Making time in digital societies: Considering the interplay of media, data, and temporalities—An introduction to the special issue

SAGE

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Abstract

The text reflects on conceptualizations of media and time, and it introduces the articles of the special issue on the "Mediatization of time."

The relationship between time and media is complex, sometimes contradictory and often characterized by struggles and ruptures especially in the context of newly emerging technologies. There are a number of important ways in which the nexus of time and media technologies has been conceptualized. First, it has been argued that time as an abstract

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category requires mediation in order to be experienced (Frabetti, 2015; Koselleck, 2002; Peters, 2015). We need clocks, calendars, and, for that matter, computers to tell us the time, and provide us with temporal frames of reference. Second, our media experiences are fundamentally about time (besides, of course, space; Keightley, 2012; Scannell, 2014). Our appreciation of media technologies is often related to temporality and timing, providing us with the right content, the right way for organizing politically or our daily lives, and the right feeling at the right moment. If these temporal expectations are not met, it can lead to rejection, dropout, and disconnection (Kaun and Schwarzenegger, 2014; Ribak and Rosenthal, 2015). Third, time and temporal experiences become part of the business model of media technologies. They become the product that is sold to users with the promise of giving us freedom through delegating tasks to media technologies, as Judy Wajcman (2019) demonstrates.

These complex interrelations have been true for all kinds of media but are even further complicated in times of digital media and datafication. This special issue addresses and explores changes in the perception and conception of time that go hand in hand with technological change. While there has been a strong focus on acceleration both in more conceptual and in theoretical work (Rosa, 2013), the special issue aims to re-emphasize the plurality of mediated and media-related social temporalities (Keightley, 2013; Sharma, 2014). For sure, speedup seems to be the preferred sort of temporal existence associated with digital data, which assumedly can be crunched and digested in an instant. One of Big Data's characterizing three Vs is about velocity after all (Lupton, 2015). Yet, at closer inspection, datafication engenders a plurality of tempos with acceleration only being one temporal mode among others. For one, data as such are about storage and retrieval, and thus rest on fixation and almost the annihilation or bypassing of temporal distance (Daston, 2017). Yet even the most efficient and powerful technologies cannot provide real-time results or seamless temporal transmission. There is always some temporal leeway, even though it is often only about fractions of a second (Hu, 2012). Using computers and mobile phones, we thus face instruments of "chrono-design," as Dieter and Gauthier (2019) have called them, that juggle with the temporal indeterminacy and contingency of information processing procedures. This situation emphasizes the need for in-depth empirical engagements that explore the nexus of temporality and data-driven media technologies in relation to lived experiences while also considering the broader societal implications of technological and ideological shifts.

Datafying and mediating time

As indicated above, time as such is depending on mediation in order to be experienced (Fornäs, 2016). It is culturally constructed and dependent on technologies. Data-driven technologies are today one of the major ways to mediate time. Datafication—referring to processes of quantification and the transformation of evermore objects into digital data, as well as the automation of judgments, evaluations, and decision making (Kitchin, 2014; Van Dijck, 2014)—has crucial implications for how time is mediated and hence experienced today. Datafication is currently discussed as a form of colonizing the life-world in order to extract value from social relations that is all encompassing and marks a new stage of capitalism (Couldry and Mejias, 2019; Madianou, 2019). In that sense,

digital technologies and datafication establish both new economic and temporal regimes that dominate globally. As Lina Dencik, Mark Andrejevic, and Emiliano Treré show in their contribution to this special issue, this is also expressed in a shift from emphasizing representational toward operational logics in how central societal institutions are approaching and establishing relationships with citizens. In their contribution, the authors focus on the temporal dimensions of predictive analytics. The idea behind this form of prediction is that through data-mining and the analysis of large datasets from past actions, future behavior can be foreseen in the present and acted upon immediately. The immediate action, however, takes attention away from questions of causality and prevention, and moves toward fantasies of "total surveillance and ceaseless intervention" while avoiding the time for political discussions and solutions as well as the involvement of other actors: "To anticipate all outcomes in advance, to collapse the future into the present is to elide the space of becoming—the possibility for change" (Dencik, et al. in this issue).

Extending the discussion of time as datafied and mediated against the background of the political economic structures of surveillance capitalism, Veronika Barassi outlines three distinct yet interconnected temporalities that define data technologies: immediacy, archival, and predictive time. By drawing on ethnographic data on the impact of data technologies on family life, Barassi explores the different ways in which these temporalities are affecting the lived experience through everyday temporalizing practices in the family context. The examples gathered through encounters in the field demonstrate the ambiguities of surveillance with parents and caretakers pointing to the advantages that the use and presence of these technologies bring. Barassi (in this issue) concludes,

> Whilst all these different temporal dimensions are not new, what is new is the fact that within data technologies they intersect and interact and create the basis for the recording of large amounts of personal data, which enables the governing of individuals throughout time.

Time of data and media

Connectedly, questions of changing temporal experiences in relation to data-driven media technologies emerge. These questions are often associated with the issue of temporality and power. In this respect, Sarah Sharma (2014) has pointed toward the hierarchies of temporalities when observing the schedules of business travelers in contrast to those taking care of their needs and mundane affairs. On one hand, owning one's time and making independent decisions about the use of one's time is a privilege that eludes many. On the other hand, we also see those who could supposedly claim temporal autonomy, feel conflicted by the way that their media and technology use seems to take power away from their capacity to make independent decisions when it comes to how they are spending their time. Contributing to this line of thought, Julie Yujie Chen and Ping Sun focus on the lived experience of food couriers in Chinese urban spaces and their strategies of juggling the temporal regime of speed that is dictated by their digital applications that at the same time constitutes their major source of income. They capture these experiences of the loss of temporal autonomy as temporal arbitrage. By questioning issues of power and marginalization, Chen and Sun explore how food delivery workers negotiate between the exact delivery time as imposed by platforms while moving through urban

spaces. The authors (in this issue) posit the concept of "temporal arbitrage" referring to the (cultural) expectation of those ordering and paying—and subsequently expecting on-demand service—at the expense of the increasingly hectic experience for the couriers.

Considering emerging temporalities of datafication, Anne Kaun and Fredrik Stiernstedt shift the focus to a specific space, namely, the prison. Analyzing the notion of the "smart prisons," their aim is to gain an understanding of emerging temporalities of digital technologies and how temporalities of real-timeness, prediction, and preemption are enacted through tracking tools, algorithms, and mobile phone applications. While prison notoriously holds inmates trapped both locally and temporally, smart prison technologies are expected to provide for a "better future." As Kaun and Stiernstedt (in this issue) sum up:

> Contributing to an intensification of future-oriented temporalities such as anticipation, pre-emption and prediction, smart technologies currently enhance a temporal desynchronization between the lived experiences of incarcerated individuals and the potentiality of smart technologies. While incarcerated individuals' experiences seem to be trapped in a precarious now, smart technologies are supposed to point to and implement future visions.

Exploring the encoding of time in journalistic products and processes, Mike Ananny and Megan Finn interrogate the rhythms of today's networked press. These are not only set by journalists and consumers but also by largely invisible digital infrastructures, including software, data, and technologies outside of the newsroom. Ananny and Finn demonstrate the interrelations between journalistic work on the one hand and materials, practices and values of hybrid, time-setting sociotechnical systems that they call "anticipatory news infrastructure" (in this issue) on the other. Their argument is that these infrastructures anticipate possible public life, thus creating anticipation publics through their largely invisible power to shape expectations of journalists and audiences alike.

Commodifying time

Treating time as a rare resource that, on one hand, requires care and, on the other hand, can be valorized is another theme addressed in several articles of the special issue. We can observe a normative stance when it comes to judgment about spending quality time and managing time in a way that does not "waste" it. The representation and use of quality time are examined by Christian Pentzold, Sebastian Konieczko, Florian Osterloh, and Ann-Christin Plöger. Starting from the observation that everyday life includes phases of stagnation and acceleration and zooming in on the judgments that go with it, Pentzold et al. (in this issue) show how research participants characterize quality time—instances of self-determined solitude or of fulfilling conviviality "in which mobile phone and social media are conspicuously absent." To create quality time, time has to be used for purposefully planned "meaningful activity." Moreover, it is seen as an ideal of temporal autonomy as quality time has to be consciously planned and created by the ones enjoying it.

At the same time, there are applications that are supposed to save us time and hence promise freedom from tedious tasks. Services such as Facebook's On This Day (Humphreys, 2020) and DoYouRemember.com (Niemeyer and Keightley, in this issue) highlight the

commercial interest in mediating temporality and offering ways of reminding us of our past, while keeping us within the datafied and datafying logic of digital platforms (Couldry and Mejias, 2019). Katharina Niemeyer and Emily Keightley consider how notions of nostalgia and temporalities are produced and articulated in the context of online communities. With DoYouRemember.com as a case study for a "nostalgia business," they identify modes of creative and commercial exploitation within the community. Next to the commodification of nostalgic moments, Niemeyer and Keightley (2020) identify a commodification of time and their ways of overlapping with other temporal layers:

> The historical time of popular culture and the repetitive time of remediation, the synchronic time of communication on social media, the chronological and dialogic time of the FB timeline, the autobiographical time of the users are synthesized in acts of longing for an idealized past.

Also focusing on the multilayered structure of the mediatization of time, Lee Humphreys puts forward a comparative analysis of two On-this-date formats: Facebook's On This Day and the Associated Press' Today in History. Humphreys' (2020) analysis demonstrates how "both form and function of this kind of media shape mediated temporalities." They also favor the inclusion of some posts, while increasing the likelihood for others to be excluded and thereby forgotten. With that, On-this-date media not only strengthen the economic interests of the platforms but also generate content easily.

Another perspective on the mediatization of time comes from Rebecca Coleman. She shows how the valorization of temporal experiences has become one of the major concerns of social media professionals constructing and maintaining the idea of real time as the major temporality that social media offer their users. After relating and analyzing key literatures on conceptualizations of the present, the now and real time, Coleman presents and analyzes interview material with social media professionals. By doing so, the article goes beyond a focus on the technological fabrication of real time and looks behind the scenes with media professionals from different sectors. A central conclusion of Coleman's (in this issue) research is that the production of "the now," is made and managed "through a wide range of technical, social, cultural and institutional practices, strategies and judgements, and how it is affectively experienced (as feelings, embodied responses, habits [and] strategies)." Similarly, Taina Bucher focuses on Facebook's goal of providing users with content at the "right time." Her argument is that the notion of right time is reflective not just of Facebook's algorithmic workings but also of a new temporal regime aimed for by algorithmic media. By drawing on the concepts of "kairos" understood as the qualitative dimension of appropriate time and "chronos" which represents the (chronological) sequence of time, Bucher demonstrates that algorithmic-driven platforms such as Facebook and Twitter no longer aim for the impression of "liveness" and real time. Rather than showing users what is happening right in this moment, their intent is to show users what they anticipate the users would *want* to see in this moment: "Right-time does not eliminate real-time but incorporates it as function of relevance. What is right might include newness, but the now is never enough to make it right" (Bucher, 2020).

The everyday use of the smartphone is the vantage point for the contribution by Brita Ytre-Arne, Trine Syvertsen, Hallvard Moe, and Faltin Karlsen. The smartphone has become the guarantor of constant connectivity. By drawing on the concepts of flow and

responsibilization, the authors consider how smartphone use becomes a hindrance in individual time management and often leaves users to make sense of contradictory (temporal) experiences regarding their smartphone use. In line with the theme of the special issue, the authors argue that "the concept of temporal ambivalence captures essential aspects of everyday experiences with the smartphone, and thereby of time management in digital society" (Ytre-Arne et al., 2020)

In sum, the contributions to the special issue highlight the continuities and disruptions emerging in the nexus of time and media. They point to the challenges of acting in the present, acceding to the future, and mobilizing the past in increasingly datafied societies. Moreover, they clearly demonstrate that the changing mediations of time leave their mark on the ways we process and order the pace, sequence, and rhythms of intersecting lives.

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Anne Kaun is an associate professor in Media and Communication Studies at Södertörn University, Sweden. Her research is concerned with media and political activism and the role of technology for political participation in the current media ecology and from a historical perspective. She is currently studying the consequences of automation in public service institutions. Her research has appeared in among others *International Journal of Communication, New Media & Society, Media, Culture & Society* and *Time & Society*. In 2016, she published her book *Crisis and Critique* with Zed Books.

Christian Pentzold is professor of Communication and Media at Chemnitz University of Technology, Germany. He is broadly interested in the construction and appropriation of digital media and the roles, information and communication technologies play in modern society. In current projects, he looks at the public understanding of big data, humans interacting with embodied technologies, the organization and governance of peer production, as well as the interplay of time, data, and media. His work has been published in places such as *New Media & Society, Media, Culture & Society, the International Journal of Communication, or Communication, Culture & Critique*. He is currently finishing a book on *Peer Production* which will come out with The MIT Press.