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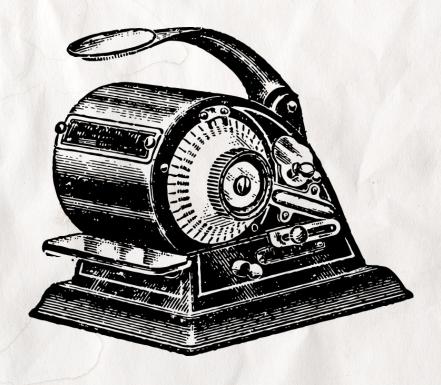
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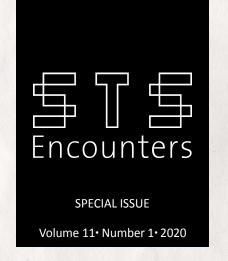
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# ENGAGING THE DATA MOMENT





# **Engaging the data moment:** an introduction

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**DASTS** is the primary academic association for STS in Denmark. Its purpose is to develop the quality and breadth of STS research within Denmark, while generating and developing national and international collaboration.

## **Abstract**

All of the contributions to this special issue are occupied with how to engage data otherwise. This otherwise indexes the rich variety of approaches to data beyond what we are currently witnessing. Whether through the development of politically and ethically relevant forms of data experiments, or the construction of alternative visions of the much-critiqued data infrastructures of powerful platform providers, all the articles reflect upon how we--as scholars and citizens--can live and work with data in ways amenable to diverse, critical, and ethical forms of social existence. This introduction intervenes in this debate in its own particular way, principally by considering what it means to characterise the contemporary as a *data moment*. The term data moment, we argue, works as a conceptual device calling for more ethical-political engagement with data practices. At the same time, it also retains a temporal inflection. Moments, we claim, are not sequential steps in a linear process, but are themselves productive of, and products of, temporal orders. Moments are also saturated in affect, we argue, and it is such affects that contribute to how particular forms of meaning emerge with/as data. By embracing the compelling empirical, theoretical and ethical challenges of this data moment our ambition with this special issue is to make a modest contribution to how scholars can engage data in the present, while also shaping a future where data are treated critically, ethically, and reflexively.

**Keywords**: data moment, temporality, aesthetics, narration, qualitative-quantitative, experimental

# **Engaging data otherwise**

It has become commonplace to suggest that our contemporary moment is ever increasingly characterized by, and through, data. Imaginaries of data's power and potential run wild as what data are, can become, or attain, are conceived of in near limitless terms; the new oil, a new global currency, the new vehicle of growth, even. From self-tracking movements, to newly emerging forms of economics (bitcoin and blockchain economies), to sensing-based environments (the internet of things), to the Janus-faced potentials of data analytics, optimism around the potentials of data to transform people, organizations, and societies continues to proliferate.

While the litany of data related controversies grows almost daily. an unease around how we--citizens, practitioners, and scholars--can engage otherwise with data also grows apace. By this we mean that questions are amassing about how we can live and work with data in ways amenable to diverse, critical, and ethical forms of social existence. Our media platforms are awash with the appearance of large technology companies performing mea culpas before democratically elected legislatures around the world, as CEOs--formerly the shiny captains of a new and benevolent industry type--now seek to refute, assure, or assuage various publics on any number of data related issues. These performances have predominantly focused on data privacy and security, but have, more recently, begun addressing not just if some of these corporations pose a threat to democracy (think Cambridge Analytica) and public safety (think Covid-19 misinformation) but how we can begin to remedy such threats. At the same time, a wave of former tech-purveyors turned reformist-proselytizers entreat us to be wary of the promises of datafied technologies, and to demand more of them for the collective good. Recent instantiations of this in a Danish context

<sup>&</sup>lt;sup>1</sup> See https://www.forbes.com/sites/forbestechcouncil/2019/11/15/data-is-the-new-oil-and-thats-a-good-thing/ and https://www.weforum.org/agenda/2015/08/is-data-the-new-currency/ and https://www.economist.com/leaders/2017/05/06/the-worlds-most-valuable-resource-is-no-longer-oil-but-data

are the Copenhagen Catalog and the Tech Pledge. The former is a list of one hundred and fifty principles for 'new directions in tech,' originally conceived and designed in a distinctively manifesto-like genre in 2018 by a group of participants at the annual TechFestival in Copenhagen.<sup>2</sup> The latter—formulated in similar terms—is a promissory document whereby signatories 'commit' to act in more ethically inclined ways regarding the future development of tech.<sup>3</sup>

At the same time that concerns around data practices are gaining more traction through public hearings and interventions—even from within the tech industry--the rhetoric of becoming 'data-driven' continues to colonise the organizational thinking of both public and private institutions. This does not, of course, happen without resistance. Translating the hype and hopes of data into organisational practice never runs smoothly and such efforts may even be actively disrupted, or ignored, by actors in the midst of everyday constraints. Nevertheless, this 'seductive imagery' (Kreiner 1992) continues to flourish. Academic literature that engages 'data-drivenness' as an extant phenomenon comes in multiple stripes, but predominant among them are accounts designed to legitimise the hype inflated optimism associated with the powers of digital data.<sup>4</sup> At the same time, there are also accounts that critically engage such positions, while also reflecting upon, and experimenting with, the modes and forms of their own interventions. It is to this latter category that this special issue aims to contribute.

Engaging the data moment is a special issue that arose from the biennial meeting of the 2018 Danish Association for Science and Technology Studies (DASTS). The collection reflects not only a diverse range of institutions, but also addresses central themes and perspectives from the fields of STS and Data Studies. Our hope is that it will make a modest contribution to how we, as scholars and citizens, can engage data in

the present while also shaping a future where data is treated critically, ethically, and reflexively.

#### A data moment?

What we have indicated thus far is the growing schism between the cry for public accountability and transformation of data practices, and the increasingly datafied practices of public and private organizations. In this section, we reflect upon our own intervention into this debate and consider what it means to characterise these ongoing developments as a *data moment*. The term moment has a long history of use in the social sciences. One memorable example is Anthropology as Cultural Critique: An Experimental Moment in the Human Sciences (Marcus and Fischer 1999). The central thesis of this book is that the mid-1980s "crisis of representation" resulted from an impoverished social theory that was being outflanked and outpaced by world events. The challenge for anthropology, the authors claimed, was to design ethnographic work that investigated and exposed what established theory had missed—in this case feminist, race, and postcolonial perspectives (Fortun 2012). This perceived 'lack' was the driving force behind the call for such a moment to be "experimental." However, while the term moment worked as a device to bind anthropology's engagement with the experimental, the concept remained unexplored and underarticulated in its own right.

Beyond this sense of the term - as a conceptual device calling for engagement - *moment* has a specific temporal inflection. While it doesn't quite designate *right now*, it retains a sense of an extended now, although what this extension is, is unclear. At the same time, the term elicits an aesthetic quality or affectation. We have moments in our lives that we deem significant, yet whose quality is difficult to articulate, elusive even. But such moments are no less affective or memorable because of this. They can be full of possibility and promise. They can be fleeting or extensive. But they can also, on the contrary, be laden with trepidation. Think about, for example, when someone asks to speak with you 'for a moment'. So, we could say that moments are saturated

 $<sup>^2</sup>$  The catalogue is a growing document which is contributed to each year at the tech festival.The Copenhagen Catalogue https://www.copenhagencatalog.org/

<sup>&</sup>lt;sup>3</sup> The Tech Pledge https://www.techpledge.org/

 $<sup>^{\</sup>rm 4}$  The majority of this literature comes from within business, organisational, and management related fields.

in significance, but of indefinite duration. Henri Bergson conceptualises this term, *duration*, as a way of thinking about a non-linear form of temporality that holds onto such an aesthetic quality. For Bergson, durations are; "convergences of different temporalities within one rhythmic configuration" (Bergson cited in Nielsen 2011: 399). While we do not claim commensurability between *moment* and *duration*, there are qualities of Bergson's use of the term that illuminate what we mean by moment. Firstly, as with duration, the temporal configuration of moment cannot be rendered through more classic tropes such as linearity or succession. Moments, we claim, are not sequential steps in a linear process, but are themselves productive of, and products of, temporal orders. Secondly, there is an aesthetic quality to duration that resonates with moment. Moments, we suggest, are saturated in affect, and it is such affects that contribute to how particular forms of meaning emerge with/as data.

The productivity of bringing the term *moment* together with data is that it pushes us to think about data as having both temporal and aesthetic forms: as being productive of temporal orders, while retaining a particular affect (or meaning) that impacts people and organisations in ways that are not always easy to account for.<sup>5</sup> A question, perhaps, of contemplating the meaningful - and multiple - whens of data rather than the more belaboured what. So, while there are already various ways to see data as temporal phenomena - for example, data could be considered temporal given their production at specific times and places - it is more interesting, we suggest, to hold onto a sense of data as tools for enacting temporal orders in affective ways. What we want to underline here is how the rendering and articulation of these temporal orders - traditionally conceived of as pasts and futures - are important to the various claims that are made on behalf of data. Characterizing the contemporary as a *data moment* - a duration of significance - signals more than an epoch of technological governance which is dependent upon, or dedicated to, progressivist and solutionist imaginaries of data.<sup>6</sup> It is a way of signalling that the social, political, and ethical data dilemmas we find ourselves enmeshed in, are saturated with claims, contestations, and implications that converge through particular modalities of articulating pasts and futures.

Let us lay out two of the various ways this special issue approaches these questions. First, much of the temporal thrust of data pertain to their *future proclivities*. Here, the hopes, aspirations, and agencies that are assigned to data - what we with others could call data imaginaries (Beer 2018, Ruppert 2018, Tupasela, Snell et al. 2020) or data promises (Hoeyer 2019) (Hoeyer 2020) - are pregnant with possibility. Oftentimes these imaginaries invoke ideas of societal transformation, holding out the potential to resolve grand tensions and conflicts. Examples range from the promise of more data-driven climate solutions, to leaps in medical developments via the use of personalised data, or even the resolution of long-standing social inequities through more aggressive public sector data interventions with citizens (O'Neil 2016, Redden 2018). Such imaginaries are of an anticipatory, promissory nature, and work to form our collective futures through the envisioning of various possible datafied scenarios. This performativity can be understood in two senses. The first is the more ordinary way in which anticipatory action works, as the hype and speculation surrounding what data might potentially accomplish in the future inflect, and are productive of, the present. So, future modalities are constitutive of present action.<sup>7</sup> The second is the manner through which prediction, and more specifically predictive data analytics, has become a mode of action and governance that is expressly articulated as part of what digital data can do. So, it is not just the rhetoric of future possibilities that partially constitute how

 $<sup>^{5}</sup>$  For example, think of the various discussions around data being 'creepy' or 'haunted' or the use of other such tropes.

<sup>&</sup>lt;sup>6</sup> We would like to thank one of the reviewers for bringing our attention to this latter point.

<sup>&</sup>lt;sup>7</sup> Anticipatory action is best exemplified through two classic examples. The first, and more modest, concerns how, for example, in consulting the weather forecast, we might decide to bring an umbrella to work. Here, the anticipation of rain impinges on present action. Another is how, for example, speculation about a run on a bank can create a sense of panic that activates customers to withdraw their money, which in turn makes the bank insolvent. Here, the anticipation of a particular future brings about that very future. A less modest form of anticipation is at work here, one could argue.

we operate in the present, but the articulation of a claim - which is at the same time a desire - to be able to know what the future can bring, and which can intervene in that very future to particular effect. STS scholars have, for some time, studied the effects of predictions and expectations (Brown and Michael 2003, Brown and Rappert 2017) in particular prediction based practices such as modelling and simulations. Still, the predictive capacities invoked on behalf of digital data develop these logics in more extensive ways. While such logics are not new in markets, and industry more generally, we can now see such predictive claims being made, and set-in motion, in what formerly might have been called welfare arenas: health, education, social services, child protection, policing, court decisions, and so on.

Second, much of the discussion as to what does and does not constitute the 'newness' or 'bigness' of contemporary data is anchored in specific renderings of the past. Whether 'big data' is conjunctive or disjunctive with the past mostly depends upon which analytical histories and trajectories are invoked. A focus on the history of statistics and the production of large numbers (Desrosières 2002), or their mobilization within census making, points out how such practices are part of the "science of the state;" not only practices carried out by the state, but also part of what and how the state is constituted (see Birk and Elmholdt this issue). In such accounts, contemporary data practices build upon, borrow from, and otherwise scale up practices that have been ongoing since the early twentieth century (Beer 2016). Other scholars are less reluctant to claim a sense of uniqueness for contemporary data practices and justify such a stance through the putatively superior speed and scale of digital technologies (Kitchin 2014). Of course, identifying how digital data both continue and depart from historical modes and standards is where STS scholarship can be most insightful. So, while it is almost trite to suggest that the past is embedded in present data practices, the articulation of particular pasts - and the claims that they afford - help to constitute the present in ways that are entirely open to contestation. Let us take the claim of uniqueness - commonly made by the data analytics industry and - as one example. The question is not

necessarily whether the data practices of today are unique as such, but how claims to uniqueness are constituted, and instantiated, through modes of converging specific futures and pasts.

# **Data and Narration**

Our engagement builds upon and works up against scholarship at the intersection of Science and Technology Studies (STS) and Critical Data Studies (CDS). What has emerged here has been a much-needed antidote to an overly-technicalised rendering of data's role in society. In a recent book, Yanni Alexander Loukissas (2019) disavows the central axioms of more dogmatic versions of data. Data are not, he asserts, universal: each disciplinary community has its own techniques for deciding what constitutes data, and this is, of course, extremely variable. They are not *singular*: they are aggregations whose articulation as singular verbs reveal a particular desire towards erasure. Data are never big: the ideology of big tends to fetishize collection and hoarding, and deflect attention away from data's origins, ethics, and complexities. They are never just *rhetorical*: they contain more than the power to persuasively represent the world; they actively shape it. These negative postulates are now common currency within STS and CDS and the ongoing impulse of work at this intersection continues to be towards asserting the infrastructural, or assemblage, quality of data, as well as their multiple configurations within various institutional and organizational contexts (Iliadis and Russo 2016). What data is, is always an empirically situated question.

While the first wave of data critique was, in part, triggered by Chris Anderson's now infamous claim of the 'end of theory' (Anderson 2008), the debates that followed have tended to somewhat over-emphasise the distinctions between quantitative and qualitative data practices. Tricia Wang's neologism *thick data* (2013) - itself a mobilization of Clifford Geertz's prominent ethnographic metaphor - became a clarion call for the need to do something qualitative with 'big data'. Since the publication of this text, there has been a wave of similar cries

advocating for more qualitative approaches to data studies (Boyd and Crawford 2012, Gitelman 2013, Pink, Lupton et al. 2016, Dourish 2017, Ruppert, Isin et al. 2017). This is something we support, up to a point. And that point is one at which the distinction between quantitative and qualitative itself becomes a blockage on more creative, experimental approaches to studying, working with, and intervening in, data worlds. While there have been, and continue to be, many interesting methodological efforts to reconfigure the nature of this distinction (Rogers 2013, Blok and Pedersen 2014, Marres and Gerlitz 2016), texts that continue to overly reify it, still have significant traction in STS and cognate disciplines. One recent example is Sally Merry's The Seduction of Quantification (2016). While Merry's assertion that the application of quantitative measures - particularly towards those living in specifically vulnerable circumstances - can amount to a form of violence is well taken, this is only one part of a more complex story about numbers—as a form of data. As Danholt et al point out in this issue, STS has a long history of analysing the interstices of sclerotic divides, emphasizing the translations that such divides are ultimately products of. Numbers and stories - as placeholders for quantitative and qualitative approaches - are articulations of particular practices in particular settings (more on this below). Both are curated cut-off points of chains of translations that have a host of embedded, value-laden, concerns: be they political, socio-economic, or ethical. Where and how this cut is made very much depends upon what questions are asked, in relation to which problems, and for what purposes.

In this regard, a particularly noteworthy collection is *Raw Data is an Oxymoron* (Gitelman 2013), a book that has made a significant contribution to the STS landscape of data studies. While clearly signalling the need to reflexively critique, and push beyond, the more prevalent technicalised renderings of data, this book also subtlety articulates some of the precepts that undergird the quali-quant division. A key point in this regard is the suggestion that even thinking of something as *data* - and here the working understanding of data is those which can evidence something - requires imaginative and symbolic acts.

Constituting something as data is itself, therefore, a story act, or act of narration. This point, amongst others, is a call for us to be more attentive to the grounds upon which we make such distinctions in the first place. While there is much interesting STS work that follows on in this spirit, we would like to draw attention to two particular examples.

Dourish and Cruz (2018) take up the challenge of thinking through the various ways that data and narration interweave. Their specific focus is the many narrative acts at work within data driven analysis. What we learn from the text's rich examples is the various modes through which data and narration live within and alongside one another, and how the production of one can depend upon, or trigger, the production of the other. Not only are there many *narratives embedded within data* - how data were made and came to be - there is also much *data in narrative accounts*, as data are used as devices to help putatively qualitative scholars generalise, qualify, compare, and analogise. One could further add to this observation. Narratives also work *as data*, as they become evidence of something: ethnographic data, for example. In sum, the relationship between quantitative and qualitative data is complex, variable, and in some cases, interdependent.

In a paper describing a home-built energy monitor experiment, Hannah Knox (Dányi, Maguire et al. 2020) also points towards particularly productive moments when the data-narration boundary becomes blurred. In observing how participants of the experiment struggled to make sense of the numerical data shown on their energy monitors, Knox argues that data is good to think with, not because it explains as such, but precisely because it oftentimes does not explain in ways people find sufficient. In this regard, "data traces" open up a cascade of relations and are productive of new forms of description.

What we find encouraging from these texts is how - through insightful ethnographic engagement with data practices - they work against the grain of perceived wisdom around quali-quant distinctions. They do not conceive them as oppositional poles with inherent characteristics, neither do they dismiss them, nor do they inflate one over the other. Instead, we get a sense of interplay and partial connectedness

(Strathern 2004). What this helps us to see is that, while on the one hand the reified contrast between quantitative and qualitative data tends to be, for the most part, unhelpful, serving to produce more rigid boundaries in approaches to, and studies of, data. On the other, the drive to rethink the distinction opens up productive spaces for scholars to actively experiment with the work that goes on in the interstices of broad categories, categories that have generally served as placeholders for more complex traffic and exchanges. Such experimentation is, we suggest, also an important part of what constitutes this *data moment*. This is analogous to the experimentalism at the heart of the "experimental moment in the human sciences" where scholars designed anthropological questions and research programs in order to push contemporary theory beyond its myopic limits. However, unlike the moment of cultural critique in the mid-1980s, what we are attempting to engage with here is more than the desire to experimentally upgrade our theoretical armature to reflect an ever-changing world. We are, at the same time, leery of the various forms of experiment that are being unleashed on an increasingly agitated citizenry. Such agitation with the current state of affairs comes in multiple guises. Whether it be from the effects of ethically contentious practices such as predictive policing, or 'interventions' into the lives of vulnerable citizens, or the even more common place, but no less insidious, forms of data mining, extraction, and commodification (Zuboff 2019). Experimentalism, in this sense, is something to be treated ambivalently.

At the start of this introduction, we suggested that we want to *engage data otherwise*, mainly by thinking about how we can live and work with data in ways amenable to diverse, critical, and ethical forms of social existence. This *otherwise* suggests that there are a rich variety of ways to engage data beyond what we are currently witnessing. Whether through the development of politically relevant - and ethical - forms of data experiments, or the construction of alternative visions of the much-critiqued data infrastructures of powerful platform providers, or the generation of insights into the various affective registers that are embedded in this moment, such as anxiety, uncertainty, and trepidation,

amongst others. At the same time, we are acutely aware that the data engagements of the vast majority are less about experimenting and more about working with everyday commercial and organisational issues and practices. Such practices, while possibly mundane, have nonetheless been central to the administration and governance of public and private sector work for decades, if not longer. Speaking of a *data moment* thus runs the risk of exoticizing matters to those who "simply" live and work within current data regimes as they attempt to make sense of data under the constraints of everyday work practices and expectations. At the same time, there is also a risk that mobilizing the term in the way we have could contribute to its preponderance in certain worlds, worlds that we want to set under scrutiny in this special issue. Our sense, however, is that our contributors do enough work to allay that fear, while, at the same time, embracing the compelling empirical, theoretical and ethical challenges of this *data moment*.

The diversity of articles in this special issue all resonate with the issues generated in what we characterized above as a *data moment*. Additionally, they are clustered around three further themes: *data experiments and interventions, data governance,* and *data concepts and approaches*. Four out of the ten contributions engage with, in some shape or form, various ways of thinking about, and practicing *experiments* in, on, and with, data. Although each article does this in its own particular way, what the articles share is a concern with *how* we experiment in politically relevant and ethically informed ways. By working through the dilemmas and complexities of their respective empirical sites, this section gives us rich, critically reflexive accounts of experimental data practices.

As an experiment in collaboration, **Mannov, Oberborbeck Andersen** and **Hojer Bruun** give a first-hand account of a Danish cryptographic research project involving mathematicians, anthropologists, and engineers. Analysing how 'secret sharing' is enacted in various settings, the authors pursue a socio-critical interventionalist approach that advocates for the development of "cryptographic techniques for social good". This article - while resonating with more traditional takes on

forms of public engagement - is particularly concerned with the politics and ethics of experimenting with, and intervening in, the *data moment* beyond traditional disciplinary boundaries.

Munk and Olesen's article describes the dilemmas they experienced as digital methods scholars engaged in an effort to gather a large body of data from a soon-to-be-closed API that harvests data from Facebook. This is partially an experiment in the quandaries of re-tooling a post-demographic machine like Facebook. At the same time the piece is, what one might tentatively call, an experiment in 'salvage' digital ethnography. While its similarity to the more nineteenth century analogue lies only in its attempt to capture and catalogue a particular cultural archive prior to its disappearance, it's clear difference resides in its attempt to critically reflect on the variety of problems posed by this effort.

Elgaard Jensen's contribution is also a first-hand account of working across disciplines. However, in this case the author uses a series of digital methods collaborations between Danish and international researchers as a way to reflect upon a range of challenges within Digital STS today. In particular, the paper analyses how such collaborations raise questions about the promises that participatory forms of Digital STS can deliver on. Even more centrally, perhaps, the paper examines how this sub-field - with a particular focus on its digital instruments and data practices - can develop accounts that live up to the theoretical demands of a post-ANT sensitivity. This paper, then, is an experiment in theory, as the author reflects upon some of the theoretical choices, consequences, and opportunities that arise when using digital methods to address some of the shared inter-disciplinary problems being posed in this data moment.

The contribution from **Blok** is both a 'meta-experimental' reflection, and a challenge to the scholarly communities involved in social research based on digital data. The question posed by Blok asks how we can be more precise in our rendering and deployment of experimental registers. In doing so, Blok pushes us to specify what we mean when we say that our research is experimental; is this a conceptual, thematic,

political, or epistemological claim? Concerned that our current practices are in danger of losing their moorings from more meaningful, dare we say disciplined, uses of terms such as experiment and intervention, the author draws upon the work of John Dewey as a source of inspiration for rethinking digital STS-as-experiment. Such a call for a form of meta-experimentalism is one that engages with our research design, practices, and consequences, and that pushes us to more specifically consider the felicity conditions of our epistemologies.

The next cluster of papers revolves around questions of *data governance*. Here the authors share a concern with the politics of data and their impact on either state-citizen or market-citizen relations. Each paper focuses on a particular datafied technology (data registers, smart meters, radiation monitors) that in some shape or form reconfigures these relationships, mostly to deleterious effects.

The paper by **Birk and Elmholdt** brings to light the predominant role of data in urban governance. It analyses how various forms of data - personal number registers, census data, unemployment statistics and so on - are central to the production of a politically controversial 'ghetto list' in Denmark. Data practices, and their politics, the authors suggest, have many entwined and performative effects. In this regard, the authors argue that it is important to consider the historical, intimate, and controversial co-production of data practices with the people, groups, and territories that the state aims to govern. For these authors, the *data moment* is paradoxically both a break with, and a continuation of, former state enumeration and categorization practices.

The paper from **Jhagroe** analyses the novel energy governance strategies that are deployed in the surveillance and management of energy grids, markets, and consumers. The paper takes its point of departure in the empirical context of a Dutch-Belgian pilot project that has designed and tested the energy management of a smart home. Analytically, the paper provides a detailed account of the techno-politics of these datafied technologies by inviting us on an energy-data journey that highlights the visions and (perverse) effects of so-called "data driven management".

**Tam's** paper brings us to a small prefecture in Fukushima, Japan in the wake of the 2011 nuclear accident. This ethnographic story recounts how data from particular radiation technologies become the means through which the state attempts to make itself, and the effects of the nuclear disaster, legible to citizens. The paper also narrates moments of data resistance as citizens mobilise and 'enliven' their own radiation data in an effort to enact alternate visions of what constitutes harm, and the state's role in the enclosure of such harm through various boundary making techniques.

The final cluster of papers are a more eclectic bunch, but each, nonetheless, touches upon *data concepts* and *approaches to data*. The article from **Kaufmann**, **Thylstrup**, **Burgess and Sætnan** – based on a predictive policing study with origins on three different continents – posits and develops a concept the authors call *data criticality*. This term gets at the various *moments* when data become critical to a specific set of practices, activities, or issues. At the same time, the authors suggest that these moments provide an opportunity for critical engagement between scholars and their interlocutors. Through this extensive predictive policing study, the article provides a catalogue of such moments, arguing that each of them - imagining data; generating data; storing data; processing data; and reusing data - render data critical and attune us to the possibility of political action.

Drawing on the work of philosopher of science Isabel Stengers, the paper from **Danholt**, **Klausen** and **Bossen** develops a cosmopolitical approach to data; a way of simultaneously acknowledging both data's realness and their constructedness in a world saturated with uncertainty, interconnectedness and multiple agencies. Central to this approach is the acknowledgement of an inability to fully know what data is capable of yet still take this uncertainty into account. The authors thus explore data cosmopolitically through two empirical examples on the governance and management of healthcare in Denmark, in which data is both given and requires careful and laborious construction in order to become functional.

The article from **Paakonnen** analyses the credibility and legitimacy making techniques around the use of 'big data' in sociological research. Deploying three rhetorical positioning strategies - conservative, reformist, and supplementarist - the article sheds light on the various arguments for doing sociology with 'big data'. The paper not only presents and discusses these arguments, it also reflects upon the different conceptions of what sociology is, or ought to be, in an effort to highlight the various inbuilt ontological and epistemological assumptions *in* and *of* sociology.

Engaging the data moment is a special issue that endeavours to take stock of how STS is engaging studies of, in, and with data. Rendering the contemporary as a data moment is a way of drawing attention to both a temporal and aesthetic quality that, we suggest, suffuses the datafied developments gathering pace around us. How significant this moment becomes, and which forms it takes, remains an open question. Today, much data discourse has a proselytizing and hyperbolic inflection. In looking towards the significance of both temporal and aesthetic questions, this special issue aims to slow down such claims while enlivening the possibility of more equitable and just forms of engagement with data.

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**Peter Danholt** is associate professor at Information Studies, Aarhus University. His research is on the role of IT and data in healthcare, organizations, design and daily life. His research draws on STS, feminism, post-structuralism and actor-network theory. He is vice president of the Danish Association of STS (DASTS), chief-editor of STS Encounters.

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