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# Algorithmic News Diversity and Democratic Theory: Adding Agonism to the Mix

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## ABSTRACT

The role news recommenders can play in stimulating news diversity is receiving increasing amounts of attention. Democratic theory plays an important role in this debate because it helps explain why news diversity is important and which kinds of news diversity should be pursued. In this article, I observe that the current literature on news recommenders and news diversity largely draws on a narrow set of theories of liberal and deliberative democracy. Another strand of democratic theory often referred to as ‘agonism’ is often ignored. This, I argue, is a mistake. Liberal and deliberative theories of democracy focus on the question of how political disagreements and conflicts can be resolved in a rational and legitimate manner. Agonism, to the contrary, stresses the ineradicability of conflict and the need to make conflict *productive*. This difference in thinking about the purpose of democratic politics can also lead to new ways of thinking about the value of news diversity and role algorithmic news recommenders should play in promoting it. The overall aim of the article is (re)introduce agonistic theory to the news recommender context and to argue that agonism deserves more serious attention.

## KEYWORDS

News recommenders; news diversity; recommender systems; algorithms; deliberative democracy; agonism

## Introduction

News organizations and news aggregators often use recommender systems in their online environments to automatically serve (prospective) readers with a selection of articles.<sup>1</sup> To serve large audiences with recommendations, news organizations and news aggregators are increasingly turning to *algorithmic* news recommenders (Diakopoulos and Koliska 2017, Helberger, Karppinen, and D’Acunto 2018, Thurman *et al.* 2019, Bodó 2019). As with all algorithmic recommendation systems, it is often asked how such systems are designed and what they are optimized for. Or, put differently, which values they embody or aim to pursue. In the context of algorithmic news recommenders, most attention has been paid to the value of news diversity. There is a lively literature which argues that news recommendations should be *diverse* because

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only when citizens have access to, or are proactively served with, a diverse media diet, they can perform their role as democratic citizens.

The critical literature on algorithmic news recommenders and news diversity is thus inextricably linked with democratic theory. Both diversity and democracy aren't straightforward concepts. 'Diversity' in the abstract doesn't mean anything. We can and should always ask the question 'diversity of what?' – do we care about diversity of topics, diversity of perspectives, diversity of media organization ownership, and so on; and do we care about source diversity, content diversity, or exposure diversity (Napoli 1999)? The same, of course, holds for democracy; there exist many models of democracy (Held 2006). So, the question of what *kind(s)* of diversity one values is tied to the question what one takes democracy to mean or to be about.

It is therefore unsurprising that scholars have tried to figure out how different models of democracy come with different normative demands for (algorithmic) media diversity. These useful mapping exercise can, of course, only discuss a limited number of models of democracy. Most scholars therefore restrict themselves to, usually, three or four ideal types of democracy (see, e.g. Ferree *et al.* 2002, Strömbäck 2005, Christians *et al.* 2009, Dahlberg 2011, Curran 2015, Helberger 2019) with a strong emphasis on theories of liberal and deliberative democracy. Several theorists have already argued that *agonistic* theories of democracy remain underrepresented in debates about the democratic role of the media (Dahlberg 2007, Raeijmaekers and Maesele 2015; 2017, Maesele and Raeijmaekers 2020). Agonism is a theory that is often explicitly contrasted with the dominant liberal and deliberative democracy perspectives on news diversity. These dominant perspectives share a focus on finding rational, procedural means to solve political and ideological conflicts by pursuing rational consensus in a public sphere characterized by pluralism. Agonism denies the possibility of 'solving' such conflicts in a pluralistic society through rational means and focuses on accommodating democratic conflict to make it productive. From an agonistic perspective, pluralism should be respected and promoted not by designing procedures that help generate consensus, but by always and continuously accommodating spaces and means for the contestation of consensus(-like) positions, actors, and procedures.

In this article, I want to build on these scholars that have recently tried to (re)introduce agonistic thinking to the media and democracy context. More specifically, I want to extend this line of reasoning to the literature on *algorithmic news recommenders and news diversity*. I aim to show that the agonistic perspective that is starting to be developed in the more general literature on media and democracy can also be of use in the algorithmic news recommender context in at least two ways. First, if we want to know what kind(s) of diversity should matter in algorithmic news recommendations, agonism as a democratic theory has interesting things to teach us. The concept of agonistic pluralism can help us think differently about the types of diversity metrics – the bread and butter of news recommender systems – we can envision. Second, the inclusion of agonistic perspectives forces us to ask more *structural* questions about diversity and news recommenders. A critical analysis of news recommenders shouldn't start from the observation that we simply happen to have tools called algorithmic news recommenders that, in a next step, need to be optimized for (some type of) diversity metric. The very

use of algorithmic news recommenders comes with questions of techno-solutionism, (platform) power and the possibilities for contestation of said power, the legitimacy of nudging-like strategies in the news context, and so on. Such important questions follow naturally from more serious engagement with agonism.

This article is structured as follows. In the next section, I briefly discuss what algorithmic news recommenders are and I explain why I adopt a broad definition of this term. In the section called Current Literature, I turn to the current literature on (algorithmic) news diversity and democratic theory. The aim of this section is to show that a few models of democracy receive a lot of attention, while agonistic theory is either ignored, or only discussed briefly and in an unsatisfactory manner. Then, in the section called Agonism, I turn to agonistic theory itself and explain in more detail how it differs from the standard liberal and deliberative democracy perspectives on the democratic value of news diversity that are so prominent in the literature. In the last section called How Agonism Can Inform Diversity Thinking in Algorithmic News Recommenders, I sketch two ways in which agonism can enrich the literature on algorithmic news recommenders.

## Algorithmic News Recommenders

In this section, I briefly explain what the term ‘algorithmic news recommenders’ refers to in this article. The ‘recommender’ portion of ‘algorithmic news recommenders’ refers to the use of so-called ‘recommender systems’<sup>2</sup> to somehow *select* a number of items out of a much larger pool which can then be presented in an interface to people. Recommender systems are typically used in settings where there is more information available than can be seen and/or ‘consumed’ by people. So, a selection must be made in order not to (cognitively) overload the user of the interface. Think, for instance, of music or video streaming services: they cannot show their users a sheer endless, unstructured list of all available content. Users would quickly get lost and wouldn’t be able to find what they want or need. The service provider will therefore often resort to a recommendation system which organizes the content in some way (e.g. by genre) and makes a limited number of suggestions based on some metrics (e.g. popularity, historic viewing behavior user, similarity). Based on this first, very basic description of recommender systems, it already seems to follow that when thinking about diversity in some shape or form in recommender systems, we are likely going to end up considering *content* diversity most of the time. This is only natural because recommender systems are – in essence – an answer to an abundance of content. In the section Agonistic Diversity Metrics?, I will briefly return to the tendency to focus mainly on content diversity in the context of (news) recommender systems, because this tendency may also tell us something about what we can – and cannot – expect from algorithmic news diversity solution.<sup>3</sup>

Metrics play an important role in the recommender systems literature, as they explain *what* (computational constructs) recommender systems are optimized *for*.<sup>4</sup> A second important reason for the use of recommender systems is that it affords power to the service provider. Put simply: a service provider can (and often will) *shape* the interface – which is effectively the user-facing end of a choice architecture (Thaler and

Sunstein 2008) – to make it fit their own goals. One can, for instance, decide to mainly show content that is advertiser-friendly. A significant portion of the recommender system literature is, however, framed in terms of how recommender system can best serve the ends of users (see, e.g. Knijnenburg, Sivakumar, and Wilkonson 2016 for a study on self-actualization) or can be made more user-friendly (see, e.g. Tintarev and Masthoff 2015 on explainability in recommender systems).

The ‘algorithmic’ in ‘algorithmic news recommender’ simply refers to the fact that recommender systems are built to produce (most of) their recommendation automatically. Precisely because of the large number of items that recommender systems must make their selection from, automating large parts of the recommendation process is necessary. Humans are, of course, always somehow involved in determining selection criteria, designing the interfaces, (occasionally) overseeing the recommendations that are produced, and so on. Diakopoulos (2019: 5) similarly stresses that “The role designers and operators play in algorithmic news media is not to be understated: they make key editorial decisions about how algorithms are parameterized, the defaults chosen, what the algorithm pays attention to, and indeed the values baked into the core of the system itself”. There is also a more general literature which addresses how humans are always involved or implicated in ostensibly fully automated (AI-powered) systems (see, e.g. Bucher 2018, Amoore and Others 2020). This literature problematizes the sharp distinction between, on the one hand, so-called fully automated process, and, on the other hand, human tasks. I acknowledge the problematic artificial distinction often made between ‘automation’ and ‘human involvement’. But for now, it suffices to say that I focus on the literature which is concerned with news recommendations that are generated *almost* fully automatically.

The ‘news’ in ‘algorithmic news recommenders’ refers to the fact that, obviously, I am dealing with algorithmic recommender systems that recommend news to users. For the purposes of this article, I do not need to dwell on the difficulty of defining what exactly counts as ‘news’. Let me just note that many types of news content – written articles, podcasts, videos – can be recommended to users. Moreover, recommendation of news content can happen on various platforms. There are of course the websites of newspapers which show a selection of news articles from their own archive. Newspaper websites typically feature some personalized recommendations (‘you might be interested in’), but as of now mainly contain recommendations common to all users. Social media platforms (Facebook, Twitter, Instagram) have also increasingly become sites of news consumption where nearly all major news organization (newspapers, public and private broadcasters) run their own accounts to spread news content. On top of that, a platform like Facebook also functions as a news aggregator *itself*, with its own algorithmic news recommender. This list of examples is not meant to be exhaustive and merely aims to show that algorithmic news recommendation happens in many shapes and forms, in many places on the Internet.

So, when I speak of algorithmic news recommenders, I refer to any type of digital service or platform that recommends news items (widely construed) to its users in a largely automatic fashion. Because my argument in the following sections focuses on the role agonism can play in better understanding and criticizing algorithmic news recommenders, I do not want or need to limit myself to a much more precise definition of algorithmic news recommenders.

## Current Literature

### *Models of Democracy, Models of Democracy Everywhere*

There is a substantial literature on the question of news diversity. This literature asks *why* news diversity matters and *what kinds of* diversity are important. To explain the value of news diversity, the role the media play in healthy democracies is often emphasized. News diversity, then, takes on an *instrumental* value; it is important because it contributes to the realization/strengthening of something else of value – democracy. As this literature rightly points out, our understanding of *why*, and *what kind of*, news diversity is important is now tied to the question of what theory of democracy one supports. Democracy is valued almost universally, but there are substantially different theories on what the ultimate end of democracy is, and how that end can or should be achieved. News diversity and democratic theory are thus inextricably linked.

### *The Dominance of Theories of Liberal and Deliberative Democracy*

There are, roughly speaking, two partly overlapping literatures: one on ‘models of democracy’ as such and the ordering of the public sphere, and one on ‘models of democracy’ and news diversity (sometimes also referred to as ‘media pluralism’<sup>5</sup>). The latter builds heavily on the former. I will discuss these partly overlapping literatures together, because agonism seems to be largely missing from both.

Most articles on models of democracy – either in general or in relation to news diversity – identify three or four models of democracy. Strömbäck (2005) provides a clean, brief overview of four ideal types one often encounters in some shape or form: (1) a standard minimal liberal model which requires citizens to respect basic institutions, rules, and procedures, but doesn’t require much more beyond that (often framed as ‘maximum autonomy for citizens, minimal amount of interference with behavior of individuals’); (2) a Schumpeterian ‘competitive’ or ‘electoral’ model where elections are seen as the most important democratic institution and elites competing for votes of citizens are the most important democratic mechanism; (3) a participatory model which emphasizes how democracy is an *activity* which requires citizens to engage in public life; (4) a deliberative model which emphasizes how properly structured deliberation can involve citizens and lead to better decision-making or, ideally, consensus. It bears emphasis that individual authors often opt for slightly different categories. Still, Strömbäck (2005) provides a good overview of the models of democracy that dominate the literature on news diversity.

This observation is supported by a literature review done by Karppinen (2013a) who analyzed the use of democratic theory in media and communication studies. Karppinen finds that theories of deliberative democracy, participatory democracy, and liberal democracy are used most often. In the conclusion, Karppinen (2013a: 15) writes that

To some extent, the results confirm that much of the discussion revolves around a broadly ‘Habermasian’ conceptions of democracy, even if some of his critics have also received a fair amount of attention. While the dominance of Habermas and the framework of deliberative democracy is hardly surprising, there is also some support also

[sic] for the claim about the relative dearth of engagement with more contemporary critical political theories in media and communication studies.

That is not to say that agonism is completely ignored in the literature. Some authors do include models that resemble – or are explicitly framed as – agonism. For example, Helberger (2019) briefly addresses but doesn't fully develop a 'critical' perspective, Bozdag and Van den Hoven (2015) include republicanism and agonism, and Ferree *et al.* (2002) include 'constructionist theory'. The attention these authors pay to agonistic theory is promising and these authors do take (perspectives that resemble) agonism seriously. There are, moreover, multiple authors that try to explicitly theorize (the first contours of) an agonistic approach to questions of media (pluralism) and democracy. Dahlberg (2007: 834-838), for instance, shows how the Habermasian public sphere concept can be "(re)radicalized" by building on theories from the agonistic tradition. Similarly, Raeijmaekers and Maesele (2017: 657) write that "only a small number of scholars have recently been found to start from the concepts of ideology and contestation in their analysis of pluralism in news reporting, regarding both the range of positions in media debates and particular modes of communication". They themselves do build on agnostic theories to challenge the notion of objectivity as it is commonly understood in journalism studies (see also Raeijmaekers and Maesele 2015 for use of an agonistic model of democracy to analyze four different approaches to media pluralism).

So, despite the dominance of theories of liberal and deliberative democracy, some scholars have started to propagate the use of agonistic perspectives in discussions on media (pluralism) and democracy. To the extent that agonism or agonism-like theories are discussed in the news recommender context, two main insights tend to be – often briefly – highlighted. First, the role *emotions* can, or should, play in news media. Here, agonism is juxtaposed with (the very popular [see Karppinen 2013a]) deliberative theories which are seen as propagating rational, dispassionate debate aimed at arriving at a rational consensus. Agonistic theory is then introduced to suggest that emotions and other forms of communication and representation can serve important democratic functions, such as getting people involved, or making democratic process more inclusive by de-emphasizing the importance of (purely) rational debate (Helberger 2019). Second, and relatedly, agonism is sometimes used as a shorthand for the need to question power relations in the media, and democratic society more generally. The idea here is that an insistence on, for instance, deliberative models of democracy implicitly works to exclude certain groups and perspectives from public debate.

These two insights are valuable. But precisely because agonism or agonism-like theories have received comparatively little attention, agonism remains undertheorized in the (algorithmic) news diversity and recommender context. My aim in this article is explicitly exploratory in nature; I see this article as a first attempt to introduce agonistic theory to the more technical context of algorithmic news recommender design.

## Agonism

In this section I aim to provide a brief overview of agonistic theory which captures its core features and helps us think through the possibilities agonism offers for news

diversity theories in the algorithmic news recommender context. I will mainly rely on the work of Mouffe (1999, 2000, 2002, 2005) because she is the most prominent scholar working on agonistic theory and is often used as the point of reference in the literature.<sup>6</sup>

### ***Politics and Deliberative Democracy, according to Mouffe***

To understand the agonistic project of Mouffe, I find it informative to focus on the question of what democratic politics is *about*, or, put differently, what the *purpose* of democratic politics is. Mouffe often addresses this question by opposing her own agonistic conception to “rationalist approaches” and “deliberative democracy” which she takes to be antithetical to agonism (see, e.g. Mouffe 2000: 132; Mouffe 2005: 9). In *The Democratic Paradox*, for instance, she announces in the introduction that “A significant part of my reflection consists in bringing to the fore the shortcomings of the dominant approach in democratic theory” and “I put special emphasis on the negative consequences of envisaging the ideal of democracy as the realization of a ‘rational consensus’” (Mouffe 2000: 7).

Mouffe’s main opponent in her work on agonism is the tradition of deliberative democracy. She ‘credits’ Habermas for propagating a view of politics as a process through which disagreement can be *resolved* in a rational and legitimate manner. Addressing proposals for deliberative democracy, Mouffe (2000: 83) writes that “[t]he specificity of their approach resides in promoting a form of *normative* rationality”. The word ‘normative’ bears emphasis here; by following the correct procedures for deliberation which are meant to ensure *rational* deliberation, the outcomes of such a process are to be deemed legitimate. “Their [i.e. proponents of deliberative democracy] central claim is that it is possible, thanks to adequate procedures of deliberation, to reach forms of agreement that would satisfy both rationality [...] and democratic legitimacy” (Mouffe 2000: 83). Different theorists of deliberative democracy formulate (slightly) different requirements for the process of rational deliberation, but most would agree that deliberative procedures should be characterized by “impartiality and equality, openness (no one and no relevant information is excluded), lack of coercion, and unanimity” (Mouffe 1999: 747). Put simply, all citizens should have equal access to the public sphere, should be free to engage in deliberation, and during deliberation no power asymmetries should be present. In public spaces that are structured accordingly – as ideal speech situation<sup>7</sup> –, citizens will deliberate together and arrive at rational, legitimate consensus. The end of democratic politics, in this model, is to arrive at such a rational – and therefore legitimate – *consensus*.

To be sure, this brief description of deliberative democracy is a description of deliberative democracy *as Mouffe perceives it*. She describes what could be called an ideal type of deliberative democracy in the Habermasian tradition and many specific theories of deliberative democracy can deviate (slightly) from this ideal type. Dahlberg (2004) has argued the Habermas’ conception of the public sphere, and more specifically the conditions for public reasoning, tend to be poorly understood, and, as a result, misrepresented. In a later article, Dahlberg (2005) mentions Mouffe as an example of what he calls a ‘difference democrat’ that reads Habermas in an overly narrow,



restrictive manner. He speaks of “poor stylizations” by Mouffe and goes on to argue that on a more generous reading of Habermas one can in fact make much more room for, among other things, contestation and different – allegedly not fully rational – styles of communication (Dahlberg 2005: 116).<sup>8</sup> Moreover, multiple authors problematize Mouffe’s own sharp opposition between deliberative democracy and her own agonistic theory (e.g., Deveaux 1999, Knops 2007, Erman 2009). For now, I want to put these discussions to the side. I acknowledge that Mouffe’s portrayal of deliberative democracy is not undisputed and can be criticized. Still, because Mouffe formulates her own agonistic theory directly in response to deliberative democracy *as she sees it*, I choose to follow her portrayal of deliberative democracy.

### ***Agonistic Pluralism***

For agonistic theorists such as Mouffe, conflict, or clashes of ideologies, political ideals, and policy proposals, are not seen as a problem to, ultimately, be overcome or solved, but as the very essence of democratic politics. Mouffe’s agonistic project consists in showing 1) why conflict and contestation are productive and should be seen as the essence of democratic politics; 2) why the attempt to *eliminate* or *solve* conflict will come with the – often silent – reinforcement of arbitrary power relations; and 3) how conflict should thus not be eliminated, but organized or managed in a manner that still complies with the demands of democratic politics because we cannot accept an ‘anything goes’ approach.

In *The Democratic Paradox*, Mouffe (2000) observes that there lies a tension at the heart of all modern democracies: put simply, both liberty and equality are embraced as constitutive principles. However, according to Mouffe, it is impossible to fully embrace and respect both principles in a neutral fashion at the same time. The more one prioritizes individual liberty, the more one runs the risk of allowing inequalities to form or letting existing inequalities exist. But if one firmly prioritizes equality, the shepherding of equality will come at the cost of decreased individual liberty. This difficult relation between liberty and equality is, of course, well-known and has already been discussed for ages. Mouffe’s issue, however, is not with this tension itself; rather, she takes issue with the fact that the rationalistic approaches (basically a shorthand for the Rawlsian and the Habermasian tradition) claim to have found solutions to ‘solve’ or ‘overcome’ the tension. This is where Mouffe parts ways with the Rawlsian and Habermasian tradition, because “their mistaken emphasis on consensus [...] sustains their belief that antagonism can be eradicated” (Mouffe 2000: 8). There is no way to ‘solve’ the tension at the heart of modern liberal democracies though; there are only different ideologically/politically motivated ways to settle the tension in a manner that gives preference to either (aspects or forms of) liberty or equality. Notice that Mouffe doesn’t make an empirical claim here; she doesn’t mean to say that sometimes circumstances are such that people will not succeed in coming to a rational agreement or consensus. Rather, Mouffe (2013: 3) argues that “Proper political questions always involve decisions that require making a choice between conflicting alternatives. [...] These are conflicts for which no rational solution could ever exist, hence the dimension of antagonism that characterizes human societies”. The problem, Mouffe

argues, is *not* that there are *only contingent* ways to settle these political conflicts, but rather that political conflicts are often settled in ways that *exclude* other ways of settling the conflicts. The problem, in other words, is that ideologies or political ideas can become hegemonic (Mouffe 2000: 5, 21).

Hegemony is always exclusionary – it establishes an objective social reality, making other positions the de facto suspicious ‘outsider’. Following Mouffe (2018: 55), Aytac (2021: 3) emphasizes that “as antagonism can never be conclusively resolved, any political order is necessarily hegemonic. [...] It is hegemonic in the sense that political institutions act *as if* the interests and values of opposing parties have been rationally reconciled”. Mouffe (1999: 752) herself also says as much: “[...] social objectivity is constituted through acts of power. This implies that any social objectivity is ultimately political and that it has to show the traces of exclusion that governs its constitution”. There is, from Mouffe’s democratic perspective, a pressing need to theorize possibilities for emancipation in response to the hegemonic tendencies of politics. There needs to be space – structurally, not incidentally – for hegemonies to be *contested*. It is here that we find her insistence on agonistic politics of contestation as the motor of democracy. It is precisely by facilitating the confrontation between ideologies and political idea(l)s that established norms and positions of power can be questioned and contested. Mouffe’s emphasis on affording more space to passions and emotions in democratic discourse should also be understood in this context. The emphasis of the dominant Rawlsian and Habermasian tradition on *rational* speech and deliberation can have an exclusionary effect. It establishes *some* forms of (political) speech – i.e. rational, dispassionate speech – as acceptable and legitimate. This is precisely the kind of hegemonic power that should be contested, and arguing for the inclusion of more styles/forms of democratic discourse is a way to do so.

Facilitating conflict does not, however, imply that anything goes. Mouffe certainly doesn’t suggest that there should be as much conflict as possible, or that every type of conflict is (equally) productive. So, the aim of facilitating conflict should be qualified. Mouffe differentiates between *antagonism* and *agonism*. The ultimate aim of politics is not to overcome conflict, but to render it productive by transforming antagonism into agonism. Political relations of antagonism are characterized by both sides perceiving each other as enemies. These enemies do not consider each other legitimate participants in the same public sphere, but as opponents that need to be delegitimized, excluded, or even destroyed. Antagonism, in short, is the epitome of unproductive conflict. This is why antagonism needs to be transformed into agonism, where opponents come to see each other as “adversaries” (Mouffe 1999: 755). One can passionately disagree with an adversary, engage in fierce debates, argue that their position of power should be questioned or even abolished, and so on. But always does one see an adversary as a legitimate party in the public sphere and democratic process. Mouffe (1999: 755-756) concludes that

Contrary to the model of “deliberative democracy,” the model of “agonistic pluralism” that I am advocating asserts that the prime task of democratic politics is not to eliminate passions nor to relegate them to the private sphere in order to render rational consensus possible, but to mobilise those passions towards the promotion of democratic designs. Far from jeopardizing democracy, agonistic confrontation is in fact its very condition of existence.

We are now able to see why Mouffe's insistence on the importance of passions, emotions, and conflict needs to be qualified. Passions, emotions, and conflict are important, but not always and at all cost. To the extent that passionate conflict is motivated by, or has as an outcome, the *delegitimization* of others as participants in the democratic process, it should be condemned. Consider the following example. The corona pandemic has led to passionate, ideological debates on the appropriate response to the crisis. There are proponents of aiming for 'zero covid'; there are proponents of opening up the economy as much as possible, accepting more fatalities and cases of long covid; there are vaccination skeptics; there are medical experts discussing the benefits of large-scale vaccination, and so on. Under conditions of agonistic pluralism, one would aim to accommodate a wide variety of voices, (minority) groups, and perspectives in the public sphere. Moreover, one would not always prioritize the most 'objective,' 'pragmatic,' and/or 'informative' contributions, but also accommodate more passionate as well as anti-establishment contributions. But content of, for instance, a conspiratorial nature which paints 'those in power' as 'dangerous criminals who wish to harm the population' does not deserve inclusion in the public sphere. Such content denies the legitimate standing of the perceived opponent and is therefore simply undemocratic. Similar questions arise in the context of far-right politics and (possibly) anti-democratic speech. Here, as in the case of corona politics, the line between antagonism and agonism is important but also at times difficult to draw (see, e.g. Cammaerts 2009).

## How Agonism Can Inform Diversity Thinking in Algorithmic News Recommenders

### *Promoting a Different – Agonistic – Kind of Diversity?*

Thus far, I have discussed that the academic literature on media (pluralism) and democracy is largely based on liberal and deliberative conceptions of democracy, although a few authors have started to highlight the value of agonistic thinking in this area. I argued for continuing this trend of theorizing agonism in the media context and applying agonistic theory to news recommender discussions with a particular focus news diversity. To do so, I discussed some of the core elements of agonistic theory. I now turn to the question of how agonistic theory can inform the debate on algorithmic news diversity. It is important to note that, to my knowledge, Mouffe herself hasn't engaged with the question of how (algorithmic) news diversity relates to agonistic theory. In an article based on an interview with Mouffe, Carpentier and Cammaerts (2006) do explore the possible implications of Mouffe's work for media theory and journalism studies more generally, but they rely on other authors as well as their own analysis – not on Mouffe's published work or her answers to interview questions – to do so. In what follow, I will therefore present my own arguments for how agonism could, potentially, inform the literature on algorithmic news recommenders and news diversity.

There are, roughly speaking, two ways in which agonistic theory can inform the debate on algorithmic news diversity. First, agonistic theory has something to say about how news diversity itself can (or should) be understood; or, put differently,

which types of diversity metrics are relevant. Second, agonistic theory can raise critical questions about the role of algorithmic news recommenders – as very particular technical tools that perform a very particular set of tasks – within the digital news ecosystem as a whole. Before I discuss these two lines of thinking, I wish to briefly discuss the distinction between ‘diversity’ and ‘pluralism’ to avoid confusion.

### **‘Simple’ News Diversity and Agonistic Pluralism**

As I noted earlier, some scholars prefer to treat ‘diversity’ and ‘pluralism’ as substantially different concepts, while others use these terms interchangeably. Considering my discussion of agonistic pluralism, I want to briefly comment on the use of these terms. Karppinen (2013b: 3) helpfully suggests that if a distinction is to be made, diversity can be “understood in a more neutral, descriptive sense, as *heterogeneity* on the level of contents, outlets, ownership or any other aspect of the media deemed relevant [emphasis added]”. On this reading, we use the term ‘diversity’ to indicate that for the thing we are discussing, there is simply some measurable and significant variance. Pluralism, on the other hand, can be understood as a “broader socio-cultural and evaluative principle” which doesn’t simply refer to empirically observable heterogeneity, but also grounds questions of diversity in normative theories of democracy and society (Karppinen 2013b: 3). On this reading, the term pluralism denotes ‘deeper’ normative issues and questions, pertaining to, for instance, the possibilities of multicultural societies to respect and promote cultural and ideological differences, while also ensuring the proper functioning of democratic procedures and institutions to everyone’s benefit.<sup>9</sup>

Discussing the difference between – or sameness of – ‘diversity’ and ‘pluralism’ becomes especially challenging when different academic disciplines or literatures are discussed. In what follows directly below, I will try to apply insights from the literature on agonistic *pluralism* – which deals with theoretical, normative dimensions of democracy – to the literature on algorithmic news diversity, which deals with questions of how diversity metrics can be constructed computationally. My aim is thus precisely to *both* consider (agonistic) pluralism in its theoretical richness, *and*, at the same time, take the literature that tries to operationalize theoretically complicated matters into – necessarily – simpler, flatter usable metrics. Because I want to do justice to both these literatures, I feel hesitant to fully embrace a very specific position in the ‘diversity versus pluralism’ debate. The reader can see this section as an explicit acknowledgement of the linguistic and conceptual difficulties involved in using these terms.

### **Agonistic Diversity Metrics?**

Having acknowledged the linguistic and conceptual difficulties of discussing diversity and pluralism across disciplines and literatures, let us first look at news diversity itself and see how a computational approach to diversity can be informed by insights about agonistic pluralism. Here, the central question is what kinds of diversity we should strive for in the news context and how those kinds of diversity can be operationalized. In the algorithmic news recommender context this question is often framed in terms

of ‘diversity metrics’ (see, e.g. Diakopoulos 2019: 189; Vrijenhoek *et al.* 2021, Lu, Dumitrache, and Graus 2020). In the current literature there is a strong focus on how various diversity metrics can be used to stimulate the consumption of news diets that conform to the dominant models of democracy described in the sections Models of Democracy, Models of Democracy Everywhere and The Dominance of Theories of Liberal and Deliberative Democracy. It should also be noted that, as already discussed in the section Algorithmic News Recommenders, there is a strong (implicit) focus on content diversity in the literature. In practice, this means that diversity metrics aimed at supporting the so-called (following Mouffe) rationalistic models of democracy receive a lot of attention. There is a strong emphasis on *informing* and *educating* citizens by serving them proper news diets. Authors such as Ferree *et al.* (2002), Strömbäck (2005), and Helberger (2019) have formulated arguments along these lines, where they emphasize how presenting people with a (more) diverse set of topics and perspectives can breed tolerance, mutual understanding, and better conditions for the creation of public forums aimed at rational deliberation and, ultimately, consensus.

A few authors have started to formulate suggestions for how agonistic(-like) theory can inform the news diversity debate in the context of algorithmic news recommenders. One proposal, briefly discussed but not fully developed by Helberger (2019: 1007-1008), is to focus on proactively including more, or a wider range of, content that is “affective, emotional, provocative, figurative” in nature. This proposal is meant to counteract the rationalistic approaches that are so dominant in the literature and that mainly focus on providing a wider range of informative, objective news content to citizens to educate them and/or to stimulate rational public debate. Another proposal by Helberger (2019: 1007-1008) is to include more content on, or by, “marginalized voices” in recommendations. This proposal also ties in with the first proposal, because the more emotional, passionate, or provocative stories/narratives are also precisely those that tend to fall outside of the scope of the rationalistic approaches, thus effectively making them more marginalized.

Both proposals are very much in the spirit of agonistic theory. They respond to Mouffe’s critique that the dominant rationalistic approaches tend to *systematically exclude* content that isn’t aimed at providing information stimulating rational, dispassionate public debate and consensus-building. But the argument I would like to develop now is that these proposals should be *qualified* to be better aligned with the main commitments of agonistic theory. To see why, let us remember that one of the main aims of Mouffe’s agonism is to facilitate productive conflict by creating and maintaining a public sphere where antagonism can be turned into agonism. In other words, there must be a lot of room for citizens and groups to contest, criticize, and question each other, but they must, at the same time, not (come to) see each other as *enemies*. The types of diversity one should find important in this context can certainly focus on including more different ‘voices’ and styles of communication. Vrijenhoek *et al.* (2021: 179) develop an ‘Alternative Voices’ metric which can be used to measure “the relative presence of people from a minority or marginalized group” which can be used to proactively promote content by or for underrepresented groups. Another metric they propose is the ‘Activation’ metric which from a Critical Model (which is roughly aligned with agonistic theory) perspective “leaves more room for emotional

and provocative content to challenge the status quo” (Vrijenhoek *et al.* 2021: 178). Such suggestions could be seen as attempts to ‘deepen’ metrics that are, ultimately, about promoting content diversity; they deepen content diversity by taking more dimensions of content (i.e. it’s ‘voice’ or style, and its ability to activate or provoke) into account.

However, for such metrics to work for agonism, the goal cannot be to just optimize for exposure to as much activating ‘emotional’ or ‘provocative’ content as possible. The line between antagonism and agonism must be kept in mind. Serving people with so-called provocative content can certainly help to stimulate more debate that does not fall within the neatly described confines of Habermasian deliberation. But too much provocative content in general (e.g. recommending provocative content on as many topics as possible) or on particular topics (e.g. recommending lots of provocative content on vaccine hesitancy or immigration policies) could conceivably lead to antagonism where an ‘Other’ is constructed and delegitimized as opponent. So even within the agonistic context which values conflict, there is still always a need to strike a difficult balance between, on the one hand, accommodating productive conflict and space of subversive practices, and, on the other hand, not endorsing an ‘anything goes’ position.<sup>10</sup>

Even though agonistic perspectives on algorithmic news diversity force us to ask difficult questions on power (also see next section), we can still try to think of ways in which diversity metrics can be tweaked – or: optimized differently – for agonistic purposes. One interesting direction to explore is that of more personalized approaches that take individual users’ characteristics into account. Reuver *et al.* (2021) provide a first exploration of how not *only content* can be recommended based on personal characteristics, but also how *nudging strategies* which stimulate actual consumption of content users are exposed to can be personalized.<sup>11</sup> Their proposals could be seen as an, admittedly, modest attempt to try to think beyond content diversity. They explain how natural language processing techniques can be used to identify individual “latitudes of diversity” of users, i.e. a user’s acceptance of diversity on specific viewpoints (Reuver *et al.* 2021: 49). The idea here is that if one knows how open a user is to which degree of (in the case of that paper) viewpoint diversity, one can also adjust the degree of viewpoint diversity offered to users in recommendations so as to not scare away users with more – or less – diversity than they can stomach. A similar personalized approach could be imagined specifically for the agonistic context. Here, the challenge would be to identify how much ‘provocativeness’ an individual person can stomach before the recommendation of provocative and/or passionate content will (likely) lead to the person seeing other participants in the public sphere as illegitimate opponents – i.e. enemies. To make such a personalized approach work computationally is difficult and cannot be done reliably as of now, but following the research agendas of Reuver *et al.* (2021) and Mattis *et al.* (2021) we might see feasible algorithmic solutions in the future.

It must be admitted though that the difficulties faced when implementing such proposals might also be indicative of a more general, underlying challenge; namely that promoting agonism-inspired news diversity via (better, different) content diversity metrics can only offer partial, imperfect solutions. Ultimately, these kinds of approaches depend on the idea that if you make sure people *consume* the ‘correct’

media diet by implementing particular (theory-inspired) metrics, some democracy-promoting outcomes will follow. The focus on redefining media diets for the public to be consumed might, by some critics, itself be considered an approach with limited utility.

### ***An Agonistic Perspective on Algorithmic News Recommenders as Technological Tools***

Thus far I have argued that agonistic theory has largely been excluded from the debate on the democratic value of news diversity. Moreover, I have tried to show how the inclusion of an agonistic perspective can lead to different views on which diversity metrics matter in news recommender systems. The guiding assumption has been that algorithmic news recommenders are a promising technology that can, in principle, be used to promote those agonistically oriented types of diversity that have been lacking from the literature. If, however, one takes agonism seriously as a democratic theory that seeks to systematically address contingent hegemonies and tries to find room for the contestation of power relations, one should also ask the reverse question: what kind of technological tools are algorithmic news recommenders to begin with, and is there something about news recommenders *as technological tools* that requires critical agonistic analysis?<sup>12</sup>

Adopting such a structural perspective raises a number of questions, such as: Which actors in the news production pipeline gain what (type of) power when algorithmic news diversity is promoted?; Which data need to be collected and which techniques to understand and influence the behavior of readers become available when algorithmic news recommenders are developed?; Do news recommenders raise manipulation worries?; Can news recommenders be designed and operated in a manner that is transparent to external actors and allows for the position of power they afford to their operators to be checked and contested? I want to use this last section to explore these questions in some more detail.

It is tempting to see news organizations and (social media) platforms as discrete, uniform actors and ask how their position of power changes with the implementation of algorithmic news recommenders. Before one starts to address that question, one should also ask how news organizations and (social media) platforms that implement algorithmic news recommenders are organized *internally* and how different actors *within* such an organization must negotiate shifting loci of power. A study by Bodó (2019) is instructive in this regard. Bodó (2019: 1054) interviewed “editors, technologists, product and business managers from a dozen European quality news organizations” and shows how different roles within one organization (can) come with different perspectives on how news recommenders should be implemented. Implementing algorithmic news recommenders comes with difficult processes of negotiating roles for different actors and the (sometimes) different goals they pursue. Journalistic values can clash with the commercial objectives a for-profit news organization has to pursue. Are journalists to be kept separate from the design of the recommender algorithm, because one does not want the journalists to be influenced by knowledge of how the recommendation engine works? Or is it desirable to involve journalists in the design of the recommendation algorithm because they understand

the relevance and meaning of the content that is going to be recommended better (we might assume) than the technologists who must build the actual recommender?

Depending on the answer to such questions, different actors will acquire different types and varying degrees of power over which news content citizens will end up seeing. For example, if journalists are *not* directly involved in the implementation of news recommenders, technologists and business managers of a news organization may acquire more power over the types of diversity that are promoted in the algorithmic distribution of news. I do not want to argue that one particular distribution of tasks within news organizations and (social media) platforms that distribute news content is more desirable than another when it comes to implementing news recommenders. But I do think it is important to acknowledge that whatever distribution of tasks between various roles within one organization is agreed upon, it will often be difficult for outsiders to see, let alone question or contest the chosen distribution of tasks. From an agonistic perspective – and maybe also in general? – this layer of opacity regarding the news production and dissemination pipeline is questionable. It makes it more difficult to understand which actors made which choices for which reasons, which, in turn, makes it more difficult to understand how the dissemination of news in the digital sphere is shaped and steered by news organizations and platforms. With the emphasis agonism places on finding space for *contesting* those actors and processes where power resides, the (re)introduction of opacity in the news production and dissemination process by algorithmic news recommenders requires our attention. For contestation to be possible, people require knowledge of what is going on as well as a sense of which actors are involved, so they know whom to address with concerns.

Another interesting dynamic in the algorithmic news recommender discussion is the fact that the constant search for better diversity metrics, as well as the optimization of existing metrics, also comes with a constant incentive to collect more (types of) user data. This raises privacy questions, not just because private information that news readers might want to keep to themselves gets shared, but also, maybe more importantly, because the collection of ever more data by news producers and news distributors grants them more power (see, e.g. Pettit 2018, Véliz 2020 for how privacy and power are related). Actors in the digital news industry that acquire more news reader data can also learn more about reading patterns, political leanings, psychological characteristics, and so on of readers. This affords power to those actors, because insights into the behavioral tendencies of people also makes behavioral patterns more manipulable (Lanzing 2019, Zuboff 2019). In the news context, as in other contexts, one must deal with the difficult tension between empowerment of news readers and the possible manipulation of news readers (Sax 2021). The collection of more user data can, in principle, be used purely for the benefit of users by strictly pursuing ends that are meant to benefit the users. However, because the digital choice architectures that we use every day to, among other things, read the news can be dynamically adjusted and personalized on the basis of (personal) data we cannot see or do not know about, it also becomes increasingly hard to see – let alone understand – as a user whose interests are being served by those same digital choice architectures. As one can see in the health context, when commercial providers offer a service within a digital choice architecture, it is difficult to disentangle the different interests



at play (Sax 2021). Since most algorithmic news recommenders are integrated in commercial digital choice environments as well, the same unclarities regarding whose interests are being served remain.

It will be difficult to image how algorithmic news recommenders can completely sidestep these challenges related to the (partial) opacity of their organization and operation. From an agonistic perspective, this remains a worry, because the ability to inspect and contest the power actors wield is essential. The fact that digital choice environments obfuscate as much as they present to users should worry every critic with sympathies for agonistic theory.

Moreover, digital choice environments have a tendency to become transparent not in the policy-sense, but in a literal sense:

As philosophers of technology and science & technology studies (STS) scholars argue, once we become adept at using technologies they become “transparent” to us. Here, transparent is meant not in the sense in which it is often used in policy contexts (i.e., as an insight into otherwise obscure practices), but rather more literally: once we are habituated to technologies we stop looking at them and instead look *through* them to the information and activities we use to facilitate (Susser 2019: 403).

This characteristic of technologies<sup>13</sup> like algorithmic news recommenders can also make it more difficult to *contest* their operation or effects. When users of algorithmic news recommenders get so used to them and they start to ‘see through them’ as their use feels (almost) natural, the very impetus for questioning and contesting their operation can fade.

What, then, should we make of the critical questions inspired by agonistic theory discussed above? The main message should not be that algorithmic news recommenders are a bad idea per se. Algorithmic news recommenders are promising in many regards and as I showed in the section Agonistic Diversity Metrics?, agonistic theory might even inform the development of different diversity metrics. But if we take agonistic theory seriously, we should also acknowledge that the introduction of technological tools to help solve, or at the very least alleviate, societal problems raise serious questions. As has been observed frequently, technological tools are never neutral interventions into a societal or policy debate. Algorithmic news recommenders are a very specific type of tool, designed for a very particular purpose, positioned at a very particular place in the news ecosystem, operated by a particular set of actors. As such, algorithmic news recommenders should only be considered a very partial answer to the immensely complex question of news diversity in a democratic society.

## Conclusion

In this article I have tried to make a case for including agonistic theory in the research agenda of algorithmic news recommender research. With the adoption of an agonistic perspective comes more attention for how conflict can be made productive instead of seen as something that needs to be solved; more attention for how power leads to the exclusion of certain groups or perspectives; more attention for finding ways to contest established procedures and actors.

In the context of algorithmic news recommenders, agonistic theory could inform our thinking in at least two ways. First, by suggesting new types of diversity metrics that focus on different democratic aims of inclusion of more types of speech beyond the informative and educational kinds, and the inclusion of more communities/groups in the news sphere, even if this leads to tensions or conflict. Second, agonism also invites us to develop a more structural critical perspective on algorithmic news recommenders which sees them as very particular technological tools that can (help to) address some challenges, but also introduce challenges of their own. As technological tools embedded in larger digital choice environments, the design, governance, and operation of algorithmic news recommenders can be(come) partly opaque to their users and critics. This raises questions over people's ability to contest their functioning, either because they cannot know which aspects require contestation in the first place, or because they do not know who to address their critique to.

The fact that agonism seems to invite permanent critical analysis of every possible actor or procedure that has some amount of power might feel paralyzing. Should we just question everything, all the time? I think a nuanced answer is required here. Sure, agonism invites permanent criticism – maybe it should even be called 'vigilance'. But contained within agonism itself is already the insight that tensions and conflicts do not have to be solved; they should be made productive. This mindset, I would like to argue, should also be applied to the criticisms raised by agonistic perspectives on news recommenders itself. We do not have to require that an agonistic analysis of shifting power relations and possibilities for contestation in the context of algorithmic news recommenders yields satisfactory conclusions that everyone agrees on. If I have been able to inspire further, maybe even passionate, debate on the role algorithmic news recommenders can and cannot play for the cause of news diversity, I am already content.

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## Notes

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2. See, e.g., Karimi *et al.* 2018 for a literature survey of the recommender systems literature.
3. I thank an anonymous reviewer for highlighting the importance of the often implicit focus on content diversity.
4. See, e.g., Chakraborty *et al.* 2019 for a discussion on how to balance different popular news recommender metrics.
5. To be sure, some authors insist that 'diversity' and 'pluralism' take on a substantially different meaning in the news or media context. See, e.g., Karppinen (2013b: 3-6) who discusses "media pluralism as an ambiguous concept". In this article, I do not want to redo

this entire discussion. I will, however, briefly return to the distinction in section 5 where I will try to apply insights from agonism to the more technical literature on news recommenders.

6. Other theorists who develop agonistic accounts of democracy are, for instance, Tully 1995 who builds on the politics of recognition, Owen 1995 who develops a perfectionist agonism which stresses the importance of developing the right virtues, Wenman 2013 who argues for a cosmopolitan perspective, and Paxton 2020 who develops a new institutionalist perspective on agonism.
7. The ideal speech situation is a prominent concept in the Habermasian tradition. As Wessler (2018) explains in his insightful book *Habermas and the Media*, the ideal speech positions has probably gained too much traction and attention. Wessler (2018: 40) writes that “To identify the kind of communication needed for theoretical and practical discourse, Habermas had developed the ideal speech situation as a *thought experiment* [...] Ironically, he himself never used it again after 1972. In addition, the ideal speech situation was never meant as a *model* that should be implemented in real life (see Habermas 1996: 322) but as a summary of the necessary pragmatic presuppositions that speakers must make when they argue seriously”.
8. Dahlberg (2007: 834) does acknowledge that “the Habermasian model, despite its sophistication, is open to a rationalist, consensus-oriented reading that displays the four problems [i.e., the types of problems scholars like Mouffe identify] listed previously”. Elsewhere, Dahlberg (2005: 116) also points out that the overly narrow reading of Habermas he sees in Mouffe’s work does have some basis in Habermas’ own work: “This “rationalist” reading does not simply result from poor stylizations of the conception by critics attempting to illuminate their own positions, but is also supported by Habermas’ own personal antipathy towards aesthetic-affective models of communication in politics”. In an elaborate footnote, Dahlberg (2005: 133) refers to several passages in Habermas’ work to support this claim (Habermas 1984: 331; 1992: 426-427; 1998: 4).
9. Here one can think of the work of theorists such as Honig (1994), Connolly (2005), and Kymlicka (1992).
10. The difficulty of this balancing act should not be underestimated. One of the essential characteristics of agonism is its sensitivity to how actors in positions of power can exclude (or diminish the relevance of) others. Now, to not end up with an ‘anything goes’ position, some kind of boundary management between antagonistic and agonistic practices has to be performed, which inevitably raises the question who gets to decide on (the interpretations of) the norms used to police those boundaries.
11. Mattis *et al.* (2021) provide a more elaborate conceptual background to developing (personalized) nudging strategies for algorithmic news diversity.
12. Karppinen (2013b) adopts a similar, more structural agonistic perspective in *Rethinking Media Pluralism*, but his book mainly focuses on media pluralism as a concept and not on algorithmic news recommenders specifically.
13. See, e.g., Idhe 1990 and Verbeek 2005 for a full elaboration of this idea.

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