### ORIGINAL ARTICLE

# Audiences' Communicative Agency in a Datafied Age: Interpretative, Relational and Increasingly Prospective

## Brita Ytre-Arne 🕕 <sup>1</sup> & Ranjana Das<sup>2</sup>

<sup>1</sup>Department of Information Science and Media Studies, University of Bergen, 5020 Bergen, Norway <sup>2</sup>Department of Sociology, University of Surrey, Surrey GU2 7XH, UK

This article develops a conceptualization of audience agency in the face of datafication. We consider how people, as audiences and users of media and technologies, face transforming communicative conditions, and how these conditions challenge the power potentials of audiences in processes of communication—that is, their communicative agency. To develop our conceptualization, we unpack the concept of audiences' communicative agency by examining its foundations in communication scholarship, in reception theory and sociology, arguing that agency is understood as interpretative and relational, and applied to make important normative assessments. We further draw on emerging scholarship on encounters with data in the everyday to discuss how audience agency is now challenged by datafication, arguing that communicative agency is increasingly prospective in a datafied age. Thereby, we provide a theoretical conceptualization for further analysis of audiences in transforming communicative conditions.

**Keywords:** Agency, Audiences, Datafication, Everyday, Interpretation, Prospection, Reception Theory, Sociological Theory, Structure, Technology

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Audiences' communicative agency is a longstanding but rarely unpacked concept in communication theory. It refers to the power potentials of people, as audiences or users, in processes of communication in a mediated world. As this mediated world is increasingly characterized by transformations often referred to as *datafication*, the need to understand audience agency has taken on new urgency. Datafication implies that people's attention and actions are turned into metrics that enter big data networks, allowing for increased tracking and predictive analysis across technological platforms and societal domains (Mayer-Schönberger & Cukier, 2013; van Dijk, 2014). Dynamics of mediated communication change as user data is

Corresponding author: Brita Ytre-Arne; e-mail: brita.ytre-arne@uib.no

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aggregated from algorithmic media, social network services, connective devices, and the Internet of things, and applied to various contexts in with cultural, economic, and political consequences, with emerging technologies for machine learning and artificial intelligence. Therefore, questions emerge about the power that structures of datafication hold over users of media technologies, and how users might respond and act in return (e.g., Hintz et al., 2017; Noble, 2018). These questions can usefully be framed as investigations of agency (Kennedy et al., 2015).

As the idea of agency is essential to understand how people experience datafication (Livingstone, 2019) and to advance social critiques of datafication (Couldry, 2013), we argue that communication scholars must rethink the theoretical foundations of agency in light of datafication. If there is a mismatch between theoretical understandings of agency and structural conditions of communication in our time, research will struggle to understand how datafication impacts people, individually and collectively. While datafication could affect agency in many ways, our discussion focuses on agency in the context of communication, and on people's experiences as audiences and as users of media technologies. In this article we contribute with a fuller conceptualization of what audiences' communicative agency is, and a discuss of how it is challenged by datafication.

As indicated by focusing on the agency of audiences or users, we find it fruitful to approach the social consequences of datafication through the scholarly tradition of audience and reception research, with the interests of audiences at the center of the research agenda (Ang, 1996; Ytre-Arne & Das, 2019). In audience research, the position of agency as a favorite or problematic notion has ebbed and flowed over time (Livingstone, 2019). Debates about agency in textual interpretation were at the heart of the rise of reception research in the 1980s, quickly to be critiqued for being overly celebratory to the extent of neglecting textual and structural power (Condit, 1989; Morley, 1996). Likewise, questions of whether technological developments challenge the very notion of audiences have been posed several times (e.g., Livingstone & Das, 2013; Rosen, 2012). Nevertheless, the audience perspective encompasses conceptual resources that constitute an alternative to problematic promises of seemingly sweeping big data methods (Boyd & Crawford, 2012) and that are needed to develop a more systematic research endeavor on everyday and embodied experiences with datafication (Kennedy, 2017). The novelty of our discussion in this article is to draw on these conceptual resources to bring forward a more specific conceptualization of audiences' communicative agency, considering both long-standing theoretical roots, and emerging challenges from datafication.

Between 2015 and 2018, we directed a European research network that conducted a critical review of the past decade of audience research, followed by a foresight analysis to formulate a research agenda for the future (Das & Ytre-Arne, 2018). This work documented a period in which datafication emerged as a key characteristic of communication, while audience research increasingly highlighted experiences of intrusive media (Mollen & Dhaenens, 2018) and co-option of audience labor across big data networks (Stehling et al., 2018). In response, we found that audiences are developing new and often ambivalent strategies for coping, negotiation, or resistance, but are nevertheless left with uncertainty about the possibilities and consequences of their own communicative actions. Integrating such ambivalence and uncertainty into considerations of agency thereby emerged as a central theoretical challenge.

The question we ask in this article, then, is what audiences' communicative agency is, how it is challenged by datafication, and how these challenges mandate us to rethink the concept. To answer this question, we first unpack communicative agency as a theoretical concept in communication scholarship and particularly in audience research. Here, we observe its centrality to normative arguments evaluating changing communicative conditions, and identify theoretical foundations in reception theory and sociology. This leads us to define the concept of audiences' communicative agency as fundamentally interpretative and relational. To assess how such communicative agency is challenged by datafication, we draw on emerging scholarship on encounters with data in the everyday, and argue that receding transparency and increasing uncertainty are prominent challenges of datafication, as seen from an audience perspective. As a response, we conclude that audiences' communicative agency needs to become increasingly prospective in a datafied age. Our article thereby contributes to define and theorize audiences' communicative agency as interpretative, relational, and increasingly prospective, grounding each of these elements in established and emerging scholarship.

#### Unpacking communicative agency

To answer the question of what audiences' communicative agency is, and develop a fuller conceptualization of the concept, we draw on three related strands of scholarship. We first consider how agency has been applied in communication research, and argue that further examination of conceptual roots in reception theory and sociology is needed to arrive at a deeper understanding of what agency is. We thus find that the concept holds normative applications in communication scholarship, relational dimensions that are highlighted in sociological theory, and interpretative aspects emphasized in reception theory, and draw on these understandings to formulate a more specific conceptualization.

#### Applications of agency in communication scholarship and audience research

In communication scholarship, the concept of agency has been fruitfully discussed and employed in fields ranging from rhetoric (Geisler, 2004; Hoff-Clausen et al., 2019) to game studies (Murray, 1997; Tanenbaum & Tanenbaum, 2009). To address all of the different applications is beyond our scope. However, some influential works focused precisely on understanding changing communicative conditions such as digitalization, mediatization and datafication, strikingly draw upon the concept of agency in order to formulate their core arguments. For instance, van Dijck employs user agency as one of the cross-cutting categories in her analysis of the social media ecosystem in *The Culture of Connectivity* (2013), arguing that "user agency is a negotiated and embattled concept, and the power of users to control their actions is an important stake" (2013, p.33). Similarly, Couldry and Hepp in *The Mediated Construction of Reality* (2017) ask whether deep mediatization enhances or limits agency, and further to which individuals or institutions it has such effects in the construction of the social world (p.12). In both of these works, the notion of agency is applied as a standard for evaluating social implications of communicative transformations, including datafication. We consider such normativity an important feature of the application of the agency concept in communication studies. This could entail that similar normative values are ascribed to the concept itself, considering agency as inherently good. However, this is not necessarily the case, as more precise definitions could encompass understandings in which actions that express agency nevertheless have negative consequences, or arise from questionable motives. The more fundamental problem is therefore that agency needs to be more specifically defined.

A few works in communication theory offer fuller theorizations of the agency concept. Siles and Boczkowski's (2012) discuss textual and material dimensions of agency, combining communication scholarship with science and technology studies. A more recent example is Picone et al. (2019) who highlight everyday agency when developing their term "small acts of engagement," which explains liking, clicking and similar practices in social media use. Here, agency is understood as potentials for interpretative resistance through audience practices embedded in everyday life, drawing on debates originating in cultural studies on resistance potentials in diverging interpretations (Jenkins, 2006; Morley, 1996). Both of these conceptual discussions share some important foundations in their understandings of agency: They locate audience agency in a realm opened up through audiences' interpretative activities when engaging with media texts and in processes of communication, not necessarily entwining agency with manifest actions or measurable consequences. Further, they emphasize relational contexts that feed into and form the conditions in which agentic interpretation plays out, whether in the form of the materiality of platforms and technologies, or the power dynamics of everyday social situations.

These foundations for understanding audience agency are valuable, but in need of further theoretical unpacking in order to assess their usefulness to understanding agency in datafied communication. To examine audiences' communicative agency as interpretative and relational, we therefore return to the theories behind these understandings, located in reception theory on interpretation, and in sociological theory on structuration.

#### Agency as interpretative: foundations in reception theory

As we have already argued, agency has been central to discussions of what audiences' freedoms and constraints are when interpreting communicative messages, such

as polysemic media texts. This debate is also noted by Siles and Boczkowski (2012) precisely as a discussion of agency, while audience scholars might be more familiar referring to it as the debate on active audiences or the role of the reader (Eco, 1981). However, it is fruitfully approached as a discussion of agency as possible diversity in interpretation. The tradition of reception research, central in the history and knowledge interests of audience research (Schrøder, 2019), therefore offers theoretical and empirical investigations of agency as interpretative. Questions often raised in this tradition concern the realm of possibly diverging interpretations, the likelihood of audiences negotiating with or opposing the intentions of producers, which textual and contextual factors influence meaning-making processes, and the cultural and political consequences of interpretation. All of these questions are potentially contested, and could be answered to produce different views on the power and efficacy of audiences. However, they all point to interpretation as a form of mediated engagement that holds agentic capabilities.

The notion of communicative agency thereby has firm roots in literary aesthetics and reception theory. Decades before datafication became our justifiable preoccupation, when attention to readings of printed texts was on the rise, scholars noted that work theorizing such agentic "reading" fell into two broad divisions-the positive camp where the reader overcomes obstacles, and the alternative camp where the reader is manipulated by an uncanny text, and where there is frustration and misreading (Freund, 1987). Reception theorist Wolfgang Iser utilized the concept of prospecting (Iser, 1993) to formulate a position where the text presents boundaries, but noted that "whenever the flow is interrupted and we are led off in unexpected directions, the opportunity is given to us to bring into play our own faculty for establishing connections-for filling in the gaps left by the text itself" (p.280). Similar interactions are echoed in Hall's (1973) well-known Encoding/Decodingmodel, bringing negotiated and oppositional readings forward as opportunities, while underlining the potential predominance of preferred readings, and the structural and ideological power dynamics that reinforce the probability of these (see also Morley, 1996).

These theories have already been adopted to analyze communication in datafied mediated environments (Schrøder, 2019). An important condition for this application of reception theory is to broaden the lens of what constitutes texts or messages for interpretation, to rather focus on the practice itself as it manifests in a range of everyday settings in technology-saturated societies. One example is Lomborg and Kapsch (2019) application of the concept of decoding, particularly drawing on Hall (1973), to analyze how users understand and respond to algorithms in daily media use. Approaching algorithms as something to be interpreted highlights important aspects of everyday encounters with these widespread features of datafied communication. This study further refers to agency to locate audiences' subversive tactics when dealing with algorithms.

A different aspect brought forward by reception theory is to understand meaning-making as a process beyond the technicalities of working with textual cues, to rather highlight creativity and pleasure. These aspects can also be usefully adapted to understand interpretation in datafied communication. An example is Kennedy's (2018) work on the intersections of data and emotions in the everyday, which highlights the emotions that arise as people encounter data in their everyday lives, including confidence, confusions, anxieties, worry, aspirations, annoyance, and playfulness. Converging Kennedy's argument with Iser's perspectives on pleasure in reading, we posit that for interfaces to work, there must be a process for engagement to be pleasurable and fruitful in people's imaginations. However, what people do with the structures they encounter, also depends on whether work with interfaces leads to experiences of defeat and fatigue, or identification of positive and emancipatory potentials. These are equally a significant part of the notion of interpretation (Iser, 1974, p.280) and point towards agentic aspects of a variety of interpretative acts.

#### Agency as relational: foundations in sociological theory

The second foundation for audiences' communicative agency that we pointed to above was agency as relational, signaling the need to locate interpretative practices within social contexts, with particular attention to power dynamics. Here, we propose that the classic sociological theory of Anthony Giddens (1984) constitutes a central and useful frame of reference. In the theory of structuration, Giddens developed the concepts of structure and agency as relational to one another. This point of inquiry is easily shared with communication theory, and more specifically with the task of understanding audiences in light of datafication, as it untangles the power dynamics between users and structures of datafication. With this starting point, the more specific understandings of agency in Giddens' scholarship offer several relevant entry-points to define audiences' agency in communicative processes.

First, Giddens argues that agency "refers not to the intentions people have in doing things, but to their capability of doing those things in the first place," and further contends that this is "why agency implies power" (1984, p.9). The emphasis on capabilities is useful to understand audiences, signaling attention beyond who uses which media or technologies, to rather consider people's capabilities to engage in different forms of mediated communication. The relevance to communication is accentuated when Giddens elaborates on power and agency: "to be an agent is to be able to deploy (chronically, in the flow of daily life) a range of causal powers, including that of influencing those deployed by others" (1984, p.14). Transferred to processes of communication, this provides an understanding of agentic audiences as having capabilities to meaningfully influence communicative interactions in their daily lives. It thus signals an everyday perspective that is suited to the concerns of audience research, placing the question of power within everyday social interactions experienced by individuals. With an understanding of agentic power as tied to capabilities, and made meaningful in everyday settings, agency in this understanding is not intrinsically expressed by measurable effects. However, the second aspect of the theory nevertheless places such agency in a broader societal framework.

Second, bringing in the duality of structure as the other key element in the theory of structuration (1984, p.25), the argument from Giddens is that agents take part in reproducing structure, willingly or not. This relational dynamic illuminates the relationship between audiences and media structures, referring to content producers, technological platforms, or to interests seeking to reach and influence audiences through the media or to harvest and utilize user data. While our conceptualization focuses on audiences' agency rather than outlining these various structures, we consider the relational dynamic central to understand how audiences take part in reworking and reinforcing structures of datafication. We can thereby draw on Giddens to consider a phenomenon such as co-option of audience's creative labor in datafied communication. Creative and productive audience engagement can meaningfully be conceived as a manifestation of agency, as audiences use their capabilities for expression and interaction, and effect power potentials in everyday communicative exchanges. Simultaneously, datafication enables such engagements to be co-opted and adapted to different purposes beyond the reach of audiences, utilized by different or even opposing interests, thereby inviting or mandating audiences to take part in the reproduction of structures.

While useful to understand the power potentials of users and audiences in light of structures of datafication, the understanding of communicative agency developed from Giddens does not in itself offer details on communicative processes as potential agentic spaces. However, by joining in perspectives on agency in interpretation from reception theory, as discussed above, this piece of the puzzle emerges more clearly. Combining attention to interpretative and relational aspects of agency thereby enables us to arrive at a more specific conceptualization, and formulate a definition.

#### Defining audiences' communicative agency

Having examined foundations of audiences' communicative agency, we find that the concept is often applied normatively to underline the interests of audiences in changing communicative conditions, and that it encompasses interpretative and relational aspects: It is usefully considered as dynamic and relational to the structures of mediated communication, and highlights the agentic potentials of interpretation. We have argued that these understandings can be unpacked by considering theoretical roots in reception theory and sociology, and joining these together to consider agency as interpretative and relational.

From both the traditions we have examined, we find a shared interest in the agentic capabilities of audiences, rather than assessment of how these are enacted, and a shared attention to power potentials in everyday contexts of communication. We thus propose that audiences' communicative agency can be defined as *capabilities to effect power potentials through interpretative engagements in everyday processes of communication, in relation to structures that take part in the same communicative processes.* This definition highlights interpretation as active

engagements that imply potential power, situated in audiences' everyday lives and in relation to societal structures of communication. The definition is relevant to the context datafied communication, as signaled by our discussion above of examples such as co-option of user data, but it stems from theories and knowledge interests that precede the phenomenon of datafication.

As capabilities and power potentials of audiences are at the center of the definition, it is essential to consider these terms in the context of audience research. We do not propose to list potential manifestations of audiences' communicative agency, but rather to exemplify what capabilities and power potentials refer to in key debates in the field. Understanding audience agency as contextual, there can be no universally given answer about whether communicative practices express agency or not. As noted also in analysis of seemingly mundane acts such as clicking (Picone et al., 2019) or everyday decoding of algorithms (Lomborg and Kapsch, 2019), the agentic potentials of such acts are not given, but found in interpretative processes and relational contexts, as also highlighted in our definition. Instead, we argue, the exploration of realms and boundaries of agency is more usefully considered as part of key debates on audiences and users in processes of communication.

We thus find that central questions in the field of audience research highlights different, but often complementary and interwoven, agentic capabilities of audiences and users. One way of characterizing these is in terms of socio-cultural, civicpolitical and creative-connective dimensions, focusing on audiences in everyday socio-cultural contexts, as political citizens, and as participatory (digital) media users. Socio-cultural capabilities consider audience agency in terms of whether media use fosters possibilities for meaningful engagements in everyday life, inclusion in cultures and communities and in processes of identity formation (e.g., Bird, 2003; Silverstone, 1994). Civic-political capabilities have intrinsically been tied to our understandings of audiences as publics and citizens, considering agency in terms of how media use contributes to civic participation or to political efficacy (Schrøder, 2012; Stehling & Murru, 2016). Creative capabilities highlight expression and production, often referring to an optimistic idea of a seemingly more expansive audience agency in the digital media era, as central in questions of audiences turning producers (Bird, 2011) and applied to phenomena such as blogging, citizen journalism or elaborate fan practices (Jenkins, 2006). However, agency in the age of digital media can also be conceptualized as broadly *connective* capabilities, looking beyond productive acts to wider explorations of audiences' lives in mediated and technology-saturated societies (Baym, 2015; Van Dijck, 2013).

Our conceptualization thus understands communicative agency as interpretative and relational, defined in terms of audiences' capabilities to effect power through interpretative engagements in everyday processes of communication, in relation to structures that take part in the same communicative processes. Such capabilities are diverse, but often understood as socio-cultural, civic-political, creative or connective, or blending several of these categories, now potentially transformed by datafication.

#### How communicative agency is challenged by datafication

Today, an urgent question is how audiences' communicative agency is challenged by datafication. Whether referring to the different capabilities and dimensions in our conceptualization above, or posed as questions about the impact of datafication elsewhere in communication scholarship, it seems clear that challenges brought forward by datafication can be considered at several levels. Often, critiques of datafication emphasize shifting power dynamics at a global scale, transcending geographical boundaries and social spheres (e.g., Milan & Treré, 2019). While this offers reminders about the far-reaching consequences of datafication, an audience perspective also begs the question of whether and how diversely situated audiences experience that their agency is challenged by datafication, in everyday life. It is to these explorations that our conceptualization of audiences' communicative agency could be most useful. We therefore suggest that emerging work on everyday encounters with data offers a crucial supplementary perspective to other critiques of datafication, and constitutes a resource for assessing how audiences experience challenges of datafication.

A growing body of research (c.f. Bucher, 2018; Kennedy, 2018) has started looking at bottom-up encounters with algorithms and data in the context of people's everyday lives. This perspective is an alternative to more sweeping representations through data visualizations or large-scale harvesting of big data methods (Boyd & Crawford, 2012; Kennedy et al., 2015), and corresponds more closely to the core knowledge interests of audience research by emphasizing social and embodied dimensions of a phenomenon such as datafication. This work is thus beginning to locate people's challenges as they work within and against datafication and the infrastructures of platform society (Plantin et al., 2018). Important justifications for this endeavor are that narratives of big data make data seem ever more natural (Couldry & Yu, 2018) and that "big data divides" (c.f. Andrejevic, 2014) grow more pronounced. Audiences and users are rarely granted access to their own data, often lack the analytical capacities to unpack such data, and the infrastructural resources to process it, creating vast power differentials (Andrejevic, 2014).

A critical route into thinking about data less as a representational resource and more about its politics (Gray, 2018), is thus through people's social interaction in everyday life situations. For instance, Bucher (2018) approaches algorithms not through technical specificities or as powerful in themselves, but by asking how they promote particular forms of "programmed sociality." Kennedy's work is particularly useful to draw out the relationships between data, emotions and the everyday. She argues for the need to "listen to the voices of ordinary people speaking about the conditions that they say would enable them to live better with data and, in so doing, arm ourselves with knowledge which advances data studies" (Kennedy, 2018, p.x). This entails attention to people's confidence, confusions, worries, hopes, aspirations—to aspects that often appear emotional, forward-looking, and focused on everyday experiences. As our discussion has accounted for, this is a good match with

the core knowledge interests of audience studies and with theoretical foundations of communicative agency.

We highlight the relevance of this budding strand of research by examining some selected examples of studies that illustrate lived, practical ways in which communicative agency plays out, and draw on these to discuss how audiences' communicative agency is challenged by datafication. Our discussion continues to consider socio-cultural, civic-political and creative-connective capabilities. From this discussion we define emerging challenges, and subsequently argue that these highlight the agentic dimensions of a particular mode of interpretative work, focused on how audiences envision consequences of datafied communication.

#### Communicative agency in everyday encounters with data

Starting with socio-cultural capabilities located in the everyday context of audiences and users, our first example comes from the connected home where all things domestic might one day also be "smart." Amidst legitimate concern about ethics, privacy and surveillance, Hine (2019) analyzes ways of living with smart tech inside the home, listening to the quiet ways in which technologies get reworked and appropriated into everyday life, instead of assuming that loss of agency is inevitable. Hine notes that this means paying attention to the seemingly mundane uses of smart domestic technology where meaning-making as a task is not apparent. She argues, using empirical notes from auto-ethnographic snapshots on technology in the context of elderly care, that "while it is undoubtedly important for some research to take a revelatory and even campaigning stance in relation to data practices (...) it is also useful to maintain some space for an ethnography of meaningmaking that does not assume that we already know what these technologies do and instead discovers their qualities alongside participants" (Hine, 2019). While these experiences seem partly or even far removed from the activities we usually consider as mediated communication, it is precisely notions of interpretation known from other communicative contexts that become crucial in these everyday encounters with data. As Bucher (2018) also suggests, contrary to ideas that individuals and communities are entirely subservient to the impact of algorithmic manipulation, there is reason to conclude that people actively work with and sometimes reject such structures in the course of everyday social interactions.

Related examples come from research into self-tracking and wearables, phenomena that are critiqued for potentials for panoptic surveillance and reduction of embodied experiences into metrification (e.g., Fotopoulou, 2020). However, Lupton notes how there has been little discussion of the ways in which "self-tracking may be used for resistant or strategic political interventions—as means to challenge accepted norms and assumptions about selves and bodies rather than conforming to these norms and assumptions" (2015, p.1). Such practices lie at the heart of Gorm and Shklovski's (2019) take on practices of care in self-tracking which considers how producing data from bodies through wearable apps create meaningful practices for the self. As Lomborg and Frandsen (2016) also note, self-tracking involves agentic choices about communication with the system, where data are created, shared and tracked all involve "the motivation of an individual user who is situated in a broader web of everyday activities, and stimulated and augmented by communicative features provided by the technology" (p.1015).

Further emphasizing civic and political capabilities, our next example comes from Velkova and Kaun's (2019) unpacking of the notions of agentic resistance and repair politics, through mundane everyday engagements between users and datafied structures. Paying particular attention to the World White Web project, they engage with "mundane user encounters with algorithms that can be inspirational for political projects that embrace-rather than denounce-the algorithmic power embedded in platforms and channel it to both serve specific political ends and act upon biased algorithmic output" (2019, p.2). Working through Johanna Burai's interventions in the Google image search function the authors seek to locate the agentic interruptions of whiteness and its amplification in search engine algorithms. Their findings put forward an understanding of "repair politics as a corrective work that works through improvisations, patches and ingenuity, together with and within algorithmic systems, to make them generate unintended, alternative outputs to respond to the 'brokenness' or biased representational politics of algorithms" (2019, p.13). In the growing discussion of problematic representations embedded in and reinforced by algorithms, such work points directly to political capabilities and agentic potentials of audience practices such as re-appropriation and resistance.

Investigation of resistant potentials is also central to Stefan Baack's (2018) analysis of "civic techs"—people proactively engaging with the structural logics of datafication, for civic and political aims. Baack uses empirical research on *MySociety*—a British, non-profit, civic tech organization, where members make meaning from and use their own data to meet their own purposes. Such initiatives seek to significantly extend prior understandings of participation in government or participatory culture, by acting as what Baack calls facilitators of engagement. If the examples until now have focused on individuals as users, this draws attention to the potentials for agentic action within community spaces. Instructive here is to note the many decades of evidence of audiences not solely operating as individuals but in the collective—as groups, communities, interest groups, where civic and political action and potential for action is repeatedly evidenced. Indeed, as Milan and van der Velden note (2018), "non-governmental organizations, hackers, and activists of all kinds provide a myriad of 'alternative' interventions, interpretations, and imaginaries of what data stands for and what can be done with it" (2018).

Connecting political potentials to creative and connective agentic capabilities, a relevant example is Literat and Kligler-Vilenchik's (2019) exposition of young people's expressions on the popular music app musical.ly (now TikTok). Analyzing how young users worked with, within and around platform architecture and affordances, they further examine the ways in which such creative expression found political meaning in the context of Donald Trump's presidential election victory in

2016. Far from being restrained or constrained by architectural affordances, it appeared that affordances were made use of, through the manufacture and use of political hashtags as shared emotional spaces. The sharing of symbolic resources with like-minded others, and creating newer spaces, products and connections which connect to civic and political participation as the instance above.

Our last example of agentic potentials in connection comes from a recent study by Das and Hodkinson (2019) of how men, in their role as new fathers, make active use of platform algorithms when engaging in "social stenography" to communicate about mental health difficulties. When feeling unable to speak about such issues in their perceived roles as supporters and providers, the study analyzes how these social media users carefully work with the news feed algorithm, and its visibility and amplification features in particular, to code, mask and hide communication on mental health difficulties. The fathers share, re-tweet, or click the like button on seemingly random popular media articles on male mental health, with the aim of positioning themselves, with algorithmic help, into the news feeds of friends and relatives, with the hope that this will invite attention and interest on their own struggles and difficulties. Far from open, dramatic acts of reaching out, this analysis underlines the emotive preparation, labor and investment made into understanding how platform architecture and newsfeed algorithms work. Whilst the hidden attempts to connect do not always get decoded, they demonstrate that avoiding anticipated societal rejection whilst seeking to connect involves careful scrutiny and working with, rather than simply accepting, algorithmic amplification.

All of these studies illustrate various expressions of audiences' communicative agency, understood as power potentials in everyday interpretative engagements, in relation to structures of datafied communication. They accentuate the relevance of interrelated agentic capabilities, from the seemingly individualist and creative to the explicitly cultural and political. We thus find ample evidence of audience agency in the form of power potentials also in the context of datafied communication, but caution not to conflate these potentials with over-celebration of the effects of such agency. Instead, the studies of experiences with data in the everyday illustrate how datafied communicative conditions also challenge agency. This leads us to more specifically locate two key challenges to audience agency in light of datafication.

# Challenges to communicative agency: receding transparency and increasing uncertainty

When considering how to assess the agentic capabilities of audiences in everyday encounters with data, it becomes clear how difficult it is to delineate the relational power dynamic we have described as audience agency. As also shown in scholarship on audience responses to intrusive media (Mollen & Dhaenens, 2018), there are agentic possibilities of people working with and against interfaces and intrusions. However, navigating these possibilities comes with a substantial amount of guesswork, uncertainty and struggle. To be agentic, audiences need some degree of

capability to evaluate the complex and opaque communicative conditions of the datafied age, simply to grasp the implications of seemingly small and mundane communicative acts becoming metrified and aggregated. This points to two related challenges to audience agency: receding transparency as a condition of datafication, and increasing uncertainty about the boundaries of communicative exchanges.

The first of these challenges concerns the lack of transparency in interactions with technological platforms, connected devices and algorithmic media. Limited transparency implies that it becomes more difficult for audiences to assess the possibilities and boundaries of their own agentic capabilities. This challenge is part of critiques voiced against powerful platforms, but also experienced by audiences in everyday communication. It is not merely the occurrence of privacy breaches or digital disinformation, but also the more or less acknowledged perception that personal data could be abused and that information could be false, while precise insight into such matters is difficult to obtain, and alternatives difficult to formulate (see also Mathieu et al., 2018). All of the examples we discussed above were premised on users actively engaging with platforms, apps or "smart" devices, seemingly with the belief that the outcome would make a difference in their own lives or effect positive change in their communities. Several of the examples also point towards creative and skilled ways of negotiating with affordances, tweaking or even "tricking" the system. However, understanding the full extent of this system would be an immensely challenging task even for trained specialists, let alone the average user. It therefore follows that it is difficult to assess the impact of agentic capabilities, even when these are applied to negotiate with or work against structures of datafication.

The second and related challenge concerns the reach and extended consequences of communicative interactions in a datafied age. Coupled with extensive uncertainty, audiences face a situation in which their data feed into complex systems, and indeed back to them, but not necessarily through feedback loops that are visible, predicable or known beforehand. It is not merely that the personal uses of search engines, streaming services, self-tracking apps or social media will affect individual recommendations, but also the aggregated and intangible effects in society more broadly. As a result, it becomes difficult to know when and how one contributes to reproduce datafied structures, in whose interests, and to what end. This implies that seemingly trivial communicative acts could be aggregated and utilized for purposes far beyond the original context or intention of the user. For instance, we might ask to which degree an individual user of a social media platform is an active contributor to the aggregation of user data, that in turn enable and feed back into commercial or political manipulation of other users. Some of the examples we discussed above located expressions of communicative agency in everyday, domestic, personal and embodied contexts, but users can hardly know when and how their data is made to travel beyond these contexts. Experiences of receding transparency and increasing uncertainty thereby characterize everyday interactions with datafied communication.

#### Agency as prospective: an audience response to the challenges of datafication

We have argued that receding transparency and increasing uncertainty could infringe upon and potentially limit audiences' communicative agency in an age of datafied communication. This calls for further empirical research on potentials and boundaries for agency in everyday communication, but also for considering if the theoretical underpinnings of agency are challenged on a more fundamental level. To which extent can audiences be agentic if consequences of communication are difficult to understand and predict? This predicament is not in itself new, but the problematic aspects of datafication we have discussed accentuate it, to the point where it is necessary to rethink what communicative agency means.

In this context, as audiences are mandated to make constant evaluations in conditions of uncertainty, we propose that communicative agency can still usefully be theorized as interpretative and relational, but also as increasingly prospective. Our emphasis on agency as increasingly prospective signals that this is not a new phenomenon emerging with datafication, but instead an element brought to the forefront more prominently in datafied communication, with the greater possibilities of data utilized across contexts.

We therefore invoke the idea of *prospection* to underline that audiences engage with data in the moment, but with views to the future, and that everyday interpretation of datafied communication mandates extemporization and imagination. Audiences often know that their engagements leave traces that form patterns and feedback loops, but also that the full extent of these are beyond transparency, rendering the prediction of outcomes of communicative exchanges less apparent. Uncertain visions of future outcomes—whether hopeful, or apprehensive, critical or instrumental-thereby underpin the idea of agency as prospective. The concept prospection is useful to capture this forward-looking interpretative work: The word has origins in Late Middle English and Latin, and incorporates notions of foresight, anticipating, planning and acting towards an as-yet unknown future. In reception theory, the concept of prospection traces back into the decoding of written text, with long roots in literary reception aesthetics. As we argued in our initial discussion of the work of for instance Iser-who utilized the notion of prospection explicitlythis tradition offers valuable resources to make sense of interpretative work also in datafied communication.

The examples we discussed above illustrate different expressions of prospective agency in everyday experiences with smart devices, self-tracking, social media platforms, algorithmic media and beyond. As some of the scholars we cited in our discussion also argue, some of these everyday practices are mundane, but that does not mean they are insignificant. Instead, it is productive to discuss the potentials for agency in everyday communication, to look for disruptive or reparative potentials as Velkova and Kaun (2019) suggest, or following Hine's (2019) argument that predetermined stances about datafication can neglect silent experiences. What cuts across several of the studies of users' everyday encounters with data is a notion of uncertainty on the one hand, and a notion of acting, in some way or another, to cope with that uncertainty, on the other. The idea of prospection avoids overcelebratory discourses around agency, but simultaneously highlights that users actually make significant efforts to make sense of, cooperate with, negotiate with or even reject datafied communicative features. Some expressions of prospective agency are cognitive or affective attunements, such as imagination or apprehension, whilst others appear more as concretized actions or behaviors, such as rejection or cooperation. Nevertheless, these do not necessarily represent individual acts with material interfaces, or overlap completely with specific practices. Instead, they offer a realm of emotional and interpretative reactions in everyday engagements with data.

#### Conclusion

In this article we have discussed what communicative agency is, and how it is challenged by datafication. Our conceptualization of the agency concept in audience research focused on interpretative and relational foundations, and grounded these further in reception theory and sociology. We defined communicative agency as the power potentials effected by interpretative engagements in everyday processes of communication, in relation to communicative structures, and further argued that conditions of datafication mandate heightened attention to how such agency is also increasingly prospective—that is forward-looking and imaginative, in the face of growing uncertainty and receding transparency. We do not propose to discard the interpretative or relational foundations of audience agency, nor to suggest that prospection is unique to agency in datafied communication. However, we argue that datafication has brought the relevance of prospective agency to the forefront.

While our discussion started from the premise of significant change in datafied times, we are mindful that this in itself is not entirely a new challenge, but rather an acknowledged aspect of studying evolving and emerging media technologies, often embedded in theories and concepts that have proven useful in the past. We have argued that the field of audience research encompasses key debates that usefully outline different agentic capabilities of audiences, understanding these as sociocultural, civic–political and creative–connective. In examining emerging scholarship on data in the everyday, we find continued attention to these agentic capabilities, but also uncertainty of what they can achieve.

Examining the power of mediated structures has ever been critical, also in terms of audience agency. Nevertheless, what is unprecedented with datafication is the scale of phenomena such as co-option of data (Stehling et al., 2018), accumulative pressures of media intrusion (Mollen & Dhaenens, 2018), or potentials for dataveillance (van Djick, 2013). Critical attention to these communicative conditions indicates that audience agency should not be taken for granted. Instead, to continue to apply agency as a normative standard in evaluations of changing communicative conditions (e.g., Van Dijck, 2014; Couldry & Hepp, 2017), it is necessary to consider

broader responsibilities. We have asserted that one crucial aspect of this debate is to strengthen the endeavors to analyze, empirically and theoretically, what datafication means for people in their roles as audiences and users.

Understanding audience agency in a datafied age is therefore a critical challenge for communication studies. As audiences' interpretative work is increasingly prospective, how are critical or transformative potentials of interpretation changing? What could audience agency potentially achieve? Our approach to these questions refers back to the audience perspectives we have developed our conceptualization from, underlining the importance of media technologies in people's lives as a fundamental reason for researching communication. This research interest persists in asking not just which communicative structures that exist but also how they are experienced by individuals and social groups, situated in different contexts, open to the possibility of diverging interpretations and various modes of engagement. Audience research brings to the forefront what Livingstone describes as "including the people in a mediated, perhaps mediatized, increasingly datafied age" (2019, p.180). While datafication could bring forward new priorities, the need to consider the interests of audiences remains (Ytre-Arne & Das, 2019). The conceptualization of audiences' communicative agency we have presented here is a contribution to theorize the position of "the people" in datafied communication.

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