely.

In the platform system, content itself is not important but only a tool to keep users interested as long as possible (Expert 3, Expert 8). Interchangeable content that users see on platforms is only associated with the platform itself and not the creator anymore (Expert 2, Expert 6). By using a platform channel such as Facebook to publish, media companies are not necessarily

contributing to trust and credibility associated with a certain name (Expert 7). To counteract this, media companies should start connecting their brand with the values of professional journalism again, which would eventually positively impact the trust they have in those brands.

Expert 3, 6, 7, 9 and 10 believe, that the only way to stay independent from the constraints platforms force upon media companies is to establish a form of direct subscription or even community-based funding for media companies.

> The self-labeled term of quality journalism. The term is debatable, but maybe this is the wrong place, and here, I think, there is a trend towards rather classic subscription models (Expert 5).

However, Expert 5 also mentions that current pricing models should be adapted accordingly to be accepted by the public, due to the current subscription models being simply overpriced for the content provided. The dependent relationship media companies enter when using platforms to publish on their channels strips them from having full control over what they present their audience. Experts 1, 5, 6, 7, 8, 10 believe that the only way media can stay independent and abide by their own standards is either through a way of community funding or direct subscription model.

By connecting a media company brand to values such as credibility and authenticity, consumers would make use of the unspoken agreement the public and a news outlet form when they are seeking credible news, defined by Hayes et al (2007). Building trust in a news media outlet seems to become more relevant in the digital world. Since institutional authenticity is much more effective in the realms of traditional media and journalists used to gain great parts of their authenticity through their employers, in digital journalism, Hayes et al. (2007) argue, users should ask themselves if a news platform is merely aggregating or producing original content. Media companies communicating to their audience that channels unaffected by the platform eco-system allow for greater accountability on their part but also require alternative models of funding should encourage users to resort to such channels.

Greater competition between media companies should, in theory, favor those providing the best product. On platforms, the popular content is appealing to the masses, which is also mentioned by Bardoel (2003) as one of the effects of the market frame. The only option here is to reach audiences on channels fully controlled by publishers, where media

companies can set their own standards of integrity and hope that consumers see the value in this service.

4.3. Citizen journalism vs. professional journalism

Generally, experts believe that citizen journalism can be a beneficial addition to professional journalism when certain conditions such as proper vetting and exceptional attention to journalistic responsibility are met. Experts 3, 5, 7 and 9 mention this benefit and the effects it can have on society, such as uncovering social injustices (Expert 2). Yet, they also recognize the blurring lines between citizen journalism and professional journalism.

> […] and what you got at the same time, with the people who still continued blogging: [they] professionalized themselves. So that very often you cannot really tell the difference between a blog and a news medium has become almost arbitrary (Expert 8).

Incorporating content journalists see on platforms requires a great deal of responsibility, also when those sources have the potential to harm innocent people (Expert 4, 5, 7, 9, 10). Special attention must be given to source checking in this context.

> I always say, treat it like it is your, any other source, check, check, check, check again, you know? Because you don't know where it comes from. (Expert 6).

In total, media literacy in new media was mentioned several times by almost all experts. For example, the publishing public is not equipped with the required knowledge to know when and what to publish on digital platforms:

> […] somebody who happens to be in close proximity of an attack or an act of violence and films the whole thing. I would like to see, that this person would recognize that it is not a good idea to upload the whole thing to Twitter, because A: personal rights of the people that are shown are being violated, B: because, for example, younger people are able to watch it and youth protection is maybe also a relevant topic (Expert 4).

Expert 2's assessment of the current situation is similar. There are no publicly known guidelines yet for users clarifying when it makes sense to publish their own content and when

it would be better to refrain from doing so, which might users to promote unwanted behavior on platforms such as promoting violence and crime.

Concerns about an increased responsibility for media companies when it comes to citizen journalism were mentioned by more experts (4, 5, 7, 9, 10) than possible benefits for improving the quality of coverage (3, 5, 7, 9). Overall, platforms have greatly simplified the process of publishing, leading to more content and therefore a much more complicated process of selecting appropriate photos or texts. Usher's model (2016) might be able to provide a viable model for journalists looking to incorporate citizen journalism into their own content. Similar issues regarding the dangers of citizen journalist were also identified by Carlsson & Nilsson (2016). Their study describes the user's lack of knowledge when it comes to participating in journalistic media. While platforms allow the formation of a closer relationship between media users and journalists and might strengthen participatory democratic processes, they are also showcasing unwanted behavior such as racist abuse in online settings.

4.3.1. User generated-content on platforms

The question of how to deal with user-generated content remained unsolved when experts were asked. Uncertainty about the responsibility of content on platforms and the labor-intensive process of moderating content were the most important themes in this context. An abundance of digital content was recognized by Experts 1 and 5, which is closely related to the digital nature of platforms that encourages permanent sharing of thoughts. There was no agreement, however, if platforms should be held accountable for user-generated content. Expert 4 and 9 believe that platforms, such as Facebook, have a certain responsibility for content that is published and accessible to others, while Expert 3 supposed that platforms are not responsible for such data. It is rather more a question of enforcing rules that are already in place and those rules becoming active when there is an actual complaint. Expert 6 mentions that a press council should not be concerned with comments on those platforms since they do not constitute journalistic content. Again, the unclear definition of where to place platforms in digital media interferes with a clear position on how to deal with this issue.

Because of the labor-intensive work moderating comments requires, Expert 6 believes journalists should rather invest the time they would spend deleting comments to produce good journalism. When established channels amplify user-generated content and improve its visibility, Expert 4 adds that integrity is boosted at the same time. Users who are not aware of

how easily personal rights can be violated by publishing digital content would benefit from guidelines addressing this, leading us to the next part.

4.3.2. Media literacy

Improving media literacy was a popular topic in tackling a variety of problems that arise with platforms and a changing media industry. Overall, experts notice a general lack of digital media literacy in today's digital environment. Media companies are called upon to educate their audience about the pitfalls and opportunities in digital media. Experts 2, 6 and 8 believe that increasing media literacy would defuse the dominant position platforms have right now:

> I think most important is actually that people choose alternative platforms, that there is a multiplicity of these kinds of mediator platforms. And there has been, I mean, you could say it's not just a utopia or wishful thinking because I think it has very much to do with media literacy, and the media literacy at the moment is not existent (Expert 8).

Furthermore, media companies should invest in media literacy to raise awareness how to correctly judge and assess media sources based on the expectations a consumer has for them (Expert 2). It is important to show users that choices they make on platforms have consequences for the content they see:

> […] why did I see this horrible advertising? Yeah, because you probably clicked on horrible sites before. So, if people realize that everything they do has a consequence on what they see next, that's a thing I think (Expert 9)

Digital literacy in new media would also have a positive effect on citizens access to a digital public sphere (Expert 5). One expert even went so far as to compare the current state of media as requiring a digital enlightenment, comparable to the Enlightenment that emerged in the public sphere.

> You have to start at a lot of places, just simply increasing media literacy systematically, and in this sense, building autonomy and for me, the central keyword is the age of digital enlightenment. We had an age of enlightenment and now we need a new one, an age of digital enlightenment (Expert 2).

Traditional views on media are outdated and have to be replaced by a differentiated view that is adapted to a new media environment (Expert 2). A difference between media literacy and critical media literacy was pointed out by Expert 8.

> So it took centuries, to have, well first of all literacy at all, that everyone can read but on top of that, also to have critical literacy, that you don't take, believe everything that is printed on a piece of paper.

Concluding, Experts 2, 4, 5 and 7 criticize that users lack required knowledge to be aware of the consequences publishing news-like content on platforms might have for others. Paradoxically, the cultural embeddedness of digital media does not necessarily mean the appropriate habits are embedded as well. The problem is partly self-induced by media companies, which did not invest in media literacy to counteract the current situation (Expert 2, 6).

Experts 2, 5, 6 and 8 declare a need for a raise of media literacy on all levels and claim that it would help solve a lot of issues that emerged with the dominance of platforms. Judging content in digital media in terms of content (Hayes et al., 2007) and facilitating a more conscious conduct when it comes to algorithmic decision making (Diakopoulos, 2014; 2016) are the overarching themes that all fall under the category of digital media literacy. Developing an awareness of how algorithms shape the way people perceive their surroundings, developing to trust media companies outside of platform environments and learning how to properly use new publishing tools such as live streaming or picture sharing are the most important themes that emerged in the context of media literacy.

5. Discussion and conclusion

This thesis examined established and proposed frameworks of holding media companies accountable when publishing on digital platforms, especially considering the yet unregulated space of an abstract and diverse digital public sphere where algorithms act as gatekeepers and curate content. Using expert interviews in a qualitative approach enabled the researcher to uncover understandings that are not yet evidenced by formal regulations or policies, which was especially relevant considering the fast changing nature of platforms. Research on the effects that algorithmic decision making has on consumer's belief is still immature, yet the potential for possibly tremendous influence on public opinion has been acknowledged by several researchers. Media companies active on curated platforms act within a set of conditions that are quite different from that of traditional media. Regulations here are not established yet, neither are guidelines on how to effectively deal with possibly biased and unreliable information. For this reason, the research question for this thesis was:

How can media companies, governmental institutions, public institutions redefine or adapt news related media policies in accordance with algorithmic accountability on platforms and normative expectations of the public sphere?

Analyzing interviews conducted with 10 media experts active in research or in a professional setting, five main themes have emerged within each of the areas of professional responsibility, public responsibility, the political frame, the market frame, and media literacy as an overarching concept guiding two of the introduced models to vet algorithms and digital content. Finally, considering the social character of most platforms that rely on users to share content, the concept of citizen journalism was contrasted against professional journalism to find practices and possible benefits for public debate. Media companies being active on platforms should disclose their operating principles and invest in media literacy and to show consumers what amounts for quality journalism. Furthermore, it is crucial to decide whether the type of journalism they want to bring to their audience is suitable for platforms or rather delivered on their own channels. Political actors should consider breaking up platforms and incentivize the creation of alternatives to boost competition and allow for different choices. Overall, digital media literacy is virtually not present in consumers' minds but vital for a differentiated debate about the impact it has society. In the following part, each of the sub-question will be answered with regard to the involved actors.

5.1. Sub-question 1: Policies regarding media companies

How can media companies redefine or adapt news related media policies in accordance with algorithmic accountability on platforms and normative expectations of the public sphere?

The findings conclude that professional responsibility for journalists being active on platforms is mostly concerned with increasing transparency in how they produce news. When gatekeeping processes are unclear to the user, the way content itself is selected and the act of production should be presented in a transparent and comprehensible way. This way, journalistic integrity can also be increased, as it a unique feature to distinguish oneself in the medley of digital content available on platforms. News should be a product of professional journalists and not just a collection of user generated content. Software can be used to increase the quality of journalism, for example, to check sources. Platforms incentivize content that is popular in social networks, which does not lead to an increase of "tabloid content", but rather to a greater visibility of this type of content. Because platforms and most media companies act as for-profit companies, the market frame was deemed to be more fitting setting by the interviewed experts.

To stand out and bind consumers to a news brand, the experts believe media companies should strengthen their institutional authenticity and demonstrate why good journalism needs proper funding and how monetary resources are spent to improve content and ensure quality features such reliability and authenticity. Being transparent on platforms is in direct contrast to the philosophy of tech companies relying on offering the best possible product to its users. Pressured by shareholders, platforms do not care what type of content is being published via their channels as long as it keeps users active on the site. Media companies, on the other hand, experience a dilution of their brand when using platforms as a distribution channel. Content is easily interchangeable and is associated rather with the platform itself than to the media company.

Platforms do not constitute the ideal environment for such a strategy since everything occurring there is designed to sell a preferably high degree of user attention to the highest bidder for ad-placement. Therefore, steering consumers to their own channels and offering reasonably priced subscription models appears to be the best solution for this strategy. The current situation is also partly self-induced by media companies that have relied decades on a functioning relationship between print and advertisers while neglecting to invest in a community that values and recognizes well-researched content.

When it comes to citizen journalism, it is vital for journalists to treat such sources just as every other and check them for accuracy and reliability. Such content has the potential to add to a public debate about injustice in society, as experts 2 and 10 demonstrated based on recent examples. However, separating professional and citizen journalism is almost impossible on platforms. While being potentially a reliable source for content, especially when timely reporting is needed, incorporating user-generated content can pose a great danger to other people. The framework Usher (2016) provided mentions best practices that can be applied when it comes to vetting sources on social media. In some cases, journalists also need to raise their own media literacy regarding user-generated content, as some experts mentioned. The sheer abundance of content requires a different approach to sources than traditional media.

Lastly, a general lack of media literacy regarding platforms and especially algorithms was recognized by most experts. Judging content, recognizing curated content and being aware of gatekeeping processes are skills that could contribute to more balanced and self-aware debate on platforms. The responsibility here lies also in the hand of the media companies, which should present consumers with ways to do just that, much like the demand for increased transparency of processes involved in producing news content. Platforms have changed the way people consume media profoundly, requiring a form of digital enlightenment, as one expert put it.

5.2. Sub-question 2: Policies regarding governmental institutions

How can governmental institutions redefine or adapt news related media policies in accordance with algorithmic accountability on platforms and normative expectations of the public sphere?

Actions taken in a political framework are considered to be not as effective when it comes to regulating media companies' content and the formation of monopolies and were therefore not a focus of the framework (Bardoel & d'Haenens, 2004b). Yet, 3 experts mentioned that breaking up platforms by intervention of the state might be an option to decrease the power they hold over media companies and the public at the moment. By acknowledging that platforms are the ones to blame and not mentioning global media conglomerates as part of the problem, the experts are also admitting that the new power structures are in favor of the digital distributors. A still missing definition of platforms as

distributors or content providers adds to the difficulty in this context and makes them hard to regulate. Besides, a lack of diversity regarding the choice of platforms users have was also identified as one of the main reasons for the dominant position platforms occupy. Subsidizing the creation of new platforms could undermine the current monopolistic structures.

5.3. Sub-question 3: Policies regarding public institutions

How can public institutions redefine or adapt news related media policies in accordance with algorithmic accountability on platforms and normative expectations of the public sphere?

Public responsibility can only be a legitimate claim to media and platforms if the public demands it. Right now, awareness is hardly present among consumers, which is why bringing attention to algorithmic decision making is one the steps experts mentioned. This awareness should be increased in both, academia and the public. Awareness is necessary but only a part of the process. For the public to be involved in a debate, there has to be critical interest in the topic also. Some experts were not sure whether it will be desirable for all users of platforms since for some of them the sheer value of the benefit is the only thing worthwhile in this context. Diakopoulos (2016) provides a detailed description of a possible model of judging algorithms, yet he also mentions that knowing how they work might have a totally different effect on users. Concerning self-organized institutions such as the press council, experts believed that the lack of severity of its sanctions on traditional media would be similar to digital media. Furthermore, even regulatory measures keep failing to have an impact, since, as one expert mentioned, the current laws are simply not made to deal with the abstract form of the public that is present on those platforms.

5.4. Theoretical implications

The abstraction of a model digital public sphere to a plurality of digital platforms is new in the concept of being accessible virtually everywhere, even ignoring national boundaries. Exactly this is what makes governing of such a space such a tedious task. When multiple nations are involved, the question of who is responsible is easy to ask but hard to answer. Ideally, the market frame and measures taken within professional responsibility seem to be most applicable in this situation. Regulation by law is futile for the most part if

platforms are able to provide their services within multiple nations while only being legally registered in one country.

Bell and Owen (2017) described the implications for media companies acting in the space of a platform press quite accurately. Just like the experts, they predicted that media companies will most likely either seek out their own channels to reach their audience or simply detach themselves from the act of publishing and leave this part to whatever third-party platform they consider most fitting for their purpose. Incentivizing good journalism on platforms seems almost impossible when everything there is designed to sell attention and visibility to the highest bidder.

Professional responsibility seems to be as important as ever, possibly even more than it was before. Experts believe that the only way the trust of the public can be regained is by documenting and publishing every step that leads to the creation of news. Ensuring that consumers experience why news organizations publish on the platforms they use and not on others, how they create content for different outlets and a detailed description of fact checking and source vetting seems to be the best answer in this case. When everybody participating on a platform can also be a citizen journalist there, the most important differentiator media companies can count on is the trust and credibility associated with their name, something that is hard copy and even easier to destroy.

The trend towards answerability and away from liability resurfaces in the findings (Bardoel, d'Haenens, 2004a). Holding media companies accountable on platforms must always happen in conjunction with said platforms. Regulations there are, however, hard to enforce and are vulnerable to the rapidly changing technology utilized on platforms. By assigning values of credibility and integrity to themselves, media companies should be able to circumvent at least some the restrictions the fragmented platforms pose for them. Policies set to prevent the formation of an overpowered press as it emerged in the mid-century should, according to the paradigm shift deal with the freedom of communication and access to information (Van Cuilenburg & McQuail (2003). On platforms, access is theoretically available for everybody but still depends limiting factors such as wealth and digital literacy. The widespread agreement among the experts that digital media literacy must be vastly improved repeats McQuail's and van Cuilenburg's predictions. Easier ways of publishing and a mostly invisible and automated process of curation make it hard for media consumers to understand the consequences their choices have on platforms.

Unregulated discussion on platforms can be a breeding ground for hateful speech and biased opinions. The emotional character can either have positive effects, as Hasell & Weeks

(2016) and interviewed experts conclude, but also hinder a well-balanced discussion. All five points Fishkin and Luskin (2005) identified that are vital for a deliberative discussion can be relevant on a platform, but can just as easily be disturbed by bots or selection processes which are not visible to participants.

5.5. Limitations of research

Although there are several models used in this research that are dealing with algorithmic and media accountability and media credibility, all of them were published rather recently and have yet to prove their significance in this context. Adding to that, unclear definitions of what platforms are in the digital space regarding distributor or creator interfere with formulating a clear approach to media accountability, also in the context of this research. The established frames of accountability did provide starting points, yet are not completely adaptable to the abstract space of digital communication where participants are always not only spectating but always creating content. Furthermore, the concept of a connected public makes it hard to distinguish where a digital public sphere begins and where distribution channels of media companies end, again, creating conflicts of the applicability of established frames of accountability to this environment.

Further research must firstly access in which magnitude algorithmic processes influence the formation of public opinion to carry forward a discussion about possible measures that can be taken to contain and control such effects. For now, research is certain that a possible impact can be considerable, but the underlying mechanisms are still to be discovered. This uncertainty was also observable during research and began while searching for appropriate interviewees. As was mentioned before, some institutions did not feel like they could contribute to this research topic in an adequate way or did not see the relevance of it, which was also reflected in the results. The technical features of algorithms and the novelty character still surrounding it were an obstacle for some experts to clearly voice their opinions.

Since the sample for this research consisted of researchers, professional journalists, and activists, opinions were quite diverse and were influenced by the corresponding professional background of the interviewee and therefore subject to bias. Experts working as media professionals were, for example, not aware of the limitations one might encounter when accessing discussions on platforms, while some researchers and activists were critical of the system of public broadcasting. As mentioned before, these relationships tend to get lost in thematic analysis to accommodate for an exclusive account for emerging patterns. To get

more distinct opinions and rule out distortions caused by personal and institutional biases, further qualitative research could focus on interviewing several experts active in the same field.

A pan-European study could contribute to the discourse and discover issues revolving around algorithmic curation processes on platforms present in other countries. Germany and Netherlands are quite similar in the composition of their media landscape, which was also observable in the results. Analyzing countries where different expectations of media apply and measures of regulation are divergently organized might add to the context of how private, public and governmental institutions ought to approach a media landscape shaped by platforms.

Regarding methodology, the assumption that algorithmic transparency should be raised was based on the theoretical framework and brought into every interview as a prerequisite, possibly biasing some experts to agree on this topic compared to merely phrasing the question in a more neutral way.

5.6. Final conclusion

The concept of an ideal digital public sphere embodied on platforms is still an illusion, just like the original idea had its flaws. Habermas' model was highly curated as well, imposing a sense of ruling mediation on every aspect that was debated inside this sphere. Prior mediators such as publishers and distributors have been replaced by algorithms and a digital infrastructure. The mathematical nature of algorithms theoretically makes them more transparent than any human-induced action can ever be because everything is based on a predictable model, making every single step traceable to allow for an exact account of why a certain decision was made. Provided the owner of the algorithm allows for such an investigation, of course. De facto, private platforms will most likely never make their algorithms public in fear of being copied and losing their competitive edge as they constitute a major part of their business model.

For media companies that are striving to provide quality journalism to their readers, the platform business model seems not to be the ideal channel of distribution. Although the content itself is irrelevant for the operators, the ecosystem promotes content that is popular, easily produced, consumable in a short amount of time and encourages people to share and engage with. Telling credible and compelling stories is certainly possible on platforms, yet most likely without reaching much of the needed audience to finance the structures that contribute to a well-balanced and researched piece of information valuable to public

discourse. This, however, is partly caused by the user's lack of skills to navigate and publish on platforms and because established media companies were comfortably relying on the classical model of advertising in exchange for attention to long, without reacting to the changing digital environment. The public broadcasters missed their opportunity to interact with their audience on platforms and are only slowly catching up to the private sector. Eventually, media companies must decide if they want to abide by the rules set by the platforms or build their audience outside this system by binding their readers directly to their brand.

The second keyword here is media literacy, which should not only be promoted by media companies but also by public institutions such as universities or pressure groups. Legislating institutions must ask themselves how to deal with the challenges platforms create for democratic societies. Breaking up big players might be an option, but should always be considered in the light of the digital ground those companies operate. An abstract and intangible space is much harder to regulate as other industries. Power structures involving discourse in digital media are mediated by consumers, the platforms, public institutions and private institutions, which all play an important part in providing a space that is fit for deliberative discussion.

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