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Algorithmic meta-capital: Bourdieusian analysis of social power through algorithms in media consumption

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ABSTRACT

Algorithms make highly consequential decisions and, thereby, exercise considerable power. In this study, I investigate how social power through algorithms is exercised in media consumption, particularly through curation algorithms. This conceptual paper then contributes to the understanding of social power through algorithms by suggesting the concept of algorithmic meta-capital. The concept derives from Bourdieu's theory on meta-capital which has also been applied to legacy media. I then argue that this algorithmic meta-capital is an extension of the power traditionally held by the state and legacy media. The study also contributes to the understanding of meta-capital as it proposes how the meta-capital possessed by digital intermediaries functions. It does so by legitimating representations of the world and by creating a necessity for algorithmic visibility across different fields, thereby shaping habitus. This Bourdieusian approach enables researchers to take a balanced view on the power of algorithms on the structure/agency continuum.

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Introduction

Algorithms are now used for a variety of purposes. They are, for instance, used to evaluate a person's credit score, to recruit the right candidate for a job, and to target the right kind of media and advertising content to the right consumers at the right time (e.g., O'Neil, 2016). A great number of scholars have therefore argued that algorithms make highly consequential decisions and, as such, exercise considerable power (Beer, 2009). Thus, they have argued that 'authority is increasingly expressed algorithmically' (Pasquale, 2015, p. 8). Hence, it has never been more important to understand how social power works through algorithms. Yet, extant literature has found this task difficult as, in Pasquale's (2015) words, we seem to be living in a society populated by 'enigmatic technologies', where the 'values and prerogatives that the encoded rules enact are hidden within black boxes' (pp. 1-8; see also e.g., Bucher 2018; Gillespie, 2014; Kitchin, 2017).

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Despite these challenges, this conceptual paper builds upon extant empirical research which has investigated how algorithms work in the world (Kitchin 2017) in order to explore how social power through algorithms functions. Thus, the aim of this study is to synthesize and contextualize extant empirical research to show how the social power of algorithms can be conceptualized. More specifically, in this study, I utilize the concept of meta-capital originally introduced by French sociologist and philosopher Pierre Bourdieu.

Bourdieu has been highly influential in social studies and his theories have been applied in various contexts, from sports to high art, and from education to nutrition (see e.g., Grenfell, 2008; Holt, 1997a, 1997b, 1998). Increasingly, Bourdieu's theory has also been utilized in the theorization of the digital world, particularly in the understanding of digital inequality (Ignatow & Robinson, 2017). However, one of his lesser known concepts, that of meta-capital, Bourdieu introduced in his theorization of the state to explain how the state wields power across different societal fields (Bourdieu & Wacquant, 1992, p. 112). Bourdieu then argues that this power is, for instance, exercised through the schooling system. This is because it is here that an individual's habits, skills, and dispositions, or in Bourdieusian terms their habitus, is formed and then carried on to other fields. Analogously, Couldry (2003) has argued that the media also has meta-capital as it has the power to legitimate representations of the social world and it also has the ability to grant symbolic capital, or status, to different actors. Furthermore, these representations act as cultural resources which can be drawn upon in all fields as actors in specific fields are also likely to be consumers of media messages.

While Couldry (2003) makes a worthwhile contribution to our understanding of the power of the media, it is worth questioning whether his conceptualization is somewhat outdated. Indeed, at the time of the publication of Couldry's (2003) article, the mediascape was still to a large extent dominated by the legacy media, or large media institutions which communicate to a mass audience through one-way technologies such as print media and television (Peterson, 2003). However, great changes have taken place within the media field since the turn of the millennium, as technological advances mean that media consumption is now increasingly a two-way process (Bruns, 2005). These technologies have also seen the fragmentation of mass audiences as technological advances have paved the way to more niche media (Webster & Ksiazek, 2012). The place of media consumption has also been shifting due to several new intermediaries. Recent years have, for instance, seen the growth of news aggregators and social media platforms, which has meant that consuming news via social media is now more widespread than going directly to the news organizations themselves (Newman et al., 2016; Nielsen, 2016).

Consequently, legacy media are now also faced with different kinds of competitive challenges. For instance, as the content which is shown to users is decided by algorithms, the media now also have to fight for visibility within these platforms as they are being subjected to algorithmic selection, which decides which consumers will see the posted content and when (Bucher, 2018; Fletcher & Nielsen, 2019). Therefore, it seems that legacy media is losing at least some of its power as editorial logic has increasingly been complemented by algorithmic logic in deciding what is important for citizens to know (Bucher, 2018; Gillespie, 2014). Furthermore, as algorithms generally direct users towards more of what they have liked in the past, it has also been argued that

algorithms create ‘filter bubbles’ which limit a user’s exposure to diverging opinions and influences (Pariser, 2011). Hence, it can also be questioned whether the concept of meta-capital, which implies centralized power, is still relevant.

In this paper, I answer this question with the affirmative. Similarly, to Couldry (2003), I also focus my analysis on the media field. However, in this study, I turn the gaze towards these new digital intermediaries in media consumption and particularly home in on the curation algorithms which mediate the consumption of media content (Berman & Katona, 2020). Thus, extending the work of both Bourdieu (Bourdieu & Wacquant, 1992) and Couldry (2003), I posit that the social power through algorithms can be conceptualized as algorithmic meta-capital.

This conceptual paper then, firstly, contributes to the literature on the social power operating through algorithms (Beer, 2017). It does so by suggesting that this power can be conceptualized as meta-capital. I then define algorithmic meta-capital as symbolic power which allows the holder to wield a power over different fields and over the various forms of capital that circulate in them. This symbolic power functions through algorithms which influence what counts as symbolic capital in each field because symbolic capital is increasingly based upon visibility both to and through algorithms, and by algorithms legitimating representations of the world in different fields.

Secondly, this paper contributes to the understanding of meta-capital by showing how the media meta-capital traditionally held by mainstream media (Couldry, 2003) is now being supplemented by algorithmic meta-capital. Thus, this study also extends the burgeoning Bourdieusian literature in digital sociology by introducing a lesser known concept to this literature and by showing how it can be applied to the understanding of algorithms. This Bourdieusian conceptualization of social power enables research to take a balanced view on the power of algorithms on the structure/agency continuum.

I will first outline extant literature on social power through algorithms. I will then explain Bourdieu’s field theory and how extant literature has conceptualized meta-capital. I will then propose how the concept of meta-capital can be utilized to understand social power through algorithms in media consumption. I will conclude with implications and questions for future research.

Algorithms and society

Algorithms

There are many ways of viewing algorithms. One view, frequently held by computer sciences and technology companies, is to view algorithms as code or as objects. Thus, algorithms are mostly presented as technical and benign, objective and impartial (Goffey, 2008; Kitchin, 2017). Within this view, the focus is on improving the efficiency of the algorithms from a purely technical perspective (Seaver, 2019). For instance, given the number of posts which are made on social media platforms every day, curation algorithms must make decisions as to which content a user is exposed to and when (Bucher, 2018). Thus, the efficiency of the algorithm would then be measured based on, for instance, the extent of user engagement.

However, in the recent years, there has been a growing awareness of the fact that algorithms make highly consequential decisions and, as such, exercise considerable power

(e.g., Beer, 2009; Pasquale, 2015). Indeed, as Montfort et al. (2012, p. 3) posit, '[c]ode is not purely abstract and mathematical; it has significant social, political, and aesthetic dimensions'. Thus, a stream of literature regarding the social, political, and economic implications of algorithms has been emerging (Beer, 2017; Kitchin, 2017; Neyland & Möllers, 2017). Bucher (2012, 2018), for instance, reverses Foucault's notion of surveillance as a form of permanent visibility and argues that social media users have instead internalized the constant possibility of disappearing and, thereby, becoming obsolete. Meanwhile, Longford (2005) argues that algorithms habituate users to giving over more of their personal information through continuous requests and carefully designed default settings. Gillespie (2014), in turn, argues that algorithms represent a new knowledge logic which has supplanted the editorial logic for deciding what is important for citizens to know, while a host of academics have argued that algorithms function in ways which often benefit commercial interests and ideological agendas (e.g., Beer, 2017; Kitchin, 2017; Mager, 2012; Neyland & Möllers, 2017; Willson, 2017).

In this article, the focus lies on the process by which algorithms wield social power. This question is an important one as extant literature has been confronted with many challenges which arise from the nature of algorithms. Indeed, as Kitchin (2017) argues, the main challenges that hinder research on algorithms is gaining access to their formulation; that they are heterogeneous and embedded in wider systems; and that their work unfolds contextually and contingently. Thus, extant literature has argued that the inner workings of many of the most powerful algorithms are inaccessible and, therefore, black boxed (Pasquale, 2015; see also e.g., Bucher, 2018; Kitchin, 2017).

It is undoubtedly true that many of the inner workings of algorithms remain hidden as researchers do not, for instance, have access to their formulation (Kitchin 2017). However, in this article, the focus is not on the coding of the algorithms but, rather, on how algorithms work in the world (Bucher, 2018; Kitchin, 2017). Indeed, a great number of empirical studies from a range of fields have already empirically investigated how algorithms have shaped how individuals behave and even how entire fields function. Thus, the aim of this conceptual paper is to contextualize and synthesize these findings in order to understand how social power through algorithms is wielded.

To shed further light on the social power which operates through algorithms, in this article I will focus particularly on the curation algorithms used by digital intermediaries. I take the view that, as they are woven into our everyday life and, in part, shape what we encounter, they also shape our understanding of the world (e.g., Beer, 2017; Kitchin, 2017; Neyland & Möllers, 2017; Willson, 2017). In this sense, algorithms bear some resemblance with legacy media.

Shaping visions of the world

Traditionally, and one might also say somewhat idealistically, journalistic media has been tasked with relaying information to citizens, setting an agenda of common concern, acting as watchdogs to the powerful and providing an arena for public deliberation (Boczkowski & Mitchelstein, 2016; Russell, 2016; Wahl-Jorgensen, 2016b). Of course, it may be questioned whether journalism has ever been able to fulfil its supposed role of 'delivering deliberative democratic nirvana', as Steel (2016, p. 40) puts it. Extant literature has also long since disproven the so-called hypodermic needle theory which suggests that media

simply injects thoughts into audiences' minds (e.g., Valkenburg et al., 2016). Nonetheless, the media has been an important factor in shaping individuals' understanding of the world and in their socialization to a society.

Indeed, the media has, for instance, been shown to have agenda setting power or, in other words, power in influencing the importance placed on topics on the public agenda (Gillespie, 2014; McCombs & Shaw, 1972). Thus, extant literature has also conceptualized the media as gatekeepers as they make decisions about what information is relevant to citizens to know (Napoli, 2015; Tufekci, 2015). However, in addition to what the media talks about, extant literature has also shown that it is important to understand how media frames issues (Entman, 1993). This is because media frames act as a cultural resource which the individuals draw upon (Fitchett & Caruana, 2015) and they normalize representations of the world over time. For instance, by framing an issue as either convergent or divergent with societal norms, media frames help to (de)legitimize societal issues, attitudes and behavioral patterns (Humphreys & Latour, 2013).

In this sense, the legacy media bears many affinities with curation algorithms. Indeed, extant literature has argued that the power of algorithms also lies in the fact that they shape what and who individuals know. However, whereas the legacy media was supposed to show audiences what they ought to know, the curation algorithms is seen as serving content it thinks the individual would want to know (Bucher, 2018).

To illustrate this process, when the social media curation algorithms make decisions as to which content a user is exposed to and when, they do so, for instance, based on the popularity of the post, the strength of the affinity between the two users, and the time when the post was made (Bucher, 2018, pp. 155-156). Similarly, the curation algorithm also assesses the extent to which a particular news story would be of interest to a user based on their previous preferences. In contrast, content which the algorithms deem uninteresting to the user, often remains hidden (Thorson & Wells, 2016). For instance, if a user has previously liked posts made by environmental activist Greta Thunberg, they are more likely to be shown content which relates to climate change. Conversely, a user will be shown less news about climate change and more lighthearted entertainment news about the reality TV star Kim Kardashian if they have shown no interest in climate change but, instead, have commented on several posts made by Kardashian. The rationale for this from the perspective of the user is that the user gains more customized and relevant content and is therefore more engaged and, thereby, spends more time on the online platform (Martin & Murphy, 2017).

What this then means is that in some ways, the curation algorithms work similarly to the legacy media in that they too act as gatekeepers by making decisions about what information is relevant for individuals to know (Napoli, 2015; Thorson & Wells, 2016; Tufekci, 2015). Indeed, extant literature has argued that the power of algorithms lies in their ability to decide what matters and what should be most visible (Beer, 2017; Gillespie, 2014). By extension, the ability to make certain content, or aspects of reality, more visible and salient, also means that their power then lies in their ability to create, maintain or cement social norms by shaping what is encountered (Beer, 2017).

However, extant literature also suggests that, in some ways, curation algorithms have the potential to be even more powerful than traditional media frames. For instance, as these algorithms are driven to show the user more of what they have preferred in the past (Bucher, 2018; Yeung, 2017), this also means that content which a user has expressed

no interest in, such as the climate change debate, could become hidden, thus limiting the experiences, issues and the range of opinions an individual is exposed to. At its extreme, Pariser (2011) argues, this can lead to ‘filter bubbles’ whereby algorithms limit external influences, leaving individuals continually exposed to the same people, experiences, news and culture. This is problematic if the content merely serves to reinforce the user’s preconceived notions of the world, and if it leads to polarized perspectives on an issue instead of balanced, informed debate.

While the concept of ‘filter bubbles’ is still contested by empirical research (e.g., Haim et al., 2018), it does indeed seem that the power of algorithms lies in their ability to make certain type of content more visible in a repetitive manner. This, essentially, is what is argued by Yeung (2017) through her concept of the ‘hypernudge’. Yeung (2017) then posits that algorithmic design nudges users in directions preferred by the so-called choice architect through processes that are subtle, unobtrusive, and yet powerful. The power of the nudge has already been demonstrated by Thaler and Sunstein (2008) in different contexts, such as healthier eating habits. However, Yeung (2017) argues that what makes these hypernudges particularly powerful is their networked, dynamic and pervasive nature.

Algorithms undoubtedly have power to shape our choices and the content to which we are exposed to. However, both the concepts of filter bubbles and hypernudges run the risk of being overly deterministic and seeing users at the mercy of powerful companies. Thus, in this paper, I aim to provide a more nuanced account of the social power of algorithms in media consumption and will do so through Bourdieu’s concept of meta-capital.

Bourdieuian field theory and meta-capital

Bourdieu’s theorization on meta-capital starts with the notion of a field. These fields are historical social arenas in which agents compete for position (Bourdieu & Wacquant, 1992), and examples of such fields include, for instance, the fields of consumption, academia, politics, and arts (Holt, 1997b, 1998). However, as different fields have distinctive value systems, normative discourses, modes of practice, and status systems (Arsel & Thompson, 2011), one must then have a sense for the ‘game’ in this particular field in order to be successful (Bourdieu & Wacquant, 1992). Put simply, the skills and merits conferred exclusively in the field of arts, for instance, are unlikely to be enough for an individual to succeed in the field of science. Thus, different fields require a different habitus which can be thought of as ingrained habits, skills, and dispositions, which guide the way an individual perceives the social world around them and the way they react to it (Bourdieu, 1984). If successful within a field, an individual is then conferred various kinds of capital, such as economic capital (financial resources), social capital (social networks), symbolic capital (prestige), or cultural capital (stock of dispositions, skills, sensibilities and embodied knowledge; Bourdieu, 1984; Holt, 1997a).

This brief outline of Bourdieu’s field theory would seem to suggest that the fields are relatively autonomous. Yet, the concept of meta-capital contests this proposition as, through meta-capital, an actor can be seen as embodying power which is external to and yet dominating the other fields. Indeed, originally, the concept of meta-capital derives from Bourdieu’s theorization on the state. Thus, Bourdieu proposes meta-capital to be a specific type of capital, which ‘allows the state to wield a power over the different

fields and over the various forms of capital that circulate in them' (Bourdieu & Wacquant, 1992, p. 114). Bourdieu then argues that the state's meta-capital consists of its monopoly of symbolic power to constitute and to impose a set of universal norms within a society (Bourdieu & Wacquant, 1992, p. 112). Indeed, Bourdieu defines symbolic power as 'a power of constructing reality' (Bourdieu, 1991, p. 166), which is derived from the relations between people, rather than formal rules and authority (Bourdieu 1991, p. 164). In this sense, symbolic power can then be thought of as institutionalized symbolic capital. As an illustration of this process, Bourdieu then argues that it is particularly through the schooling system that this kind of power is exercised and reproduced as it is through the schooling system that the habitus of the individuals is formed, and then carried on to other fields (Bourdieu & Wacquant, 1992).

Analogously, Couldry (2003) has also applied the concept of meta-capital to explain the power of the media. Similarly, to Bourdieu, Couldry (2003) argues that it is through meta-capital that the media exercises power over other forms of power. It does so by, firstly, influencing what counts as symbolic capital in each field because it has an 'increasing monopoly over the sites of social prestige' (Couldry 2003, p. 668). He argues that media visibility has become an important way in which symbolic capital, or prestige, is conferred in almost any field. Thus, he argues that, for instance, an academic's symbolic capital within the academic field does not only rest upon their academic achievements but may also be heightened through media exposure. Secondly, he argues that media's meta-capital functions through the framing of social issues which influences agendas and legitimates representations of the world. He then argues that, because of their generality, these representations act as cultural resources which can be drawn upon in all fields as actors in specific fields are also likely to be consumers of media messages (Couldry, 2003). Finally, Couldry (2003, 2004) suggests that this power functions by shaping the individuals' habitus as media is an important institution through which individuals learn about the world around them and, thus, like schools (Bourdieu, 1984; Bourdieu & Wacquant, 1992), are an important factor in the socialization of an individual.

From this discussion arises two issues worthy of note. Firstly, despite the notion of symbolic power, it would be wrong to interpret Bourdieu's theorization as overly deterministic. Indeed, from a Bourdieusian perspective, symbolic power does enable the holder to shape categories of thought in ways which are often beneficial for themselves (Cattani et al., 2014). However, throughout his theorization, Bourdieu does attempt to find a balanced point on the structure-agency continuum seeing consumers as guided, yet not fully restricted, by the social and cultural structures which they inhabit (Askegaard & Linnet, 2011). Indeed, Bourdieu's concept of habitus builds on the idea that actors act strategically and practically rather than merely conforming to external rules or norms (Schwartz, 2002). Thus, Bourdieusian literature is in contrast with, for instance, more traditional media effects literature which has argued that the media has the ability to affect cultural norms in a unidirectional manner and, therefore, dictate how audiences both think and act (e.g., Valkenburg et al., 2016). Hence, instead of strict adherence to cultural norms, what Bourdieu's notion of habitus emphasizes is that actors instead respond to present situations in terms of deeply ingrained past experiences (Schwartz, 2002). Therefore, according to Bourdieu, what is important are the dispositions, habits, and skills to act in a certain way, which are all shaped by past experiences, upbringing, and social surroundings.

This notion also opens avenues for a more nuanced understanding of the power through algorithms. Indeed, a Bourdieusian perspective is in contrast with, for instance, critical scholars who emphasize societal structures over the agentic power of the individual consumers. This can lead to a one-sided perspective with consumers perceived as dupes, who are at the mercy of, say, legacy media corporations (e.g., Horkheimer & Adorno, 1972) or, nowadays, the digital intermediaries who create the algorithms (e.g., Berry, 2014; Pariser, 2011; for critique see Seaver, 2019). Yet, Bourdieusian theory also does not believe that consumers have fully unrestricted agentic power, which seems to be implied in research which sees algorithms as fully neutral and objective.

Secondly, one might question whether this conceptualization of meta-capital still holds in a postmodern society. Indeed, technological advances have enabled a steady growth in the number of media outlets and products competing for public attention and, therefore, the growth in digital media has led to a noticeable degree of audience fragmentation. This has been a cause for concern for some as this fragmentation is seen as an end of a common public sphere (Webster & Ksiazek, 2012). Similarly, the filter bubble thesis (Pariser, 2011) suggests that curation algorithms are limiting our cultural experiences and social connections and, thereby, are driving us into ever smaller niches which limit the possibilities for a balanced and inclusive debate. Hence, it can also be questioned whether the concept of meta-capital, which implies centralized power, is still relevant. This is the question I will turn to next, as I outline my conceptualization of algorithmic meta-capital in media consumption.

Algorithmic meta-capital

I define algorithmic meta-capital as symbolic power which allows the holder to wield a power over different fields and over the various forms of capital that circulate in them. This symbolic power functions through algorithms which influence what counts as symbolic capital in each field because symbolic capital is increasingly based upon visibility both to and through algorithms, and by algorithms legitimating representations of the world in different fields. However, in contrast to Bourdieu who considered meta-capital to be symbolic power to impose universal norms upon fields, I consider this power to be more subtle and, instead, as functioning by shaping habitus.

The reason for this is that, as has been noted before, in Bourdieu's oeuvre, more weight is given to the notion of habitus, which disposes an individual to behave in a certain manner, rather than strict cultural norms, which would dictate the way in which a person behaves (Schwartz, 2002). Thus, it may well be that the state possesses more deterministic statist power, which it can enact through laws and regulations but the same cannot be said for curation algorithms. Indeed, an individual is exposed to a range of cultural and social influences, such as education, social contacts and even other cultural industries, which also shape what an individual experiences.

Additionally, as Bourdieu (1977, p. 20) argues elsewhere, habitus is particularly important in situations in which normative rules are not explicit and, instead, individuals must rely on their 'gut feeling' based on the 'feel for the game' they have developed over time. This can be considered to be the case in individuals' encounters with curation algorithms, as extant literature has revealed, for instance, that social media users are conscious of algorithms and attempt to understand and work with them based on their prior

encounters and, yet, are unable to fully pinpoint their functioning due to their ever-changing and opaque nature (Bucher, 2018). Thus, I see algorithms as guiding an individual towards particular dispositions, habits and skills but do not see the individual as a prisoner of them.

I will next elaborate more on the two processes through which algorithms shape habitus and grant symbolic capital. I will also compare my notion of algorithmic meta-capital with Couldry's (2003) conceptualization of media meta-capital.

Legitimizing representations of the world

Couldry (2003) argues that media's meta-capital functions through the framing of social issues which influences agendas and legitimates representations of the world. Indeed, as has been discussed, media representations act as cultural resources which shape how individuals perceive the world around them. Thus, it acts as a type of 'social conditioning' (Bourdieu, 1990, p. 116), which does not dictate how individuals should think or act but does shape their dispositions, habits and skills and, thereby, their habitus (Couldry, 2004). Importantly, Couldry (2003) then argues that media has meta-capital as, because of the generality of these media representations, they can be drawn upon in all fields as actors in specific fields are also likely to be consumers of media messages.

However, as has been discussed, a considerable change has taken place in the mediascape since the turn of the millennium. Thus, it must be questioned whether Couldry's (2003) argument about all individuals being consumers of the same media messages holds true. It certainly is true that internet penetration is very high as, for instance, in 2019, 92–95% of the population in Northern and Western Europe were internet users (Clement, 2019a) and 79% of the population in the United States also had at least one social networking profile (Clement, 2019b). However, as algorithms serve content based on a user's preferences and interests, and as the mediascape has been said to be characterized by audience fragmentation (Webster & Ksiazek, 2012), this would seem to pose a challenge to the notion of meta-capital in the digital era.

However, there seems to be little empirical evidence of either complete media fragmentation or of filter bubbles created by algorithms. For instance, Haim et al. (2018) found no empirical evidence that warrants any worries about filter bubbles, whereas Bechmann and Nielbo (2018) do find some limited evidence of filter bubbles but find that the main reason for this is the limited sociality of the individuals. Thus, their study suggests that the bubbles are in fact caused by limited page likes, group memberships and friends, rather than by algorithmic curation, per se.

Moreover, Webster and Ksiazek (2012) find very little evidence that the typical user spends long periods of time in niche outlets. Instead, they find that, while the number of niche outlets has grown, most individuals still also consume media from mainstream outlets. Therefore, instead of audience fragmentation, empirical research has found that there is a trend towards large digital intermediaries, which now act as a nexus for media consumption (Newman et al., 2016; Nielsen, 2016). Thus, extant research has clearly demonstrated a winner-takes-all logic as the media market is now dominated by a few market leaders (such as Google, Yahoo!, MSN/Windows Live, YouTube, and Facebook), which have a high monthly reach of unique visitors, whereas the extent of the market reach quickly declines for smaller digital intermediaries (Webster & Ksiazek, 2012).

Hence, the content algorithms of these platforms have a great deal of social power which, similarly to legacy media, works across different fields.

In addition to the concentration of media consumption, another mechanism which ensures the field spanning potential of algorithms are trending algorithms, which are here considered an extension of curation algorithms. The aim of these algorithms is to highlight what a particular public is supposedly talking about at that moment (Bucher, 2018). Such algorithms have become a ubiquitous feature from legacy media websites and web browsers to social media platforms (Bucher, 2018; Gillespie, 2016).

Whether or not such features truly reflect what is most popular at a particular time is questionable (Bucher, 2018; Gillespie, 2016). Nevertheless, similarly to other measures of public opinion, such as polling or surveys (Gillespie, 2014), they still frame issues as important and as the current opinion. Indeed, such algorithms work by highlighting topics which show spikes in interest not only in one section of users but in an audience which ‘*exceeds single clusters* of interconnected users’ (Gillespie, 2011, emphasis added, as cited in Bucher 2018; Caplan & boyd, 2016; Gillespie, 2016). Thus, similarly to media framing, they also legitimate issues as noteworthy and important across fields. Therefore, similarly to legacy media, curation algorithms also have field spanning meta-capital.

Algorithmic visibility

Couldry (2003, p. 668) also considered media meta-capital as functioning by influencing what counts as symbolic capital in each field because it has an ‘increasing monopoly over the sites of social prestige’. Thus, he, for instance, argues that an academic’s symbolic capital is not only influenced by their academic achievements but can also be enhanced by their visibility in the media. I posit that the same is also true for algorithmic meta-capital but, instead, what is at stake is algorithmic visibility, in other words, visibility both through and to the algorithm. This is because in many fields’ algorithms have, essentially, shaped the rules of the game, to use Bourdieu’s terminology. Thus, to gain symbolic capital, one must first be visible to the algorithm but to gain such visibility, one must first learn the new rules of the game. If one is successful, one will then gain visibility through the algorithm and, thereby, be granted symbolic capital.

Firstly, extending Couldry’s (2003) example of the academic field, it seems that algorithms now decide upon an academic’s symbolic capital in more pervasive ways. For instance, when searching for extant literature, an academic is likely to use an academic search engine, such as Google Scholar. Similarly to the curation algorithm, the search algorithm must then decide which publications are shown first and, therefore, which articles are most likely to be cited. One of the criteria it will use is the number of citations an article has received because Google’s search engine presumes that relevant knowledge is largely assured by public ratification (Beel & Gipp, 2009; Gillespie, 2014; Yeung, 2017). However, what this also suggests is that those who already have numerous citations, or symbolic capital, will have more visibility both to and through the algorithm, thereby, leading to further symbolic capital. Thus, algorithmic visibility has become an important means by which symbolic capital is granted within the academic field.

Interestingly, some scholars, such as Jacsó (2011) and Beel and Gipp (2009), have also investigated more proactive ways in which scholars can increase their visibility to the search engine algorithm. For instance, Beel and Gipp (2009) suggest that, similarly to

marketers who engage in search engine optimization, academics should also optimize their publications for search engines by, for instance, reconsidering the name of their article. To do so, they say that ‘knowledge about the applied ranking algorithms is essential’ (Beel & Gipp, 2009, p. 230). This then, again, implies a changing habitus as this suggests a necessity for new skills and habits which are required for algorithmic visibility and, ultimately, symbolic capital.

Analogously, a similar pattern is also to be detected in media production, as extant literature has shown that curation algorithms have changed journalistic content because they promote and reward clickbait journalism. This is because algorithms value clicks, likes, and shares and, thereby, reward journalists for attention grabbing headlines and photos (Bucher, 2018; Caplan & Boyd, 2016; Peters & Broersma, 2017; Wahl-Jorgensen, 2016a). Hence, journalists must now also optimize their media content for algorithmic visibility. This suggests, first, that journalists have had to learn and internalize the new rules of the media field but, also, that journalists have had to master new digital skills both for producing and distributing the news on digital platforms (Creech & Mendelson, 2015; Johnston, 2016, p. 900). By having to learn new skills and the new rules of the game, this then again implies that curation algorithms have shaped the habitus of the journalists. Furthermore, it suggests that they have done so to gain algorithmic visibility and, ultimately, to gain symbolic capital.

A similar principle also extends to media consumption. As Thorson and Wells (2016), for instance, note social curation is also an important element of media consumption. This curation is performed by one’s social network when users recommend media content to others in their network. However, this social curation is also mediated by curation algorithms because the curation algorithm makes decisions on who will see the post based, for instance, on the popularity of the post and the strength of the affinity between the two users (Bucher, 2018). Thus, for the post to become popular, users must first have social capital as expressed in strong networks. Secondly, they must also have the necessary skills and dispositions to gauge what makes a popular post. Indeed, as Bucher (2018), for instance, has shown, users can expend a great deal of time and effort in trying to learn the unwritten rules of the curation algorithms in order to make a popular post. Thus, the users’ habitus is shaped to gain visibility through the algorithm for increased symbolic capital which is expressed through likes and comments.

Overall, and to paraphrase Couldry (2003), this then suggests that algorithms now have an increasing monopoly over the sites of social prestige due to the need for algorithmic visibility. Different algorithms may be of more importance in different fields but, in both examples, the process is similar. Thus, algorithms have changed the rules of the game in various fields by changing how symbolic capital is conferred and, in order to continue playing the game, individuals within these fields have had to acquire new habits, skills and dispositions.

Conclusions

Following Bourdieu, this conceptual paper has contributed to extant literature by suggesting the concept of algorithmic meta-capital for understanding social power through algorithms in media consumption. The study also contributes to the understanding of meta-capital as I propose how this meta-capital functions, particularly through curation

algorithms. Thus, I have also posited that this algorithmic meta-capital is an extension of the power traditionally held by the state and legacy media. This Bourdieusian perspective then paves way for understanding how forms of social power change. Thus, instead of being a new type of knowledge logic (Gillespie, 2014), this perspective suggests that the social power wielded through algorithms is an extension of the power traditionally held by the state (Bourdieu & Wacquant, 1992) and the legacy media (Coudry, 2003).

The understanding of social power through algorithms is of great importance particularly in the post-Cambridge Analytica, ‘fake news’ world (Lazer et al., 2018). Indeed, algorithms are inevitably modelled on visions of the social world and are often created in ways which benefit commercial interests and ideological agendas (e.g., Beer, 2017). Thus, it is also important to consider who stands to gain from different algorithmic configurations and how. However, particularly given the moral panic around Cambridge Analytica and fake news, it may then be tempting to take a very critical stance against algorithms and the social power that is wielded through them.

This would be the perspective taken by critical scholars who emphasize societal structures over the agentic power of the individual consumers. Thus, as has been noted, they tend to see consumers as dupes, who are at the mercy of the digital intermediaries who create the algorithms. Indeed, Pariser’s (2011) notion of filter bubbles, for instance, can be seen as arising from a critical perspective where the aim is to reveal the inner workings of the algorithm so that they can be resisted and critiqued (Seaver, 2019). Yet, as Seaver (2019) posits, this perspective is overly simplistic and also contradicts empirical studies (Haim et al., 2018). Instead, then, I have proposed a Bourdieusian conceptualization of social power which enables research to take a balanced view on the power of algorithms on the structure/agency continuum. In other words, Bourdieusian conceptualization sees consumers neither as fully agentic and free from the power of the algorithm nor as passive dupes, as critical scholars would suggest. Therefore, a Bourdieusian view sees consumers as guided, yet not fully restricted, by the social and cultural structures which they inhabit.

However, while care has been taken to base the propositions made on extant empirical studies, it is prudent to note that, in this conceptual paper, it has not been possible to investigate these propositions empirically. Indeed, as extant literature has agreed, studying the social power of algorithms is a difficult task due to their black boxed nature. Due to these challenges, studies aiming to understand the social power of algorithms have predominantly used a theoretical focus (Fletcher & Nielsen, 2019), and in this study I have continued this tradition. What this then means is that investigating the concept of algorithmic meta-capital empirically is a question for future research. Nevertheless, as Gilson and Goldberg (2015), for instance, argue, conceptual papers in themselves are valuable when they are able to bridge existing theories in novel ways, link work across disciplines, and broaden the scope of thinking within a field. This conceptual paper has aimed to do so in several ways to provide a map for future Bourdieusian studies in understanding social power through algorithms. Furthermore, this paper has also synthesized and contextualized extant empirical literature by showing how they can be reinterpreted through the lens of algorithmic meta-capital.

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