

Media Innovation and social change: introduction to the special issue

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The diffusion of the World Wide Web in the 1990s, followed by more recent developments in mobile media have facilitated significant social change. Today it is hard to imagine any event, whether public or private, that is not documented and communicated via the Internet and mobile media. In addition to journalism, film and other forms of entertainment, media innovations are now extensively used for interpersonal, educational and work-related communication. They are also deeply integrated in processes of activism and social change, as witnessed during the Arab Spring, or the Occupy movement and its siblings, #BlackLivesMatter, #Metoo and the recent climate awareness protests (cf. Milan, 2013). Media innovations also increase opportunities for communication between groups that have previously been marginalised in mainstream media, such as Indigenous or minority communities (cf. Ní Bhroin, 2015). Furthermore, they facilitate the development of communi-

cation services in communities that have previously been under-served by existing media (cf. Csíkszent-mihályi, Mukundane, Rodrigues, Mwesigwa and Kasprzak, 2018). In spite of this, we know relatively little about how media innovations interact with and influence processes of social change, or about the social consequences of these processes. Most publications that focus on media innovation, including those that have appeared in this journal, do not explicitly engage with social change.

Our purpose with this Special Issue is to present and contribute to a body of research that critically explores the relationship between media innovation and social change. In doing so, we also outline the contours of a research agenda to further develop this emerging field. Our motivation arises from a review of research published in the nine previous editions of this journal, where we explored how research about media innovations engaged with the topic of social change. We find that research in the field of media innovations has tended to focus on business and economic imperatives for media innovation, following the paradigm of research on digitalisation introduced by von Hippel's theories of 'democratizing innovation' (2005), Chesbrough's 'open innovation' (2006), or Tapscott and Williams, 'Wikinomics' (2011). As a consequence, digitalisation and the introduction of new technologies is usually unquestioningly presented as a business imperative for media industry stakeholders.

In spite of this, a significant body of international research points to the deepening and increasingly complex interconnection between the development of media and communication technologies and social change (cf. Vallor. 2016; Bruns, 2014; Couldry and Hepp, 2017, Carpentier, 2011). Media innovations research therefore lacks critical perspectives and analyses of how these innovations interact with and aim

to address social change, and what their social consequences might be. By succumbing to what we may call the digital imperative, current research on media innovations also forecloses on the possibility to imagine alternative futures (cf. Zuboff, 2019; Fairclough, 2010). This Special Issue includes seven interdisciplinary contributions from journalism, film studies, new media studies, media literacy, social movement theory and science and technology studies. As these articles clearly demonstrate, a more explicit research agenda could foster more critical perspectives and analyses of the interplay and mutual influence between media innovation and social change.

Our first task in this introduction is therefore to define what we mean by our key concepts of 'media innovation' and 'social change'. From this conceptual starting point, we introduce the articles in this Special Issue and outline their contributions. To summarise we outline a research agenda for the near future with which we argue the field of media innovation research should engage.

MFDIA INNOVATION

Following Axel Bruns in the inaugural issue of this journal, we take a broad and inclusive approach to defining media innovation, as an interwoven and interdependent process of innovation in both media technologies and media practices (2014, p. 13).

Charles Ess (2014a), in his introduction to the same issue, understands media innovation to delimit both an analytical academic field, as well as a field of practice in media industries. Because media innovations are also social, i.e. they take place in, react to and are generated socially, and have social consequences, we suggest broadening this definition to include media innovations that are implemented beyond, or at the edge of, media industries, whether in the more amorphous realms of social movements and activism, or more broadly in organised civil society (e.g. progressive non-governmental organisations).

In parallel to this, we note that while the Internet was initially understood to represent a promise of 'democratizing innovation' (cf. von Hippel, 2005), we are now in a situation where a handful of global corporations own and control the most used platforms and, as a result, profit from data flows as the 'newest' commodity that is globally exchanged. There are arguably few media innovations that do not intersect with these corporations in one way or another. It is therefore important to explore how media innovations that aim to bring about social change are impacted by these circumstances.

In addition to analysing media innovations, we also need to understand media innovations from a more etic (that is, practical) perspective, i.e. by getting involved in the design and implementation of media innovation, in particular where this aims to bring about social change (cf. Csíkszentmihályi et al., 2018). Related to this lacking etic perspective, is the question of when exactly media innovation occurs? We know for example that innovation tends to be non-linear, messy and not always directly observable while it is happening (Kline and Rosenberg, 1986). It is usually something that becomes clearer in retrospect. What consequences does this then have when studying the relationship between media innovation and social change?

Broadly speaking, we agree with the analytical approach outlined by Storsul and Krumsvik (2013) and Krumsvik, Milan, Ní Bhroin and Storsul (2019) in that studying media innovations requires attention to be paid to three important aspects – namely, identifying what is changing (production, paradigm, process, position, genre or social change); identifying and analysing the extent and nature of the change (i.e. is it a radical or an incremental innovation?), and; identifying the factors that influence change, including media institutional factors; technological developments; and sociocultural factors and power relations. However, we submit that this research also needs to engage with the consequences of change, whether these are social, socio-cultural or socio-political.

SOCIAL CHANGE

The multifaced concept of 'social change' can be understood as an empty trope that can be filled with all kinds of meaning. It is therefore important for us to provide a working definition of what we mean by 'social change'. We focus on three key features that are relevant to analyses of media innovations. These are (a) complex power relations, (b) political dimensions and (c) ethical imperatives.

Following Latour (2005, p. 13), we agree that 'society' is a dynamic arrangement and rearrangement of human and non-human components in 'assemblages', that are constantly in flux (see also Delueze and Guattari, 2007, Chadwick 2013, and De Landa, 2013). We also agree with Latour in so far as a 'critical sociology' is required to understand how assemblages are interconnected. At the same time, it is particularly important for our work to explore the complex power relations and dynamics that are constituted in and around these assemblages. This is because, as a result of interaction and social flux, and what Chadwick calls interdependence (2013, p. 86), power relations normally maintain a status quo that serves particular, usually commercial, interests. In the context of our specific focus on media innovation, these interests drive for example the development and maintenance of business models that aim to commodify communication (see also Ess, 2014b, Mosco, 2009; Wu, 2010).

Our approach is therefore critical in nature. In exploring the political potential of participation, Arnstein (1969, in Carpentier, 2016, p. 75) argued that: "There is a critical difference between going through the empty ritual of participation and having the real power needed to affect the outcome of the process". Following this, we understand social change to have political dimensions, which facilitate considerations of, and mobilisations towards, alternative futures, however utopian these may be (see also Calhoun 1995). Social change then, as we understand it, does not refer to any change in society, but to changes that involve or strive for the equalization of power relations, or the achievement of social justice, between privileged and non-privileged actors.

Understanding 'the social' as something that relates to a social contract comes to us from Rousseau (see also Latour 2005, p. 6). It is this ethical interpretation of the concept as it relates for example to equalizing power relations by ensuring minimum wages, human rights (including communication and digital rights) and democracy, that we are invoking when we talk about social change. By exploring the relationship between media innovation and social change, we seek to understand more about how a distinct set of interactions and interdependencies that relate to media innovations (broadly defined) might allow us to understand more about our potential to

thrive in social contexts that are increasingly mediated (following Vallor, 2016). It is therefore important to acknowledge the extent to which broad processes of technological innovation, such as the introduction of the Internet, convergence, digitalization and more recently datafication and Artificial Intelligence, influence this potential.

As stated above, empirical analyses of, and theoretical reflections on, the interplay and mutual influence between media innovation and social change are lacking in this field of inquiry. One of the most important components of our research agenda is to take a critical approach to the role technology plays in the equalization of power relations. The introduction of the Internet (and its initial underlying (and for the most part failed) ideology of net neutrality, among other aspects) enhanced processes of convergence and digitalization that in turn contributed to the development of a 'participatory' media culture (cf. Jenkins, Ito and boyd, 2015). Early analyses of participatory culture proposed that new media technologies could enhance democracy, empower users and increase social participation (cf. von Hippel, 2005; Jenkins 2006; Tapscott and Williams, 2007). In the context of political participation and organised collective action, such as the Occupy movement, Milan (2013) identified and argued for the importance of understanding how different social movements develop particular repertoires of action when it comes to the use of digital media to achieve social change. This introduces questions about agency, motivation and empowerment, i.e. who or what (i.e. actants/communication machines) have agency or are empowered to participate in processes of media innovation that aim to bring about social change?

Mediated mobilizations such as #Occupy and more recent examples like #FridaysForFuture have raised awareness of open source values and dynamics and mobilised support for issues of concern. At the same time, we witness the same platforms that hosted these mobilisations in use by the ultra-conservative Alt Right movement, or by global terrorist organisations. By consequence, we cannot uncritically claim that media innovations facilitate the equalization of power relations by default. Instead we need to dig deeper in order to understand more about the specific contexts, including regulatory and commercial contexts, in which media innovations are used to bring about social change.

One important aspect of Internet-based media in this regard was precisely its 'neutrality' i.e. the extent to which Internet service providers should treat all data in the same way and not block, speed up or slow down traffic based on payment or other preferences (Wu, 2003). At the same time, many of the providers of new media technologies, including the most popular social platforms on the web, are commercial operators, and the services they provide rely largely on proprietary algorithms. Therefore, while these services are offered to users for 'free', the practices of these users are commodified in exchange for revenue (cf. Mosco 2009). What initially might have seemed like a new and more democratic set of opportunities for users to engage with media in fact turned into the development of a range of services, conceptualized as 'platforms', that aimed to get their users 'hooked' in order to capture their data for revenue generation purposes (cf. Nieborg and Poell, 2018; Krüger, 2019).

At the core of the platformisation of digital media is a process that is conceptualized as 'datafication' (cf. Couldry and Hepp, 2017). Datafication ultimately contributes to what Zuboff (2019) has labelled 'surveillance capitalism'. Through datafication, increasingly large amounts of data about individuals are gathered, stored and aggregated in order to facilitate the targeting of products and commercials. More recently, the introduction of platforms for 'behavioural change' (see Krüger and Ní Bhroin, this issue), indicate additional authoritarian dimensions to these innovations. What's more, states partake in these forms of intrusive data collection in the liberal West as well as in authoritarian countries (see Hintz and Milan,

2018). Contemporary digital media, and processes of innovation implemented through and around them, have a key role in driving and sustaining surveillance capitalism and behavioural change. Acknowledging this is also important when exploring the relationship between media innovation and social change.

THE ARTICLES IN THIS ISSUE

Working from this conceptual starting point, we introduce the articles in this Special Issue and broadly outline their contributions to this field of study. Two of our articles deal with media innovations in what Lucy Küng (2013) has conceptualized as 'legacy media' industries. Their authors analyse the social consequences of media innovations in these industries. The first article by Maria Konow-Lund explores the development of new models for investigative journalism in the United Kingdom. Konow-Lund's study reveals that while each of the organisations that she has explored wish to introduce new forms of collaboration in order to 'democratise' the process of journalism, the structure of these new collaboration models gradually creeps towards the previous norms of media management and control that they aimed to differentiate themselves from.

Next, Frederic Dubois takes an etic approach to his study of the production of Field Trip, a crowdfunded documentary in Berlin. As a participant in the project. Dubois engages in a critical reflection of his double-role as media scholar and film director. He also argues for the importance of nuancing the concept of 'social change', and focuses instead on 'social impact' in order to more tangibly identify the consequences of media innovations on society. Dubois finds that a negotiated and shared understanding of social impact drives the production of the Field Day documentary. This in turn indicates that we need to understand more about the social forces that influence media innovations, including the extent to which collaboration is consciously initiated and managed (for example in the case of crowd-funding for various campaigns, or the management of new models for the production or journalism).

Our third article explores some of the ambivalences that arise when introducing media innovations that aim to bring about social change. Sigrid Kannengießer looks at the Fairphone, a smartphone that is supposed to be produced under fair working conditions and with sustainable resources. In spite of these ambitions, as Kannengießer points out, the Fairphone is not a 'completely' fair phone. There are still a number of issues with the way in which the products required to make the phone are sourced and produced. Furthermore, the customers who buy the Fairphone are not necessarily contributing to sus-

tainability. Sustainability and fairness instead become components of a brand that they buy into.

Next, Mona Khattab explores how live streaming was used by the Swedish activist Elin Ersson to attempt to stop the deportation of an asylum seeker. Khattab finds that the dynamics of the livestreamed event generate social support for Ersson's actions. Khattab also highlights the importance of exploring the context in which social change is occurring, and how this introduces particular technological affordances that can influence social change. In this regard Khattab notes that in spite of Ersson's actions, the asylum seeker was ultimately deported from Sweden, thereby highlighting the broader and more complex dynamics and power relations that influenced this process.

Similarly, Wiebke Reile's study of 'Code Pink', a feminist social movement in the USA that uses the commercial 'Nation Builder' platform, highlights how technology can be used for micro-campaigning and building support for particular mobilisations. At the same time this kind of campaigning raises ethical questions about the use of personal data and individual targeting. While platforms to support social change help to efficiently coordinate organisations and movements that might otherwise be diffuse, as Virginia Eubanks (2018) has pointed out, they also work to categorise individuals and could therefore

contribute to discrimination and inequality.

The two final articles in this issue further explore the social consequences of media innovations. Lauren Dempsey's analysis of longitudinal data gathered by the regulator Ofcom in the United Kingdom explores how the introduction of various Computer Mediated Communication technologies provides opportunities for individuals to develop media literacy. At the same time this contributes to the social isolation of certain groups of users over time. Dempsey points out that this social isolation has a cumulative effect, and that while certain groups of users manage to navigate between different modes of engagement with media innovations, those who become isolated tend to remain isolated. This is because of a broader range of factors including in particular socio-economic status and media literacy skills.

Finally, Steffen Krüger and Niamh Ní Bhroin explore the social consequences of media innovations developed by commercial insurance providers in an evolving market sector known as 'Insurtech'. These innovations continuously gather data about insurance customers using self-tracking devices. The schemes are promoted as empowering customers to live healthier lives. At the same time, customers are ushered into increasingly commercial digital ecologies. Krüger and Ní Bhroin find that these innovations introduce an imbalance of power between insurance

corporations and their customers. Furthermore, self-tracking technology facilitates the processing of individual rather than group data to determine premium costs. This could undermine the notions of collective responsibility that have previously underpinned the provision of health insurance, at least in a European context.

A RESEARCH AGENDA

To summarise this excursion into the interplay between media innovation and social change, we present a research agenda to increase our understanding of how media innovations interact with, contribute to, or act against societal challenges such as social exclusion, participation and commercial exploitation. While many of the articles in this Special Issue present dilemmas arising from the use of media innovations for social change, they also highlight the eagerness of individuals and social movements to work to equalize power relations, to reach out, communicate, and to network, in order to inform others about their campaigns, mobilise support for social change, and lobby power-holders. While current media innovations support these processes, they are also designed and used in ways that are problematic, with particular regard to the commercial business models underpinning the major platforms that are commonly used.

Therefore, we need to take a critical approach to

understanding the ultimate goals of media innovations that aim to bring about social change. Firstly, acknowledging the (socio-) political context, we need to be mindful of how these innovations are initiated, i.e. as commercial/non-commercial innovations or for other purposes. We need in particular to identify how social needs are defined, who partakes in their definition, and how they may change during their design and implementation (Nancy Fraser, 1989).

Secondly, we need to centre our focus on the complex power relations that facilitate or constrain media innovations. These include both government and policy issues, but also broader relations of power, including interpersonal relations e.g., within a given community or between media innovation practitioners. In this regard we need to identify and explore the political ethos and governing logics according to which media innovations play out. Where hybrid logics and interdependences are at play, for example where social justice projects are implemented and/or conveyed via commercial media platforms, the consequences of these logics for process of innovation should be identified and explored.

Thirdly we need to analyse the social factors that drive these innovations. In particular we should explore how collaboration is organised, whether through management structures, communities of practice or otherwise. We also need a greater understanding of the extent to which these collaborations relate to an ethical interpretation of discourses of transformation and practice.

Finally, we need to identify and understand the social consequences of these innovations. Where vulnerable groups of users are increasingly isolated over time, we need to highlight the reasons for this isolation and work to address these at the level of policy. We also need to explore how the development and expansion of commercial digital ecologies are locking individual citizens/consumers into systems that are designed to influence their behaviour.

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