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Reversing Data Politics: An Introduction to the Special Issue

Lonneke van der Velden and Stefania Milan

Digital data increasingly plays a central role in contemporary politics and public life. Citizen voices in the so-called public sphere are increasingly mediated by proprietary social media platforms such as Twitter and Facebook, and are thus shaped by algorithmic ranking and re-ordering. ‘Calculated publics’ fashioned by ‘new kinds of human and machine interaction’ (Amoore and Piotukh 2016, 2) replace communities of interest. Most controversial at the time of writing is what we may call the ‘dirty politics’ of data analytics company Cambridge Analytica (Graham-Harrison, Cadwalladr, and Hilary Osborne 2018), which reportedly played a role in a number of electoral campaigns, such as the US presidential election and the Brexit referendum: algorithms were used to profile, target and influence voters, on the basis of millions of private profiles of Facebook users, unaware of their data being collected, sold and used for these purposes. But data informs how states act, too: since 2013, the whistleblower Edward Snowden has offered ample evidence of the connivance of the data industry with intelligence services, to the detriment of citizens’ privacy and political oversight (Greenwald 2014). Cambridge Analytica and the Snowden leaks are just two of the many cases showing how data has opened up an unregulated arena for new actors that play a role in today’s politics. Data has become the new currency for many processes within contemporary democracies—from the fight for electoral consent to the protection of national security, from

advertising to the monitoring of citizens. Many aspects of the state and the market today have to do with the ‘data economy’ and its rules (or lack thereof).

In this special issue, we are also interested in ‘data politics’, but we want to shift the focus of the conversation. Big data corporations and intelligence agencies are not the only ones acting on datafication, or the process of turning into monetizable and analyzable data many aspects of life that had never been quantified before, such as people’s emotions and interpersonal connections. 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.

The idea of the special issue emerged during a two-day workshop on ‘Contentious Data’ hosted by the research group DATACTIVE at the University of Amsterdam in September 2016 (DATACTIVE). As the organisers argued elsewhere, these emerging forms of ‘data activism’, that is to say socio-technical mobilizations and tactics taking a critical approach towards datafication and massive data collection, offer new epistemologies able to counteract the mainstream positivistic discourse of datafication (Milan and van der Velden 2016). Data activism can be understood as a contemporary evolution of already existing phenomena like radical tech activism and hacktivism (Milan 2017). It represents yet another possible manifestation of activism in the information society—one that, however, explicitly engages with the new forms information and knowledge take today as well as their modes of production, challenging dominant understandings of datafication. Because datafication is such a prominent feature in public life, data activism, as a way of responding to its challenges, might progressively appeal to more diverse communities of concerned citizens, beyond the expert niche of previous incarnations of tech activist engagement. We believe that this shifting terrain represents an interesting testing ground for contemporary philosophy and theory-building in general.

Like the workshop, this special issue of *Krisis* aims to present a wide range of philosophical and theoretical perspectives on emerging forms of grassroots engagement with datafication. We bring into dialogue scholars and practitioners who

critically explore the politics of data from the perspective of grassroots activism, organised civil society, and the citizenry at large. Thus, several of the articles illustrate or critically engage with the notion of data activism.

Jonathan Gray's article "Three Aspects of Data Worlds" starts off the special issue by introducing and developing the notion of "data worlds". Exploring several theoretical traditions of conceptualising worlds, worlding and world-making, Gray suggests ways of looking beyond prominent narratives about data politics – such as the liberation of data as a resource and Orwellian visions of data surveillance – to consider how data can be involved in providing horizons of intelligibility and organising social and political life.

In "Living with data: Aligning Data Studies and Data Activism through a Focus on Everyday Experiences of Datafication", Helen Kennedy reflects upon the field of 'data studies' as it emerges around the phenomenon of datafication. Her contribution rethinks the field of philosophy of technology in light of the data justice agenda often propagated by data activists, and advocates for a focus on emotions and everyday lived experiences with data.

The third article by Lina Dencik, entitled "Surveillance Realism and the Politics of Imagination: Is There No Alternative?" puts forward the notion of 'surveillance realism'. By building on Mark Fisher's definition of capitalist realism (Fisher 2009), Dencik explores the pervasiveness of contemporary surveillance and the emergence of alternative imaginaries, looking into how the UK public responded to the Snowden revelations.

The following three articles engage with or tackle the notion of data activism by delving into paradigmatic case studies. Stefan Baack's piece on "Civic tech at mySociety: How the Imagined Affordances of Data Shape Data Activism" investigates how data are used to facilitate civic engagement. More specifically, he shows how 'civic technologists' think of themselves as facilitators of civic engagement, and how this relates to the agency of these novel publics in relation to state institutions.

In "Data Activism in Light of the Public Sphere", Miren Gutiérrez explores how activists can make use of data infrastructures such as databases, servers, and algorithms. In her analysis, data infrastructures make new forms of activism possible by creating spaces for dialogue, consensus and networked action. Her case study, namely the Ushahidi software, allows for a reflection on the evolution of the public sphere in relation to data activism.

In "Ambiguity, Ambivalence, and Activism: Data Organising Inside the Institution", Leah Horgan and Paul Dourish critically engage with the notion of data activism going beyond some of the assumptions around the distinction between grassroots activism and the government. By looking at everyday data work in a local administration, they show how activist ideals are pushed forward in a bureaucratic setting. Meyerson and Scully's notion of 'tempered radicalism' (Meyerson and Scully 1995) serves as a useful lens to describe a particular form of data tactics deployed by 'outsiders within'.

To complement the articles, the special issue features an interview with philosopher and media theorist Boris Groys by Thijs Lijster, whose work *Über das Neue* enjoys its 25th anniversary this year.

Finally, three book reviews enrich this special issue, illuminating three key aspects of datafication, namely involuntary disclosure as a radical form of informational democracy, the role of platforms, and the evolution of subjectivity. Patricia de Vries reviews Metahavens' *Black Transparency*; Niels van Doorn writes on *Platform Capitalism* by Nick Srnicek and Jan Overwijk comments on *The Entrepreneurial Self* by Ulrich Bröckling.

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Three Aspects of Data Worlds

Jonathan Gray

Introduction: Data Politics Beyond Liberation and Protection?

“Data” has become an important keyword in contemporary life. It features prominently in many different visions of the future, as well as in relation to a wide range of practical tasks. Companies see data as a lucrative new asset class and as a resource for streamlining their operations and for providing new offerings. Politicians see data as an instrument of reform by enabling transparency, accountability, participation and innovation. Journalists see data as a means to source stories and enrich their reportage. Activists see data as both an issue in itself and as a resource for intervention concerning everything from corporate and governmental surveillance to climate change and migration. Data is envisaged to make money, strengthen democracies, aid investigations and enable justice. At the same time it has been subjected to numerous critiques. Data is also held to disrupt livelihoods, violate privacy, undermine democracies, deepen inequalities, distract from issues, and displace other forms of reasoning, sense-making and experience.

What are we to make of what appears concurrently as an almost magical object of attention and concern, as well an integral part of the mundane organisation of daily affairs? Data has become an object of study in numerous fields, and has even given

rise to new fields and sub-fields such as “data studies” and “critical data studies” (see, e.g. Kitchin and Lauriault 2014; Iliadis and Russo 2016; Dalton, Taylor and Thatcher 2016). This article introduces the notion of “data worlds” and explores its relevance for studying, theorising and doing things with data. It draws on previous research on worlds, worlding and world-making in order to examine three aspects of data worlds as: (i) horizons of intelligibility, (ii) collective accomplishments, and (iii) transnational coordination. These three aspects are illustrated with examples from ongoing research on the politics of public data. The article concludes by reflecting on how the notion of data worlds might inform not only social and cultural research, but also inspire interventions and experimentation around the politics of data.

While using the concept of data worlds in my own research, I’ve been reviewing how others use it. The term has been mentioned in relation to topics such as “big and small data worlds” (Blok and Pedersen 2014), “data art” (Singer 2016), “test bed urbanism” (Halpern, LeCavalier, Calvillo and Pietsch 2013) and “thing ethnography” (Giaccardi, Cila, Speed and Caldwell 2016). Many of these brief references do not dwell on what is meant by the term. This article addresses the gap in this literature by unpacking the notion of data worlds and suggesting three closely related ways in which it can be understood. Before looking at these in more depth I will briefly say a bit more about why and how the concept of data worlds may be useful in relation to studying the politics of data, and why I focus on the particular set of ideas about worlds, worlding and world-making that informs the discussion below.

The notion of data worlds is used in my work in order to look beyond data as a “representational resource”, to consider the various forms of epistemic, social and political work that it does and which is done to produce it. The representational conception is evident in both implicit metaphors and explicit models for talking about and doing things with data. While data does indeed designate aspects of situations, it could also do other things, such as shape the way we see and think about things, serve as a common point of connection across situations, and help to conventionalise ways of organising the world.

The notion of data worlds is thus partly a response to contemporary “socio-technical imaginaries” (Jasanoff and Kim 2015) about data. Just as industrial technologies of the past were accompanied by new social, cultural and political imaginaries, so we can trace the ascent of “data imaginaries” and “data speak”: visions and rhetoric concerning the role of data in society. As Gillespie notes in relation to platforms, these imaginaries do “discursive work” (2010). For example, data is framed as “the new oil”, “the new gold” or “the new soil”, in order to emphasise its value as a social or economic *resource*. We also see the idea of “infrastructures” of data being used in order to emphasise different configurations of public-private and state-citizen collaboration, as well as to establish information infrastructures as a basic good in society alongside infrastructures for water, gas, electricity and so on. The platform, the portal, the app, the lab and the hackday give rise to new imaginaries and discursive regimes as well as material practices suggesting the role of data in public life.

Many of these imaginaries focus on the *value* to be extracted from data, through various mechanisms and arrangements to *make data public*. The issue is often framed as one of access, formats and conventions for encouraging the re-use of public data in innovative applications and services. I have found the notion of data worlds to be useful in examining what open data initiatives do and do not do, and how they might be done differently (Gray 2018). For example, open data projects may focus on *redistributing access* to data about public finances without substantively engaging with the epistemic, social and political work of data infrastructures in selecting, translating, arranging and articulating certain aspects of fiscal policy (such as detailed spending estimates of local councils), but not others (such as the economic activities and tax payments of multinational corporations).

The notion of data worlds is intended to gesture beyond two prominent forms of data politics which can be broadly characterised as “data liberation” and “data protection”. Both emphasise dynamics of power related to *access*. Data liberation is widely associated with hacker culture and other forms of information activism: setting information free from institutions and corporations as a means to address information asymmetries, and to provide a resource for activism and social change.

This may be considered in terms of a “Promethean” mythology of broadening access to a powerful resource or instrument (just as Prometheus stole fire from the gods to give to humankind) – an outlook which is shared across the spectrum from the “mega-leaks” of Wikileaks and the Panama Papers and the more curated, selective leaks of Edward Snowden, through to “Freedom of Information” (FOI) and access to information movements in the 1990s, as well as official and grassroots open data initiatives which emphasise making data legally and technically amenable to re-use (Gray 2016).

On the flipside, we have “data protection” as a narrative of information politics which emphasises the protection of personal information from state, corporate and other actors – as is exemplified in the work of civil society groups such as Privacy International and the Electronic Frontier Foundation. These narratives place an emphasis on the individual ownership and control of personal data, as well as on preventing, obstructing, managing, regulating and raising awareness of the collection of personally identifying information – from artistic projects to make visible the personal information different actors have collected, to law and policy (such as EU Data Protection rules or US Fair Information Principles).

Whilst these two genres of information policy and information politics are indeed vital, data infrastructures do much more than *making data public* and *making data private*. Raymond Geuss has critiqued what he considers the disproportionate attention accorded to the “public/private distinction” which both reflects and reinforces the absence of “any effective general framework for thinking about politics apart from liberalism” (Geuss 2003). Dominic Boyer has suggested the phrase “digital liberalism” as an invitation to attend to how “techno-institutional processes such as computerization and digital information and politico-institutional discourses of late liberalism have coevolved, at times reinforcing and naturalizing each other, promoting novel bundles of epistemics and ethics” (Boyer 2013).

The notion of data worlds is intended to make space for thinking about data as more than simply a representational resource, and the politics of data as more than a matter of liberation and protection. It is intended to encourage exploration of

the *performative* capacities of data infrastructures: what they do and could do differently, and how they are done and could be done differently. This includes consideration of, as Geoffrey Bowker puts it, “the ways in which our social, cultural and political values are braided into the wires, coded into the applications and built into the databases which are so much a part of our daily lives” (2014). In doing so we may draw on performative analyses of numbers (Espeland and Stevens 2008; Verran 2015), models (Mackenzie 2008) and methods (Law, Ruppert and Savage 2011) to consider how data infrastructures may be involved in not just the *representation* but also the *articulation* of collective life, while at the same time being the products of social and institutional work themselves.

Many accounts of performativity allude to the work of J. L. Austin, who suggests “the issuing of an utterance is the performing of an action” (1975: 6). Austin is associated with a “linguistic turn” in Anglophone analytic philosophy said to begin with Wittgenstein, whose later work reflects on what language does beyond referring to things. In the following discussion of the performative and world-making capacities of data infrastructures, I draw on an earlier linguistic turn that occurred in German philosophy in the eighteenth century and which has recently begun to receive more attention in English-language scholarship (Lifschitz 2012; Bowie 2013; Taylor 2016). Thinkers associated with this earlier turn also sought to look beyond representational accounts of language towards its other capacities as a situated set of social practices. Ian Hacking argues this tradition can be viewed as an alternative to Wittgenstein’s “depoliticized” philosophy of language (2002). I do not argue for the special relevance of this period and these ideas. Rather I suggest that it contains conceptual and theoretical resources which may be useful when considering different aspects of worlds, worlding and world-making in relation to data.

The three aspects of data worlds which I examine below are not intended to be comprehensive, but illustrative of what is involved in data infrastructures, what they do, and how they are put to work. As I shall return to in the conclusion, this outline is intended to open up space for not only *thinking about data differently*, but

also *doing things with data differently*. The test of these three aspects is therefore not only their analytical purchase, but also their practical utility.

1. Data Worlds as Horizons of Intelligibility

The first aspect of data worlds draws on philosophical ideas about worlds, worlding and world-making to look at how things are *sayable*, *knowable*, *intelligible* and *experiencable* through data. In European philosophy this begins with Kant’s “Copernican revolution” which recognises the active and creative role that human beings played in composing the worlds that they experience – including through schemes, categories and structures such as space, time, causality and quantity which give form to experience. This is an explicit departure from views which saw experience as “given” and immediate, and also heralds a broader philosophical shift towards looking at how experience is articulated and mediated through language, culture and social arrangements.

Subsequent thinkers in this tradition – Hamann and Herder in the eighteenth century to thinkers as diverse as Heidegger, Gadamer, Benjamin and Wittgenstein in the twentieth century – stripped Kant’s project of its aspiration to clarify universal structures, and highlighted the role of socially and historically situated linguistic and cultural infrastructures, or what the contemporary philosopher Charles Taylor calls “meaningful media” (Taylor 1985), in shaping our apprehension of the worlds we inhabit.

Many of these earlier thinkers mainly focused on the role of *language* as a horizon of intelligibility, providing the “conditions of possibility” for our experience. As Taylor notes, this also corresponded with an explicit move away from a dominant focus on the designative, representational and “information encoding” capacities of language and other meaningful media – and a focus on their role in composing and co-producing our worlds of experience (2016). As Hacking puts it, in this tradition we find the notion that: “language is creative; to it we owe the existences and structures that populate our world-versions” (2002, 139). And yet, while there is a

focus on language as an important and paradigmatic case of how our experience is formed, language is very often construed in a broad sense – including not only written and verbal language, but also music, painting, sculpture, and other social and cultural conventions for making meaning.

Benjamin draws on Hamann’s “metacritical” challenge towards narrower conceptions of experience as “naked, primitive, self-evident” (Benjamin 1996), exploring in his work the world-making capacities of architecture, urban planning, fashion, advertising and technologies, perhaps most famously in his *Arcades Project* (Benjamin 1999). Later in the twentieth century, these kinds of appropriations of Kantian ideas about schematism and world-making (minus the transcendental idealist baggage), have broadened out from what Apel calls the “linguistic *a priori*” of thinkers like Hamann, Herder and Heidegger (Apel 1973, 39), to the “historical *a priori*” of Michel Foucault (Foucault 1972) and what has been called the “technological *a priori*” of German media theorists shifting the focus to *Kulturtechniken* or “cultural techniques” (Tuschling 2016; Winthrop-Young, Iurascu and Parikka 2013).

What might this sense of world-making bring to an understanding of the politics of data? Taking a cue from this theoretical constellation, we might envisage data worlding in terms of a contingent, historically and socially situated, technologically mediated “data *a priori*” which not only designates but also provides the conditions of possibility for seeing and engaging with different aspects of collective life – making possible particular styles of reasoning and particular forms of knowledge and experience.

Data practices might be understood not just in terms of more sophisticated ways of *picking things out*, but as contributing to new ways of *making things up*, as Hacking puts it (1985). Here critical data scholars can benefit from decades of research on social practices of quantification (Porter 1996; Espeland and Stevens 2008; Rottenburg, Merry, Park and Mugler 2015; Bruno, Jany-Catrice and Touchelay 2016); statistics (Porter 1986; Desrosières 2002); standards (Lampland and Star 2008); probability (Hacking 1990); visual reasoning (Halpern 2015); and other studies of cultures and practices of knowledge which focus not just on what is said, but on

the background against which things become sayable. In looking at how data worlds provide horizons of intelligibility we can both draw on genealogies of the modes of experience and styles of reasoning which are rendered possible through data over previous decades and centuries, as well as looking at what is distinctive about new and emerging digital technologies. As Nelson Goodman puts it in his classic *Ways of Worldmaking*: “worldmaking as we know it always starts from worlds already on hand; the making is a remaking” (Goodman 1978, 6).

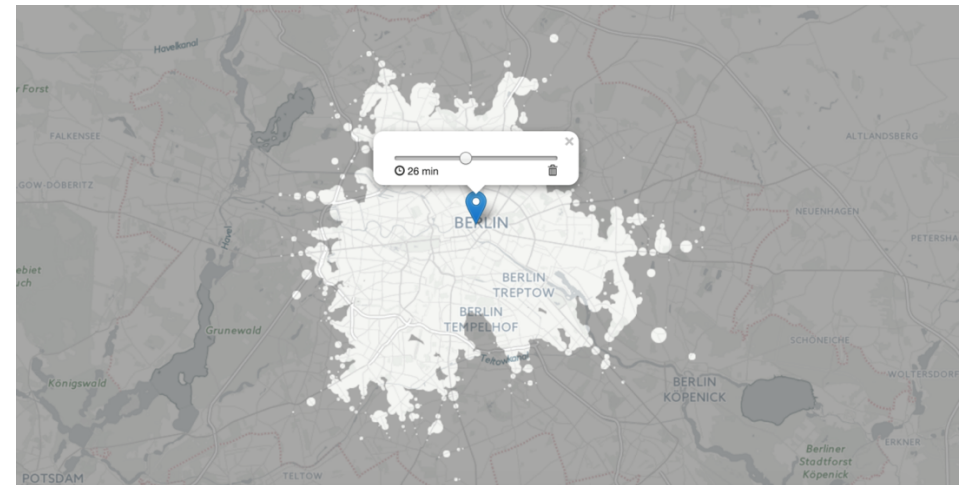


Figure 1: Screenshot of transportation maps from Mapnificent project (mapnificent.net), showing which places are accessible in a given amount of time from a given point.

Thus in relation to digital data worlds we may examine how composites of conventions, norms, technologies, practices, methods, pieces of software, graphical user interfaces, data standards, data formats and aesthetic approaches are implicated in making things up and making things intelligible with data. This might include looking at how horizons of intelligibility change from pre-digital to digital data worlds. For example, we might look at differences in how the world is conceptually organised or “carved up” into categories. In contrast to the classificatory practices of statisticians taking measure of economies or populations, “born digital” and big data, generated as a result of interactions with online platforms, can give rise to

novel practices of semi-automated classification, as well as emerging forms of inequality and discrimination.

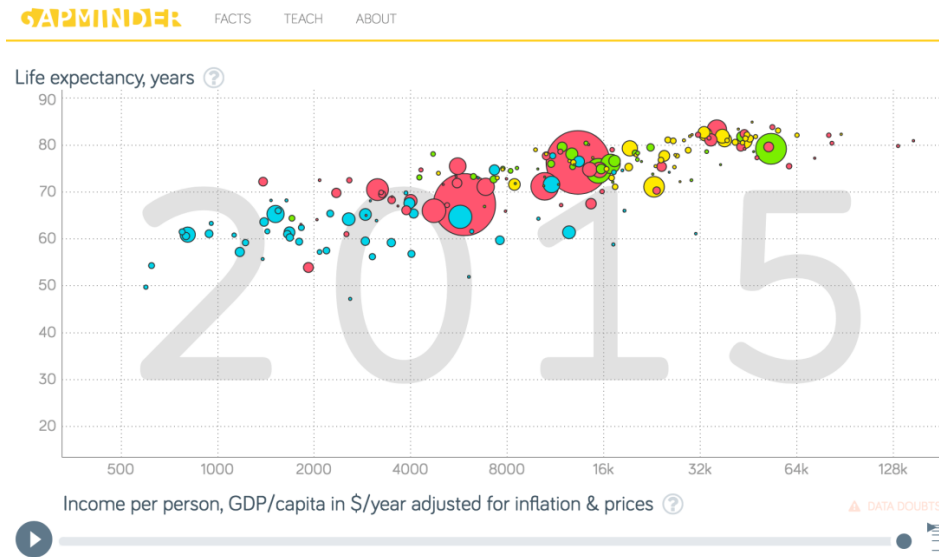
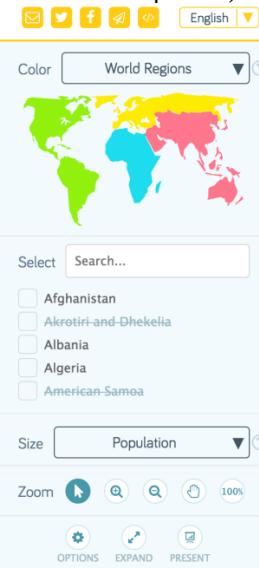


Figure 2: Screenshot of interactive “animated bubble charts” of Gapminder project (gapminder.org), exploring relations between average life expectancy and income per capita over time for countries around the world.

There are many historical studies looking at how social categories are articulated through statistical practices (Desrosières 2002). In digital data worlds computational techniques such as machine learning may be used to facilitate “class discovery”. Clusters and orderings of hashtags, links, likes, images and other media can be viewed as *co-produced* by the logic of platforms, algorithms, and the “device cultures” of users. For example, Sam Lavigne’s “Taxonomy of Humans According to Twitter” at *The New Inquiry* explores and visually represents the “bizarre rubrics Twitter uses to render its users legible” (Lavigne 2017). This project aims to make visible the way in which people are classified according to a combination of user activity and information from data-brokerage companies, leading to categories such as “people who live with three other people”, “buyers of frozen ethnic foods”, and

“households whose behavior indicates they are spa mavens”. These algorithmically-mediated data practices around online platforms can be understood, as Annemarie Mol puts it, as “new ways of *doing* reality” (Mol 1999).



look at the forms of experience, styles of reasoning, and genres of use with novel kinds of cultural objects associated with digital data includes the world-making capacities of things such as apps, platform packages, code libraries, and data analysis and visualisation tools people make sense with data, and integrate data into different kinds of spaces, practices and institutions. We might consider how space, time, and categories are articulated and organised through lists, tables, charts, maps, and coordinate systems – and inscribed into dashboards, interactive maps, word clouds, network graphs, mapping technologies, and communication techniques for filtering, reconciling and analysing data.

talks of “seeing like a state” by reducing “an infinite array of detail to a few statistics that will facilitate summary descriptions, comparisons, and generalizations” (19, 77), and Law talks of “seeing like a survey” by using statistical techniques to enact “a very particular version of the collective” (2009), so we may consider how the performative and world-making capacities of data projects are conventionalised into familiar forms such as seeing like an app, a network graph, a data portal, an API, an interactive map, a Google Spreadsheet and so on.



Figure 3: Detail of dashboard previews from London Datastore (data.london.gov.uk) showing trends in relation to performance indicators for the city.

“Time travel” maps articulate novel and interactive relationships between space and time by estimating the zones that can be reached from a given point in a given time

interval (Figure 1). Global indicators are no longer simply represented through tables, charts or line graphs, but through interactive animated graphics dramatizing the passage of centuries through the movements of multicoloured bubbles articulating different dimensions of collective life (Figure 2). Interactive dashboards are envisaged as the preferred mode to increase transparency and public accountability in the city by tracking trends in relation to key performance indicators (Figure 3). While these kinds of projects draw on ideals and practices that have much longer histories – such as the aspiration for what Theodore Porter characterises as “thin descriptions” and an aesthetic of distance – digital technologies are also facilitating reconfigurations and redistributions of these data world-making capacities, leading to emerging genres of making sense with data. As we shall see in the following section, these meaning-making practices should be understood as social conventions.

2. Data Worlds as Collective Accomplishments

The second aspect of data worlds draws on a sociological tradition of studying “social worlds”. Adele Clarke and Susan Leigh Star trace this from the Chicago School of Sociology to Science and Technology Studies (Clarke and Star 2008). This approach encompasses and informs a range of research on social worlds – including for example Anselm Strauss, who suggests in the 1970s that we should look at the “social worlds” of genetics, high energy physics, computerisation and banking (Strauss 1978), to Howard Becker’s renowned work on “art worlds” (Becker 1984), as well as the “worlds of classification” and “information worlds” explored in the work of Bowker, Star and other scholars of information infrastructures (Bowker and Star 2000; Star, Bowker and Neumann 1997).

This view of social world-making is also commensurate with both critics and radical interpreters of Kant who suggest that language and meaning-making practices should be regarded in fundamentally social and historical terms – a move which led Ian Hacking to mark this as a key moment when language “goes public” (2002). This tendency to look at language and meaning-making practices in terms of

contingent and evolving social institutions is also present in Wittgenstein’s work, which is a formative influence on subsequent social research agendas from ethno-methodology, to the “Strong Programme”, to Science and Technology Studies (see, e.g. Bloor 1983, 2002; Hacking 1984; Lynch 1992).

Taking a cue from this tradition, we might look at how the information products, styles of reasoning, and meaning-making capacities associated with data infrastructures can be considered as “relational achievements” or “distributed accomplishments” – and how the collectives associated with data infrastructures are changing in composition. Data worlds as horizons of intelligibility must thus be understood as social and collective. Changes in these collectives can carry significant political and political-economic consequences. For example, in the case of the redistribution of “data work” from official institutions to actors outside the public sector – as in the case of open data initiatives (Gray 2018), to civil society and citizen generated data (Gray, Lämmerhirt and Bounegru, 2016), through a shift of emphasis from statistical data to “big data” generated by major technology companies (Flyverbom, Madsen and Rasche 2017).

In Howard Becker’s terms, we can examine the “conventions” and practices which hold these social “data worlds” together – which he characterises as “ways of seeing and hearing that were known by everyone involved and thus formed the basis for their collective action” (Becker 1984, xv). In the case of open data, this might include, for example, such things as open licensing practices, legal arrangements, and technical practices which aim to “unlock the potential” of data as a resource, and “reduce the barriers” to its re-use by non-state actors – whether in new technology products such as Google Maps, the stories of data journalists, or the campaigns of NGOs or civil society groups. This concern with legal and technical conventions suggests that the open data community might be understood as what Chris Kelty calls a “recursive public”, or “a public that is vitally concerned with the material and practical maintenance and modification of the technical, legal, practical, and conceptual means of its own existence as a public” (Kelty 2005, 3). There are also emerging conventions for making sense with data such as those discussed in the previous section.

Looking at data worlds as collective accomplishments includes recognising the role of actors whose contributions may otherwise be under-recognised. In his work on the sociology of “art worlds” Becker suggests a shift of emphasis from the formal quality of art works to “complex networks through which art happens” (1984, 1). In his work he describes a broad range of materials, formats, spaces, instruments, distribution networks and art workers which are involved in the production and distribution of art works, and the assembly of their publics. Hence we might survey not just the formal properties of data projects or practices of prominent data workers (such as data scientists or data journalists), but a much broader cast of characters who are involved in the production, circulation and reception of data work.

Similar moves will be familiar from approaches inspired by Science and Technology Studies which view data infrastructures as *relations* of people, machines, software, standards, processes, practices, and cultures of knowledge production (e.g. Bowker and Star 1998, 2000; Star 1999; Star and Bowker 2002; Star and Ruhleder 1996; Jackson, Edwards, Bowker and Knobel 2007). Susan Leigh Star and Geoffrey Bowker suggest the notion of “infrastructural inversion” to bring neglected actors and processes into the foreground, including the role of non-human actors. In other recent work this has been framed in terms of “data assemblages” (see, e.g., Kitchin and Lauriault 2014).

One notable feature of many aspects of contemporary data politics is the emphasis on *redistributing* different forms of data work through digital technologies and networks. This redistribution comes in many different flavours. The tendency to redistribute “data work” from the public sector to the private sector is reflected in what Joseph Stiglitz calls the “default position” in information policy in the US, which is that states should not attempt what can be more effectively delivered by markets. This sentiment is also echoed in an influential paper called “Government Data and the Invisible Hand”, suggesting that states cannot “keep pace” with the internet. This paper is picked up by Tim O’Reilly with his idea of “government as a platform” (which he opposed to “vending machine government”), an idea which was institutionalised as part of government policy in the UK (Gray 2014). Since the turn of the millennium, public information policy has seen an influx of

different ideas concerning how and why to redistribute public data work – from enabling new kinds of innovation and businesses, reducing public sector costs, to crowdsourcing, distributed collaboration or peer production around data (modelled on open source software development), to grassroots, bottom up and participatory data cultures.

The redistribution of data worlds can be facilitated through a variety of devices and conventions, such as *open licenses* (like Creative Commons licenses); *data formats* such as Google Transit Feed Specification (later renamed General Transit Feed Specification); *online platforms* such as GitHub; *data portals* (such as data.gov); as well as hackathons, fellowships, and other public engagement activities. We may consider these not only as “transparency devices” (Barry 2010), but also as “infrastructuring devices” (Star and Bowker 2002; Pipek and Wulf 2009; Björgvinsson, Ehn and Hillgren 2010; Karasti 2014; Le Dantec and DiSalvo 2013), assembling different publics around data, whether it is to clean it up, crowdsource quality control of bus stop locations, monitor potholes, or make new apps and services. How these different forms of publicity, participation and contribution are materially organised is an important question which can be read in relation to recent research on the politics of openness and participation (Tkacz 2014) and of platforms, platformisation and platform capitalism (Helmond 2015; Srnicek 2016).

3. Data Worlds as Transnational Coordination

A third aspect of data worlds is world-making as transnational coordination, which includes projects of shaping, governing and articulating transnational relations, from empires and international institution building, to the networks, circuits and tendencies which are often studied by sociologists of globalisation (Sassen 2006).

Through this lens we can look at the world-making ambitions of legal and technical norms, standardisation, harmonisation and interoperability processes undertaken by a wide variety of different actors in the service of different projects for making things global. For example, UN bodies and EU statistical agencies have

undertaken extensive programmes of work to align national forms of quantification – to support transnational policy coordination and comparison. Intergovernmental actors and international organisations such as the IMF, the World Bank and the UN, have long supported the creation and alignment of systems and standards for the management of public finances in order to support objectives such as “fiscal discipline”, the allocation and coordination of development funds, and the comparability of public spending across borders.

It is not only public institutions which share these kinds of world-shaping ambitions by means of data. They are accompanied by a host of researchers, companies, statisticians, consultants, analysts, accountants, scientists, activists, technologists, managers, journalists, ecologists, librarians, and others who seek to establish transnational information systems, practices, norms and standards. This may range from professional standards bodies (such as the International Accounting Standards Board), to multinational consultancies (such as Deloitte and other “big four” accounting firms), to private technology companies or startups (big tech companies such as Google to smaller projects like OpenCorporates), to non-profit and civil society initiatives (such as the Open Contracting Partnership’s work on procurement data or Data2X’s work on gender data).

Such initiatives often aim to shape the world through the coordination of data. Data worlds can make things amenable to measurement, monitoring, evaluation, analysis, and visualisation across space and time in support of diverse political, geopolitical, eco-political or political economic programmes – from neoliberal fiscal policy to market creation, gender equality to tax justice, increasing biodiversity to strengthening democracy. Civil society interventions to create and shape global data can be read in terms of other recent work around the history and sociology of quantification, as well as in terms of what some researchers have called “statactivism”, and, more recently, “data activism” (Bruno, Didier and Vitale, 2014; Milan and van der Velden 2016). Longstanding information infrastructure projects, such as Amnesty International’s “Urgent Actions” database, can be viewed as a kind of transnational “issue work”, in order to render what might otherwise be

disconnected incidents amenable to classification, measurement, comparison and virtual witnessing across borders.

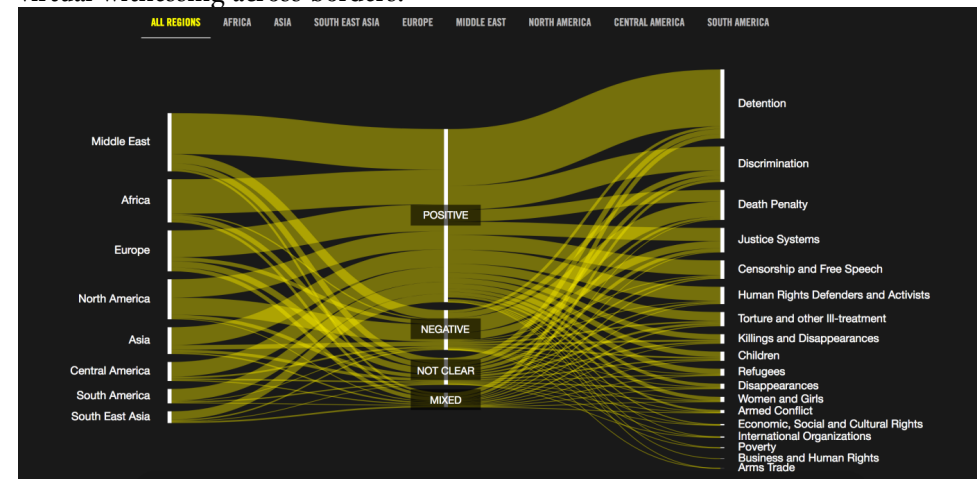


Figure 4. “Urgent Actions Visualised” from Amnesty International’s Decoders project. <http://decoders.amnesty.org/projects/decode-urgent-actions/results>

There are of course many ways in which a given issue or matter of concern may be articulated, defined, parameterised, quantified, and given life through data. The transnational coordination aspect of data world-making is multivalent and may be considered in relation to a wide variety of utopian and dystopian, progressive and regressive political and ecological projects, as well as in terms of different histories and conceptions of land, territory, empire and earth. Here we may benefit from previous research on the colonial aspects of worlding in literary and cultural studies (e.g. Spivak 1985; Karagiannis and Wagner 2007; Clark, Finlay, and Kelly 2017); post-colonial computing (e.g. Irani, Vertesi, Dourish, Philip and Grinter, 2010); “planetary-scale computation” and emerging “technogeographies” (Bratton 2016; Gabrys 2016); as well as the surge of interest around “global intellectual history” and the making of worlds (e.g. Bell 2013).

We may consider data worlds to facilitate the demarcation and shaping of spaces, territories, environments, categories, identities and boundaries, separating interior

from exterior, and sorting things, people and places out. They may also direct attention to different kinds of transnational issues, dynamics, concerns or collectives. For example, we may look at the role of data worlds in relation to notions of the Anthropocene and the Capitalocene, in order to look at the role of human activity on a geological scale, as well as in the service of anthropologies of modernity, and projects to, as Bruno Latour puts it, “recompose a common world” (Kunkel 2017; Haraway 2016; Latour 2013). As well as deploying data worlds in order to better understand how human activity shapes the earth, information infrastructures may also be used to attempt to take various ecological signals into account in collectively redirecting its trajectory. As Goodman puts it: “if there is one world, it embraces a multiplicity of contrasting aspects; if there are many worlds, the collection of them all is one” (1978, 2). Data infrastructures can be used to establish the material character and limits of our one earth which contains such a plurality of social worlds and world-versions.

Data worlds can thus be understood as a means to institutionalise different forms of transnational coordination by providing the background against which things become seeable, sayable and doable with data across borders. Following recent research on neoliberal programmes (Roberts 2011; Davies 2014), data worlds may be considered as part of projects for reconfiguring relations between states, markets, citizens and civil society by foregrounding rankings, ratings and regimes of valuation in order to reinforce ideas of performance, competition and innovation, at the same time as moving tenets of economic and fiscal policy outside the realm of public and political deliberation. We can also read the redistributions of various forms of data work in terms of these contemporary imaginaries of democracy, markets and information – including those of competition, accountability, transparency, innovation, self-optimising systems and specific configurations of centralised management and decision-making coupled with decentralised delivery and contribution.

While there are indeed data worlds which may be configured to accelerate marketisation, bureaucratisation and what Habermas characterises as the “colonisation of the lifeworld”; other projects seek to address inequality and injustice, or to hold

powerful elites accountable (as emphasised by the “statactivism” tradition), and all else in between. Data worlds can be malleable and may have unexpected consequences – such as in the cases of reports for investors being used by journalists and activists, or data from international development organisations being used by credit agencies.

Conclusion: Other Data Worlds Are Possible?

The aspects of data worlds described above are intended to gesture beyond two prominent narratives of data politics: of Promethean conceptions of liberating data as a resource on the one hand, and Orwellian visions of data surveillance, privacy and data protection on the other. These are vital parts of contemporary information politics, but there are other important aspects of what data is and what data does that should not be overlooked.

This article explores how theoretical traditions and literatures about worlds, worlding and world-making may be brought to bear to suggest different ways of thinking about data politics, highlighting three closely related aspects of data worlds. These three aspects are intended to be *illustrative* not exhaustive, and are intended as *overlapping* rather than distinct lenses through which to consider data infrastructures. They give rise to three different but closely related sets of questions for researching, theorising and reflecting on different aspects of data worlds.

1. **Data worlds as horizons of intelligibility:** What are the epistemic world-making capacities of data infrastructures? How might data infrastructures be involved in “making things up”? Can they provide conditions of possibility for different ways of seeing, saying and knowing collective life, and if so, how?
2. **Data worlds as collective accomplishments:** Who and what is involved with making, and making sense with, data? How are data worlds being redistributed through digital technologies? Who is (and who isn’t) able to

shape data worlds? What kinds of practices of participation and public involvement are emerging around data worlds?

3. **Data worlds as transnational coordination:** How might data infrastructures be implicated in different attempts to “make things global”? What kinds of transnational alliances and circuits are being formed and to what end? Who advocates which kinds of data worlds, and according to which kinds of visions and fields of transnational coordination (from international relations to earth science)?

It is worth noting that it remains an empirical question as to *how* and *to what extent* data infrastructures are involved in world-making in these three senses. Data infrastructures can be deployed with certain epistemic, social and political aspirations and imaginaries in mind which they do not live up to. Data projects can fail to become data worlds in these three senses.

The notion of data worlds is not just intended to advance research on data politics. Following recent debates about the performativity of critique (e.g. Latour 2004), and calls to integrate critical, theoretical and humanistic reflection into technical practice (e.g. Agre 1997; Rieder and Röhle 2012; Berry 2014), I am particularly interested in how the notion of data worlds might suggest different kinds of data politics. Of course, theory and critique can contribute to doing things differently, as critical data studies researchers have pointed out. Dalton, Taylor and Thatcher, for example, propose to “develop alternative knowledges that reflect and build on our criticisms” (2016).

To this end, I’d like to propose the notion of “critical data practice” as a site for pedagogical experimentation, research and intervention around the politics of data. This follows Agre’s notion of “critical technical practice” which he uses to characterise his attempts to integrate historical and theoretical reflection around artificial intelligence into his work as an AI researcher (Agre 1997). The crucial question here is *what difference* critical studies can make in doing things with data. As well as contributing to critical genealogies and sociologies of the politics of “data worlds” and “data world-making” projects, researchers and universities might

contribute to “making space” for such experimentation and intervention around public data infrastructures and the role they play in collective life.

The three aspects of data worlds I have examined are intended to assist with the task of rethinking the politics of public data, by considering *how* and *for whom* it is made public. Thus we may examine the organisation of what Evelyn Ruppert calls “data publics” (Ruppert 2015) beyond a focus on accessing, liberating and using data, and taking a broader look at how different actors engage with, mobilise around, shape and are shaped by, public data infrastructures. This includes distributed collaboration around different kinds of “data work” – from projects inspired by free software, free culture and open access movements such as Open Street Map or Wikidata, to data journalism and data activism projects for counting police killings or migrant deaths, to other kinds of civil society interventions for changing the socio-technical arrangements by which public institutions account for issues by means of data. As well as attending to these arrangements, researchers may also consider “experiments in participation” (Lezaun, Marres and Tironi 2016; Marres 2012) around data worlds, which are also cognisant of patterning and politics of these participatory processes. Such experimentation would not just aim to interpret data worlds, but also to question them, to re-imagine them, and to change them.

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Living with Data: Aligning Data Studies and Data Activism Through a Focus on Everyday Experiences of Datafication

Helen Kennedy

Introduction

It is now widely accepted that data are oiling the twenty-first century (Toonders 2014). Data gathering and tracking are practically universal, and datafication (the quantification of aspects of life previously experienced in qualitative, non-numeric form, such as communication, relationships, health and fitness, transport and mobility, democratic participation, leisure and consumption) is a transformation disrupting the social world in all its forms (Couldry 2016). Statistics confirm the assertion that the datafication of almost everything is growing relentlessly: in 2012 it was claimed that 90% of the world's data had been created in the previous two years (IBM 2012), and a future 40% annual rise in data generation has been estimated (Manyika et al. 2011).

Less commonly noted is the place of everyday experience in the machine of datafication. *The Berliner Gazette* (nd) has claimed that 75% of these newly available data are by-products of people's everyday activities, and Michael and Lupton also note the centrality of the everyday in the current Big Data moment:

Human actors contribute to big datasets when they engage in activities such as making calls and using apps on mobile phones, using online search engines such as Google, purchasing goods or services online or taking part in customer loyalty programmes, uploading contributions to social media platforms, using wearable self-tracking devices or moving around in spaces that are equipped with digital sensing or recording devices (Michael and Lupton 2015, 104).

Despite the significance of such everyday practices in the production of large-scale data, little attention has been paid to people's thoughts and feelings about these data-producing processes. These issues have not, on the whole, been the focus of the emerging field of data studies, which seeks to understand the new roles played by data in times of datafication. This is a problem for a number of reasons. First, if we do not understand whether data condition everyday experiences as it is claimed, and our thinking about these matters is not informed by the perspectives of the people upon whose data datafication is built, scholarship about data-in-society will be incomplete. Second, and importantly for this special issue, in the absence of such knowledge, data activism, which seeks to challenge existing data power relations and to mobilise data in order to enhance social justice, will rely upon the judgments of elite technical actors and activists about what would constitute more just data practices. In contrast, I argue that to build a picture of what just data arrangements (that is, the practices of organisations that handle and produce data, the policies that govern these practices, and provisions for the development of skills that people need in order to engage with data) might look like, it is important to take account of what non-expert citizens themselves say would enable them to live better with data, based on their everyday experiences of datafication. Greater understanding of everyday living with data can contribute significantly to the knowledge base on which data activism is built. A third problem, then, is that by not focusing on these issues, the field of data studies is not currently as well aligned to the aims of data activism as it might be. This paper explores how we might address this gap.

The paper proceeds to elaborate the argument that data studies and data activism could be better aligned through a focus on everyday experiences of datafication. The next section provides a brief sketch of the field of data studies, identifying the everyday as a critical absence. Here I discuss how more empirical research into what it means to live with datafication could enhance both data studies and data activism. In the subsequent section, I outline what the project of researching living with data might look like. I explore two possible approaches to this endeavour, the first of which I describe as “a phenomenology of datafied agency.” The second focuses on data-related capabilities and their emotional dimensions. Both of these approaches, I argue, suggest the need for a vocabulary of emotions in researching everyday living with data.

Inserting the Everyday into Data Studies and Data Activism

Within the emerging field of data studies, datafication is said to have all kinds of effects, many of them troubling, and to result in an array of new harms. These include: increased surveillance; threats to privacy; new forms of algorithmic control; and the expansion of new and old inequalities and forms of discrimination. Surveillance is said to be much more ubiquitous, opaque and speculative in datafied times, as social media and other kinds of data mining make it possible to surveil aspects of life once private and intimate (Andrejevic and Gates 2014, Dencik and Cable 2017, Lehtiniemi 2017) and thus deny people their basic right to privacy (Cohen 2013). Privacy itself is a contested issue, with industry figures like Mark Zuckerberg claiming that it is no longer a social norm (Johnson 2010), and critical researchers pushing back against this view with all kinds of empirically grounded (boyd 2014) and philosophical (Nissenbaum 2009) assertions that privacy does, in fact, still matter. Elsewhere, significant attention has been paid to the function of algorithms in emergent forms of datafied governance and control. In times of datafication, algorithms have power, it is claimed (for example by Gillespie 2014 and Striphos 2015). They make and shape data in particular ways, certifying knowledge and so shape public, social and cultural life.

Another troubling consequence of datafication is that it reproduces old inequalities and creates new ones. One of danah boyd and Kate Crawford’s much-cited “six provocations for big data” is that “limited access to big data creates new digital divides” (boyd and Crawford 2012, 673). In data mining, who is deemed to have expertise determines who controls the process and the “knowledge” about the social world that results, knowledge which in turn reproduces the social world, as scholars writing about the power of algorithms also claim. Relatedly, and emerging from these debates, the discriminatory consequences of the rise of big data have also been noted. Data mining, analysis and subsequent discrimination result in certain groups having better access to all kinds of resources (Andrejevic 2013, Taylor and Richter 2017). Datafication affects citizens differentially, and data-driven discrimination can mean that already-disadvantaged populations have their access to fundamental human rights further limited (see for example Gangadharan 2012 and 2015).

To date, studies of the rise of datafication have primarily sought to expose these harms, and the field of data studies has therefore been dominated by critical political economy and neo-Foucauldian analyses of the problems that accompany widespread datafication and its intricate relationship with neoliberal forms of governance. Data are seen as powerful and troubling actors in the control of contemporary life, playing a role in shaping how we live, what we know and how we know, and contributing in new ways to old problems like discrimination and inequality. Without doubt, this literature has played a vital role in making visible the serious issues that datafication raise in relation to rights, freedoms and justice, and in questioning the celebratory rhetoric that has accompanied the spread of big data.

But there are some absences here. Because data studies has primarily focused on the operations of data power and their harmful consequences, it has been characterised in large part by a focus on powerful actors. Studies which focus instead on attempts to democratise data, such as open data initiatives (Baack 2015), hackathons (Gregg 2015, Irani 2015), the Quantified Self (QS) movement (in which participants use apps and mobile devices to collect data about various aspects of their bodies and lives, such as the work of Neff and Nafus 2016) or data activism,

also often focus on elites, as the initiatives and practices which are the object of these studies tend to involve technological and data savvy experts. For example, as early researchers of the QS movement have acknowledged, QSers are atypical in their data expertise, commitment and enthusiasm, and so cannot be said to be representative of “ordinary people.” Indeed, my use of the term “ordinary people” in the cultural studies tradition in this paper highlights what is missing from the existing literature. Building on the politics of the ordinary, my argument here is that “lowering” academic sights (McCarthy 2008) to “activities in the daily round” (Silverstone 1994) is a much-needed political gesture in the field of data studies.

Thus data studies has not paid much attention to the everyday experiences of non-expert citizens of living with data and datafication. Michael and Lupton noted in 2015 that “there is still little research that has investigated what the public make of big data, aside from reports from privacy organizations and government bodies” (Michael and Lupton 2015, 110), and that characterisation is still largely true two years later. It is because of this absence that, alongside Michael and Lupton, commentators such as Couldry and Powell (2014), Pink et al. (2017) and Ruckenstein and Pantzar (2015), have called for more research into everyday engagements with data. I join them in this call in this paper, argue that such a turn is important to data activism as well as to data studies, and explore how we might enact it. Indeed, it is because of these limitations in dominant critical approaches that I propose that the term “data studies” is preferable to describe this emergent field, rather than the alternative “*critical* data studies” which is also sometimes used (for example by Iliadis and Russo 2016).

It should be noted that there are a small number of exceptions to my claim that data studies has not attended to the everyday. These include research into the datafication of health, such as Harris et al’s (2016) work on cybergenetics, and the work of Lupton (2018) and Ruckenstein (2016). Another example is Couldry et al’s (2016) Storycircle project, which explored how analytics are used by community groups for social ends. Research in the field of data-driven discrimination, such as Eubanks and Gangadharan’s Our Data Bodies project (<http://www.odbproject.org/>), is also an exception, as it grounds concerns about the discriminatory

effects of datafication in empirical research with those most likely to be discriminated against. Two small-scale studies have explored how social media platform users feel about these technologies and their algorithms (Bucher 2017, Colbjornsen forthcoming). Barassi’s Child Data Citizen project (<http://childdatacitizen.com/>), which aims to look at how the lived experience of childhood is being transformed by datafication, is also an exception, as is research into the everyday self-monitoring practices that have emerged from the more elite QS movement mentioned above (especially the work of Pink, such as Pink and Forst 2017, Pink et al 2017 and Pink et al 2018; see also Sharon and Zandbergen 2016). These examples notwithstanding, there is limited research which seeks to develop understanding of how ordinary people experience and live with data as part of everyday life – these exceptions represent only a small handful of projects from across the globe, after all. In short, we need more empirical research into everyday living with data.

A further problem with existing data studies literature is that much of it conceives of life with data in limited ways, as harmful and oppressive. This is not helpful for data activism which, as noted above, seeks to identify and establish more just forms of datafication. Data activism is characterised by mobilisations against existing data uses and practices, and has been defined as a “series of sociotechnical practices that, emerging at the fringes of the contemporary activism ecology, critically interrogate datafication and its socio-political consequences” (Milan and Van der Velden 2016, np). As such, data activism is premised on the assumption that current “data arrangements” are harmful to non-powerful citizens, and that alternative arrangements are therefore needed to improve people’s experiences of datafication. Data activism thus requires the possibility of agency, yet there is little scope for agentic engagements with data in the visions of datafication provided in much data studies scholarship.

Bringing the sociology of the everyday into data studies can help to resolve this problem. In sociological terms, the everyday refers to the habits and practices in which we engage and which surround us, what Pink et al describe as the “routines, contingencies and accomplishments” of the mundane (Pink et al 2017). Given that datafication is now widely considered to be a defining feature of everyday life

(Couldry 2016), this approach is clearly helpful for understanding everyday experiences of datafication. Because the everyday is conceived as contingent and situational within this sociological sub-field, this makes it possible to think of social phenomena like datafication as not simply constitutive of social life, as critical political economy and neo-Foucauldian analyses do, but rather as “made and unmade” (Neal and Murji 2015, 812) through everyday practices. (Of course, people’s everyday lives are not all the same, and it is important to take account of how social inequalities lead to different data experiences, as work on data and discrimination has begun to do (such as the Our Data Bodies project mentioned above)). Thus not only does researching everyday engagements with data fill an empirical gap for data activism, its acknowledgement of the agentic actions that constitute social and political life mean that it is well aligned with data activism’s interest in the possibilities for agency in datafied times.

There is a third contribution that a focus on the everyday can make to data activism, in addition to the two already noted (that is, filling an empirical gap and focusing on agency). In a talk about data activism which had as its subtitle “the conditions of possibility for democratic agency in the datafied society”, Stefania Milan (2017) identified three such conditions. The first is critical consciousness, or “conscientização”, a Portuguese term coined by Brazilian popular educator Paulo Freire to refer to achieving critical understanding of the world and taking action against injustices revealed through such consciousness (Freire 1968). The second, according to Milan, is grassroots data literacy, which is required in order to comprehend existing data practices and processes. The third is critical imagination, or the capacity to imagine alternative forms of living with data. Here Milan draws on Emirbaye and Mische’s (1998, 970) definition of political agency as constituted “through the interplay of habit, *imagination* and judgement” (my emphasis). But what precedes the achievement of these conditions outlined by Milan? What comes before them? We need to know the answers to these questions before we can understand what leads people (or future data activists) to be able to acquire them. Here again, understanding of non-expert citizens’ experiences of datafication is crucial, because we cannot arrive at the conditions identified by Milan without understanding *first* how people who do not (yet) consider themselves as data

activists experience datafication, and *second* how to move from these experiences to engagement in data activism. In the next section, I explore two possible approaches for arriving at such understanding and some of the issues that might emerge along the way.

Approaches to Researching “Living with Data”: Two Possibilities, and an Emergent Vocabulary of Emotions

One of the main purposes of exploring how ordinary people experience datafication in their everyday lives is to develop understanding of their perspectives on how they might live *better* with data, understanding that is useful to the mission of data activism and its efforts to improve data arrangements so that they are less harmful and more just. Taking account of what people say about these issues is important, but so are the conceptual tools with which we develop this knowledge. In this section, I explore two possible approaches that put philosophical concepts into dialogue with examples from my own research. Taken together, these explorations suggest the need for a vocabulary of emotions in researching living with data.

A Phenomenology of Datafied Agency

The field of the philosophy of technology, concerned in large part with questions about the relationship between technology and well-being, seems a good place to start exploring how people live and how they might live better with data. A major question for this field is whether technological developments of diverse kinds are good or bad for society – as Brey (2012) notes, whether it is possible to lead good lives in a world so committed to technology is a pressing question. While some philosophy of technology literature focuses on *subjective* variations of well-being, either asking whether technology can make us happy (Spahn 2015), or conflating well-being with happiness and using these terms interchangeably (Søraker et al. 2015), subjective notions like happiness are not helpful to the cause of data activism and the data justice it seeks to promote. They are individualistic and do not

contribute to thinking about the kinds of data arrangements that might benefit communities of people disadvantaged by current conditions.

We need therefore to turn elsewhere in the field, to philosophers of technology who ask whether technological ensembles of all kinds can be appropriated as tools of democratisation, enablement and activism, despite their origins within the belly of the beast. Data activism asks these same questions of datafication, a new kind of technological ensemble. This concern is captured nicely in the first words of Andrew Feenberg's preface to *Transforming Technology*: "must human beings submit to the harsh logic of machinery, or can technology be fundamentally redesigned to better serve its creators?" (2002, v). Through this question about agency, important both to data activism and to researching datafied everyday life, Feenberg raises the issue of differential technological subject positions that he addresses explicitly elsewhere. In another book, Feenberg (1999) argues that the fundamental difference "between the dominant and subordinate subject positions with respect to technological systems" (1999, x) is significant, a distinction which echoes my argument that non-expert citizens' experiences of datafication are differentially socially stratified. "Ordinary people encounter technology as a dimension of their lifeworld" (1999, x), he writes, and he continues:

For the most part they merely carry out the plans of others or inhabit technologically constructed spaces and environments. As subordinate actors, they strive to appropriate the technologies with which they are involved and adapt them to the meanings that illuminate their lives. Their relation to technology is thus far more complex than that of dominant actors (which they too may be on occasion) (1999, x).

Differential subject positions matter, Feenberg argues, because change comes "when we recognize the nature of our subordinate position in the technical systems that enrol us, and begin to intervene in the design process in the defence of the conditions of a meaningful life and a livable environment" (1999, xiv). Likewise, my argument here is that moving beyond critical thinking about technology, as Feenberg advocates, and exploring technology's "ambivalence", or "the availability

of technology for alternative developments with different social consequences" (1999, 7), is an essential component of data activism and an important next step for data studies.

Feenberg's concerns are concerns about agency, as are those of data activism. To address these issues of agency and possible change through empirical research into everyday experiences of datafication, a phenomenological approach might be helpful. Phenomenology focuses on the point of view of actors and their perceptions and experiences of the (datafied) world – in this sense it is distinct from ethnography which is more commonly dependent on the point of view of the observing researcher. This perspective and phenomenology's excavation of the taken-for-granted layers of everyday action fit with the project that I am describing here, which also prioritises the conscious experiences of datafication of non-expert citizens. As such it enables attention to the differences in people's experiences of datafication which, as noted above, are significant. Schutz and Luckmann's (1973, 105) argument that phenomenology acknowledges that "not only the what but also the how of the individual situation in the lifeworld belongs to the fundamental elements of the stock of knowledge" (quoted in Couldry et al 2015, 125), further confirms its usefulness for producing a more detailed understanding of living with data "from the bottom up" (Couldry and Powell 2014). Also arguing for a phenomenology of datafication, Couldry et al (2015) state that we need research "that recognises people's ongoing reflexivity about their conditions of entanglement with [the] digital infrastructures" of datafication (2015, 124) – indeed, Couldry et al and some of the other researchers turning their attention to living with data who were noted above (such as Ruckenstein 2014) describe their own research as phenomenological. For many writers, such reflexivity is intricately entangled with agency. Couldry, for example, defines agency as "the longer processes of action based on reflection, giving an account of what one has done, even more basically, making sense of the world *so as* to act within it" (Couldry 2014, 891). Phenomenology's focus on both of these things, reflexivity and action, make it a useful approach for researching living with data.

My research into uses of social media data mining, in organisations which I describe as the pillars of everyday life (local councils, museums, training organisations, educational institutions and shops), illustrates what a phenomenology of datafied agency might offer. This research focused on the datafication of *working* life, not on non-experts' experiences of data in the everyday, but nonetheless it is indicative of what might surface through such an approach. In this research, one thing that emerged across research sites was a desire for numbers, which, I have argued, engaging in data mining elicits (Kennedy 2016). I give some examples below, after which I reflect on what these tell us about reflexivity, agency, and the importance of researching living with data.

In research with city councils and museums in which we experimented with social media data mining techniques, the data generated through our experiments was met with much enthusiasm by participants, especially when presented in visually appealing charts and graphs. A sense of amazement was expressed by participants who read reports we produced and who attended workshops. Emotional responses to data often elicited a desire for more data. One participant said:

I think I had a lot of confidence in the numbers. I think I was amazed by how deep a lot of these tools could go. [...] I think they're very clever. It was amazing how much you could drill into this.

Some participants said that they were required to report the results of analytics exercises "up" to managers and funders, but that there was no discernible action taken as a result. Quantitative data, produced through systems like Museum Analytics (a platform which carries out social media analytics for the museums sector, as the name suggests), were desired by managers and funders, with no apparent concrete consequence – the "data gathered" box was ticked, the desire for numbers was fulfilled, and data were filed away.

In interviews within social media insights companies, some social media analysts said that accuracy was not important to their clients. One said:

Whether that data is accurate or not is irrelevant. They just want some numbers to put into a PowerPoint that they can show to their boss. If anyone asks, "Are you keeping an eye on social media?" You can say, "Yes, we're 36 this week." And it is a very attractive solution.

Sometimes clients are drawn in by the allure of numbers and just want numbers, participants said – inaccuracy is acceptable, as long as the desire for numbers is fulfilled. Participants felt that this desire for numbers suppressed discussion between them and their clients about the limitations of the data that data mining produces, and they were frustrated at this. They were alert to the inadequacies of the numbers they produced and they would have liked to talk to clients about the challenge of obtaining good quality, accurate data, and about what the numbers that social media analytics produce do and do not represent.

In an interview in an educational organisation which uses the services of social media analytics companies, a digital marketer expressed his frustration with what he referred to as "the fetishism of the 1000". He claimed that within his organisation there was a perception that the ability to cite numbers of people "reached" through a campaign was proof in itself of a campaign's success. When a project has been completed, he said, if numbers can be produced, if it can be claimed "that we've reached 50,000 and we've had 1000 people respond back to us about it, then that fulfils some kind of sense of requirement." He felt that measurement was rarely undertaken with a genuine desire to self-evaluate, but rather was motivated precisely by a desire to produce numbers, which were uncritically equated with success.

The emotions that came to the surface in this research seem troubling, as it seems as if there is no escape from the prevalent desire for numbers in the datafied workplace. However, a phenomenological approach, which excavates the layers of conscious experience and is attentive to the judgements, perceptions and emotions of key actors, reveals a more nuanced picture. As can be seen in the examples above, although a desire for numbers dominated, participants were also reflexive about the ways in which such desires limit critical engagement with data amongst their

clients or colleagues. There was also some reflection about the ethics of data mining amongst participants, about whether data mining methods are acceptable, whether the mantra that social media data are public and therefore “fair game” to be mined and analysed holds up. All of these reflections, and related ethical decision-making and line-drawing, can be seen as nascent acts of agency and point towards possibilities for different data arrangements, as participants did not simply submit to the “harsh logic” (Feenberg 2002, v) of datafication and desiring numbers. A phenomenological approach to participants’ experiences also highlights the important role that emotions play in engagements with data in the workplace. This in turn suggests a need for a vocabulary of emotions in researching everyday experiences of datafication.

Data-related Capabilities and Their Emotional Dimensions

Another way in which we might bring together data activism’s interest in social justice with people’s perspectives on how they live and might live better with data is through the capabilities approach. Two of the original proponents of this approach, Amartya Sen and Martha Nussbaum, argue that to think about how people might live well, we need to focus on what people need to be capable of doing, should they choose to (Nussbaum 2006 and 2011, Sen 1973, 1992 and 2009). For Nussbaum, the capabilities approach directs attention to how certain social or institutional arrangements are more effective than others in enhancing social life and social justice. Both Nussbaum and Sen emphasise the role of the external environment in enabling capabilities; this makes possible a normative assessment of technological developments like datafication, argues Johnstone (2012). Nussbaum’s version of the capabilities approach also involves asking how we might live well *together*, especially in light of the growing value attached to competitive individualism and neo-liberalism. Despite the dominance of these latter ideas, within capabilities thinking, “the notion of the common good survives as a key ethical principle” argues Hesmondhalgh (2012, 84), a notion that is clearly relevant to data activism.

For Sen, capabilities are freedoms (freedoms to – for example receive an education, earn a living, express oneself, form relationships – and freedoms from – for example oppression, violence, censorship, arbitrary arrest) (Johnstone 2012). He defines capabilities as “the various combinations of functionings (beings and doings) that a person can achieve [...] reflecting the person’s freedom to lead one type of life or another [...] to choose from possible livings [...]” (Sen 1992, 40). Nussbaum (2006) lists ten such capabilities, some of which are physical, such as not dying prematurely and having good health and shelter. Others relate more clearly to datafication: being able to imagine, think and reason; being able to form a conception of the good and to engage in critical reflection about planning one’s life; and having control over one’s (political or material) environment, can all be influenced in one way or another by people’s experiences of data and datafication.

A number of media theorists have applied the capabilities approach to explorations of the media practices that can enhance people’s efforts to live good lives (such as Coleman and Moss 2016, Hesmondhalgh 2013, Mansell 2002). For example Hesmondhalgh’s (2013) *Why Music Matters* draws on Nussbaum and Sen’s ideas to reflect on the communicative practices – in this case, in relation to music – that would create conditions under which humans might flourish. Whilst it might be easy to understand why cultural goods like music matter in relation to living well and flourishing, these questions are equally important in relation to data and datafication.

Exploring how ordinary people’s experiences of datafication might be enhanced through the lens of the capabilities approach could also be seen as a response to Andrew Sayer’s argument that ideas about living well and flourishing are vital for attempts to understand how greater social justice might be achieved (Sayer 2011). Sayer argues that social science should be more attentive to people’s first-person, evaluative relation to the world, to their evaluations of how they live and how they might live well, because “Social struggles are not merely struggles for goods and power but about how to live, about what is a just, virtuous or good life and a good society” (2011, 172). Social science often disregards people’s evaluative relation to the world and the force of these evaluations, he claims, but we need to attend to

these things; values, feelings and emotions need to be taken more seriously in social sciences. Sayer writes that there is a “macho tendency to view the study of values, emotions and ethics as less scientific than the study of power, discourse and social structure”, whereas he argues that we need to develop our understanding of the former which, he argues, constitute “ethical being in everyday life” (Sayer 2011, 15).

Ideas about capabilities and flourishing might help us to understand what is important for people to live their lives well with data. In relation to datafication, capabilities might include being able to have control over one’s own data, to choose to opt out of – or, better still, in to – data gathering, and to make sense of data mining processes because they are made transparent to non-expert citizens, or accountable to expert others. The problem is that, whilst these issues are widely discussed amongst data activists, ordinary people’s perspectives on whether they might result in living better with data are missing from these debates. This is why we need to produce the kinds of first-person evaluations of “living well with data” that Sayer advocates.

As with the phenomenological approach discussed earlier, a capabilities approach also highlights the importance of emotions in relation to living well and flourishing. Through this approach Hesmondhalgh looks at how music communicates emotions in particular ways and how emotions thus play a role in good lives. Likewise, Sayer highlights the significance of feelings in everyday evaluative relations with the world. In other research of mine which explored how people engage with visual representations of data which circulate in the everyday, my co-researchers and I found that emotions play important roles in such engagements (Kennedy and Hill 2017, Kennedy et al 2016). Because a major way that most people access data is through their visual representation, as Gitelman and Jackson (2013) argue, visual sensibilities are required in order to make sense of data, not just cognitive reason and statistical skills. This entanglement of the numeric and the visual, at the heart of most people’s engagements with data in their everyday lives, means that data stir up emotions. A broad range of emotions emerged in relation to engagements with visual representations of data in the research, including pleasure, anger, sadness,

guilt, shame, relief, worry, love, empathy, excitement, offence. Participants reported emotional responses to visualisations in general, represented data, visual style, the subject matter of data visualisations, the source or original location of visualisations, and their own skill levels for making sense of visualisations (Kennedy and Hill 2017).

Thinking about the relationship between emotions and capabilities can contribute to understanding experiences of engaging with visual representations of data. In our research, participants expressed strong feelings about their own skills – or capabilities – for decoding visualisations. Some participants felt a lack of confidence in this regard. One said of a visualization: “It was all these circles and colours and I thought, that looks like a bit of hard work; don’t know if I understand”. Many of our participants expressed similar negative feelings about their lack of skills, and this lack of confidence had a profound impact on some participants’ engagement with visualisations. One reacted to all of the visualisations that we showed him in a focus group with confusion and dislike, as seen in the grid he produced, on which we asked all participants to place thumbnail images of visualisations in order to identify whether they liked, or had learnt from, the visualisations which we showed them. He placed most thumbnails in the “disliked + didn’t learn” quadrant, and one outside the grid altogether (Figure 1).

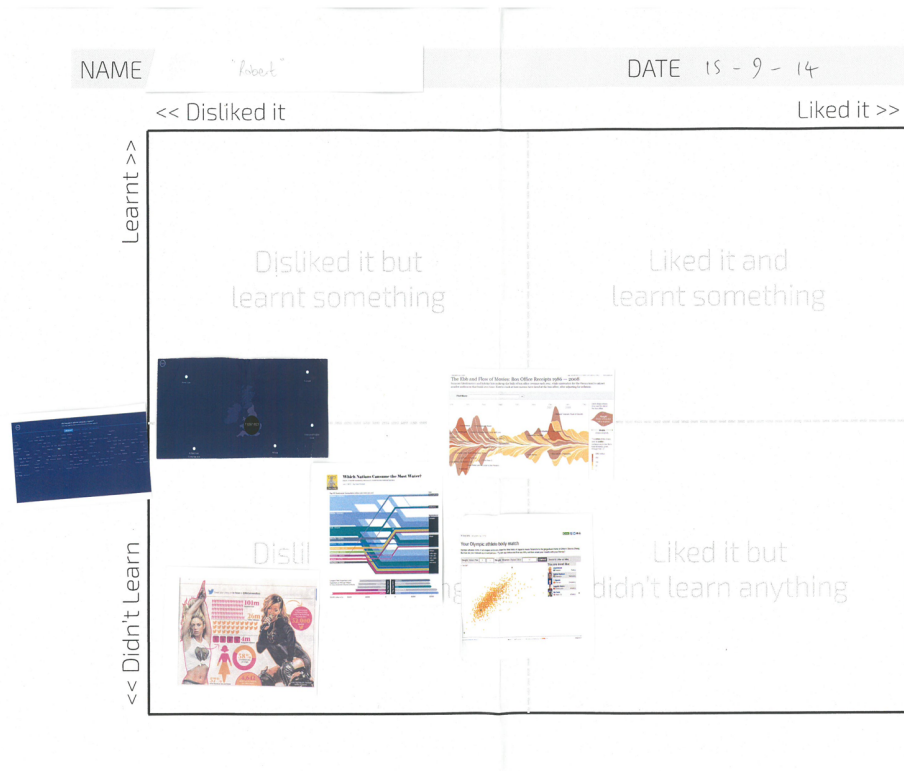


Figure 1: Seeing Data participant's grid

This participant responded in this way because he doubted his own ability to make sense of visualisations. This lack of confidence was echoed by other participants, such as this person who wrote in her diary about visualisations in a newspaper article on tax:

I felt confused and a bit stupid for not being able to stay the course with this article. It's too maths based for me. Too many numbers and pie charts, I get lost in it.

Feeling “stupid” was the result of a perceived lack of skills, such as knowing how to read particular chart types. When participants felt more skilled, unfamiliar chart types could evoke positive emotions, rather than negative ones: “I didn’t hate it because it made me want to try and put a little bit of effort into navigate those lines”, said another participant about a visualisation of freshwater consumption across the globe.

Educational background was an important factor which influenced whether participants felt stupid or felt capable, something which they themselves recognised. Some participants identified that higher education contributed to the development of relevant skills. One participant who had a Masters degree was more confident about how to understand and assess the data visualizations than the participant whose grid is shown in Figure 1, because he felt he had the training to do so. Alongside education, gender and class, which we might describe as social arrangements, to use Nussbaum’s term, appeared to influence emotions such as feeling confident or feeling stupid.

Although these examples are not concerned with reducing data-related inequalities and improving data justice as data activism seeks to, the emotional dimensions of living with data which they reveal are relevant to this mission. As Sayer notes, it is important to take people’s values, emotions and ethics seriously in our quest for social justice. Feelings play a role in non-experts’ experiences of data and datafication processes. Building on this finding, for example in initiatives which aim to enhance data literacy (Milan’s second condition for the possibility of datafied agency), might result in more people feeling confident about their skills for engaging with data, and greater understanding of datafication and its many consequences might result. Thus the approaches I explore in this paper, and the ways in which they enable foregrounding the emotional dimensions of living with data, are important for data activism as well as for data studies. To advance, both fields need better understanding of how data and emotions relate to each other in ordinary people’s everyday experiences of datafication.

In thinking with concepts like capabilities and living well with data, it is important to subject them to critical scrutiny, of course. For example, how might data be constrained from contributing to people's flourishing, given their location in unequal relations of power? How to account for how injustice, inequality and oppression inform people's access to capabilities, to living well and flourishing (Hesmondhalgh 2012)? How to avoid homogenising everyday experiences, and instead to recognise that human needs "may take very different forms in different societies" (Hesmondhalgh 2012, 18)? Who gets to decide what needs to be sacrificed for the common good? It is important to acknowledge that these notions are not without problems – they are abstract and complex and suffer from what Johnstone (2012) describes as "radical empirical underspecification." Nonetheless, their application in data studies and in data activism could open up a vocabulary of the emotional, and such a vocabulary could make these issues explicit and open them up for debate. Thus these concepts, and the vocabularies they bring with them, are potentially useful for understanding datafication's social consequences. They might help our mission to identify the types of data arrangements that can enhance people's efforts to live good lives, reduce data-related inequalities and improve data justice.

Conclusion: why this matters for data activism

Datafication is a major social phenomenon which has all kinds of effects, and because of this, how people experience data in their everyday lives is extremely important. Yet, in data studies and in data activism, little attention has been paid to ordinary people's thoughts and feelings about their own data production and the data practices of others. Understanding such everyday experiences is crucial, because without such understanding, data studies and data activism are not informed by the perspectives of the people with whose lives they are ostensibly concerned. In this paper I have argued that we need to look at datafication as it is lived, felt and experienced at the level of the everyday. We need to attend to ordinary people's perspectives on how data arrangements can be improved, so that these perspectives can play a role in determining improved data arrangements. Through this, I argue,

an empirical gap in data studies would be filled, knowledge that is useful for data activism would be produced, and data studies and data activism would be better aligned. Data activism seeks to challenge unjust data arrangements and to mobilise data in order to enhance social justice, and taking account of what non-expert citizens say would enable them to live better with data will help data activists to imagine more just arrangements, the third of Milan's conditions for data activism.

I have also argued that inserting the everyday into data studies opens up a space in which to explore possible conditions for agency in datafied societies, to paraphrase the subtitle of Milan's talk. The topic of agency is a shared concern of scholars of the everyday and of data activists, and in this way a focus on the everyday makes another contribution to data activism. What's more, not only does researching everyday experiences of datafication fill an empirical gap and highlight issues of agency, it also enables us to attend to the question of what precedes data activism. How is datafication lived, felt and experienced by non-expert citizens before they start to develop the conditions or consider the possibility of activism in relation to data? Data activists cannot make the three conditions for datafied political agency identified by Milan possible without first understanding where we need to move *from* in order *to get to* these conditions.

In this paper, I explored two approaches to researching everyday engagements with datafication. The first, "a phenomenology of datafied agency", mobilises a phenomenological excavation of data experiences to explore the possibility of agency in datafied conditions. The second is an approach which looks at data-related capabilities and their emotional dimensions, and which highlights the importance of identifying what people need to be capable of doing in order to live well in times of datafication. Arguably, the "conditions of possibility for political agency in the datafied society" identified by Milan are, in fact, capabilities. Thus there is a direct link between these approaches and data activism. Both of the approaches I discuss highlight the importance of emotions in everyday engagements with data. The ways in which these approaches value emotions in relation to acting agentially and living well can help us understand the important role that feelings play in everyday engagements with data. These approaches thus suggest the need for a vocabulary

of emotions within data studies and data activism, something that has been largely absent from these fields to date.

At the time of writing, there are many examples of initiatives which aim to improve life with data. Attempts to “do good with data”, to paraphrase the strapline of US visualisation agency Periscope, include enterprises like DataKind, which puts data experts, working pro bono, together with social groups to address social and humanitarian problems, for example relating to homelessness and child poverty. Data visualisation itself is seen by many practitioners as a way of “doing good with data” (this is the strapline of a datavis agency after all), as this practice is often motivated by a desire to make data transparent and accessible. Efforts to develop alternative, human-centric personal data management models, like the MyData movement (<http://mydata2016.org/>) and to enhance data literacy, such as School Of Data (<https://schoolofdata.org/>), can also be included here. What is missing from these endeavours is an understanding of non-expert citizens’ perspectives on whether they might result in better living with data. We 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, serves the interests of data activism, and brings both fields into closer alignment with each other.

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Biography

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Helen Kennedy (@hmtk) is Professor of Digital Society at the University of Sheffield. Her research has focused on: social media, data in society, data visualisation, inequality, digital labour, digital identity and other things digital. Recent work has explored how non-experts relate to data visualisations, and what happens when social media data mining becomes ordinary. She is interested in critical approaches to big data and data visualisations, how people experience and live with data and the relationship between datafication, well-being and justice.

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Surveillance Realism and the Politics of Imagination: Is There No Alternative?

Lina Dencik

“Someone once said it is easier to imagine the end of the world, than it is to imagine the end of capitalism,” wrote Frederic Jameson, in a now famous reflection on the stifling parameters of cultural life in late capitalist societies.

Building on this, Mark Fisher advanced the concept of “*capitalist realism*” in his 2009 book of the same name as a way to articulate the peculiar persistence of a system that has proved itself so full of fallacies, so unjust and inegalitarian in its rewards (Fisher 2009). Writing in the wake of the financial crisis, Fisher described the contemporary condition of capitalist realism as a “pervasive atmosphere” that comes to regulate thought and action, limiting the possibilities of even imagining alternatives: “[it is] the widespread sense that not only is capitalism the only viable political and economic system, but also...it is now impossible even to *imagine* a coherent alternative to it.” (Fisher 2009: 6; italics in original). In describing capitalism in these terms, his ambition was to stress its *contingency* and destroy its appearance as an inevitable “natural” order.

The dominance and resilience of contemporary capitalism has been a prominent theme in debates on the politics of imagination, and linked to that, the field of social and political imaginaries (Adams et al. 2015). In looking at imagination and

imaginaries, we are invited to consider how we make sense of society, instituting and instituted by social practices in their emergence, formation and reproduction. As such, a concern with the politics of imagination is as much a concern with the way in which social institutions and practices are legitimized and continued as it is a concern with the possibilities for the articulation and doing of alternative formations. That is, imagination can both open and close a path to critique (Bottici and Challand 2011).

Capitalism, as a political-economic imaginary in the context of modernity (Adams et al. 2015), is intimately linked to contemporary forms of surveillance. Today, capitalism is said to increasingly progress through an accumulation logic based on the ability to monitor and track different forms of social activity with the view to predict and modify human behavior as a means to gain revenue and market control. An information order Zuboff (2015) has described as “surveillance capitalism”, advanced in the form of “big data”, and underpinned by a digital economy based on mass data collection and analysis. Turow et al. (2015) have argued that this information order now constitutes what can be described as a “21st century imaginary” in which we see the discursive and institutional normalization of surveillance infrastructures pervading more and more aspects of everyday life. Despite prominent concerns with how these infrastructures might be inherently unjust, Turow argues that ubiquitous and continuous data collection has become “common sense” – a set of practices that people have become widely resigned to.

In this article I engage with this interplay between data-driven surveillance and contemporary social imaginaries, using research based on the aftermath of the Snowden leaks, first published in June 2013, which revealed unprecedented details of contemporary surveillance programs. Drawing on Fisher’s use of the term “realism” in relation to capitalist realism, I advance the argument here that public debate and response to the Snowden leaks indicate a similar “pervasive atmosphere” that comes to regulate thought and action, in which the active normalization of surveillance infrastructures limits the possibilities of even *imagining* alternatives – a condition I describe as *surveillance realism*. I also use this to highlight some of the opportunities and challenges in articulating and doing resistance, such as the

kind that has emerged in the form of “data activism” (Milan and van der Velden 2016). Whilst the research is focused on the UK and the Snowden leaks, I also draw here on wider debates and studies to illustrate key developments. By analyzing activities and public response in this way, the point is, in line with Fisher, to “reveal what is presented as necessary and inevitable to be a mere contingency” as a way of advancing an emancipatory politics that can also then “make what was previously deemed to be impossible seem attainable.” (Fisher 2009: 21).

I start by briefly outlining the role of imagination in sustaining and challenging social orders before going on to discuss contemporary imaginaries of surveillance and datafication, providing examples from post-Snowden developments. Based on this, I argue that surveillance realism is useful for understanding the politics of imagination in relation to ubiquitous data collection, and I end by considering how resistance might be enacted in such a context.

The politics of imagination

Early inceptions of imagination, such as those articulated by Aristotle and later within the Kantian tradition, predominantly viewed imagination in relation to individual capacity. It is with the emergence of social imaginaries as a field that we begin to emphasize the properly social aspect of the imagination, and to grasp it as authentically creative rather than as merely reproductive and imitative (Adams et al. 2015). In his seminal work on the imaginary institution of society, Castoriadis (1987) stresses the collective instituted and instituting forms of meaning and the societal dimension of the human condition. Imagination, for Castoriadis therefore, is linked more to a social *imaginary* that comes to be central for the very existence of society, in that the instituting social imaginary is always at the same time instituted. Coming before both the concept of ideology and utopia as presented in the related work of Ricoeur (Bottici and Challand 2011, Adams et al. 2015), Castoriadis presents a view of imagination as radical, in the double sense that without it there could be no reality as such, and that it can always potentially question its objects by disclosing possible alternatives.

In advancing a concept of a social imaginary, “reality” and “subject” become intertwined. As laid out by Taylor (2004, 2), the social imaginary is, therefore, not a set of ideas; rather, it is what enables, through making sense of, the practices of a society. For Taylor, this is central to understanding the nature of modernity and the conception of moral order of society that accompanies it. He describes the relationship as a form of “embeddedness” in that certain self-understandings are embedded in certain practices that are both promoted by the spread of these practices and which shape them and help get them established. It is, as he argues, “both a matter of identity – the contextual limits to the imagination of the self – and of the social imaginary: the ways we are able to think or imagine the whole of society.” (2004, 63). The focus is on the way ordinary people “imagine” their social surroundings, shared by large groups of people, if not the whole of society, leading to a public understanding that makes possible common practices and a widely shared sense of legitimacy.

In that sense, a focus on imagination in this collective form helps to understand how systems come to be legitimized and what comes to be perceived as possible. Whilst the concepts of imagination and imaginary have been used much more differentially than this (including a prominent discussion on socio-technical imaginaries in the field of Science and Technology Studies), my interest in them here is in terms of how people come to make sense of social institutions and practices. I therefore draw on the field of social imaginaries as outlined by Adams et al. (2015, 19) as elucidating “the ways in which cultural configurations of meaning creatively configure the human encounter with – and formation (as articulation and doing) of – the world, on the one hand, and, articulate their centrality for the emergence, formation and reproduction of social institutions and practices, that is, of social change and social continuity, on the other.” In particular, I draw on the notion of radical imagination, in Castoriadis’ sense, as both the study of what limits our imagination and the study of what expands it. Similarly, Ricoeur’s outline of the reproductive imagination as the core of ideology and utopia situates the ideological imagination as that which reproduces an image that society has of itself, whilst the utopian imagination produces alternative images of society that puts ideological images into question (Ricoeur 1986). This can come to serve an emancipatory

politics by approaching the legitimacy of established practices and the accompanying cultural articulations as socially constructed. The way in which we imagine our social surroundings is not necessary or inevitable. Emancipatory politics serves to reveal the power relations that underpin any perceived natural order as a means to simultaneously nurture alternative imaginations of what can be possible.

Although Fisher, in his description of capitalist realism, does not refer explicitly to the field of social imaginaries, he is concerned with what he describes as a “pervasive atmosphere”, articulated in the circulation of cultural products and evident in work and education, in which capitalism has “colonized dreams”, lowering our expectations into accepting that, in the words of Margaret Thatcher (during the miners’ strike) “there is no alternative”. As Fisher states, “The “realism” here is analogous to the deflationary perspective of a depressive who believes that any positive state, any hope, is a dangerous illusion.” (2009, 9). This is closely aligned to more recent debates on the resilience of contemporary neo-liberal capitalism and the relative lack of political imagination as in the articulation of alternatives. There has been a closure of the economic imaginary in the form of depoliticization, meaning the active denial of the need for a political, public discussion of the means and ends of the market economy (Adams et al. 2015, Straume and Humphrey 2010). This also speaks to Foucauldian notions of normalization as the way in which norms of conduct are established and enforced through discursive practices backed up by institutional sanctions (Foucault 1977). However, Fisher’s take on “realism” pays more explicit attention to the active marginalization of alternatives, and the dictation of terms of any resistance. That is, the focus is on the construction of the realm of what is considered to be possible.

In thinking about how people make sense of society, and understanding Fisher’s use of the term “realism” to articulate a relative closure of cultural articulations of the world as part of an active denial of political debate, I now turn to look at data-driven surveillance through this lens.

Surveillance Culture and Dataism

In analyzing the changing consumer environment of the twenty-first century, Turow et al. (2015) combine Taylor’s notion of social imaginary with Gramsci’s concept of hegemony to articulate the entrenchment of data-driven surveillance within retail. For Gramsci, hegemony is a way to understand how power is exercised without, or in addition to, coercion. It relies on a “compromised equilibrium”, achieved from concessions that subordinate groups gain from the bourgeois state, which is then maintained through the concrete coordination of interests by civil society. Civil society - the public sphere where ideas and beliefs are shaped - in turn comes to reproduce hegemony through the “organic intellectuals” in the media, universities and religious institutions that then enable “common sense” societal values and legitimacy (Gramsci 1971, Wood 2015). Whilst hegemony therefore emphasizes how common sense becomes institutionalized as part of certain social mechanisms and power relations, Taylor’s social imaginary captures the nuances of everyday life and practices. Combining these approaches, Turow et al. (2015) argue that, over time, consumers have become institutionalized into accepting a retail environment that has transitioned from broad demographic lenses to one based on their monitoring as individuals who give off streams of data, often in real time. Consultancies and technology firms assist retailers in reshaping the shopper, the store, and the deal so that people (consumers) become institutionalized into what Turow et al. understand as taken-for-granted values, habits and expectations of an increasingly data-driven and discriminatory market-place.

In his later book on the topic, Turow (2017) builds on his account of “common sense” data collection by drawing on Jackson’s 1968 notion of the “hidden curriculum”, used to refer to the social norms and rules in education that become accepted through repetition and the implicit values laid out in schools that connects young people to the structures of power in society and defines their relationships to them. This can be broadened to the education that people receive through media and culture about all institutions (Gerbner 1972), including, as Turow argues, the retail space. There is a prevalence of symbol systems that designate, for example, the meaning of trendy clothing, outdoor happiness, and wealth - codes that

shoppers have come to take for granted. We are now, Turow states, “on the cusp of a retailing era that is adding an entirely new layer of routine surveillance activities and that carries with it the accompanying underlying lesson that it is common sense for shoppers to accept individualized profiling and deal making as part of the process of buying things.” (2017, 18).

Whilst Turow’s focus is particularly on data-driven surveillance in the retail space, his analysis of the normalization of surveillance infrastructures in everyday life finds echoes far beyond it and are pertinent in relation to post-Snowden debate more broadly. Indeed, when the documents leaked by Snowden were first published in June 2013, they both confirmed and surprised prevalent understandings of surveillance practices. The documents detailed a continuation of the development of what had previously been described as the “surveillance society” (Rule, 1973; Lyon, 1994), but they also represent a significant juncture in how surveillance is conceptualized and discussed. Classic conceptions such as Foucault’s “panopticon” or Orwell’s “Big Brother” struggle to account for these technological developments and later incarnations of surveillance practices (Browne, 2015). Moreover, concepts such as the “surveillance state” and “surveillance society” are no longer adequate for describing the form contemporary surveillance takes. As was made explicit in the Snowden leaks, the state is no longer the only, perhaps not even the main, arbiter of surveillance. Instead, we are confronted with what Harcourt (2015, 66) describes as a new “oligarkhia” made up of an “amalgam of the intelligence community, retailers, Silicon Valley, military interests, social media, the Inner Beltway, multinational corporations, midtown Manhattan, and Wall Street.” This “oligarkhia” is the product, in part, of shared interests in security (from foreign corporate espionage, cyber hacking, malevolent actors etc.) among government and technology companies, in conjunction with the rise of neoliberalism and the associated trend toward deregulation, outsourcing and privatization.

For Lyon, the contemporary nature of surveillance also cannot be sufficiently understood in terms of “surveillance society”, which he understands as a concept originally used to indicate “ways in which surveillance was spilling over the rims of its previous containers – government departments, policing agencies, workplaces – to

affect many aspects of daily life.” (2017, 826). What is missing from these accounts are the active roles played by surveillance subjects, paying more attention to the ways in which citizens, consumers, employees etc. experience and engage with surveillance. Rather, Lyon suggests, in line with Turow’s analysis, we need to understand surveillance within everyday practices and in the very fabric of society’s culture. By advancing the concept “surveillance culture”, therefore, Lyon is seeking to highlight how surveillance is becoming part of a whole way of life: “From being an institutional aspect of modernity or a technologically enhanced mode of social discipline or control, it is now internalized and forms part of everyday reflections on how things are and of the repertoire of everyday practices.” (Lyon 2017, 825).

In placing emphasis on subjects as active participants in surveillance, Lyon points to a more complex power dynamic than have previous discussions of surveillance which focused mainly on the ways in which surveillance is exercised from ‘outside’, by one actor over another. Rather, we need to consider how different “surveillance mentalities and practices” come to be manifested (Lyon 2017, 828). This speaks to the active participation by citizens in how data is generated which marks part of the human interaction with digital environments. That is, data is collected based on what might be described as ‘voluntary’ activities by ‘ordinary citizens’, who ‘choose’ to share data about themselves. Or as Harcourt (2015, 19) argues, perhaps not so much out of actual choice, but rather “a feeling of necessity”. Digital infrastructures lure us into participating in data extraction not just in their ubiquity but also in the “seductive surveillance” that marks their technological manifestations (Troullinou 2016). The technologies which end up facilitating surveillance, Harcourt (2015) argues, “are the very technologies that we crave.” Harcourt goes as far as to argue that we now live in a society of *exposure* and *exhibition*; an “expository society” that takes the architectural structure of a mirrored glass pavilion in which we are not only seen but in which “we play and explore, take selfies and photograph others” (Harcourt 2015, 107).

Entire populations are integrated into systems of tracking and monitoring, continuously and in real-time; what Andrejevic (2017) describes as a shift from panoptic modes of surveillance to “environmental surveillance” – the replacement of selective

disciplinary surveillance with total perpetual monitoring and on-going intervention. Power in such a society, Harcourt (2015) argues, circulates by a new form of rationality, one that is driven by algorithmic processes based on a “digital *doppelgänger* logic” in search of our data double. That is, the continuous collection of data abstracted from the digital traces left behind as we interact with our digital environments is used to identify, classify, assess, sort, or otherwise “control the access to goods and services that define life in modern capitalist society.” (Gandy 1993, 15). Indeed, as Van Dijck (2014, 198) has outlined, “metadata appear to have become a regular *currency* for citizens to pay for their communication services and security – a trade-off that has nestled into the comfort zone of most people.” We are seeing the gradual normalization of this datafication as a new paradigm in science and society. Such normalization is driven by the ideology of what Van Dijck refers to as “dataism”. She describes this as showing

characteristics of the widespread *belief* in the objective quantification and potential tracking of all kinds of behavior and sociality through online media technologies. Besides, dataism also involves *trust* in the (institutional) agents that collect, interpret, and share (meta)data culled from social media, internet platforms and other communication technologies. (Van Dijck 2014, 198).

In outlining dataism as the ideological component of the datafication paradigm, Van Dijck highlights how this paradigm is being advanced on a set of assumptions that are deeply contested. Not only is there an assumption that (objective) data flows through neutral technological channels, but also that there is “a self-evident relationship between data and people, subsequently interpreting aggregated data to predict individual behavior.” (2014, 199). These assumptions are further embedded in society through the active attempts to maintain the integrity of the system via government regulation aimed at assuring public trust in (private) data infrastructures by limiting excesses and harms.

Surveillance Realism Post-Snowden

The Snowden leaks and its aftermath are an important component in further outlining the nature of this datafication paradigm. Having served as contractor for the National Security Agency (the NSA), Edward Snowden gained privileged access to information about secret surveillance programs run by the NSA and British Government Communications Headquarters (GCHQ), amongst other agencies. In 2013, he leaked this information to leading global media organizations. Starting in June 2013, organizations such as *The Guardian*, the *Washington Post*, *Der Spiegel* and *The New York Times* began to publish detailed and wide-ranging stories revealing the unprecedented extent to which our activities and behavior in digital environments are tracked, monitored, analyzed and stored. While the leaks focused on surveillance by state agencies, they also highlighted the “oligarkhia” of state, corporate and commercial actors mentioned above.

Whilst protests were prevalent in the immediate aftermath of the Snowden leaks, in particularly in the United States with the Stop Watching Us protests, and in Germany with the Freedom Not Fear protests, dominant interpretations have suggested that there was little response from the broader public concerning these revelations of surveillance (Cable 2015). Often this has advanced a narrative that people either do not care, or feel that surveillance practices are largely justified in a perceived trade-off between security and privacy (Mols and Janssen 2017). Yet such an analysis is too simple and neglects the complexities of the contemporary digital environment. In this section I build on the above arguments with regards to shifts in the nature of data-driven surveillance, focusing particularly on the immediate aftermath of the Snowden leaks. I advance the concept of *surveillance realism* as a way to articulate the context in which we are to understand public debate and responses to the revelations of mass data collection and analysis. I use this concept to describe the nature of acceptance and resignation in relation to the increasing mass collection of data across social life and the active marginalization of alternatives, despite widespread unease and concerns about these infrastructures and systems.

The justification and normalization of data-driven surveillance has been actively advanced in public debate. When the Snowden leaks were first published, we saw a quick convergence across media, government and security services around a discourse of threat and (in)security. In the UK, condemnation of both Snowden as a whistle-blower and *The Guardian* newspaper for publishing the documents was prevalent across political parties, and state agencies responded with overt force to stop information from being released. This became symbolized in the now notorious confrontation at *The Guardian* where editorial staff was forced to destroy hard-disks and files under the watchful eye of the British intelligence agency, GCHQ, in a feeble attempt to prevent further publications of the Snowden files. Within months of the first publications the sitting director of MI5 made a rare public statement condemning the newspaper, accusing it of “handing the advantage to the terrorists” (Whitehead 2013). This argument was replicated in mainstream media debate with the majority of newspapers advancing the opinion that the publication of the Snowden leaks had compromised the work of the intelligence services (Wahl-Jorgensen and Bennett 2017). In fact, editor of *The Independent* Chris Blackhurst went as far as to publish an editorial explaining that he would not have published the leaks had it been up to him, stating “if MI5 warns that this is not in the public interest who am I to disbelieve them?” (Blackhurst 2013).

As Wahl-Jorgensen and Bennett (2017) have illustrated, the media debate on surveillance and data collection following the Snowden leaks became marked by an overarching discourse of securitization that situated surveillance firmly within a terrorism context. This is despite the fact that journalists themselves are often critical about surveillance practices, acknowledging not only the increasing normalization of datafication, but also raising concerns about the limited public knowledge of the extent of data collection and critiquing the media’s contribution in providing justifications for it (Hintz et al. 2018). However, as Wahl-Jorgensen and Bennett (2017) point out, data-driven surveillance was discursively justified by stories about the Snowden revelations and its aftermath through the reliance on official sources expressing the view that surveillance should be increased or is acceptable/necessary; the most frequently expressed opinion in newspaper coverage. Sources expressing this view suggested that surveillance is crucial to national

security, and is particularly important to strengthen in light of terrorist threats. As Wahl-Jorgensen and Bennett state, “the prominence of opinions that justified surveillance in the name of national security in mainstream media is not accidental. Rather, there is evidence to suggest a longer-standing legitimation of state interventions through a reference to concerns about state security in the British context.” (2017: 10). That is, as they put it, the idea of national security constitutes a discursive “trump card” overriding all other claims. This narrative was intermittently supported with statements from intelligence agencies which claimed that surveillance played an active role in curbing terrorist attacks (cf. Bakir 2015).

In such a context, a widespread logic that this also means mass surveillance is primarily a concern for those who have “something to hide” (i.e. terrorists, criminals, and other social deviants) became manifest. As Wahl-Jorgensen and Bennett (2017) suggest, the “nothing to fear” position “offers a common-sense articulation of the idea that being under constant surveillance is not only a fact of life in contemporary societies but also entirely acceptable given the constant terrorist threat.” Whilst the Snowden leaks constituted a global media event in which coverage differentiated across social, historical and political contexts with reference to national and geopolitical interests (Kunelius et al. 2017, Hintz et al. 2018), the “nothing to hide, nothing to fear” pretext as a way of describing public responses and attitudes has been prominent across national contexts (Lyon 2015, Mils and Janssen 2017). Although blogs and alternative media provided a space for more critical arguments that highlighted a lack of transparency surrounding intelligence agencies and violations of privacy, “the mediated public debate on the issue has, in the longer run, contributed to rendering such concerns less visible and marginalized” (Hintz et al. 2018, 77).

Research on public attitudes to post-Snowden data collection highlights that whilst many people actually have these concerns, the justification for surveillance is often widely internalized (Dencik and Cable 2017) along with a trust in institutions that collect data, as pointed out by Van Dijck (2014). This is not to suggest that people are either passive or apathetic in relation to their digital environments, but rather that attitudes and practices are continuously negotiated in relation to

the way data-driven systems have become integrated and mediated in society. In fact, numerous studies have shown that people feel a “lack of control” over how information is collected (Eurobarometer 2015) and are “bewildered and fearful” about the use of their data (Gompertz 2016) but do not necessarily act according to such concerns. In explaining the “privacy paradox”, for example, Hargittai and Marwick (2016) emphasize pragmatism as a central component. This is the paradox that emerges from a prominent concern with privacy in the digital environment that is not manifested in actual online behavior. Focusing on young people in particular, they outline how people experience “privacy fatigue” and confusion about the data-driven systems in place, which leads to an acceptance of their data being collected as a pragmatic response in the negotiation with digital infrastructures. Moreover, research has shown that, despite an increasing awareness of surveillance and a prevalent unease with the implications of such systems, people feel largely disempowered to fundamentally challenge the nature of data collection (Dencik and Cable 2017). Rather, they come to negotiate their own position and vulnerability as part of an everyday practice within what they recognize as being relatively limited parameters, such as adjusting privacy settings on social media, or refraining from sharing certain content or not engaging in particular searches (Marthews and Tucker 2015, Penney 2016, Hampton et al. 2014).

In other words, the sheer ubiquity of surveillance infrastructures and their embeddedness in ordinary aspects of social, political and cultural participation make it difficult to think they can be challenged. Adjusting to this “reality” pragmatically is a key tenet of what Draper and Turow (2017) term a “sociology of digital resignation”. Crucially, for Draper and Turow, a sociology of digital resignation suggests that these developments are not natural or inevitable, nor that people are simply passive agents in the process. Rather, in addition to the nature of public debate discussed above, they stress the ways in which resignation to mass data collection has been actively manufactured through a number of different practices, such as obfuscation in privacy agreements between users and platforms, or simply by making services inaccessible if personal data is not shared. These defaults are ingrained in the general standards and design of digital infrastructures and are advanced in the operations of data mining practices. At the same time, people continuously

navigate this environment, negotiate costs and benefits, adjust settings where pragmatically possible, but with the recognition that any actual control over the environment is limited. In recognizing the extent of a prevalent “surveillance culture”, as Lyon (2017) suggests, such resignation also illustrates the increasing struggle to actually imagine alternatives. Rather, in line with Fisher’s “realism”, expectations become lowered, and data-driven surveillance, along with its perceived infringements upon civic rights, becomes a small price to pay for being protected from terrorism, or for being able to participate in society through digital means. This *surveillance realism* is a realism that speaks to a hampered imagination where datafication and surveillance is seen as the only legitimate response to social ills.

Whilst the Snowden leaks provided opportunities for reflection and substantial reform on data collection, any substantial overhaul of digital infrastructures was kept at bay. Although new legislation was introduced in places like Brazil with the Marco Civil Act, and changes to the Freedom Act in the US intended to curb surveillance powers, any fundamental questioning of surveillance, and indeed of a data-driven digital economy underpinning contemporary surveillance culture, was undermined. In fact, several countries have extended surveillance powers and enabled further data collection following the Snowden leaks, with the UK’s Investigatory Powers Act leading the way (Hintz and Dencik 2016). The political discourse on surveillance in the aftermath of the leaks restricted the policy debate within very limited parameters and served to advance hegemonic powers. Disputes circulated around definitions of surveillance (e.g. at point of collection vs. point of analysis), infrastructure security and the need for encryption, and the nature of state-corporate relations in the sharing of data (Hintz and Brown 2017). However, political consolidation around the justification for mass data collection marginalized possibilities for fundamental opposition. In what can be considered atypical fashion, digital rights and civil liberties groups were invited to the table through consultations, and were allowed to participate in the policy process, but their participation became predominantly token in nature, being allowed to provide expertise and winning some battles on specific aspects of surveillance policy at the expense of any fundamental review of surveillance practices and mass data collection. In what can be considered a “compromised equilibrium”, in Gramscian terms, that

comes to stabilize surveillance as “common sense”, Hintz and Brown point out that the recognition of campaign groups and advocacy organizations as legitimate actors “has enabled civil society to participate in a key policy process, but it has also risked the normalization of surveillance as principled opposition is replaced by collaboration, and it has exposed differences in civil society agendas.” (2017, 794).

These developments speak to a context in which the Snowden leaks, and their aftermath, whilst creating awareness and unease with digital infrastructures, also illustrate the perseverance of surveillance culture and dataism. When Fisher described capitalist realism, he wrote of the credit crisis of 2008: “The speculations that capitalism might be on the verge of collapsing soon proved to be unfounded. It quickly became clear that, far from constituting the end of capitalism, the bank bail-outs were a massive re-assertion of the capitalist realist insistence that there is no alternative.” (2009, 78). In this spirit, the aftermath of the Snowden leaks, in terms of both policy and technology developments (just think of the proliferation of Artificial Intelligence, Internet of Things, “smart” cities and “smart” homes), largely enabling further and wider data collection and data sharing, has made clear that Snowden’s revelations did not constitute the end of surveillance. In fact, the Investigatory Powers Act was, to use Fisher’s words, a massive re-assertion of the surveillance realist insistence that there is no alternative.

Beyond Surveillance Realism?

So what power does imagination have in a state of surveillance realism? Imagination has the potential for both oppression and emancipation; it may limit or expand that which we see as possible. As Castoradis as well as Ricoeur and Taylor make clear, a concern with the creative and collective dimensions of imagination as social imaginaries is also a concern with the ways the instituted order of society is problematized in the search for “the possible” as opposed to “the given” (Adams et al. 2015). Any established social order always includes resistance, and the aftermath of the Snowden leaks also included continued and new challenges to surveillance realism. However, the nature of resistance in any instituted order is also partly

generated and shaped by the circumstances of that society. In his analysis of the anti-capitalist movement at the time of Fisher’s writing, he describes the staging of protests as “a kind of carnivalesque background noise to capitalist realism” where the suspicion was that the actual aim was not to replace capitalism but to mitigate its worst excesses (2009, 13). Although Fisher has been criticized for succumbing to “Left melancholia” (Hoffman 2016), an interesting aspect is his concern with the rejection of political organization in formulations of resistance at the time, and a turn to moral critiques of capitalism that only reinforce capitalist realism. In discussing the limits of confining critique to the moral realm, he states: “Poverty, famine and war can be presented as an inevitable part of reality, while the hope that these forms of suffering could be eliminated easily painted as naïve utopianism.” (Fisher 2009, 20). Capitalist realism, therefore, according to Fisher, can only be threatened “if it is shown to be in some way inconsistent or untenable; if, that is to say, capitalism’s ostensible ‘realism’ turns out to be nothing of the sort.” (ibid.).

In her analysis of environmental movements in late capitalism, Naomi Klein (2014) has posited a similar critique. Whilst there has been an increased awareness of climate change and a substantial normative overhaul in media and political debate on the crisis of the environment (Castells 2009), there has also been an ongoing concern with ways in which to engage public response and resistance. A key issue has been the marketization of environmental concerns such as the notion that it is possible “buy yourself green” through more environmentally ethical consumption. This has, at one and the same time, attributed socio-economic status to environmentalism as an aspirational consumerist lifestyle whilst also individualizing the response. That is to say, the onus is on the individual consumer as the emblem of environmental resistance (Scott 2010). More broadly, Klein (2014) highlights the limitations of engaging with the environment as a question of moral conscience, or to frame it as an opportunity for competitive advantage in a market economy, instead of linking it more directly to questions of economic justice. “A different kind of climate movement”, Klein contends, “would have tried to challenge the extreme ideology that was blocking so much sensible action, joining with other

sectors to show how unfettered corporate power posed a grave threat to the habitability of the planet.” (Klein 2014: 20).

In thinking about resistance to data-driven surveillance post-Snowden these concerns can inform a useful critique. Whilst there has been an increased awareness and important prominent developments in activism that has sought to challenge dominant trends of datafication (Milan and van der Velden 2016), resistance in the aftermath of Snowden has also been pursued through particular avenues. Most notably, these have been technological pursuits to self-protect against surveillance (what Milan and van der Velden refer to as “reactive” data activism) and lobbying around policy pertaining to privacy and data protection (Dencik and Hintz 2017). Forums to provide secure digital infrastructures proliferated in the wake of the Snowden leaks, with “numerous digital rights and internet freedom initiatives seizing the moment to propose new communication methods for activists (and everyday citizens) that are strengthened through encryption.” (Aouragh et al. 2015: 213). Increase in the use of privacy-enhancing tools such as the TOR browser, GPG email encryption, and encrypted messaging software such as Signal, indicate a rising consciousness and concern with surveillance practices. Alongside this, digital rights and civil liberties groups, such as Open Rights Group, Big Brother Watch, Article 19 and Liberty in the UK, have regularly issued statements regarding their concerns about surveillance, organizing public debates and lobbying legislators particularly around the Investigatory Powers Act and data protection regulation. This has been accompanied by litigation activism where groups have taken governments to court over particular policies, and made concerted efforts to change technical standards and protocols within relevant institutions and bodies, such as the Internet Corporation for Assigned Names and Numbers (ICANN) (Dencik et al. 2016).

These efforts have been significant in creating a contested environment for advancing mass data collection and for pushing back on certain surveillance practices. However, resistance of this kind has also struggled to challenge the wider social imaginary and provide a substantial threat to surveillance realism (Dencik et al. 2016). Partly, an issue with technological responses to mass data collection is the risk that they come to advance individualized understandings of resistance in which

the onus is on the individual to change their own behavior. This means that challenging data collection becomes an individualized act based on perceived skill and ability to engage in privacy-enhancing digital practices, such as downloading encrypted software, using anonymised browsers, and changing security settings. Lobbying for policy reform and engaging in litigation activism, meanwhile, is often bounded by technical and issue-specific expertise that confines the debate to a small constituency of experts (Hintz and Brown 2017).

Moreover, resistance to data-driven surveillance following the Snowden leaks has often focused on trying to mitigate the excessive harms of datafication rather than questioning developments at a fundamental level. Gürses et al. (2016) highlight how this has led to digital rights campaigns centred on ‘targeted’ surveillance as a more benign alternative to ‘mass’ surveillance, and an emphasis on proportionality as the overarching goal. As Gürses et al. argue, this constitutes depoliticized framings that are unable to account for the ways in which surveillance has been historically central to the control of particular communities and as a way to limit and suppress dissent. Furthermore, such framings serve to entrench the constructed trade-off between privacy and security that underpins the surveillance realist narrative that mass data collection is, indeed, a necessary and inevitable part of contemporary society. Although these responses are shaped, in part, by what is perceived as possible, what is missed in these efforts is a form of resistance that explicitly highlights how datafication and data-driven surveillance relates to dominant economic interests and political agendas in advanced capitalist societies. These processes are neither accidental nor inevitable but serve a particular form of social organization. In such a context, identifying infringement upon individual privacy as the core harm produced by mass data collection may do little to reveal the power structures that shape digital infrastructures. And individual technological self-protection may do little to overcome or change them.

Rather, an analysis of data-driven surveillance as a “realism” invites a more systemic critique of datafication in which resistance is intimately linked to questions of social and economic justice; what has also been referred to as a “data justice” movement (Dencik et al. 2016). In advancing such a framework, the aim would be to

situate data-driven surveillance in the context of the interests driving such processes, and the social and economic organization that enables them. For example, this involves engaging with the ways in which data collection and analysis embodies historical institutionalized forms of discrimination and exclusion that limits opportunity and participation for certain communities in society (Gangadharan et al. 2015, Eubanks 2018). Similarly, the asymmetries of power between those who collect and analyze data and those who are subject to such data collection and analysis as an inherent feature of datafication (Citron and Pasquale 2014), are seen as an expression of the increasing concentrations of power in fewer hands and related to a wider trend of privatization and deregulation (along with a shift in decision-making away from the public realm). Or, the corporate and centralized nature of data systems is understood in relation to the organization of the digital economy and the labour relations and governance that sustain it (Scholz 2017). In this sense, questions of economic and social justice precede any analysis and development of data infrastructures and their position in society.

Although there is not the space to outline it fully here, resistance, through this lens, would involve dynamic collaboration between different groups and movements in civil society that combine economic, social, cultural, ecological and technological dimensions in articulating both problems and solutions (see also Hintz et al. 2018). Pointing to surveillance realism in this context is therefore about inviting a more active politicization of data processes that, to borrow from Ricoeur's (1986) assertions, articulates the ideological imagination as a way to nurture the utopian imagination (here I also take inspiration from writings on "real utopia" such as those of Olin Wright 2010). As Fisher notes, "nothing is inherently political; politicization requires a political agent which can transform the taken-for-granted into the up-for-grabs." (2009, 79). Surveillance realism identifies contemporary (often undesirable) mass data collection as a *contingency* that has been *actively constructed* as an inevitability, which can therefore also be challenged and reconstructed.

Conclusion

In drawing on Fisher's notion of "capitalist realism" as a way to understand the contemporary social condition with regards to data-driven surveillance, and the datafication paradigm more broadly, this article posits a way to reveal the contingency and construction of our current digital environment. The perceived necessity and inevitability of mass data collection is one that has been advanced partly through a compromised equilibrium, to use Gramsci's term, in which the normalization and entrenchment of a surveillance culture has stabilized the nature of contemporary digital infrastructures as "common sense". This, in turn, has established a social imaginary of resignation to ubiquitous data collection despite prevalent feelings of unease and recognition of discriminatory and suppressive effects. In a context of surveillance realism, the injustices and fallacies of the system become a small price to pay to fight off inefficiency, threats and terror.

The Snowden leaks constitute a significant moment in the advancement of surveillance realism. They provided unprecedented insights into the extent of datafication and created increased awareness of surveillance practices. This led to outbursts of resistance, which focused particularly on what we might think of as techno-legal solutionism. Such a response, however, has been unable to transform the social imaginary and pose a substantial threat to surveillance realism. Rather, it has struggled to overcome enclosed expert discourses and individualized acts of resistance that have been confined to mitigating the worst excesses of mass data collection, sometimes even advancing the inevitability of the model through its suggested compromises. The UK's Investigatory Powers Act in the wake of the Snowden leaks has come to symbolize the re-assertion of the surveillance realist insistence that there is no alternative.

The inability to articulate a coherent alternative to surveillance culture and dataism speaks to the politics of imagination that is played out in the kind of "realism" that Fisher described. It is one in which our aspirations and hopes are formatted to fit the hegemonic system. In advancing a critique, therefore, suitable for an emancipatory politics, it becomes essential to destroy the "natural order" of surveillance

realism in order to make what seems impossible attainable. That is, the challenge becomes one in which the issue is not simply to harvest the resources available to mitigate the excessive harms of the current datafication paradigm, but is one in which we have to expand the limits of our imagination and reassert the possibilities of another world, another way of organizing society.

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Biography

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Civic Tech at mySociety: How the Imagined Affordances of Data Shape Data Activism

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Introduction

The progressive datafication of social life is often perceived as a threat to democratic publics. Critics warn that filter bubbles would undermine dialogue and consensus, that social discrimination will be reinforced (Barocas and Selbst 2016) or that ‘surveillance capitalism’ is fundamentally anti-democratic (Zuboff 2015). Yet as “democratic power is calculated power” (Rose 1999, 200), datafication is *also* driven by democratic visions and closely linked to notions of political accountability, fairness, and citizen empowerment. Forms of datafication driven by commercial players or governments have always been accompanied by civil society actors or journalists who have utilized data and related forms of quantification to advance their goals. However, given the new structures of (data) power that shape the workings of governments and businesses today, Milan and Van der Velden (2016, 6) suggest that it is increasingly important to investigate “how activism evolves in relation to big data”. They argue that new forms of ‘data activism’ are “enabled and constrained by data [...] and this special relation shapes tactics, identities, and modes of organizing” (Milan and Van der Velden 2016, 3).

In this article, I explore ways in which activism is enabled by datafication by looking at a group of actors who not only reacted to processes of datafication, but proactively embraced them: civic technologists. Civic tech is an umbrella term for diverse projects that attempt to make engagement easier for citizens, improve communication and feedback between governments and citizens, and strengthen political accountability. Among other things, civic technologists develop parliamentary monitoring websites, tools to help citizens report local infrastructure problems to local government, or freedom of information (FOI) websites that help users to submit freedom of information requests to public institutions. In its modern incarnation, civic tech is the result of a convergence between “communities of technological and political openness” (Yu and Robinson 2012, 195). Early examples include the British FaxYourMP (2003), which helped citizens to find and contact their representatives in UK parliaments (Townend 2008), or the monitoring website GovTrack.us (2004), which made information provided by the US Congress more accessible (Yu and Robinson 2012). From these early volunteer experiments, civic tech has grown substantially in recent years as it has been embraced by governments, corporations and foundations (Baraniuk 2013).

In addition to their success and growth, civic technologists are relevant because they act as pioneers for the use of data to facilitate civic engagement. While there have been predecessors of the tools they developed, the way they utilized data to make them accessible and offer additional services was novel. They took information that was available elsewhere and made it machine-readable, shared it openly, and built services on top of it, e.g. the ability to type in one’s post-code to find one’s representative in the British parliament on FaxYourMP. Through such practices, they combined concepts of legal and technical openness in new ways (cf. Yu and Robinson 2012). Being pioneers of this type of work is also part of the self-conception of at least some civic tech organizations. They possess a sense of mission and make teaching their (data) skills and experiences to other civil society or media organizations an important part of their work.¹ Finally, non-profit civic tech organizations such as the Sunlight Foundation in the US or mySociety in the UK were also among the first to advocate for open data policies, and supported related freedom of information policies (Schrock 2016).

However, despite civic tech's success and potential influence, it has received little attention in media and communication studies to date. Most of the research that does exist is interested in how the phenomenon might reinforce existing power structures (cf. Gregg 2015), or who is using civic tech applications and in what way (cf. Cantijoch, Galandini, and Gibson 2016). What is missing is a nuanced understanding of the practices, ideas and motivations that guide civic technologists themselves and how those practices and ideas provide orientation for others. Critically examining civic technologists themselves is relevant because the broader impact of civic tech goes beyond the impact of individual civic tech applications. As Hepp (2016, 919) describes, pioneer communities such as civic technologists are influential in the sense that they develop "a horizon of *possibility* to which the everyday media appropriation of others orients itself, or at least can do so" (Hepp 2016, 919). Accordingly, we also need to be sensitive to how the practices and imaginaries civic technologists develop provide orientation for others, i.e. how other actors adapt and modify them.

This paper therefore critically examines how civic technologists understand and use data to "meet their social ends" (Couldry and Powell 2014, 2). What are the key practices of civic technologists in relation to data and how do they themselves understand what they are doing? Addressing these questions will contribute to our understanding of how activism is enabled or constrained by datafication, as it provides a basis for subsequent studies to examine if and how these practices and imaginaries can be found elsewhere, and how they might have been modified.

I present findings from a case study about the British non-profit organization mySociety. Founded in 2003, mySociety is one of the oldest and most influential civic tech organizations and arguably represents 'best practice' in the extremely diverse civic tech sector. Its UK websites have millions of users (mySociety 2015) and the organization had a direct influence on British policy-making (cf. www.parliament.uk 2014). Some of its more popular projects include FixMyStreet, which lets citizens report local problems like broken streetlights or potholes to local government; its right-to-know website WhatDoTheyKnow which helps users to submit FOI requests to public institutions; or its parliamentary monitoring website

TheyWorkForYou which gives detailed information about voting records and makes parliamentary speeches more accessible. mySociety's projects are also prominent internationally and customized versions of its tools are used in 44 different countries (mySociety 2015), which let mySociety to transition from a UK-centric to an international organization. While it is not representative of the phenomenon as a whole, mySociety's success and international influence provide a good starting point for studying the values and practices which shape civic technologists' use of data.

In the following, I shall first discuss my methodological approach. I follow a practice theory approach and use the concept of 'imagined affordances' (Nagy and Neff 2015) as a lens which helps amplify how members of mySociety themselves understand data and how they imagine it to advance their agenda. The remainder of the article describes how the data practices of mySociety relate to their broader imaginaries. In the conclusion, I will reflect on the implications for studying civic tech and data activism in general.

Researching the Imagined Affordances of Data

To examine how members of mySociety understand and use data to meet their own ends, this paper relies on the concept of 'imagined affordances' (Nagy and Neff 2015). According to Nagy and Neff (2015), whatever actions a particular technology enables or constrains does not solely depend on its features or its material properties, but also on the *perception* of users and designers. Both may have "expectations about their communication technologies, data, and media that, in effect and practice, shape how they approach them and what actions they think are suggested" (Nagy and Neff 2015, 5). Applied to the subject of this paper, what data enables civic technologists to do does not solely depend on the properties of the data they collect or re-use, or on the applications they are able to develop with it; it also depends on how civic technologists themselves understand and perceive how data can serve their agenda. These perceptions and understandings are the basis for the "horizon of *possibility*" (Hepp 2016, 919) they develop as a pioneer community,

which affects the perceptions of other actors concerning how data can be used to facilitate forms of civic engagement and activism.

To study the imagined affordances of data for members of mySociety, this paper relied on a methodological approach inspired by practice theory. First, a focus on practices aligns well with the concept of imagined affordances because affordances enable or constrain certain actions, and people make sense of affordances “in and through practices” (McVeigh-Schultz and Baym 2015, 2). Second, practices are useful for examining the role of pioneer communities because they *act* as exemplars. This means that they not only communicate ideas and visions about how a technology can be used, but they also become influential because they demonstrate their own visions and thereby affect the perceptions of others. The practices they develop are expressions of their broader visions and we have to consider them inseparable if we want to understand their influence.

Accordingly, I employ methods that helped exploring what members of mySociety are doing and how they themselves understand and categorize what they are doing in relation to data (cf. Couldry 2004, 2012). I followed a constructivist grounded theory approach (Charmaz 2006). Grounded theory was chosen because of its core principle of theoretical sampling, i.e. an initial data sample is continuously expanded with new data to systematically elaborate and refine the theory. This approach was useful for exploring the open-ended range of practices (Couldry 2012) and to more fully reconstruct the perspectives of the research subjects without applying pre-conceived concepts.

Spread over three rounds of data collection, I conducted five semi-structured interviews with members of mySociety, including its founder and former CEO, two senior developers, a member of the international team, and a member of mySociety’s research team. These interviews had an average length of one-and-a-half hours. A large part of each interview consisted in the reconstruction of a particular project. Each interviewee was asked to pick a project that illustrates her or his work and then walk me through the development process: What was the initial idea behind the project, what were the different steps and phases for implementing the

project, what happened after the initial release? Reich (2013, 422) calls this ‘reconstruction interviews’ because it reconstructs “technological ‘biographies’”. Exploring the development of a project in-depth vividly illustrated the practices and routines of my interviewees. If not mentioned by the interviewees, specific questions about the role of data were asked. After one project was explored, I asked whether this was a ‘typical’ project and if there are very different examples. If there were, I explored those as well. Other questions addressed self-understandings (preferred job title, understanding of civic tech) and personal or organizational ambitions and values.

These interviews were complemented by 17 documents found online: mySociety’s homepage (including the use of the Internet Wayback Machine to retrieve older versions), project specific websites, blog posts and forum discussions from Tony Bowden (who has been working for mySociety since 2009), other interviews given by different mySociety members to newspapers or bloggers (e.g. Townend 2008), as well as presentations given by members like Tom Steinberg or Dave Whiteland available online (UsNowFilm 2008; Arcopix 2014; IndigoTrust 2011; mySociety 2014). Some of these documents were included in the initial data sample, others were added later following the theoretical sampling. Moreover, I conducted ethnographic research on two separate conferences which were visited by several mySociety members: The Open Knowledge Festival 2014 in Berlin and the Mozilla Festival 2015 in London. These conferences helped to get an impression of the larger community mySociety is involved with and provided a helpful guidance for both the interviews and the analysis.

How mySociety Members Imagine the Affordances of Structured Data

In the following, I describe the imagined affordances members of mySociety hold around structured data. First, I will explore mySociety’s mission and self-understanding in more detail to give a dense description of the broader ambitions and imaginaries that drive this organization. Then I show how data is used to facilitate this mission by describing four imagined affordances: deep linking into documents

to engage citizens with the processes of governments; making the performance of governments legible to affect how they implement laws and public services; affecting its users' perceptions by demonstrating their impact to them; and scaling technological solutions to support a distributed form of agency.

mySociety's Mission: Facilitating Engagement

mySociety's self-proclaimed mission is to "help citizens demand better [...] our web tools and apps are breaking down the barriers around governments" (mySociety 2016b). Its tools are supposed to give "greater access for citizens to the work of government and the democratic process", which essentially means improving how publics can monitor and provide feedback to governments: "We believe that governments tend only to get better at serving the needs of citizens when citizens are capable of demanding better, creating a virtuous circle that leads steadily to better government" (Criddle 2015). While this statement might imply advocacy for specific policy changes, mySociety understands its role as a 'mere' facilitator of civic engagement, not as an advocacy organization.

Members generally reject the idea of being a gatekeeper that stands between the citizens and their governments. Instead, they suggest to provide the means by which others are able to take actions more effectively: "What we do is present the facts: This is how your MP [Member of Parliament] voted, this is where the money went, this is what was said. It's then up to other people to do with that what they will, which might well be using it to promote a cause" (Interview: Research Team). The idealized and simplified scenario that members sketch out rhetorically to describe their role can be outlined as follows: Before mySociety enters the arena, citizens are apathetic and disengaged because engagement is too difficult and time-consuming due to high barriers raised by governments (in most cases unintentionally). mySociety identifies these barriers and then 'drops' its tools into the public arena to make engagement easier for citizens, which subsequently facilitates engagement between citizens and their governments and leads to better governance.

Underlying this approach is the assumption that *more means for citizens to provide feedback to elected representatives* leads to 'better' outcomes, i.e. *more representative* and therefore *more democratic* outcomes. Given its self-understanding as a 'facilitator', mySociety is not advocating for specific outcomes, but is concerned with the processes by which outcomes are generated: "We're in favour of a vibrant, healthy, lively democracy. That means a rude and obnoxious place. Although we don't want to do that ourselves, it's entirely appropriate that we should facilitate other people to" (Steinberg quoted in Krotoski 2010). This approach builds on the principles of open source culture (Kelty 2008; Lewis 2012). "The essence of open source," Weber (2004, 56) describes, "is not the software. It is the *process* by which software is created". As the ideas and practices of the 'open source process' were increasingly applied outside of software development (most prominently with Wikipedia) they formed the basis for a larger technological and cultural phenomenon that Jenkins (2006) has described as participatory culture, a culture "which posits that knowledge is richest and most accurate when it reflects the pooled inputs of a distributed population, as opposed to the expertise of a single agent" (Lewis 2012, 847).

MySociety builds on previous forms of participatory culture and has particularly strong connections to technology-driven open data initiatives and rights-based open government or freedom of information initiatives, both of which are interested in applying the 'logic of open participation' (Lewis 2012) to institutionalized politics (Schrock 2016; Janssen 2012; Yu and Robinson 2012). mySociety was an early supporter of open data in the UK and its founder was part of a group that articulated the '8 principles of open government data' (OpenGovData.org 2007). It also promoted freedom of information laws through its website WhatDoTheyKnow, which helps users to submit FOI requests to public institutions, and advocated for strong FOI legislations. Yet despite this strong connection, advocating for open data and FOI is not mySociety's main purpose, they are rather perceived as "resources that mySociety needed to function" (Interview: Former CEO). This is because mySociety does not just build on participatory culture, it also *extends* it in important ways. Participatory culture relied on the connectivity of internet technologies to establish new forms of governance based on

collaboration and sharing. As Lewis (2012, 848) describes, participatory culture is based on a forging of technology and culture, in that digitalization “enables greater user participation on a seemingly infinite order, and the socio-cultural context of this technology has *encouraged* greater participation to achieve normative aims of collective wisdom and well-being”.

MySociety similarly wants to create a more collaborative and participatory process for achieving better outcomes, but it does not solely rely on the connectivity enabled by internet technologies and ways of ‘coordinating collaborations’ (Kelty 2008). Its civic tech applications are not primarily about connecting people, but about *facilitating* them, i.e. enabling them to engage with governments in ways that go beyond ‘mere’ connectivity or access to information. In other words, mySociety is extending participatory culture by drawing attention to the conditions that would allow and encourage people to participate. Civic tech at mySociety is essentially about feasibility, in that it aims at making engagement more feasible for citizens by removing frictions such as needing to find out who represents them in parliament and how to contact them.

MySociety’s imagined affordances of data are closely tied to this broader mission of creating a participatory culture. To illustrate the fundamental importance of structured data for mySociety, a member uses the analogy of cooking ingredients:

If the useful thing is a cake that people want to eat, you’re interested in the ingredients...But you don’t want raw ingredients like wheat, you need the flour. Some processing has to be done to the ingredients before they are ingredients that you can sensibly make a cake with...Without the structured data, you wouldn’t be able to offer that service and until you can offer that service you couldn’t really prove that the demand for it would be so great. (Interview: International Team)

This suggests that structured data, if ‘served’ correctly, would increase engagement and subsequently alter the relationship between citizens and their governments

because it shows that the ‘demand is great’. In the following, I unpack this statement and describe the imagined affordances of data underlying it.

Improving Engagement with Governments: Deep Linking

One of the most popular services on mySociety’s parliamentary monitoring website TheyWorkForYou are email alerts. For example, users can search for keywords in parliamentary discussions and then sign up to regularly receive emails informing them when their keyword comes up in future discussions. This service was significant because British parliaments used to publish transcripts of speeches as PDF files. To monitor keywords or what individual MPs are saying in parliamentary discussions, one needed to download these PDFs regularly and search through them individually. The email alerts at TheyWorkForYou turned this monitoring process into something people are able to do along the way, without investing considerable time and effort.

The key practice behind this service is the idea of ‘deep linking’: “The idea that there is councilor Jones who said ‘This is what we have to do in my home town!’ and you can cite it directly” (Interview: International Team) – similar to Twitter, where every individual Tweet has its own URL which can be shared or embedded on other websites. For deep linking, mySociety (2016c) considers transcripts “made of nicely structured data [...] hard to beat”. If documents are in a format that does not allow deep linking, “you can’t cite, you can’t share, you can’t show specific utterances [...] that pretty much stops details in documents being called out in debates” (Whiteland in mySociety 2016a). Today, it uses a data standard for modeling parliamentary speeches called Akoma Ntoso. It allows granular filtering (everything *this* person has said), an analysis of the speakers’ behavior (what was said, how and when?), and the ability to link speakers and what they say to other statements and events: “We would like to see people...build sites like ‘all public statements by the Prime Minister’” (mySociety 2016c). This creates a level of “semantic understanding” with an “awareness of speakers” (Interview: International Team) that is necessary for the services mySociety develops.

The ability to link deeply into a document using structured data is considered “really important in public discourses about documents” (Interview: International Team). More fundamentally, documents are considered important because mySociety is “concerned with the process of government and most government [...] is actually the business of making laws, and laws traditionally have been written down” (Interview: International Team).

From the perspective of mySociety members, enabling deep linking into documents and providing services around it improves the public’s awareness of, and engagement with, the businesses of governments (as those businesses are captured in documents). As mySociety explains:

Transcripts are a kind of oil that greases the wheels of well-functioning societies. They let people discover when powerful people have made pronouncements that affect less powerful people. We believe that by making transcripts function better, more people will end up learning about decisions and opinions that affect their lives. (mySociety 2016c)

In the interviews, members also frequently referred to a claim by mySociety’s founder: “everything you can and cannot do in your life has been decided by more powerful people in a meeting” (cf. Whiteland in mySociety 2016a). Deep linking is about improving access to such meetings to help figure out “who was responsible for things” (Interview: Former CEO) by improving the accessibility of those documents which capture what was said by whom. Put simply, deep linking should help to keep track of where and when powerful people make decisions.

Taken together, mySociety is imagining the affordances of structured data in this case as a basis for a *document-driven monitoring tool* to help engage the public with the businesses and decision-making processes of governments. Through deep linking, structured data is imagined to “even [affect] an apathetic population, it affects the way that they behave and what they know about what’s going on in their own society” (Whiteland in Arcopix 2014). This makes turning documents into structured information a central part of mySociety’s mission of creating a more

participatory culture. Importantly, deep linking is more likely to facilitate individuals who are already highly engaged and interested in the processes of governments to begin with, either privately or professionally (e.g. journalists or activist groups). As I will discuss below, mySociety also imagines data to help engaging citizens who are not necessarily interested in politics or feel disengaged and powerless.

Mediating between Governments and Their Publics

On FixMyStreet and WhatDoTheyKnow, mySociety collects all the problem reports or freedom of information requests by its users, tracks the responses by public institutions, and makes both publicly accessible. By making the resulting databases public, mySociety creates new forms of legibility and assessability. The database on FixMyStreet enables the analysis of a city’s infrastructure problems by the public and makes the performance of governments, e.g. how fast they fix problems in specific regions, legible. WhatDoTheyKnow similarly allows an assessment of how different public institutions respond to FOI requests and subsequently how the law is being practiced.

One reason for mySociety to ‘aggressively’ impose transparency on governments is its reliance on their cooperation. Its applications are built *on top* of services provided by governments and cannot exist independently without them. If public institutions refuse to cooperate, for example by ignoring reports sent via FixMyStreet, their tools would be of little or no use. By imposing transparency and allowing the public to assess their performance, mySociety makes it more difficult for authorities to ignore them. It is a way of pushing institutions to cooperate and to adopt mySociety’s emphasis on user-friendliness and accessibility (see below). This is described as “the one bit of activism that we occasionally engage in” (Interview: Research Team).

A less obvious aspect of this ‘one bit of activism’ is how mySociety’s use of data enables it to mediate between the bureaucratic and legal processes of governments

and the users of its applications. The way mySociety's tools work is usually not a direct reflection of how public institutions or legislations are working:

We think about the aim of the software as not being necessarily to model exactly the processes as they already exist in the world, but to make the software embody a slightly better way of doing things. (Interview: Senior Developer 2)

In this sense, mySociety's tools are "intended to provoke some friction" (Interview: Senior Developer 2). In the cases of FixMyStreet and WhatDoTheyKnow, the laws and regulations did not prohibit the publication of problem reports or FOI requests, but it also was not something that was suggested. In addition, mySociety reinterprets how services and laws should be implemented in smaller ways, for example by forwarding reports to councils via email, while councils prefer people to use a form on their website; or by allowing users to send FOI requests to institutions that were not subject to the FOI law on WhatDoTheyKnow (mySociety 2011).

MySociety developer Tony Bowden (2010) described this principle as 'dreaming out loud': "simply act the way you want the world to be, then wait for reality to catch up" – by finding ways to make institutions cooperate and push 'reality' in that direction. This 'dreaming out loud' principle fundamentally depends on mySociety's use of data to make the performance of governments legible and assessable for the public.

However, mySociety cannot simply invent new ways of how governments should work and then impose this vision on institutions. While they are intended to create frictions, the software tools and data structures mySociety develops need to reflect the real-world processes they are supposed to represent to a large enough degree "to actually work" (Interview: Senior Developer 2). Instead of 'reinventing' government, mySociety's tools are compatible with *existing* services and legislations, but simultaneously utilize data to assess and affect how they are being *implemented*: "that gap between the way the law works, the way institutions implement the law and

the way perhaps it might be ideal from a citizen's point of view is an important one and one where I think it's significant to build an artifact that demonstrates that" (Interview: Senior Developer 2). Using data to demonstrate and potentially close this gap is mySociety's definition of 'empowerment': people are empowered by giving them tools which enable them to "see and be able to do what they are legally entitled to as easily as possible" (Interview: Research Team).

This understanding of empowerment encapsulates how mySociety imagines to affect the relationship between citizens and their governments through data. It uses data to facilitate the use of preexisting rights and services, not to fundamentally change them. It envisions its tools to act like a 'layer' that translates the bureaucratic and legal procedures followed by public institutions into user-friendly interfaces with accessible language for citizens. They are supposed to both reflect existing processes *and* visions of how these processes should 'ideally' work. The legibility and assessability created by data is imagined by mySociety to affect the implementation of rights and public services in ways intended to make engagement easier for citizens and thus 'push reality' closer to its vision of a more participatory culture.

Changing Perceptions: Providing a Sense of Agency

While facilitating already interested users via deep linking is important to mySociety (see above), it ultimately aims at engaging people who are usually not engaged. mySociety aims at a more long-term change in perception about "what is normal rather than what is exceptional" (Interview: Former CEO). Using TripAdvisor as an example, the former CEO explains that it "has caused a massive power shift in the hotel industry from the people who run the hotels towards people who stay in hotels", even though it is not a "campaign for better hotels". Services such as TripAdvisor would change people's expectations about things like going to hotels if they are popular enough, i.e. widely used (cf. Steinberg in IndigoTrust 2011). In a similar vein, mySociety wants its tools to be "popular rather than idealistic" (Interview: Former CEO) and has a strong emphasis on usability, i.e. on making sure

its tools are easy to use and provide “the same level of service that the best [commercial] websites we use nowadays would have” (Interview: Senior Developer 1).

In order to simultaneously achieve popularity *and* promote a more participatory culture, mySociety tries to ‘harness self-interest’ (Bowden 2014b) by generating “public good from private desire” (Steinberg in Nestoria 2008). It aims at developing services that address individual end-users, but use the data gathered from the engagement of these users to create “public value” (Steinberg in UsNowFilm 2008) on top of it. Crowdsourced databases such as those created on FixMyStreet or WhatDoTheyKnow are key to this. FixMyStreet helps individuals to fix their specific problem, but it also collects all the reported problems to create a public database about local problems that can be useful for others, for example local journalists who can sign up to get email alerts for problems reported in a specific region.

By bridging individuals with collectives in this way and by emphasizing ease-of-use, mySociety ultimately wants to affect the perception of users about their own agency. For example, when a problem reported via FixMyStreet has been fixed, it will be removed from the public city map and the user who reported it will receive an email encouraging her to report more, or to try out mySociety’s other projects for contacting her representatives. This way, mySociety is not only solving an individual’s problem, but is also trying to demonstrate the public value created by its action. This is intended to give users a “sense of agency...some ability to change their environment” (Interview: Senior Developer 2) by demonstrating that their actions do have an impact:

[W]hat we often see as apathy is really just learned helplessness. People feel powerless, because they don’t believe they can make a difference. And the best way to change that is not to argue with them [...] It’s to simply show them that they *do* actually have power. That what they do *can* have an effect, not only for themselves but for people around them. (Bowden 2014b)

Here, the legibility and assessability of crowdsourced data is imagined to create a more abstract, cultural and psychological change in perception.

Taken together, the crowdsourced databases mySociety creates are imagined to affect both governments and the public. On the one hand, they enable mySociety to push governments and influence how laws and public services are being implemented, as they make the performance of governments legible in new ways (see above). On the other hand, it uses the data generated by its users in ways intended to change how they feel about engagement by providing easy-to-use tools and by demonstrating that their actions had an impact. Databases are imagined to affect emotions and perceptions in order to advance a vision of a more participatory culture, which illustrates the importance of emotions and perceptions around data (cf. Kennedy and Hill 2017). As I show in the next section, data is also key to mySociety’s ambition to support the development of similar applications elsewhere.

Scaling Civic Tech: Supporting a Distributed Form of Agency

The bulk of mySociety’s work today is based on collaborations with groups in other countries to create national versions of projects originally created in the UK, especially Alaveteli (an international version of its right-to-know site WhatDoTheyKnow) and tools for parliamentary monitoring. In part, this international orientation is driven by funding opportunities, but also because numerous groups in other countries expressed a desire to have customized versions of mySociety’s UK tools. While partly self-interested, members share the desire to support groups that similarly want to promote a form of participatory culture elsewhere. They think of themselves not merely as ‘tool suppliers’, but as part of an international civic tech community.

MySociety essentially wants to promote its values and practices in many different contexts by supporting local groups with developing customized versions of its tools. To achieve this, it has to accommodate the fact that “people in different places care about different aspects of politics. In some countries what really counts

is how politicians vote, in others the crux is campaign finance contributions” (Steinberg 2012). Data is seen as both a key problem and a solution to this approach. One of the main obstacles for transferring an existing application to a new country or for building new civic tech applications from scratch is the design of consistent data models that adequately reflect the structures and legislations of the respective national government. A data model designed to capture the British parliamentary system cannot simply be transferred to another country. If they are not already available (as open data), developing such data models is complex.

Therefore, mySociety is one of the founding members of Poplus, a ‘global civic tech federation’ of organizations similar to mySociety, like Code for America in the US or g0v in Taiwan. The basic idea that drives Poplus is that “pretty much every tool in the civic and democratic space can be broken down into some parts that are universal, with usually only a little bit of local glue holding them together”:

Although pretty much every Parliament has different processes, they’re still dealing with *the same raw ingredients* – people, parties, speeches, bills, votes, etc. – and if we could create standardised ways of modelling each of those things, it would be a lot less work for people to combine these in the way that makes most sense for their own situation. (Bowden 2014a, emphasize added)

In connection to Poplus, mySociety supports data standards for modelling government structures and develops EveryPolitician, a project that literally collects data about every politician in the world. In this project, mySociety makes “data editorial decision[s]” (Interview: International Team) about how the ‘basic elements’ that can be found in every government are represented in a consistent manner across countries to ensure tools can be easily deployed internationally.

On a technical level, mySociety is trying to reduce problems of scale through data structures and tools that standardize how common ‘ingredients’ of government systems are formalized. However, members perceive this not merely as a technological detail, but as a way to facilitate mySociety’s vision of a more participatory

culture elsewhere. By enabling other groups with similar values and social imaginaries to create their own, local versions of civic tech applications that serve their particular needs, mySociety is essentially trying to support a *distributed form of agency*. By promoting data standards and reusable tools, it tries to create the conditions necessary for supporting its values and approaches in as many different contexts as possible.

Conclusion: The Cultural and Historical Situatedness of Affordances

This article examined the imagined affordances members of mySociety hold around data to gain a deeper understanding of how civic technologists rely on data to meet their own ends. mySociety is trying to facilitate civic engagement and, by extension, create a more participatory culture. Taken together, it is imagining the affordances of structured data in ways that are supposed to expand the agency of publics towards governments: ways intended to enable citizens to better influence and interact with governments or other powerful institutions. Four imagined affordances have been identified.

First, members of mySociety use structured data to make ‘deep linking’ into documents possible, thereby aiming to increase the publics’ awareness of, and engagement with, the processes of governments. Second, crowdsourced databases enable mySociety to mediate between governments and their publics. By collecting data to monitor the performance of governments, and by making this data publicly available, mySociety is trying to push governments to cooperate with its services and thereby affect how existing laws and public services are being implemented in supposedly more user-friendly, i.e. ‘citizen oriented’ ways. Third, members of mySociety are trying to use data to affect the perceptions and self-understandings of their users. Crowdsourced databases are supposed to help connect the individual with the collective by demonstrating to individual users that their actions have an ‘impact’ and create a kind of ‘public value’. Fourth, members of mySociety are scaling technological solutions to support a distributed form of agency that should enable groups in other countries, which similarly want to promote a more

participatory culture, to develop customized versions of mySociety tools that serve their particular needs.

The way mySociety is using data to apply notions of participatory culture to politics suggests that we should understand the role of civic technologists in the public arena as *facilitators of engagement*. Facilitating means that data is used in ways that are supposed to enable others to take actions themselves. mySociety does not advocate specific outcomes (such as particular policy changes), but is concerned with how the *processes* by which outcomes are generated are designed. It aims to enable users to easily engage with authorities in order to ensure that decision-making “reflects the pooled inputs of a distributed population” (Lewis 2012, 847). In other words, mySociety wants to influence the conditions by which others participate in the public arena without directing the public discourse or influencing policy making. At the same time, it sees its role as complementing actors who *do* want specific outcomes, like advocacy groups within civil society, or professional journalists who emphasize gatekeeping.

By showing how members of mySociety understand and use data to facilitate civic engagement and realize a more participatory culture, this article draws attention to the fact that “the political and democratic possibilities of data” (Milan and Van der Velden 2016, 8) cannot be determined in an abstract way. What data affords to whom does not only depend on the technological properties of data, but is fundamentally social, and both culturally and historically situated. This has implications for studying data activism in general and civic tech in particular. Related to data activism, the findings presented here invite us to extend Milan and Van der Velden’s (2016) conceptualization of data activism as creating novel epistemic cultures around datafication within civil society. The epistemic cultures and related social imaginaries promoted by mySociety are not novel: the practices and imaginaries described here build on participatory culture, which itself has roots predating computer culture and notions of open source software (Tkacz 2012). mySociety’s practices and epistemologies did not appear out of nowhere and the epistemic cultures they create are not necessarily novel, but they develop imagined affordances around data to *implement* these ideas in new ways. To understand imagined

affordances, historical trajectories are just as important as the new elements added by data activists.

Studying imagined affordances does have a lot of potential for further developing and refining notions of data activism. First, imagined affordances provide a useful angle for moving beyond broad dichotomies of pro-active and re-active forms of data activism (Milan and Van der Velden 2016) and for studying how the epistemic cultures developed by data activists are connected to data in nuanced ways. Especially when combined with a focus on practices, it is a powerful tool for illustrating the “distributions of agency and organising forces” (Tkacz 2012, 404) activists set in motion. Second, the article shows how imagined affordances can be used as an integrative framework for studying how data activists affect the distribution of knowledge and power. I described how mySociety is trying to utilize the legibility and assessability created by data to change the perceptions of users about their own agency. Subsequent studies could examine how the practices and social imaginaries of data activists interrelate or clash with the self-understanding and perception of different groups in the public arena, and how different imagined affordances by various types of users emerge around civic tech applications.

Applied to civic tech, the research approach developed here calls for a more differentiated picture of the civic tech sector. Civic tech organizations and their funders are very much interested in a “coherent and clearly articulated vision and sense of shared identity for civic tech” (Donohue 2016). Yet while the diverse actors in the field of civic tech might align inasmuch as they are all interested in open data, reusability and a vague sense of improving ‘civic life’, their interests might eventually clash. For example, European non-profits like mySociety or the Open Knowledge Foundation Germany advocate for governments to *copy* civic tech applications. At mySociety, this even goes as far as stating that most mySociety projects “shouldn’t need to exist at all” (Interview: Senior Developer 1). Elsewhere, civic tech is closely aligned with start-up culture and attempts to create new industries. Wanting public institutions to copy civic tech applications in order to change the relationship between citizens and these institutions, or favouring the ‘government as a platform’ paradigm (O’Reilly 2010) and wanting public

institutions to ‘step back’ and foster ecosystems of for-profit services, has very different implications for civic life (Baack in DataDrivenJournalism.net 2016).

Pointing out such differences is also important for developing a more differentiated critique of civic tech. Civic tech and open data initiatives have been said to uncritically support a neoliberal agenda driven by commercial interests rather than government accountability or citizen empowerment (cf. Bates 2012; Slee 2012; Gregg 2015). Moreover, their focus on technological solutions would merely reinforce existing power relationships by ‘empowering the empowered’ (Gurstein 2011). While this critique is important, it does not equally apply to every actor in the civic tech sector. We should not discard the agency and intentions of non-profit organizations such as mySociety, who are aware of these discussions and conduct research to better understand the impact of their applications. Members of mySociety constantly experiment and explore ways to support and encourage civic engagement. In this sense, they are “potential ‘laboratories’” (Hepp 2016, 929) that we should not ignore if we want to formulate normative principles for making processes of datafication more democratic and for creating more self-aware and agentic publics (Kennedy and Moss 2015).

The imagined affordances identified and described here can help to map differences among actors in the civic tech sector: Are other civic tech organizations relying on data in the same way, and do they promote similar ends with them? Are actors outside the field of civic tech adopting them, and in what way? Which actor in the civic tech sector influences what field? Given civic tech’s status as a ‘pioneer community’ (Hepp 2016), tackling these questions is one way to conduct empirical research to trace and understand how forms of civic engagement and activism are changing due to their growing reliance on data.

Notes

1] An example are the ‘Schools of Data’ organized by *Open Knowledge*, which are active in various countries.

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Biography

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Stefan Baack is a PhD student at the Centre for Media and Journalism Studies at the University of Groningen (Netherlands). In his work, he studies the ways in which the steady quantification of social life affects democratic publics, and in particular how such publics are envisioned and assembled. He published about the open data movement, civic tech, and data journalism.

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Data activism in Light of the Public Sphere

Miren Gutiérrez

Introduction

'Ayuda Ecuador,' a deployment of the Ushahidi platform, was launched on April 16, 2016, after the first tremors of the earthquake that killed 660 people and injured 4,605 (USAID 2016). Within a matter of two hours, a group of 'digital humanitarians' – who typically comprise bloggers, *techies* and activists willing to volunteer their time to assist in emergencies remotely (Gutiérrez 2018a) — launched the deployment to 'generate collectively data relevant to the emergency, threats, logistic needs and response that the affected population was experiencing (...) and effectively channel the efforts by different institutions and agencies' (Ayuda Ecuador 2016).

The Ushahidi platform – a non-profit tech company from Kenya that allows the visualization of crowdsourced crisis data for humanitarian purposes – is a proactive data activist organization, proactively employing software and data for humanitarian assistance (Gutiérrez 2018a).

Data activism involves a series of practices 'at the intersection of the social and the technological dimension of human action,' aiming at either 'resisting massive data

collection,' in the case of reactive data activists, or 'actively pursuing the exploitation of available data for social change,' in the case of proactive data activists (Milan and Gutiérrez 2015, 127). This article deals with the second type of data activism.

Proactive data activism is currently being harnessed to understand, analyze and develop solutions to a range of social problems, from climate change and biodiversity loss, to inequality and human rights abuses (Hogan and Roberts 2015), as well as to assist in humanitarian crises, as in the case of the Ushahidi platform.

Because of its capacity to generate alternative digital public spheres (called here APSs for short), this paper specifically refers to a type of proactive data activism termed 'geoactivism,' which employs interactive cartography to communicate and trigger action. In this paper, Geoactivism galvanized to address an emergency is called 'crisis mapping,' while geoactivism employed in evidence-gathering for advocacy is called 'activist mapping' (Gutiérrez 2018a).

The cases mobilized to illustrate this article include mainly deployments of the Ushahidi platform, based on crowdsourced data, as well as other cases, including InfoAmazonia, which relies on public data, as well as crowdsourcing and sensors to generate data. They are introduced in the analysis because they are typical geoactivist organizations (Gutiérrez 2018a).

To examine how APSs behave, I draw on 'Why the net is not a public sphere' (Dean 2003). Particularly useful are Jodi Dean's reflections on how the net cannot be considered a public sphere, but a set of democratic configurations that she calls 'neodemocracies' (ibid., 105). Dean considers that the architecture of the public sphere is based on a set of components – specifically, site, goal and vehicle, as well as means and norms (2003, 96). I take this idea further to highlight facets of the APSs (see Table 1).

The primary purpose of this paper is not to compare the public sphere and Dean's neodemocracies, but to contribute to a theory of data activism, a relatively

unexplored phenomenon. Therefore, the theoretical comparison provided in this paper is a heuristic exercise for enlarging the concept of the APS in data activism.

Discussion

In this section, some of the central concepts and theories mobilized for this study are explored and put in the context of data activism, including Dean's neodemocracies (2003), Jürgen Habermas's public sphere and its criticism, James Bohman's electronic public space (2004), Nancy Fraser's counterpublics (1990), and the theory of *dataveillance* (Poell, Kennedy and Dijck 2015). A brief comparison of the public sphere, the neodemocracies and the APSs is offered, which is explored in the next section.

According to Dean, the Habermasian public sphere arises in the nation, is aimed at consensus, abides by the rules of inclusivity, equality, transparency and rationality, and revolves around actors (2003). Meanwhile, Dean's internet-based neodemocracies aim at contestation, happen on the web via networked conflict occurring within the canons of duration, hegemony, decisiveness and credibility, and emerge around issues (*ibid.*). The concepts emerging from this taxonomy are employed here probingly to observe the APSs generated by data activism.

I do not entirely subscribe to Dean's criticism of the Habermasian understanding of the public sphere. Dean's criticism does not take into consideration how the concept of the public sphere has evolved in Habermas's thinking. Habermas updated it, suggesting that 'a cosmopolitan matrix of communication' could make a 'world public sphere' possible (Habermas 1996, 514), decoupling the public sphere from the nation. Therefore, when I uphold the idea that the public sphere is linked to the nation, I am referring to Dean's critique.

Besides, the Habermasian public sphere is not as placid as Dean portrays it, since it also deals with struggle and is intended for action. In the public sphere, discourse commences once there is a problem and actors can contest each other's validity

claims (Habermas 2006, 413). In fact, the public sphere is the place where differences are settled by reason, and not by war (Negt and Kluge 1993, ix). Likewise, when I mention consensus as the goal of the public sphere, I am using Dean's views.

One of Dean's criticisms is that adding an 's' to the concept does not save it, because groups either share the same norms (and therefore are a public in Habermasian terms) or they do not (and therefore are not a public) (Dean 2003, 97).

This distinction does not apply easily to the APSs created by data activism. APSs may share the same norms, underlying values and solidarity, but their evanescence makes them plural and *ad hoc*. They are similar to Stefania Milan's karst river movements, which remain dormant, reappearing when conditions require it (2013), while their members feel part of the same movement and principles (Grabowski 2012). They match Donatella della Porta's and Mario Diani's description of a network organisation combining formality (i.e. norms) with elements typical of a distributed network, based on the independence of single components which adapt and change as the occasion demands (2006, 159).

Dean's taxonomy arranges the features of the public sphere and the neodemocracies into boxes whose boundaries blur once you look more closely at them. Conscious that any classification is arbitrary, I employ Dean's taxonomy as a heuristic tool for reflecting on data activism.

Thus, APSs' frame of reference is the local and the global concurrently (not the national or the web), since they are 'transnational,' in Bohman's terms (2004). They are directed at action (not solely at consensus, as Dean asserts for the public sphere), and are established around conflicts (not actors or simple issues).

Table 1: Comparing the public sphere, neodemocracies and APSs

	Public Sphere	Neo-democracies	APSs
SITE	Nation	Web	Local/global
GOAL	Consensus (legitimization)	Contestation	Action (via consensus)
VEHICLE	Actors	Issues	Crises and problems
MEANS	Procedures (legal, national)	Networked conflict	Networked coordination (via procedures)
NORMS	Inclusivity Equality Transparency Rationality	Duration Hegemony Decisiveness Credibility	Inclusivity and evanescence Equal access Transparency Credibility

Source: Elaboration by the author based on Dean (2003, 108).

This new taxonomy allows me to make some observations about how APSs behave.

Other authors' arguments, compatible or not, are employed later in this paper for thinking about APSs, although the intention is not to subscribe to any theory of the public sphere.

For example, Bohman's reflection on 'a new kind of public sphere' that emerges in the era of 'electronic democracy' (2004, 131) is useful. Bohman acknowledges that an 'electronic public space' – understood as a computer-mediated, Internet-enabled communication — may have the potential of generating a 'novel public sphere,' enlarging the scope of 'certain features of communicative interaction across space and time,' especially when applied to 'deliberative transnationalism' (2004, 132-151).

Data activism could be considered an enhanced variety of activism in that it is enabled by a cutting-edge form of technology (i.e. the data infrastructure), and data activists often use the Internet as a platform for disseminating information (together with other information and communication technologies or ICTs). Bohman's viewpoints are therefore interesting for considering how data activism employs technology to generate novel public sphere(s) for transnational advocacy and humanitarianism.

This article draws too on Fraser's look at marginalized groups excluded from the public sphere, and the formation of their post-bourgeois public spheres as 'subaltern counterpublics,' overcoming a 'hegemonic' mode of domination (1990, 61-62). These groups generate counterpublics, or 'parallel discursive arenas,' to develop and circulate 'counter-discourses,' which present alternative 'interpretations of their identities, interests and needs' (ibid., 67).

Although there is a difference between Fraser's bottom-up counterpublics and the spaces generated by proactive data activism, her conceptualization is useful here too. In 2008, four volunteering *techies* and bloggers, who could hardly be described as 'marginalized' in spite of being 'repressed,' launched the first deployment of the Ushahidi platform.

This first application was set up to bypass an information shutdown during the bloodbath that arose after the presidential elections in Kenya a year earlier, and to give voice to the anonymous victims. The deployment allowed victims to disseminate alternative narratives about the post-electoral violence. Since then, other applications have been set up by campaigners, organizations and digital humanitarians in every major disaster not only to visualize what is happening but also to assist people affected in real time, offering some 'expectation of a response' and opening a 'space for interaction,' in Bohman's words (2004, 135). Namely, the APSs of data activism could be considered subaltern in that they are parallel discursive arenas where people disseminate counter-discourses in opposition to top-down narratives and approaches.

This paper also takes into account the backdrop in which proactive data activism emerges, which includes the datafication process – that is, computing aspects of life that had never been quantified before (Mayer-Schönberger and Cukier 2013, 78) — and the massive collection of data by governments and corporations, giving rise to ‘computational politics’ (Tufekci 2012), what Braman calls the *panspectron* (2009, 314) or dataveillance (Poell, Kennedy and Dijck 2015). Dataveillance employs ‘the massive flows of data circulating between devices, institutions, industries and users’ for ‘new and troubling practices’ (ibid.). Reactive data activism, a front-runner of data activism, emerges precisely in answer to this data-gathering and intrusion (Milan and Gutiérrez 2015).

Labels employed in this paper are derived from Gutiérrez (2018a), where eleven attributes observed in forty data initiatives (i.e. how collaborative a concrete organization is), thirty semi-structured interviews with data activists, practitioners and experts, and four in-depth interviews with Ushahidi developers and deployers were the basis for a non-normative taxonomy employed in examining proactive data activism (ibid.). According to this classification, proactive data activists can be categorized as: skills transferrers, focused on transferring data or social science skills, forging opportunities for alliances and generating digital platforms and tools for data activism; ‘catalysts’ who chiefly fund data projects; activists who produce data journalism, when news media organizations are not willing or capable of doing so; and the actual data activists and geoactivists (ibid.).

The ability of some proactive data activist initiatives to generate APSs is the pivotal idea in this paper. Happening both locally and globally across borders (site), aiming at action (goal) and gathered as a temporary network around the crisis caused by the earthquake (vehicle), ‘Ayuda Ecuador’ is an example of how data activism can generate temporary spaces for dialogue and action.

The ‘deployers’ at ‘Ayuda Ecuador’ included several organizations from different countries, supported by four experts: Luis Hernando Aguilar, on knowledge management; Byron Herrera, on software development; Estela Navarrete, on mobile software development; and Angela Oduor, from Ushahidi (Ayuda Ecuador 2016).

The application connected them and other digital humanitarians with victims (reporters) generating data via the crowdsourcing platform, and traditional humanitarian agencies, using the resulting information on the ground. For almost three weeks, these three communities – that is, deployers, reporters and humanitarian workers — ‘met’ in the public space generated by the platform to agree, make decisions and coordinate actions.

The theory of the public sphere is employed here to analyze these spaces. It was Habermas who described the public sphere’s emergence in the 17th and 18th centuries as space where a communicative action leads to mutual understanding (Habermas 1984, 17–18). However, Habermas was criticized for having created too abstract a model, and for having bypassed some challenges, such as the exclusion of women and men from the lower classes, and the heterogeneity of the public (Webster 2006, 163–68; Calhoun 1992).

Nevertheless, the idea of the public sphere has been revived with the emergence of ICTs, the ‘networked information economy’ (Benkler 2006, 212), and the data infrastructure — including databases, algorithms, servers and systems needed to obtain, curate, analyze and visualize data (Gutiérrez and Milan 2017) —, due to the fact that these technologies appear to augment opportunities for interaction and debate (Rheingold 2002; Papacharissi 2002; Benkler 2006). Habermas himself reviewed the concept, suggesting that ‘a world public sphere’ could become possible (1996, 514).

However, in the ‘network society’ (Castells 2010b), the public sphere does not remain intact. The rise of ‘digital contention’ generates a ‘structural transformation of the public sphere,’ where access, participation and communication ‘are constantly redefined and renegotiated’ in ‘multiple arenas’ (Celikates 2015, 14).

This revival, again, met with more criticism. Distinctions between the bourgeois and proletarian public sphere (Negt and Kluge 1993), national and translational publics (Bohman 2004), the Habermasian public sphere and the ‘networked public sphere’ (Friedland, Hove, and Rojas 2006), as well as discussions about whether

the concept of the public sphere could be applied to the net (Dean 2003) and social media (Fuchs 2013) ensued, leading the debate towards ‘opposing assessments’ (Bohman 2004, 132).

For Lewis A. Friedland, Thomas Hove and Hernando Rojas, the ‘centrality of networks’ demands revisions of the public sphere (2006, 5). These authors argue that the ‘networked public sphere’ presents challenges to the public sphere in that it raises questions about the structure of communicative action, as the institutions of socialization are now networked, transforming ‘core forms of intersubjective communication and sociation’ (ibid., 24).

Echoing Oskar Negt’s and Alexander Kluge’s proletarian public sphere, Christian Fuchs critiques ‘the contemporary web’ and social media as false emancipatory public spheres because they are dominated by capitalist interests (2013). He adopts the notion of ‘proletarian counter-public sphere’ as a ‘radically different’ public sphere (Fuchs 2010, 176).

Concurring, Dean notes that the net is ‘the architecture for communicative capitalism, both as order establishing itself and as an order being resisted’ (2003, 105). The online presence of activists supports her arguments that resistance and discord are the goals of the web (ibid.). There is a different way to look at it. The data infrastructure embeds several forms of bias, discrimination and asymmetry, which do not disappear when activists use it for their causes (Gutiérrez 2018a, 2018b). However, I do not think that these contradictions annul the APSs’ power to foster democratic participation; they simply reflect the complexity of our world, where simultaneous, often clashing, phenomena happen.

Having framed the discussion, what follows is an analysis of the comparison between the public sphere, the neodemocracies, and the APSs.

The Tensions of the Site, the Goal and the Vehicle

Data activism imposes tensions on the public sphere. The following section dwells on them, paying particular attention to three strains (site, goal and vehicle), which are mainly significant because they present the most noteworthy differences between the public sphere, the neodemocracies, and the new APSs.

The Tension of the Site

Several communities typically convene when launching a Ushahidi deployment tackling a crisis: the group of expert ‘digital humanitarians’ (Meier 2015a) setting up and supporting the deployment remotely; the people affected by the disaster or violence, who contribute their data and use the information; and the humanitarian workers, responding to the crisis.

The first group can be based on different geographic locations, taking advantage of the ‘space of flows,’ which allows real-time social practices to happen simultaneously (Castells 1992, 2010a). The second and third groups operate locally, on the ground, and globally, when they communicate in the APSs generated by the platform. ‘Ayuda Ecuador’ offers an example: ‘locals’ (i.e. on-the-ground humanitarian personnel and reporters) and experts from different parts of the world (i.e. the digital humanitarians) create a space where they can discuss and coordinate actions.

According to Dean, the public sphere occurs in the nation, while the neodemocracies are situated on the web (ibid., 108); meanwhile, the new APSs happen both locally and globally, all at once. During the Enlightenment, the public sphere surfaced in the salons of England, France and Germany, a neutral arena of critique against the absolute power of royals (Habermas 1991, 33-34). The conceptions that Habermas mobilized initially to examine the bourgeois public sphere (i.e. ‘State,’ ‘Church,’ ‘aristocracy’ and ‘royalty,’ among others) cannot be fully appreciated outside the framework of the nation.

Meanwhile, Dean states that neodemocracies – understood as democratic configurations which are organized through contestation (2003, 108) — happen on the web, a place of conflict and antagonism, where differences ‘emerge, mutate, link up into and through networks’ (ibid., 105-106).

Instead, the communities that engage in initiating an Ushahidi deployment interact in a space where the local and the global intersect via the web or other communication systems (i.e. mobile phones).

As with neodemocracies, the concept of the nation limits the way proactive data activism can be theorized. In proactive data activism, a global interaction seeks local effects. The nation can be an element in the offline aspects of proactive data activism (i.e. the level of freedom of speech of the country where the crisis happens), but it is not determining. For instance, the first Ushahidi deployment in Kenya managed to bypass national restrictions and to impose an alternative narrative thanks to a synchronized, collaborative effort.

The Tension of the Goal

APs are created for tangible action. The interactive mapping employed by Ushahidi, for example, depicts different layers of information in diverse formats (i.e. images, graphs, text). These strata are provided by reporters and deployers (i.e. where and when ‘water purification and sanitation’ services are offered on the ‘Ayuda Ecuador’ map) so that others can use them. Namely, verified reports about where water purification and sanitation services are available, and for how long, are offered so people can act on them.

Another example is the geoactivist initiative ‘Rede InfoAmazonia,’ which offers actionable information on the quality and quantity of the Amazon river’s water and issues warnings, so the communities in the West of Pará, Brazil, can make decisions in their daily lives (Rede InfoAmazonia 2016). ‘Rede InfoAmazonia’ is based on a system of connected sensors that capture data based on physical and chemical

parameters, which produces cartography, data and notifications via mobile technologies when the water indicators exceed or go below boundaries of normality (ibid.).

Ushahidi largely engages in crisis mapping, increasing the efficiency in response to humanitarian emergencies, while InfoAmazonia often deals with activist mapping, generating data and empowering communities for participating in decision-making processes. Occasionally, data activism engages in contest (which places it closer to Dean’s neodemocracies). That is, crisis mapping is the art of visualizing citizen reports on a map during a crisis to enhance humanitarianism, whereas activist mapping is more focused on galvanizing communities and gathering bodies of evidence that can be used for advocacy (Gutiérrez 2018a).

Consequently, the idea of proactive data activism should be regarded here as a broad grouping that embraces cases with multiple goals related to action, but not all of them are considered in this article.

Habermas regarded the public sphere initially as a *locus* of rational discussion aimed at understanding (Habermas 1991). In the public sphere ‘everybody’ gets a chance to talk and to be listened to. That is why Dean considers that the Habermasian public sphere’s goal is principally consensus; in contrast, contestation is what neodemocracies aim at (Dean 2003, 109). A democratic theory built around the notion of issue networks aiming at struggle recognizes that antagonism is what gives democracy ‘its political strength’ (ibid., 111).

Meanwhile, the APs generated by proactive data activism exhibit a propositive teleological pragmatism, as seen in crisis and activist mapping. This makes proactive data activist initiatives ephemeral: they are created only as a response to a crisis or to an issue perceived as problematic, which they seek to highlight, elucidate and even solve. When the difficulty disappears (or the deployment fails), these initiatives tend to fade as well, in the same way as collective action sometimes remains concealed and resurfaces only when the conditions are auspicious, mimicking a karst river (Milan 2013, 137–68).

The Tension of the Vehicle

The crisis or problem that the data-activist endeavor is tackling is the vehicle, if 'vehicle' is to be thought as the trigger for the formation of the APS. However, actors are as significant in the APSs as in the public sphere, giving good reason why they deserve some attention here too.

As with citizens' media, proactive data activism places people at the forefront of content production (Rodríguez 2001, 20). In 'Rede InfoAmazonia,' local communities generate data via sensors, contribute to their interpretation and use the resulting information to make decisions. Their data agency is enhanced when the datafication process – typically the monopoly of governments and corporations — is reversed. Thus, these communities' 'routine association' with automatized data collection is transformed (Milan and Gutiérrez 2015, 130).

In the case of crisis mapping, actors include deployers, reporting victims and humanitarian workers. These three communities are fundamental. Useful crisis mapping cannot occur without credible deployers, eager reporting witnesses (reporters) and collaborating humanitarian workers. The challenge in crowdsourcing data does not come from its technical sophistication, but from the convening power of the project. For instance, hundreds of Ushahidi deployments have failed due to the absence of people submitting reports from the ground, transforming maps into 'dead maps' (Vota 2012). Likewise, the failure of some Ushahidi deployments to engage humanitarian forces on the ground has led to hiccups as well (Keim 2012).

Actors in APSs are significant in more ways because they can include marginalized people, making APSs close to Fraser's counterpublics (1990, 61). For example, the Ushahidi deployment in Haiti in 2010 offered visibility and decision-making power to the victims affected by the earthquake. Another example is InfoAmazonia's 'Annual cycles of the indigenous peoples of the Rio Toque' project, which crowdsources and visualizes information from indigenous people (Cardoso 2015). However, APSs can be considered counterpublics, up to a point. Even if some deployers are victims themselves, there are apparent power asymmetries between

the tech-savvy deployers, building and managing the platform, and the data reporters, merely using it under predetermined conditions.

Nonetheless, actors are not the vehicle for APSs. Without the emergency or conflict, the APS do not make any sense. The vehicle for proactive data activism is, then, the crisis or problem at hand, and the nature of data activist projects is teleological.

Proactive data activism can be seen as an instance of collective action triggered by conflicts and problems, which then deploys unconventional means – specifically, the data infrastructure used critically – to deal with them.

In contrast, in the public sphere actors are the vehicle. They are conceptualized as rational beings that make coherent choices, based on reason (Habermas 1984, 89-93). As said, the public sphere has been challenged from many fronts, one of them questioning who can be an actor because the bourgeois public sphere was an elitist island for educated, propertied, white men. Its character was 'equal' only for the privileged few, but 'exclusionary' for others (Calhoun 1992, 223).

Dean states that a democratic theory built around the notion of issue networks can avoid this 'fantasy of unity' (2003, 107). In fact, the neodemocracies are focused on issues because the web is structured by networks formed around issues (ibid., 110-111). Although actors are 'always embedded in networks,' they are replaceable because networks' configuration continuously changes as players enter or leave them (Dean 2003, 108), realizing forms of *autopoiesis*, 'or network-based self-organization' (Friedland, Hove, and Rojas 2006). In a Ushahidi deployment, for example, roles are static while people can change responsibilities or move in and out of the APS.

Looking at the element of the vehicle, APSs seem closer to neodemocracies than to the public sphere in that they are characteristically triggered by (problematic) issues and not actors. However, while any neodemocratic network can be gathered around any issue, any problem will not trigger a proactive data endeavor.

Whether an issue is catastrophic or problematic enough (or perceived as such) depends on different factors. Droughts, for example, are amongst the most deadly disasters regarding the loss of lives (Live Science 2013), but because they often occur over long periods in far-away developing countries, most droughts get a fraction of the coverage that any hurricane receives in rich countries (Tzvetkova 2017). Meanwhile, public attention, media reach and emotion are essential in any successful Ushahidi deployment, since they require a high degree of buy-in among actors.

Other Tensions

The new APSs stand in contrast to both the bourgeois public sphere and Dean's neodemocracies; but the lines which separate them become more imprecise when looking at their means and norms.

The means mobilized by APSs is networked coordination, while the public sphere is only possible through procedures, and neodemocracies 'open up opportunities for (networked) conflict' (Dean 2003, 108).

Networked coordination works within the APS through the formation of temporary networks for action, triggered by the conflict or problem and glued together by solidarity and values, enacting a 'logic of aggregation' as they assemble individuals from diverse backgrounds (Juris 2012). While the deployment lasts, the deployers become digital humanitarians, a collective category that groups people of different backgrounds, ranks and nationalities.

However, the 'diversity of individualized actors' imposes stress on the sustainability of the effort (Juris 2012, 261). In fact, the need for an unremitting exertion inflicts a strain within the APSs of crisis mapping. Volunteer burnout is, for example, a problem in humanitarian emergencies, since they can last for months, demanding a sustained determination and long hours. It is not the individual that guarantees results but the network, which is resilient because their elements are disposable.

In that way, data activist organizations resemble the flexible networks described by della Porta and Diani (2006).

From the perspective of norms, the APSs are ruled by inclusivity and evanescence, equal access, transparency and credibility. This places them halfway between the public sphere, whose rules are inclusivity, equality, transparency and rationality, and the neodemocracies, governed by duration, hegemony, decisiveness and credibility (Dean 2003, 108).

Where the public sphere is regulated by 'inclusivity' in Habermasian terms, the neodemocracies value duration (Dean 2003, 109). But for APSs duration makes no sense, since they exist only while the conflict or problem persists. APSs get constantly activated and discontinued, and a conditioned 'inclusivity' is essential for generating the crowds, networks and communities that keep them alive.

Paradoxically, 'inclusion' in crisis mapping is delimited by the rules determining that actors must belong to one of the three communities necessary to launch a deployment. But for Bohman, 'any social exclusion undermines the existence of a public sphere' (2004, 134). To think about the inclusion of the APSs, this concept must be qualified.

The APSs are inclusive, but they establish boundaries for inclusion. Ushahidi deployments create spaces for equal participation with concrete rules: anybody can become a digital humanitarian, but they need to register, declare their abilities and potential contributions to the crisis, and then follow guidelines to produce as much verified, actionable information as quickly as possible. These guidelines are not imposed from external actors in a higher hierarchical position, though, but as a result of internal, horizontal processes of evaluation (Gutiérrez 2018a). For the duration of the deployment, the space is open to experts and non-experts, as long as they share the same objectives, can contribute time and comply with the rules. Then, it shuts down.

Volunteering experts are privileged people with access to technology; however, the APSs also include victims and vulnerable people. The only barrier to the victims' mediated participation is their access to ICTs, especially mobile phones, which in the past few years has been growing [e.g. in 2008, with a population of over 39 million people, Kenya had experienced a sharp growth in mobile technology penetration, with more than 16 million subscribers (Oteri, Kibet, and Ndung'u 2015)]. In the case of InfoAmazonia's 'Annual cycles of the indigenous peoples of the Rio Toque' project, participation is even more mediated.

Therefore, APSs are ruled by impermanence and qualified inclusion.

In the context of antagonism, 'neodemocratic politics are struggles for hegemony' (ibid. 110), and the public sphere is governed by the norm of equality. Meanwhile, the APSs are ruled by equal access.

In Ushahidi deployments, for instance, all actors can participate in the decision-making process: everyone has a parallel capacity of generating and accessing information.

However, equal access does not mean equality here. There are three primary power asymmetries that can be observed in crisis mapping. First, by verifying the information reported by witnesses, deployers turn into gatekeepers of what is public in an APS. Namely, they are placed in a higher echelon. Second, although victims can include deployers, being a deployer is not as dangerous as being a witness or a conventional humanitarian worker, and there is an abyss of difference between working on a disaster remotely and confronting the physical conditions of an emergency on the ground. Third, the reports that are published by the deployment can expose, and have exposed, the victims' and the human rights defenders' whereabouts, activities and networks, endangering them in situations of repression and violence (Hankey and Clunaigh 2013; Slater 2016).

Another rule of the public sphere is transparency. But according to Dean, nowadays power is not hidden, so transparency does not need to be a goal. Echoing the

concept of infoxication (Toffler 1984), Dean means here that, in the net, there is not a lack of information, but the opposite: an overload. 'Fully aware that there is always more information and that this availability is ultimately depoliticizing, neodemocratic politics prioritizes decisiveness' (ibid.).

But contrary to what Dean says, information is not always available, even when it is most needed such as in the case of disasters or emergencies. Snowden revelations in 2013 put an end to any illusions of transparency on the part of governments too (Castells 2015).

APSs seek transparency when information is hidden, not as a final goal, but as a tool for action. Ushahidi's first deployment was put in place precisely to break the news blockade by the Kenyan government and media.

However, too much transparency can render victims vulnerable to being targeted. The use of the data infrastructure enables digital humanitarianism, but it also produces new risks for both humanitarian workers and witnesses, since their reports can disclose their location, actions and networks to the dataveillance machinery (Hankey and Clunaigh 2013, 536; Stottlemire and Stottlemire 2012, 12). Namely, data and metadata produced in data activism can be harvested by people in power to control and locate activists and witnesses (Burns 2014). That is why Ushahidi deployments do not usually open their data.

Proactive data activism can also offer alternative narratives when the mainstream versions of reality are manipulated. An example is the 'counter-mapping' project set up by several communities in Indonesia in resistance to governmental initiatives to remap land and surrender it to companies (Radjawali and Pye 2015). Indigenous counter-mapping challenges the state power over maps, and its categorization of land uses (ibid., 4). This movement is currently testing 'grassroots UAVs' (Unmanned Aerial Vehicles) to generate data, and strengthen people's datasets and political actions (Meier 2015b). Again, the idea in data activism is not to produce transparency for transparency's sake or to create awareness, but is aimed at action.

Finally, issue networks are ruled by credibility over rationality; in contrast, rationality governs the public sphere (Dean 2003). The APSs look more like neodemocratic networks since credibility and trust are vital to sustaining the crowd and the activist effort (Gutiérrez 2018a).

The APSs are not ideal havens of cooperation and equality: power asymmetries exist within actors, and some glitches and oversights in real-life cases have created ‘dead Ushahidi maps.’ However, the rules of the APSs imply that they have to be guided by: conditioned inclusivity and temporality, within a set of procedures; equal access, so actors can communicate and act; transparency, so unconventional data-based narratives are produced; and credibility, so buy-in and adhesion on the part of the actors involved in tackling a crisis are generated.

Framing the New APSs

Based on the observations made earlier, this section justifies why the sphere of communication and action created by data activism are called here ‘alternative digital public spheres,’ and also provides a broader context for the rise of data activism in the big data society.

The APSs are ‘alternative’ because they engage alternative actors (i.e. non-experts, victims and vulnerable people) in producing counter-narratives, using technologies in unconventional ways (i.e. the data infrastructure employed critically), and sometimes altering power dynamics by reversing the monopoly of maps and the datafication process. Namely, they propose formats, actors and subjects outside the established norms.

They are ‘digital’ because they are enabled and constrained by the data infrastructure, that is, a digital infrastructure that allows the managing, sharing, storage and use of data. That is, they are digital because they are enabled by information, communication and data technologies.

The APSs conform to the rule of ‘publicness’ as a condition of the public sphere, defined by Bohman, although he talks about face-to-face interaction (2006, 134). In the APSs, there is little physical contact, but the ‘conversation’ is public not purely because it could be seen online by others but to the extent that it could be taken to address anyone, paraphrasing Bohman, (ibid.). That is, they are public because they are ‘the result of the social activities made by individuals sharing symbolic representations and common emotions in publicness’ (Mateus 2011, 275).

Data activism happens in the context of other social uses of the data infrastructure. It can be employed in two opposing ways: it can facilitate governmental and corporate intrusion, manipulation and control, but it can also be a powerful tool for interaction, activism and social change.

The unyielding datafication of all human activity has profound impacts. With big data and computational techniques, massive surveillance and manufacturing consent is easier: it has moved from the ‘magnifying glasses and baseball bats’ of the 20th century into ‘telescopes, microscopes and scalpels’ of the 21st century (Tufekci 2012, 6).

To be exact, employed as a scalpel, data infrastructure allows manipulators to engage people on an individual basis. Before data infrastructure, social scientists analyzed relevant samples of the universe they wanted to study and relied on surveys in which people said what they thought they did. With data infrastructure, social scientists now can examine what people do (Stephens-Davidowitz 2017). Data infrastructure enhances and quickens surveillance, makes it personal and renders it ubiquitous and surgical. Surveillance today involves ‘the ability to go beyond what is offered to the unaided senses and minds or what is voluntarily reported’ (Ball, Haggerty, and Lyon 2012, 26).

But the ICTs and, lately, data have transformed activism too. The rise of the data infrastructure and massive surveillance prompted ‘reactive data activism,’ which employs the data infrastructure to shelter online interactions and communities from massive surveillance (Milan and Gutiérrez 2015, 127). With reactive data

activism, the infrastructure that makes it possible has become more accessible to the average user, ‘rapidly evolving from a peripheral, elitist form of activism to a diffused one, whereby also non-skilled users take part in the game’ (ibid.).

Data infrastructure allows a zooming in and out of processes and places and can offer both the high-resolution landscape of a situation and a vision of the life of one single person at a given time (i.e. a request for help posted at ‘Ayuda Ecuador’). These capabilities are incorporated into the new APSs.

The realization of the APSs is not free of contradictions. Differing from that which reactive data activists usually do, proactive data activists often resort to capitalist technologies, whose values they do not seem to share. Some of these technologies are based on business models that require the low production costs that only semi-slave conditions and child labor afford (Amnesty International 2016, 29), and create environmental damage (Hogan and Roberts 2015). Proactive data activists typically turn to whatever tool is at hand – including Google Maps, mobile technology and other corporate inventions — to respond to a crisis (Gutiérrez 2018a). Other problematic issues include the power asymmetries and the failures that real cases of data activism accumulate.

Conclusions

The spaces for debate, consensus and networked action that are generated in proactive data activism can be theorized as public spheres, because they share some of their attributes: although proactive data activism’s final aim is action, it is articulated by actors who interact and organize following procedures framed by ‘inclusivity,’ equal access and transparency. However, they do not resemble the bourgeois public sphere entirely. I have called them ‘alternative digital public spheres’ or APSs for short. Table 2 summarizes their qualities, which emerge in comparison with the public sphere and the neodemocracies.

SITE: Local/global	Global interaction in the space of flows with local effects (local dimension also in on-the-ground action).
GOAL: Action	<ul style="list-style-type: none"> ➤ Consensus (which embeds an expectation of response) is a tool for action; ➤ crisis mapping’s aim is tackling emergencies and activist mapping’s is to enhance advocacy and empower communities.
VEHICLE: Crises and problems	<ul style="list-style-type: none"> ➤ APSs can bypass information blockades, generate alternative narratives and counter-maps, and revert datafication; ➤ emergencies can trigger crisis mapping and social problems, activist mapping; ➤ although not the vehicle, actors are important, citizens are placed at the forefront of production, marginalized people can get empowered and some roles are fundamental in crisis mapping.
MEANS: Networked coordination	<ul style="list-style-type: none"> ➤ APSs behave like decentralized network organizations, where roles are static (i.e. crisis mapping), while concrete individuals are expendable; ➤ a sustained effort over time strains the endeavor, but networks are resilient.
NORMS: Inclusivity, evanescence, equal access, transparency, credibility	<ul style="list-style-type: none"> ➤ Norms come from the network, not imposed in top-down processes; ➤ APSs emerge with an built-in obsolescence; ➤ they are ruled by conditioned inclusivity; ➤ their equal access (not equality) is framed by asymmetries (in the roles and rules, in the level of danger and because victims can be exposed); ➤ transparency is a tool (like consensus), which can generate disruptions, but too much transparency can be dangerous for victims/reporters; ➤ without credibility, data activist initiatives fail.

Table 2: The alternative digital public spheres. Elaboration by the author.

What follows is an explanation of Table 2. APSs generated by data activism have lost the nation as a reference because they are located both in the local and the global, taking advantage of the space of flows. The action coordinated globally in the APSs has local consequences. In crisis mapping, for instance, the local determines the conditions in which victims can report, and humanitarian workers can use the information on the ground.

Actors in the APSs seek consensus, but this accord embeds an expectation of a response and is used as an instrument for action. The two main varieties of geoactivism, crisis mapping and activist mapping, are targeted at action, although the former's aim is tackling emergencies (short-termed action,) and the latter is deployed to generate evidence for advocacy and empower communities (medium- and long-termed action). In APSs there is a difference between the local and the national. For example, disasters may affect vulnerable people in remote rural areas more than others living in cities of the same country. Also, catastrophes do not respect national frontiers.

APSs are formed around conflicts and problems they seek to address, and sometimes they bypass information blockades and generate alternative narratives and counter-discourses. They can allow ordinary people to generate their own data on their own terms, reversing the datafication process, which is typically the monopoly of governments and corporations. Emergencies can trigger crisis mapping, which is the geolocation of citizen data to assist humanitarian efforts, while activist mapping can be activated by social causes. Although not the vehicle, actors are essential in APSs: citizens are placed at the forefront of content production; disenfranchised people are at the decision-making table, which empowers them and enhances their agency; and some roles are fundamental in crisis mapping, for example.

APSs are managed by decentralized, networked coordination in which roles are static, while individuals are expendable. Although a sustained effort over time can impose strains on the actors supporting the APSs, it can be overcome by the resilience of the network.

The norms that rule APSs come from the network, that is, they are not imposed in top-down processes by external actors. APSs in data-activist initiatives are fluid and short-lived, embedding a built-in obsolescence because they arise in the face of finite emergencies and problems. Another rule governing APSs is conditioned inclusivity, which allows the participation of anyone, as long as he or she follows the guidelines, for example, to produce verified reports during crises. However, this equal access (not equality) embeds some asymmetries. In the case of crisis mapping, for example, deployers act as gatekeepers of verified reports, victims and humanitarian workers often face dangerous situations, and victims can be exposed by the APS. Transparency, another rule, is employed in the APS as a tool and can generate disruptions when it becomes evident that, for example, news media organizations are not doing their jobs. However, too much transparency can be dangerous for victims reporting data about their situations. Finally, credibility, needed to generate buy-in, ensures the success of the data-activist initiative.

But exactly as is the public sphere, the APSs are a construct. They are offered here as a heuristic concept for understanding how proactive data activism raises networked communities of individuals from a diverse background, sometimes based in remote locations, for coordinated action. APSs, in which actors work in perfect harmony towards results, are never to be found in real life, as actual-life implementations discussed in this paper demonstrate.

What real cases show is that, with enhanced data-based capabilities, activism can unleash processes of real communication conducive to action. APSs also provide another turn of the screw in the theoretical debate about the validity of the public sphere as a concept today.

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Biography

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Ambiguity, Ambivalence, and Activism: Data Organizing Inside the Institution

Leah Horgan and Paul Dourish

Introduction

Data are often framed as tools of organized, entrenched power. The etymology of the word “statistics” reveals its origins as an aspect of the operation of the state, and it has traditionally been states, bureaucracies, and large capitalist enterprises that accumulate and manage through data, and especially through digital information-processing technologies. Indeed, since the 1960s, the dominant models of organizational action have been information-processing models (Simon 1997). Data, then, have largely lived within these centers of power and indeed have been thought of largely as consolidating that power.

To some extent, though, recent shifts have challenged this status quo. While most data sets remain located exactly where they were—in centers that have the capacity to produce, analyze, and make use of data—technical developments, such as the burgeoning capacity for information processing in the hands of everyday users, and social developments, such as transparency initiatives and movements advocating for more public access to data and data literacy, have begun to put similar kinds of big data and data processing tools in the hands of individual citizens, grassroots organizations, activist groups, and others engaged in what we might broadly class as “data

activism.” This offers the potential for new forms of activism and a reconfiguration of power relations – the opportunity for forms of “sousveillance” to counter the “surveillance” at the heart of data-driven governance, for example.

We ask, what happens when these new opportunities must be enacted in the richer textures of practical organizations, and how do actors and activists resolve the tensions and frictions that shape the contexts of their action? In this paper, we examine the practical realities of everyday data activism in urban governance, with a particular focus on the ways in which people balance the activist ideals and institutional mechanisms of their daily work. In so doing, we seek to unpack notions of “activism” itself and identify within it multiple different moments, functions, and positions individuals may adopt for achieving activist goals and for opening up opportunities for others. Our argument draws on material from an ongoing research investigation into civic data work. For the last ten months, the first author has been conducting ethnographic fieldwork with an official urban data team. This team sits in the office of the mayor of one of the largest cities on the West coast of the United States. Our ongoing study looks at the practical, day-to-day work of the data team, including advocacy work (articulating and communicating the value of open data and extending data capabilities, both internally to departments and externally to the public), organizational work (including formulating, running, and publicizing specific data-driven initiatives, and developing and maintaining collaborative relationships with other parts of city government), and technical work (working with the city’s legacy systems, and cleaning, regularizing, publishing, and maintaining data sets). Through participant observation, it becomes apparent that many of the grand notions surrounding the revolutionary power of big data for both social justice aims, or for the reinvention of the bureaucracy, occur incrementally, collectively, and non-linearly, in the quotidian moments of data work. Here, the ambivalences and contested dynamics of fields of activist action become more prominent.

The data team itself comprises a range of diversely skilled individuals who evince (in casual conversations, presentations, and formal mission statements alike) a strong individual and collective concern with open government and the value of

data. They see open access to data as a site for accessible and equitable city services, enhanced quality of life for all citizens, and deeper forms of citizen engagement across the range of city government functions. Some members of the data team consider themselves data activists, or at the very least more on the “radical” side of the civil servant ethos, as stated by the chief data officer in conversation with a social media platform research team in the planning of a forthcoming partnership. The actors leverage a variety of resources—such as county and state, or private, sources of data, as in the case of this collaboration—to achieve these “open” aims even as they work inside city government and within its practical limits.

Drawing on Meyerson and Scully’s notion of “tempered radicals” (Meyerson and Scully 1995), we consider how the staff of municipal data offices, and other informal data workers, enact their own “more radical” agendas and forms of data activism while negotiating the complex dynamics and organizational structures of city governments. This formulation encourages us to adopt a more nuanced approach to questions of power, activism, and resistance, one that focuses on the variety of configurations of “insider” and “outsider” perspectives, the complexities of meshing politics and practical action, the diversity of positions within the landscape of resistance, and the ongoing daily encounter with the ambiguities of positionality. Our ethnographic work, then, provides a starting-point for a broader reconsideration of how politics and activism are enacted in practice.

Data Activism, Organizing, and Ambivalence

Exploring the political consequences of the contemporary spread of data-driven analytics, Milan and van der Velden (2016) describe data activism efforts as supporting “the emergence of novel epistemic cultures within the realm of civil society, making sense of data as a way of knowing the world and turning it into a point of intervention and generation of data countercultures.” They suggest that data activism might even incite new populations of tech activists, stating:

because datafication is such a prominent feature in public life, data activism, as a mode of dealing with it, might progressively appeal to more diverse communities of concerned citizens, beyond the expert niche of previous incarnations of tech activist engagement (Milan and van der Velden 2016, 4).

Milan and van der Velden describe the opportunity for activists to appropriate the technical tools of data analytics typically associated with sites of corporate power and municipal governance, and the opportunities that those tools provide both for holding such entities to account and for offering alternative accounts of matters of concern. Central to the authors’ concern is a notion of resistance, counter-hegemony, or alterity – that is, the idea that the core of any activist position is its opposition to mainstream thought or to traditional power.

However, as writers such as Turner (2006, 2013), amongst others, have noted, stark dividing lines and oppositional stances are not always so clear. Particularly in the domain of digital technology and its development, a complex interplay can be seen between mainstream culture and counter-culture “resistance.” This interplay results in complicated, hybrid contexts, such as former Merry Prankster Stewart Brand operating the camera for Douglas Englebart’s famous demonstration of his military-funded NLS project. Turner traces a complex lineage, reaching back to American anti-fascist movements, in which the distinctions between “conventional” and “counter-cultural” positions are not always easy to discern.

Noting that “politics always takes place in a field criss-crossed by antagonisms,” Chantal Mouffe (2013) has advanced a political philosophy focused on disagreements, local tensions, and radical plurality. Perhaps most important for us here is the intricate texture of the forms of agonistic political relations that she explores, in which, again, no global orientations are easily sustainable in the face of a multi-dimensional and multi-faceted series of local tensions and distinctions of position. In light of Mouffe’s thinking, any activism must always be read locally, as a relational matter, and as a matter of degree, allowing again for a complex internal polyvocality. Sometimes, this polyvocality reflects intersectional concerns and the

work involved in engaging in, and maintaining positions of, strategic essentialism in order to achieve particular political ends. Sometimes it speaks purely to the pragmatics of effecting action.

In a recent episode of the Politically Reactive podcast series (Bell and Kondabolu 2017), guest Patrisse Kahn-Cullors—one of the founders of the Black Lives Matter movement, and a decorated social organizer—spoke briefly on her role as an organizer. When one of the hosts queried why she identifies as an *organizer* instead of an *activist*, Kahn-Cullors answered that she works to make distinctions between the various critical roles in resistance movements, namely the activist and the organizer. The activist, to paraphrase, is the one who goes out and *does* the action, one such example being attending a protest. Conversely, the organizer lays the groundwork for there to be a protest in the first place, through planning, organizing, and networking. Kahn-Cullors states, that for her, activists are “super important” as “they sign the petition, they show up to the rally, they show up to the board meeting. But the organizer is the one who develops the petition, they are the ones who get the rally together, the ones that bring communities together so that activists can show up.” Both roles are critical in order for social change to take place.

Within the revolutionary rhetoric of the digital, these pragmatic considerations and organizing efforts often go unrecognized. Tufekci (2017) draws attention to this oversight when discussing the role of digital technologies in supporting and organizing protest movements in sites such as Istanbul’s Gezi Park and Cairo’s Tahrir Square. While celebrating the power of social media to mobilize and connect large numbers of people in the absence of prior large-scale social infrastructure, she cautions that traditional protest movements build infrastructure slowly as they grow, and so are more likely, when decisive moments come, to already have in place the support structures necessary to, say, provide food, clothing, material assistance, and medical care to protesters. In enabling mass assembly without passing through the phase of building a community, movements grounded in social media risk focusing on the “activism” component of Kahn-Cullors’ construction without proper attention to the “organizer” role.

Building on these analyses, we want to take a further step, moving from the organizational requirements of activism towards a consideration of the potential configurations of activism in organizations more broadly. We see “activism” here as a complex set of practices and acts of positionality, encompassing many different kinds of work. Importantly, we aim to underscore a need to look at activism and social change at the scale of the micro negotiations of the everyday, while understanding their affects are neither discrete nor direct. Our field site is one where the data team members find themselves navigating and leveraging the uncertainty in large formal institutional structures undergoing change, working to effect social change, but charged too with the need to acknowledge limits and conditions upon that change. The questions that this paper attempts to open up is just how radicalism is “tempered,” in Meyerson and Scully’s (1995) terms, and how that shapes encounters with new understandings of data, particularly in terms of what new forms of data and data technologies can mean for social justice and urban governance.

The budding forms of data collection and expression that we see in the data team (making data open, automated, and interoperable), provide new ways of knowing, or new knowledge, and along with them alternative methods for challenging hegemonies. We approach activism in this domain as a collective process. In reflecting on our own experiences at the study field site, we ask: how might those with more radical aims incorporate activist modes and ideals into the everyday operations of a large urban bureaucracy? What does it mean to do so at a politically volatile time? We focus on data activism as it is expressed in *organizing* roles, embodied by the ambivalent data activist. Here, we consider the productive ambivalence in everyday data work for understanding how uncertainty is leveraged to push activist ideals in a bureaucratic setting. The characteristics of this setting, along with the motivations of the individuals who inhabit it, allow for expressions of activist ideals and of “making sense of data as a way of knowing the world and turning it into a point of intervention” (Milan and van der Velden 2016, 1).

Possibilities in Being Data-driven

The broader domain of this inquiry is the increasing turn to data-driven approaches in urban governance. Promising greater transparency, quality of life, and civic participation, these data-driven approaches avow to more effectively and efficiently address complex social problems. While information objects have long been a key resource in the creation of systems, products, and policies that shape the world in which we live, this current movement—what many term a “data revolution”—marks the advent of a new and forceful *volume*, *variety*, and *velocity* of data (Kitchin 2014). Derived from sources such as citywide sensor systems and more pervasive online tracking through a myriad of personal devices, these new data assets engender new forms of data curation and processing, along with a greater anticipation of new *possibilities*.

Milan and van der Velden characterize the big data movement writ large as evoking “a broad set of socio-technical phenomena enveloped in quasi-mythological narratives that univocally emphasize possibility and magnitude” (Milan and van der Velden 2016, 2). The “datification” of everything, from sleep habits to stock-broking to municipal sanitation services, emphasizes in particular the possibilities of better, faster, and more accurate decision making; these “better decisions” become the foundation for a more effective problem solving. This is owed in part to the seeming objectivity and representativeness located in big data’s near constant accumulation and administering, as compared to earlier forms of quantification. This data-as-truth account is leveraged by data activists and the civic realm (citizens, civic technologists, and city staff) alike; each hope for data to more objectively expose entrenched injustices and enable equitable futures.

The movement is not without its critics. Many are quick to point out that these new forms of data-driven decision-making may—much like extant forms of social rationalization—end up reinforcing both existing inequities and hegemonic interests (Kitchin 2014). There are certainly concerns that these novel tools will make and remake unjust futures and do so with greater potency. But while many have viewed the burgeoning enthusiasm around the possibilities of big data with

skepticism, there exists a greater lot of researchers, corporations, technologists, and other technology users and data workers who encourage and normalize the potentiality of big data. Such stakeholders have lent a legitimacy to this burgeoning movement, as exhibited by the increasing number of formal data positions and identities (such as the data scientist, the data janitor, the chief data officer, the data journalist, official city data teams, and so on); in fact, a current project of this urban data team is to expand the formal position titles and training tracks within the bureaucracy to “modernize the workforce,” encompassing more of such roles and skills.

Context: Everyday Data Work

The data workers in our study sit in the mayor’s office in one of the largest cities in the United States, with a population of well over one million and a city government that employs about 40,000 people. Established in 2013—when many cities around the world were beginning to “open” data—this team is responsible for managing data assets and related technologies within and beyond city hall, for making data visualizations and data dashboarding tools available to departments and citizens, and, most expressly, for motivating the city to be open and interoperable with their data practices for the making of data-driven decisions. This latter charge involves encouraging different departments, initiatives, and teams to work across otherwise siloed operations in order to utilize each other’s data, as well as other sources of public (county) and private data (via data warehousing services and tech companies). The aim here is to optimize data operations and engender a level of transparency whereby departments and citizens alike know how (and what) the city is performing.

The team itself is comprised of a small but diversely skilled set of data enthusiasts who collect, clean, analyze, visualize, package, and promote data assets, techniques, and tools; much of this work occurs behind the face of a given initiative (e.g. recently the team cleaned, visualized, and trained a group of city staffers working on domestic violence awareness and prevention). The professional and educational

backgrounds of these individuals run the gamut, spanning from software engineering and business analytics, to public policy and communications; together these skillsets forge the necessary work of accumulating, organizing, and communicating the city's data. Whether it is a focus on equity, transparency, or environmental sustainability, each team member is invested in data-driven governance as a means to enhance the quality of life for city staff and the citizens they work for, to make the city more "livable" for all.

The data with which they work are generated from a range of government functions, including city services (e.g. tracking speed and distribution of graffiti cleanup or waste management), urban planning (e.g. measuring traffic, tracking affordable housing stock or the quality of paved lane-miles and sidewalks), and economic development (e.g. understanding local business needs, or the landscape of employment opportunities in the growing tech industry). In the best cases, this means that data from numeric tables in static spreadsheets will be moved to a system (via sensing or scraping) that automatically collects and updates standardized data recurrently, whereby the data sources have defined "owners" and all necessary metadata, and in some cases universal IDs (categories that work across all operations in the city).

Opening and activating new streams of data, then—especially all-encompassing, continuously accumulating data—requires a lot of organizing. Organizing toward transparency can be a challenge in a bureaucratic institution for a variety of reasons, not least of which is the fact that making governing processes transparent creates new accountabilities that departments may not yet have the bandwidth to address. While there was indeed an executive mandate to open data and become both more open and more data driven, there is little direction on how this should work in practice, or how to define success. Thus, there is much uncertainty surrounding the open data movement at the sites of actual instantiation, especially with regard to authority, accountability, and even the very definition of data work.

Uncertainty, Bureaucracy, and a Tempered Approach

A bureaucratic setting may not be the first that comes to mind when looking for examples of data (or any form of) activism or radical thinking. However, through leveraging contingency and ambiguity in day-to-day workflows, and by embodying the position of the "tempered radical" within those areas whereby a given bureaucratic staff member maintains both an authentic activist self as well as a professional position self, opportunities to exercise activist aims arise.

In *The Bureaucratic Phenomenon*, Michael Crozier (1964) outlines a theory of power and uncertainty, particularly the important role of the latter in enabling agency as well as stabilizing conflict (if one is to bend rules or exploit uncertainty, it is important that organizational homeostasis remains a possibility). Crozier offers a broad study of a French monopoly where automation is not able to fully rationalize work or action, and he characterizes the ways in which there remain undefinable, human-dependent actions within an organizational system. These un-rationalized moments create a wellspring of wiggle room against authority.

Crozier finds that "even those with the least amount of status in an organization" will push "to the extreme their initial advantage—their control over the last source of uncertainty remaining in a completely routinized organizational system" (Crozier 1964, 154). The reason uncertainty becomes important is because it removes predictability. Where behavior is determined, it will be obvious and anticipated. With full rationalization, there would be little need for interpersonal negotiation, leaving no room for bargaining or ingratiation, no room to expand or push upon the boundaries of roles or duties. Crozier argues that in a completely determined and predictable bureaucracy, power relationships could not develop because staff would exist in a context where no one person's actions would have any potential to impact the behavior of another's.

In being a sanctioned office of the mayor, this data team certainly owns some leverage for making data demands of other departments. However, there are many ideological and infrastructural constraints to fostering engagement and transparency through open data. Due in part to this being both a newer office, concept,

and indeed a new organizational function, there is considerable uncertainty as to what these data projects produce, or how they should be structured. The data team attempts to take advantage of this lack of determinacy in defining their roles in relation to data as a means of procuring it from less than willing departments, (those who, perhaps, do not see the value in increasing their workload to clean and “open” their data, or do not have the capacity to do so, nor the capacity to address what the data might reveal). However, these departmental operations are already rather opaque, and departments are likewise able to contest or expand upon the areas of uncertainty in turn, offering up reasons of bandwidth, capability, political, or infrastructural complications that prevent them from submitting to the data team’s requests. While many leverage this uncertainty against open data advocacy (in the very form of resistance against authority Crozier hints at), ambiguity can be operationalized in favor of activist-leaning goals with the new tools of big data.

Although full rationalization and prediction is often the goal of big data, it is still a novel and unfolding practice, especially in these civic spaces, and the data team can and does define the meaning and structure of this data work, iteratively and collectively, in a variety of creative manners, to expand their own domain of authority. This may translate into a series of more informal programs, meetings, and trainings to build mutual understanding in micro-moments and discussions over time, or it may mean sacrificing the visibility of their own work in order to build bridges and partnerships on matters that they care about. It may also mean leveraging external networks such as the neighborhood, academic, and civic tech communities—in the form of events, public talks, trainings, or dedicated projects. In leveraging others’ time, motivation, and expertise, the team is able to push projects forward that may otherwise raise hackles inside the bureaucracy, or simply become stalled due to lack of proper economic or personnel capacity.

In contrast, the overarching structure of bureaucratic rules and hierarchy create just enough unity to avoid conflict; organizations are buttressed by the fact that employees need to coexist, which often includes a mutual dependency, and a mutual desire for efficiency, ease, or efficacy in getting the work done. In the context of urban governance, the mayor’s influence, in tandem with an overall desire for

recognition, may become a structuring order, but as each department holds domain over their given expertise, or in this example, their own information and data, departments and individuals within them can exploit the unpredictable variables of their territory to strike a balance.

Crozier also shows the tendency, with the advent of new technologies, to move toward “technical controls instead of human leadership.” This desire to displace the human is rhetorically framed as a move away from the “affective” and mistake-ridden to the “rational” action of machines, and such a logic can be found again in the big data or the data-driven governance paradigm. In this movement, there is perhaps an aim to rationalize even more invasively, and more rapidly. This is in some ways the entire premise of data-driven governance: a move not only to rationalize but also to automate (and predict) decision-making so that action is based on information unsullied by human affect. How can these same rationalizing techniques instead be leveraged for a more positive and inclusive form of social change?

Exploiting Uncertainty: Data Activism as Tempered Radicalism

Milan and van der Velden (2016, 7) note that “[m]any contentious actions in data activism are performed at the individual level: think, for example, of engaging in programming or inserting data into a spreadsheet.” Bureaucratic employees similarly—especially in zones of uncertainty—have the agency to exploit ambiguity in their discrete, daily work practices and “perform activism at the individual level” even in the rote aspects of data work. The concept of the “tempered radical” becomes important here, which is a theoretical and feminist position of productive ambivalence (Meyerson and Scully 1995).

Tempered radicals are individuals, often located in a professional organization, “who identify with and are committed to their organizations, and are also committed to a cause, community, or ideology that is fundamentally different from, and possibly at odds with the dominant culture of their organization” (Meyerson and Scully 1995, 585). Frequently, these are people whose work focuses on aspects of

organizational change or evolution. While this mode of boundary-pushing and change is situated in the domain of organization science, their concept is in conversation with both feminist and activist inquiry. Here the authors seek to expand the frame of “being radical” most commonly featured in literature, and move toward a “collaborative division of labor among activists” which will help to buffer against what they term “the counterproductive tendency [...] to judge who is being the best and most true advocate for change.”

Adhering to radical ideals, while working professionally in a bureaucracy of slow and opaque data practices, is one such example. Importantly, the tempered radical is a position of purposeful ambivalence, and it is a challenging role to occupy as it requires holding multiple intensities. The authors of the concept state that:

individuals can remain ambivalent and quite clear about their attachments and identities. In contrast to compromise, ambivalence involves pure expression of both sides of a dualism; compromise seeks a middle ground which may lose the flavor of both sides (Meyerson and Scully 1995, 588).

Far from the typically negative connotations of the word ambivalence, Meyerson and Scully show both the challenges and the constructive nature of maintaining a dualism. Simply by existing in an organization while not fitting into the organization’s overarching, hegemonic structures gives rise to owning ambivalence; this certainly holds true for the data activist enlisted in bureaucratic processes, but may also characterize anyone working through or with data who maintains skepticism about its promises. Alongside the ambivalence exists a complimentary embracing of uncertainty, or an embracing of the inability to completely control. While this may fly in the face of what using data-driven practices hope to achieve, the pragmatic response to precariousness can be used productively in the spaces of big data administering.

Strategies of the Tempered Radical

Meyerson and Scully describe four important strategies of effecting, affecting, and surviving via the role of tempered radical. The first strategy employs Karl Weick’s concept of *small wins* whereby the tempered radical can undertake smaller or trial projects to encourage larger moments of change, and test or expand existing and entrenched cultural boundaries (Weick 1984). Local boundary-pushing schemes can build, creating future opportunities and ultimately turning into larger projects over time. As does the human body in reaction to something perceived as invasive, so too does the organization when faced with dangerously different and potentially destabilizing ideas. A *small wins* approach helps to avoid any such reaction while still effecting real change.

The second strategy may seem reductive, but it is that of essentially being true to oneself, or what the authors call *authentic action*. Specifically, they refer to being oneself continuously and spontaneously. Being true to oneself when one does not neatly fit into predetermined parameters of organizational culture creates opportunities, through exposure, for new ways of doing things by providing examples of alternative modes. The third strategy is that of *language styles*, or speaking or being fluent in multiple languages (i.e. the languages of each facet of the ambivalent self, or the language of each space the tempered radical inhabits). The important work of this language strategy involves communicating a collage of these languages (i.e. knitting the radical or activist language together with that of the urban bureaucrat so as to be legible to both domains) instead of employing only one language across domains, or only the local language. Strategically leveraging language styles allows for discourse deconstruction, where the tempered radical can dismantle hegemonic ideas and assumptions in either domain to “make room for alternative conceptions of organizing and management” (Meyerson and Scully 1995, 597). Lastly, owing to the cumbersome nature of juggling these dualities, a final and important tempered radical approach involves actively garnering support. The authors cite an *affiliations* strategy—particularly maintaining affiliations outside of the organization for emotional, ideological, and informational support—as a means to express rather than suppress emotions and ideas, and avoid burnout.

With this in mind, then, we explore productive ambivalence in everyday data work to understand how uncertainty is leveraged to push activist ideals in a bureaucratic setting. We ask: how might civil servants leverage zones of uncertainty in daily data work to push personal or “radical” agendas using these strategies? How do orientations towards “data” in particular allow them to present a view on new organizational opportunities within “legacy” organizational frameworks? Our ethnographic work begins to provide us with a view of how these concerns figure in the work of the data team.

Civic Data Organizing

The constellation of the aforementioned big data enthusiasms—alongside streams of private sector support, civic-minded investment, and a growing political interest in the administrating potentiality of big data—has engendered formal data teams in urban governance across the globe. On taking office, the mayor of the city of our study sought to lead the way for these global smart cities to certify that the city uses data to solve problems and promote innovation, as stated in the open data mandate. The city thus institutionalized data work in an official mayoral data team (a common configuration for these official data teams), which has been the site of our inquiry.

Despite the data team’s institutionalization, the onus is on the scrappy data team to define what data-driven governance looks like by encouraging personnel in the more than forty departments to switch over from legacy systems and make their work “transparent.” Many share the excitement of potential and possibility through data, but enthusiasm is dampened by tensions surrounding the previously opaque becoming open to scrutiny; once a performance issue is identified, it must be addressed lest it be subject to media attention or citizens’ demands. What “tempered radical” strategies might be enacted by the data team staff members to encourage this leap of faith into data-driven governance? How can they provide public access to the city’s data assets and the more activist ideals of civic participation, justice, and equity?

Small Wins

As Crozier explains, being in a position where one does not have full authority to direct occupational efforts engenders a situation where “each group fights to preserve and enlarge the area upon which it has some discretion” (Crozier 1964, 156). This is certainly true of the tempered radical caught in the crossfire of opposing definitions of data work and civic responsibility. Where the data team makes attempts to define and fortify their open data program throughout the city, other departments are likewise doing the same (i.e. holding onto their old and opaque ways, or even coopting and claiming new forms of data work as their dominion). Nevertheless, the streamlining and opening of city data is precisely the type of organizing work that will allow for other forms of data activism to take place: data resources can be used to advocate for various community needs where, for instance, one is able to see the landscape and distribution of city services. Of course, revealing that one neighborhood is not receiving timely sanitation or security services, for instance, is the sort of visibility that some city departments may be keen to avoid.

Meyerson and Scully (1995) show how the tempered radical strategy of obtaining *small wins* (instead of, say, a top-down overhaul of civic data work) can be used as trials to “test the boundaries of an organization’s capacity for change.” The city data team members employ such incremental moves to “test the boundaries” of a given department’s ability and willingness to partner in the open data paradigm. A recent instance of this boundary-testing at our field site involved the need to release (via a mandate and pressure from citizen and media data requests), and the desire to automate (so as to avoid manually uploading data every month), the city’s safety data. One data staff member in particular, whom we refer to here as “Dina” (a pseudonym), dedicated herself to procuring this data so as to allow it to, in her words, “speak” about crime patterns across the city with the hope of fostering both discourse and action. Dina met with the data-owners—the city’s police department data team—in person in a series of more casual office visits, coffees, and lunches to explain aims and intentions, and to learn what she could do to facilitate the process. She offered up extra time to jump-start the project with hands-on

training, and encouraged regular problem-solving check-ins throughout (a process which later became institutionalized across the city).

The experimental nature of small wins helps to “uncover resources, information, allies, sources of resistance, and additional opportunities for change” (Meyerson and Scully 1995, 595). Rather than insisting the data be fully and immediately released per the top-down mandate, Dina labored continuously to ease concerns, educate, and enhance overall capacities, eradicating at first the infrastructural barriers and later the ideological ones. In the course of these nudging efforts, she also came to learn that prior resistance was enacted for a constellation of less-obvious reasons, namely, legitimate concerns surrounding citizen privacy, technical and personnel bandwidth, and the complicated nature in which data are gathered and stored in the field. This process, then, garnered unlikely allies within the police department itself, data workers who align with her ideals despite the appearance of opposition; these new allies in turn are able to leverage their domain expertise to create space for opening data within broader systems of actual departmental resistance.

Weick suggests that “small wins reduce large problems to a manageable size. Big, unwieldy problems produce anxiety, which limits people's capacities to think and act creatively” (Meyerson and Scully 1995, 595). Through persistent, smaller projects of familiarization, narrativization, accommodation, and automation, Dina was able to secure the release of the contentious data (contentious as the data points to marginalized neighborhoods with fixed or increasing crime while other neighborhoods are experiencing a decline), paving the way for other highly-desired but potentially problematic datasets to follow suit. This day-to-day organizing work is certainly not part of the city's open mandate, nor is it the way many other data workers have interpreted what it means to be data-driven; this labor often is invisible and goes unrewarded. However, small wins such as these are a crucial foundation for other efforts of data journalism, data activism, and even internal advocacy, that aims to use the city's data for political action. For example, owing in particular to the scale and granularity of new forms of data, advocates can discern whether the city is indeed becoming safer for all.

Authentic Action and Language Styles

Dina achieved a cultural shift by “acting in a way that was simply authentic” (Meyerson and Scully 1995, 596). Her earnest interest, in both the release of safety data and in being supportive to those who owned the data, demonstrated an alternative interpretation of the mayor's open data directive (collective vs. authoritative), and city work writ large which tends to be guarded and competitive. Rolled into the small wins strategy are two other tempered radical approaches: *authentic action* and *language styles*. In the conversations regarding safety data, Dina was able to leverage the language of the mandate to open data, and also define the data work as a service and as mutually useful, by couching it in both bureaucratic and progressive frameworks. Her authenticity was perceived and appreciated by others, and even allowed her to forge new partnerships for the open data efforts to come.

However, Dina later stated that she wishes that all of these laborious negotiations (e.g. constant follow-ups, couching transparency in terms of automated workflow efficiency, or framing what the data reveals in a more palatable light) were not necessary; she wishes the data could instead “speak for itself.” This individual considers herself a data activist. She works in the data team less than full time so as to perform other forms of data work in her spare time to achieve activist pursuits. When engaging with the various audiences, she is able to stitch together bureaucratic languages with the vernacular of activists, data scientists, and tech evangelists. She finds that holding these multiple identities and maintaining ambivalence is useful, that “there's value being both an insider and an outsider.”

Currently, she believes that a lot of the more legible data activism is occurring outside of official offices, but she finds the organizing work done within the data team to be very important for achieving activist ends. When asked what work, if any, is done to ensure external data activists are able to leverage the work done inside city hall, she stated:

“You don't have to do that much, all you need to do is to put the data out there. Like a lot of people say it [the work that needs to be done to

promote social change] is not just open data, like you can't just do that on its own, but what I'm finding is that you can, as long as you have a data dictionary and that there's enough data where it's interesting, people immediately do something with it."

Multiple Languages and External Affiliations

Meyerson and Scully discuss the importance of external affiliations for tempered radicals (with "people who represent both sides of their identity"), not only to strategize and accumulate useful information, but also for maintaining the ability to remain "fluent in multiple languages." In another recent instance, the data team's membership fluency allowed them to take special advantage of an event in the informal civic data-hacking sphere to affect change inside the institution. The advent of new information-processing tools, and broader data literacy in everyday users, has engendered new data cultures such as those located in the volunteer-based civic tech community. Civic data hacking, one such example, "can be framed as a form of data activism and advocacy: requesting, digesting, contributing to, modeling, and contesting data" (Shrock 2016, 4). Many cities utilize such civic tech groups and efforts to enhance the function of their city, or to address social concerns and injustices more directly. In fact, once off the clock, the city employees themselves may also participate in such endeavors to build bridges or exercise their own interests.

One such informal civic data group recently organized around a controversial topic—that of racial discrimination in police procedures—using the "Veil of Darkness" hypothesis. The Veil of Darkness hypothesis "asserts that police are less likely to know the race of a motorist before making a [traffic violation] stop after dark than they are during daylight" (Grogger 2006, 878). Thus, if there is indeed a pattern of racial discrimination, the pattern of traffic stops will differ during the daytime from those conducted at night, where the race of the driver is (supposedly) less readily visible. On the event's online description, however, the organizer remarked that this more contentious open dataset was recently made inaccessible

(password-protected), and those attending the event would now need to collect the data from the organizer who had already downloaded it. This otherwise unexceptional caveat within the event description quickly traveled to city hall.

Employing "multiple languages" (activist language surrounding concerns about racial profiling, together with the language of data science and inclusive of bureaucratic undertones), the team was able "to speak to multiple constituencies" (Meyerson and Scully 1995, 590) about this issue, and leverage the novelty of the situation for their benefit. In the context of this city's open data efforts, all departments retain control of the datasets they share. That the local civic tech community (and, thus, citizens) noticed and publicized the locking of a particular department's data became cause for general concern, but there was much uncertainty with regard to what the occasion meant or how it should be dealt with. The data team converted this event into a lever for imploring transparency objectives. They leveraged uncertainty here by highlighting this open data breach to remind stakeholders that these assets (and especially their withdrawal) have the capacity to garner positive or negative citizen and media attention. Thus, the event became an opportunity to apply pressure on appropriate parties to (re)release data, not only in the vein of the open data mandate, but as a means to serve their constituents' needs and interests. In this sense, the data team was able to use the more familiar language of civil service to encourage the opening of data.

Leveraging external networks like the civic tech community as such exemplifies the *affiliations* strategy, where those holding dual modes garner the necessary support (emotional, professional, and otherwise) from like-minded peers to buttress against "difficult emotions" and the possibility of burnout (Meyerson and Scully 1995). Members of the data team connect with formal and informal networks that seek to use data for social good to extend their bandwidth, but also to attain support within and outside of the walls of city hall. In a recent interview, Dina reflected on leveraging such a network: civic volunteers (often data scientists or technologists) in the city. She remarked that there appeared to be a boost in interest from citizens (especially those in the civic tech domain), stating that there are: "just a lot of people looking to help the city" via socially-minded data projects. She

credited the increased interest to the current political climate; many see this liberal sanctuary city as “a pocket of hope in the nation.”

Local concerns, then, play out against a broader backdrop. The current US presidential administration’s value system is markedly different to predecessors, with differing data policies and demands, notably with regard to immigration and citizenship. The support and enthusiasm shown by citizens and other city data teams helps the team remember why their values are important, providing emotional, technical, and ideological support to buffer against the fatigue incurred from the lack of internal support or recognition, especially at a time of nation-wide consternation.

Tempered Data Organizers

Organizing in the era of big data—and especially big and *open* data—allows new forms of activism to be layered on top of such efforts. There is a copious amount of work that goes into standardizing and contextualizing data (with meta data, data dictionaries, attributed ownership available for questioning datasets, and so on), as there is with “making it interesting.” Members of the data team believe that this work of making data relevant is their most challenging charge, as it involves procuring vast amounts of interoperable data across city functions and over years before anyone will be able to derive useful meanings from these data resources. In desiring the data to “speak for itself,” the data team is referring to its opposite: the invisible and tedious labor entailed in training, standardization, and meaning-making with data. Tempering data projects with useful interpretations, quality control, and capacity building, allows the data to travel with more ease, making it more accessible and less likely to engender resistance.

Milan and van der Velden discuss how data activism is “polyfunctional” because “it can be read through diverse disciplinary lenses, and can be domesticated to investigate different dynamics and relations, between and within people, information, technology, and the state/industry complex.” Allowing the data to speak for itself does not mean that the data team believes data are wholly objective. Instead, they

believe the data are tools to reveal patterns which might help various city workers, civic technologists, non-profits, and data activists speak to matters of concern which might not otherwise be legible.

Although exhausting, organizing from the inside allows for invaluable insight into how and why decisions are made; this has the effect of productively humanizing the opposition, allowing space to introduce activist ideals that may indeed only be impeded by structural ones. By leveraging insider knowledge and strategically pushing zones of uncertainty to engender change, along with being their authentic selves, using variegated language styles, and leveraging external networks, tempered data activists can normalize the exposure and scrutiny involved in releasing massive streams of data to the public, push their own social justice ideals into every day open data work, and allow others outside of centers of power to advocate using these resources.

Conclusion

Open data initiatives in urban governance have been advocated by many in and outside of city government. Values embedded in these programs attract those with more radical ideals about transparency, technology, and civic participation into bureaucracies. However, there are practical realities, and even contradictions, in carrying out such an agenda in the vein of more traditional forms of civic work. We have turned to Crozier’s discussion of the productive uses of uncertainty, and to Meyerson and Scully’s concept of tempered radicalism, to find conceptual resources to account for the practical work of a municipal government data team involved not just in making data work for the city and its citizens, but also charged with figuring out what that might even mean.

Of course, it is easy, particularly for those more actively and visibly radical, to criticize a tempered approach for not going far enough, for not doing all that is possible with data assets, or to accuse those within positions of power of not advocating social change. The authors of the tempered radical concept also take up these concerns, explaining that while judgements of conservatism and hypocrisy abound,

the ambivalent position of the tempered radical can play a role in a larger movement outside of themselves and outside of their organizations. They conclude that “the labor of resistance may be divided among those who push for change from the inside, from the outside, and from the margin, each effort being essential to the others and to an overall movement of change” (Meyerson and Scully 1995, 598). Perhaps the world of the tempered data activist in a bureaucratic context can only go so far as that of the data organizer, working tirelessly to systematize institutional data practices to make as much data as accessible as possible, and to normalize ideas of data transparency (whatever that may mean). This role or duty aims to produce a framework and resources for others who own more radical or visibly activist positions, or more fully dedicate their time to activist causes (such as organizations that explicitly work to do so, or data and civic technologists who have more resources at hand in conjunction with less entrenched hierarchies to answer to). Thus, in the broader context of the work that data (and non-data) activists must perform, the work of a tempered radical in this domain, or an activist-as-organizer, is only one, though important, node in the larger data activism assemblage.

The tempered data activist will face additional skepticism—coming from outside the big data movement—as to how well data capture any meaningful truths or experiences of urban citizens, particularly the experiences of those most in need of services and social change. As we noted at the outset, big data itself can only go so far, and it is important to consider what conversations spoken through the language of data might restrict or preclude. In considering tempered radicalism, Meyerson and Scully deliberate on the role of language and its tendency to circumscribe. The authors reveal in one interview that “the power of language was located not in the ability to communicate technically, but rather in its capacity to rule out other forms of talk, thought, and identity.” What possibilities do the current expressions of data assets, technology, and the still unfolding practices of data activism rule out?

Tempered radicals have the advantage of being “outsiders within,” and although this position entails a lot of unaccounted for and uncredited labor, of both a technical and emotional nature, they are also positions of power (fringe identities operating in more traditional power structures are less predictable, and as Crozier

shows, there is power in unpredictability). Although she speaks to a more challenging and entrenched position on the margin, bell hooks holds that ambivalent identities offer “the possibility of a radical perspective from which to see and create, to imagine alternative new worlds” (Meyerson and Scully 1995, 589; hooks 1984). The very nature of holding such an identity allows for a vantage point not afforded those well within the margins, though maintaining this ambivalent post certainly has its challenges. What practices—located in everyday negotiations—might foster appreciation and collaboration in and outside of the margin? How can we encourage and better appreciate those embodying these exhausting roles to stick with the discomfort of ambivalence? Given the uncertainty surrounding the possibilities of new data technologies and their application, and their emphasis on vastness and speed, it is crucial to examine the more micro moments of potential as a means to indeed “imagine alternative new worlds,” and to do so incrementally, and collectively.

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Biographies

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The Future of the New
An interview with Boris Groys
Thijs Lijster

Introduction

‘New!’ ‘Improved recipe!’ ‘Now better than ever!’ This much is clear: if you want to sell something, you have to emphasize its novelty. The driving force of history is innovation, constant progress and improvement. That is at least what we are made to believe; the dominant ideology of our times. This ideology was once most forcefully voiced and promoted by nineteenth-century artists and art theorists. *Make it new!* said Ezra Pound. *Il faut être absolument moderne*, said Arthur Rimbaud. ‘And plunge to depths of Heaven or Hell, / To fathom the Unknown and find the *new!*’ said Charles Baudelaire. After God, morality and even beauty had ceased to function as credible criteria for evaluating the arts, all that remained were novelty and originality. The shock of the new, as Australian art critic Robert Hughes later called it, became the primary characteristic of modern art, the first as well as the final criterion for its valuation.

In the 1980s and 1990s, however, theorists of the postmodern argued that this final criterion now too failed us. In his essay ‘The Sublime and the Avant-garde’ (1984) Jean Francois Lyotard scorned ‘the cheap thrill, the profitable pathos, that accompanies an innovation’ (106), Fredric Jameson in his seminal essay ‘Postmodernism

and Consumer Society’ (1983) argued that ‘the writers and artists of the present day will no longer be able to invent new styles and worlds’ (7), and American art critic Rosalind Krauss published a book titled *The Originality of the Avant-garde and Other Modernist Myths* (1986). In his essay ‘Comrades of Time’ (2009) Boris Groys writes:

The present as such was mostly seen in the context of modernity as something negative, as something that should be overcome in the name of the future [...] Today, we are stuck in the present as it reproduces itself without leading to any future. [...] One can say that we now live in a time of indecision, of delay—a boring time.

This boredom characterizes contemporary art, in Groys’ view. The contemporary artist for him is like Sisyphus, who in the same repetitive and senseless act has to keep rolling the boulder up the mountain. The modernist artist was facing the glorious horizon of the future, but the contemporary artist swims in a sea of contemplation and confusion. For Groys this is not necessarily a bad thing, but it does raise questions on the nature and function of ‘artistic innovation’ today.

These were questions that he already dealt with in his book *Über das Neue* (On the new), which was published 25 years ago in 1992, in the context of aforementioned debates on art and theory.¹ According to Groys, something peculiar was happening with regard to the new: on the one hand, and in line with the theorists mentioned above, no one ‘believed’ in the new any longer; but on the other hand, everyone still expected to see or hear something new, upon entering the museum, going to concerts or theatre plays, or when reading novels, poems, philosophical books etc. For Groys, this meant that we had to start looking for a new understanding of the new.

In order to do that, Groys first stripped the new from its – mostly modernist – connotations of concepts such as utopia, historical progress, creativity and authenticity. Referring back to Nietzsche, he defines innovation instead as the revaluation of values:

Innovation does not consist in the emergence of something previously hidden, but in the fact that the value of something always already seen and known is re-valued. The revaluation of values is the general form of innovation: here the true or the refined that is regarded as valuable is devalorized, while that which was formerly considered profane, alien, primitive, or vulgar, and therefore valueless, is valorized. (10)

The exemplary work of art, to which Groys would return again and again throughout his oeuvre, is Marcel Duchamp's *Fountain* (1917). What Duchamp did, after all, was not to invent something that was not there before, but to place something from the domain of the profane in the domain of the sacred. In retrospect, argues Groys, this was what art and artists have always done. Duchamp, by stripping the act of artistic transformation down to almost nothing, shows us what innovation comes down to: cultural revaluation.

For Groys this meant that the answer to the question of innovation was to be found in a specific place: the collection or archive. To collect something, whether it concerns the library, the collection of immortal souls, or the museum of modern art, means to grant it importance, that is, to sanctify it. Hence, *Über das Neue* can be considered as the starting point of Groys' reflections on the function and status of the museum in our contemporary society, which he later developed in books such as *Logik der Sammlung* (1997) and *Topologie der Kunst* (2003). As the subtitle of *Logik der Sammlung* makes clear – *Am Ende des musealen Zeitalter*, 'at the end of the museum age' – Groys was already well aware of the waning influence and importance of the traditional museum, in the face not only of societal developments such as the suspicion of a supposedly elitist culture and the increasing power of private collectors, but also of artistic movements, which in several waves of so called 'institutional critique' tried to break out of, or emancipate themselves from, the museum. Still, as Groys emphasizes again in the interview below, without the museum, there can be no innovation.

Groys distinguishes the new from modernist 'myths' of historical progress and utopia, but also from contemporary myths such as creativity and the 'Other'. With

regard to the latter, he has always been critical towards the idea of the art world having to be a 'reflection' of society. In *Art Power* (2008), for instance, he writes:

When art relinquishes its autonomous ability to artificially produce its own differences, it also loses the ability to subject society, as it is, to a radical critique. All that remains for art is to illustrate a critique that society has already leveled at or manufactured for itself. To demand that art be practiced in the name of existing social differences is actually to demand the affirmation of the existing structure of society in the guise of social critique (113).

However, this does not mean, for Groys, that art is apolitical. On the contrary, as he argues below, the revaluation of values which is the general form of innovation, i.e. to value something that was not valued before, or to devalue something that was valued, is the political act *per se*. Scenes from everyday life, the dream, rituals, household equipment, advertisement and popular culture – all these things were considered too base or banal for art, but were included in the cultural realm by innovative artists, in much the same way as voices that are not heard in the political realm strive to be heard, and as entities that were not previously represented in politics and law gained rights.²

Born in East Berlin in 1947, Groys began his academic career in Leningrad and Moscow, where he was also active in the unofficial art scene. In 1981 he moved to West Germany where he later received his PhD at the University of Münster. Today he is Global Distinguished Professor of Russian and Slavic Studies at New York University, and travels around the globe as a lecturer and curator at art institutes, biennials, conferences, etc. His experiences of both sides of the Iron Curtain proved to be crucial for his thinking, which is always thought-provoking, sometimes puzzling, and which occasionally leads to controversial or even questionable statements. He has a way of thinking through a certain statement up to its most extreme and seemingly bizarre consequences, such as in *Gesamtkunstwerk Stalin* (1988) in which he argues that Stalin completed the utopian project of Russian avant-garde artists like Malevich or Mayakovsky, and even understood it better than they

themselves did; or in *Das kommunistische Postskriptum* (2006), where he argued that the Soviet Union was the realization of the linguistic turn in the political realm.

Another aspect of his work and style that makes him both a fascinating and provocative thinker is his apparent nihilism. In this interview as well as in any of his other writings, he resolutely refuses to be nostalgic or moralistic. He registers the differences between, and historical developments of, the modern and the postmodern, between the East and the West, or between the museum and the supermarket, but he nowhere speaks of decline. Rather than passing value-judgments, Groys seems to be more interested in analyzing what has actually changed, and how this change allows or forces us to reframe our concepts and practices.

On the occasion of the 25th anniversary of *Über das Neue*, as well as, as it happens, that of the 100th anniversary of Marcel Duchamp's *Fountain*, Krisis asked Groys to reflect on the legacy of this book, on the contemporary meaning of notions such as creativity, originality and novelty, and on the future of the new.

I. On the New, 25 years ago

Thijs Lijster: Could you tell something about the time in which the book was written? What was the situation in the art world, and why did you think it was important to write a book on the category of the new back then?

Boris Groys: That was the time of postmodern discourses: everywhere everybody was speaking about the impossibility of the new. That was a core belief of the postmodern mind-frame. At the same time, it was quite clear to me – I was teaching at the university and I was also, as a curator, participating in artistic activities – the factual criteria of the new were still valid. For example, imagine someone who has to write a doctoral thesis, saying: I don't say anything new, because we live in postmodern times and the new is impossible, so let me only repeat what was said before. It would not be possible for him to make his doctorate. So, to make the doctorate, he would have to prove that he said something new. It was the same

in the case of selection of artworks at an exhibition, especially contemporary overviews of the state of the art world. Here again, the first question was still: is the art work a new phenomenon, did this artist do something new or not?

So, there was a kind of duplicity in culture that I experienced at that point: on a theoretical level, everybody said that the new was impossible, but in cultural practice this requirement of the new was still valid. The goal of the book *Über das Neue* was to try to reconstruct and to describe the hidden, implicit presuppositions of this requirement. So: what does it mean to require something new after the new became impossible? What is the context in which the new is still possible? My book was an attempt to reconstruct the theoretical, and in a certain way also pragmatic, presuppositions of the new, against the background of this cultural duplicity.

TL: In order to do that, you rid the concept of the new from all kinds of ideological connotations, like 'utopia' and 'progress'. You start out by giving a series of negative definitions of the new: "The New is not just the Other", "The New is not utopian", "The New is not a product of human freedom", etc. Could one say you try to 'rescue' the category of the new, by detaching it from all these other categories?

BG: I wouldn't say I tried to rescue it, and I wouldn't say I tried to negate all the other concepts. I merely responded to the situation I just described. I saw that all these connections, between the new and progress, utopia and so on, became obsolete, if we would take the postmodern discourse seriously. All the while, the new hadn't become obsolete; it remained operative in our culture. So, it's not like I tried to do something - to disengage the new from all these associations, it is what happened in culture. That was the situation. I was not the author of this situation; I just tried to phenomenologically describe it.

TL: The new was, as you said, separated from utopia and progress, and with that also from its temporal dimension. You write: "The new stands in opposition to the future as much as to the past" (2014, 41). Innovation, in your view, is what happens when an object is transferred from everyday life into cultural tradition. Still, is it

possible to detach the new from its temporal dimension? After all, isn't the new what happens after the old?

BG: Again, I didn't detach it; it was detached *de facto*. So, I asked myself: What is the function of the new in this context? It became clear to me that the new, in the context of art, is related to what is already in our archives. Our culture is structured in the following way: we have the archives, and the world outside of the archives. The archives exist in the here and now, and the world outside of the archives also exists now, it is not the world of the future or the past; both worlds – that of the archives and the outside world – are contemporary to each other and to our own experience.

But what is their relation? My idea was that it is in the intersection between these two worlds that the new emerges. If I write a doctorate and I want to show that the doctorate is new I do not compare what I said to all possible opinions in the world I'm living in, because it can happen that some of these opinions actually are part of my world. I begin to compare this text, my own text, with the archives, with what is already accepted as valid in a certain discipline. So, I take some opinions or knowledge – my own opinions and those of my friends – from outside of the archives, compare them to what is already in the archives and precisely if some of these opinions are not in the archives I present them as new. The artist does the same. That is something already described very well by Baudelaire, in his famous essay on 'The Painter of Modern Life'. Baudelaire speaks about an artist who looks at the classical ideal of beauty and at the same time at what happens around him, and then what he tries to do is to combine them. The same can be said about the avant-garde. The avant-garde never ever indicated any future. If we look at the avant-garde writings, their programs and manifestoes, they tell you all the same: we have the museums, filled with ancient Apollos and so on, and outside of the museums and around us we have tanks, trains, airplanes, explosions and killings, industrial machines, and mathematics and geometry. Some kind of new order; these things are not precisely the things of the future, they are already around.

TL: All they did was implement them into the cultural realm?

BG: Precisely. That's it, and only that. The avant-garde never went an inch into the future. The avant-garde always only wanted to transport and transpose certain experiences that the people in their contemporary life had into the museum space, into the space of the cultural archives. And the power of the avant-garde was precisely its ability to cross this border and to bring the lived experience into the cultural space. It was not concerned with some idle projection of the future, or some senseless utopia, but with the lived experience of everyday life in an industrial civilisation. It is the same with Marcel Duchamp, Andy Warhol, and so on. Duchamp doesn't invent anything. He takes a urinal and places it in the museum. Now imagine that you bring to the museum another urinal, and say: this is a different one, because it has a different form. No museum would take it, because they would say: it is irrelevant, because it is not new enough. What does that mean, not new enough? It means that it might be different in form, but does not engage in the difference between art and life, between the cultural and the profane realm, between the archives and everyday existence. So, I would say that the notion of the new, and the effect of the new, is something that has its place on the border of the cultural archive and contemporary life.

TL: If the new is detached from the aforementioned categories like utopia, progress and human freedom, doesn't that also imply a depoliticization of the new? In *Über das Neue*, also in *Logik der Sammlung*, you point to the many failed liaisons between artistic and political avant-gardes. However, if the idea of innovation is detached from the idea of a better world, what is then still the value of the new?

BG: First of all, I consider my own theory of the new as a total politicization of the new. The decision to take something from everyday life or everyday experience and to put it into the archive is an eminently political decision. In a certain way, it is the *actual* political decision. It's what Kierkegaard said with regard to Jesus Christ: believing he was not just a normal man but the son of God is simply a decision. To ascribe value to something that up till then had no value, to put it in a valuable context, is the *Urform* of political decision-making. Actual politics functions according to the same pattern. For example: up to a certain point in history

the workers had no value in the system of representation. It takes a political decision to change this value, after which they are represented.

In the *Second Surrealist Manifesto*, Breton asks: What is an authentic surrealist artwork? And he answers: to go into the crowd with a revolver and randomly shooting into it. So, you take this action, a terrorist deed, and put it into another context, the context of art. In the same way, Marinetti speaks of the metallization of the human body, the wonderful effect of exploding African villages, and so on. If you look at those examples, you see immediately that what I describe is eminently political. Utopias are not by nature political, they are literary fictions. Whether they have any political value has to be decided politically. In other words: utopias are not a source of politics, but an object of politics. I have to make the decision, and this decision cannot be delegated to any theory or any utopian vision. That means that the value of my political decision cannot be deduced from utopia itself.

TL: The politics of the new, then, is that in the same way as people that were not politically represented get a vote and get representation, something that was outside of the cultural realm gets inserted.

BG: Yes. And with regard to politics, not only people, but maybe even lions or plants. There has emerged a new ecological consciousness that believes that also certain animals or plants should be represented in our culture, which means they should be protected. The question what should be represented is the crucial question of our society, because our society knows only two modes of relating to things and people: to let them perish, or to protect them. That is the basic political decision. If you decide to include something into the system of representation, this means that you are interested in how this thing – object, human being, animal or whatever – will be translated into the future. The museum, the archive in general, is a futurist institution, because it keeps things for the future. Futurism was never about the future, innovation is not about the future, but it relates to the future in so far as it gives us a promise of protection and preservation.

TL: So what is new now will be included in the collection and preserved for the future.

BG: Yes, precisely. Being included, it will not be discarded. That is the promise on which our culture is based. This basis is so fundamental that it is often neglected. For example, Nietzsche said: my writings will only be understood after three hundred years. It meant that he firmly believed that mankind, without actually understanding his writings, would be reproducing them, putting them in libraries, distributing them, for three hundred years. If you want to speak about utopia, this is a true utopia. There is an almost automatic and unconscious reliance on the institutions of protection in our culture. People writing books, producing art works, have an instinctive trust in the possibility of their survival. This faith is precisely what gives the basic energy to the effort to make something new, so that it would be safeguarded, protected, translated into the future. And that is precisely what I was and still am interested in.

II. The new, then and now

TL: What, in your view, is the main difference between the situation in the art world 25 years ago and now?

BG: The main differences have to do with the emergence of the Internet, as an electronic archive. These differences manifest themselves in the two following ways. First, if you think of the traditional role of the writer, philosopher and artist, it was precisely to mediate between the archive and everyday life, that is, to provide artistic (or theoretical) expression and representation of everyday life. But the Internet gives to everybody the immediate possibility to present oneself on the global stage – everybody makes selfies, videos, writes blogs, and so on. We no longer have a mass culture of consumers – the situation that was described by Adorno – but a situation of mass cultural production, where everybody is an artist, everybody is a writer, and a philosopher. We no longer need mediators, so we no longer need writers, philosophers, or artists.

The second difference, however, is that the Internet still does not produce the stability, security and protection that the traditional archives had. We often think this is an institutional question, or a technological one, but in fact it is an economic one. Internet platforms are privately driven, so they have to make profit. And that means that on the Internet there is no place for the museum, or an archive in any form. I'm quite sceptical about whether this will change. Basically, today, if you want to have an archive on the Internet, it should be based on already existing archives. Only institutions like the MoMA and Tate can establish something like an Internet archive, partially also because they are able to pay for this. In the EU, if you want to establish an Internet archive, you get a guarantee of protection of maximum 30 years. So it will cost a lot of money, and there is still a lot of insecurity.

What does it mean if you take these two points together? It means that in the contemporary global framework, you have total representation, but from a future perspective, it is all garbage. What is interesting is that the Silicon Valley people know this very well; they all create secret museums, libraries, documentation centres, etc. but these are not traditional archives in the sense I describe in my book, since they are not publicly supported and accessible for the public. There have been many attempts to create electronic archives, but *de facto* none of these attempts were really successful, precisely because of the general structure of the Internet and its relations of property.

It is the classical Marxist situation of collective use and private property. That analysis, if there is any place to use it, very much applies here. Everybody uses these Internet platforms, but they belong to only a few companies. There is a tension between the interests of the users and the interests of the companies, but this tension is hidden and not thematized, because people believe that the Internet is a means of communication. If we would start to think the Internet as a means of archiving, then this tension would be obvious. It is possible, however, that people would give up the archive in general, that people will be only interested in communication and no longer in archiving. That would mean indeed that they would not be interested in the future, and then the role of the archives would be

decreasing. Partially we already are in this situation: the museums are poor; they cannot compete with private collections. Private collections are based partially on the current situation in the art world, but being private they are based very much on the collector's taste, which cannot be collectivized. These private collections do not of course constitute the framework for protection that I was describing. The same can be said about libraries and so on. We more and more experience them as too expensive, taking up too much space.

It seems to me that today we are in a period of transition. On the one hand, the structures I described in my book – in academia, in museums, in the art world – are still existing and function in the same way. Parallel to that we have Instagram, virtual reality, viral videos, and so on. I don't say we have to make a choice; I only want to say that there is a factor of uncertainty and a lack of clarity about their relationship, and I think that is a factor that emerged only after the book was written.

TL: You say that people are no longer interested in the archival function, but at the same time there is a lot of anxiety about the preservation of tradition, in the shape of 'cultural heritage' and so forth. In *Über das Neue* you write: "[T]he new ceases to represent a danger and becomes a positive demand only after the identity of tradition has been preserved" (2014, 21). Might one say that the contemporary anxiety emerges from a lack of historical orientation? In other words: since we cannot make sense of the present, or determine our direction for the future, we do not know what is historically meaningful and meaningless. And what would this mean for the category of the new?

BG: Indeed, we can no longer rely on the tradition. And again, I think this is related to digital media: we are confronted with everything at the same time, and everyone globalized him or herself. At the same time, we're not sure what the archive still means under this new condition. But as long as there are archives, it makes no difference for the category of the new. There would only be a difference if the archives would dissolve completely. If that happens, then we no longer have the new, but then we also no longer have philosophy, literature, and art. Probably

we'll still have politics, but I'm not sure about it. All these phenomena relate to the archives, so if the archives dissolve, then all the other things dissolve as well.

TL: Is that a real threat?

BG: Maybe it is a threat, maybe a relief. I think a lot of people would see it as liberation. It is difficult to say. I think it is a mixture between threat and liberation, in the same way that every utopia is also a dystopia. But I think the fact is that many people welcome this development; that the feeling of liberation prevails, the feeling of being liberated from the archive, but also from literature, art and philosophy.

In a sense it would be another step in the history of secularization. European culture has a complex relation to its religious heritage. You still have the names of the saints, ideals of sovereignty and creativity, and an institutional long-term memory, which all together show that it is really a secularized version of a feudal or religious order. In one of my early texts, written at the same time as *Über das Neue*, I wrote that I would not be surprised if after a new revolution curators would be hanged on lampposts in the same way the French aristocracy was, because they incorporate the same feudal order. It is possible that we go through a new wave of liberation, which started in the 1960s, found its medium in the Internet, and now rids itself of the final traces of the feudal order.

TL: And would this also mean the end of the new?

BG: Yes. The problem is that the new itself, in European culture, has of course its origin in the New Testament. So what is the new? The New Testament is new in relation to the Old Testament. If you don't have the Old Testament, you can't have a New Testament. That's only logic. Now, if we have an anti-testamentarian movement, as we have now, almost already full-fledged, then it is all over. There is no old, no new, there's no culture. And I tell you: people experience that as liberation. I see that a young generation is very happy about it. And I'm not against it.

TL: In your book, you discuss the issue of representation, and also the struggle of minorities or socially oppressed groups that want to be represented in the collection or archive. This seems to be a highly topical issue (not only with regard to the museum, but for instance also with regard to popular culture, e.g. Hollywood that is considered to be too masculine, too white, etc.). However, you are quite sceptical of the way this debate is usually framed. You write: "Even if an artist or theoretician utilizes things and signs of the social class from which she comes, she has always already detached herself from this class and acquired a capacity for observing it from without." (2014, 169). But isn't it also the question from which direction the innovation is supposed to come? In other words: whether it is from the perspective of the collection that something appears as new (as you argued in your book), or that something from the outside demands access to the collection? In the latter case, you might say that claims to just representation or, in Honneth's terms, cultural recognition, are in fact highly important.

BG: They are relevant. But first of all: if there is a pressure from the outside, a struggle to enter the collection, this struggle is almost always successful. Why is that? It is always successful because, as I try to show, it corresponds to a certain kind of inner logic of the collection itself. It wants to expand. When the collections are confronted with something they overlooked they are eager to absorb it.

However, as I tried to discuss in *Über das Neue*, the question of minority representation involves two problems. In my view, this whole issue has an American background. When I went to America some years ago, it was an interesting discovery for me that I had to fill in 'race' in many forms. I suddenly belonged to the cultural majority, because I am a white male. There are 1.5 million Russians living only in New York City, many don't speak English, but they are supposed to belong to the majority culture of the US. So first of all, the problem is: what counts as a minority and what is the majority? These categories are always problematic.

The second problem is that the individual artist, writer or philosopher never really represents his or her culture of origin. Could we say that Baudelaire is typical French, that Huysmans is, or who is typical German or Dutch? After all, these

artists represent only themselves. The idea that they represent a bigger group is, I would say, a very American idea.

TL: But even if you say that the individual artist doesn't represent a group, you still might say that the museum represents a certain western white male culture, rather than other cultures, which are present geographically speaking but aren't represented in the museum's collection.

BG: I agree with that. We have a complicated structure of protest and domestication. To become a famous French poet you first have to hate everything French, to break with the tradition. Like Rimbaud who said: I want to become black, I hate France; or Breton who said: when I see a French flag I vomit, and so on. If you are really and typical French, you will never get into a French museum, and you will never be a French poet of genius, because you will be average French. You will have to break all the rules, hate France, committing some crimes is always helpful – think of Genet – and only then you get the status of being a great French artist.

The problem with the contemporary struggles is that people want to get access to the collection, but without putting into question yourself and your own tradition. You are not obliged or expected to make this detour, not obliged to become other to yourself, which is, actually, the meaning of the word 'other'. As French philosophy crossed the Atlantic it changed in many ways, but the crucial change was in the word 'other'. In the French tradition, the 'other' is either God, or the subconscious, but in any case, it is something living in you that is not you, that can possess you, destroy you, take over. You are struggling against it, put it under control or otherwise it controls you. It is an old story, and eventually leads to Bataille, Foucault and Derrida, for whom the other is writing: it is not you who write, but something in you and through you. But then, after this French philosophy crossed the Atlantic Ocean, the 'other' become simply: the other guy. People think they are already the other, because they are the other guy. This secularization or banalization of otherness is actually what constitutes the major part of contemporary discourse.

I don't say it's a wrong development, because secularization is at the core of our modern consciousness. I just wanted to point out that, in relation to the concept of the new, something changed. My relation to my identity changed. Instead of trying to destroy my identity, becoming other to myself and in this way gain access to the cultural tradition (as was always the case), now I simply reassert my identity and raise a claim to be accepted to the cultural archives, without any kind of suffering or inner struggle.

TL: Today, even more than when you wrote the book, innovation seems to be applauded throughout society, especially with regard to economic production. Think of Richard Florida's praise of the creative class and the creative city, everyone has to be creative, think outside the box, every product has to be innovative, etc. How do you regard this imperative of creativity in the sphere of economic production?

BG: I think creativity is nonsense, total nonsense. The notion of creativity is a Christian notion *per se*, it is a residue of religion. I think that, if you are not a Catholic, and all these people probably are, you cannot believe in creativity. Mankind cannot be creative. It's the worst form of religious naivety. The only form of human productivity is combining, putting things together. The Internet was modelled after an elementary Turing machine, and that was actually a full description of what a human mind can do. After all it is just copy and paste. We cannot do anything ontologically new; that is the principle of human activity. So creativity is divine privilege.

TL: You argue in your book that it is impossible to distinguish authentic from inauthentic newness. But don't you think that newness/novelty means something different, or is used in a different way, in different spheres? For instance, the new iPhone that one needs to have every couple of years; is it the same kind of newness as an innovation in the art world?

BG: A new iPhone is not an innovation. It is repetition. The structural condition of innovation is the archive. We have two models in our civilization: the

supermarket, and the museum. What is the difference? One model, the museum, allows for innovation, because it keeps all the old productions, and so you can compare the old with the new. If I introduce a new product in the supermarket, it is simply part of the offer. You don't see what is not offered. Assyrian Gods, for instance, are not offered in the supermarket. What is not produced here and now is removed from the supermarket, and so we can't see it. And because you can't see it, you can't compare it, and because you can't compare it, you are in the same situation as you were before. Maybe you can remember what was in the supermarket two months ago, if you have a good memory, but not for very much longer. So if you are not in the archive but in the real world, there is no real change, because every moment is like the other moment. As long as you don't think teleologically – so if you don't think there is an origin, and don't believe there is an end – you cannot differentiate between one moment and another, since you cannot determine their distance from the beginning or the end. If you believe in the second coming of Christ, you can calculate the distance of a particular moment from the first and the second coming, but if there is no such promise, whatever it is, then it is like if you're running on a treadmill: you are running, but you remain in the same place.

When I came to America, there was the Obama campaign, with the posters “Change”, and “Yes we can”. I always told my students: changing is the only thing we can. There is change today, and change tomorrow. The only real change would be a change from change to no change – that is utopia.

TL: But social institutions can change. Replacing the feudal order with a democratic system is an actual change, isn't it?

BG: Yes, that was a historical change. But after that, and if there is no longer a hierarchy, then you don't have any change. The problem of our social institutions today is rather that they change all the time. You can never find the same person in the same place. I don't think democracy has anything to do with it. What happened is that ever since the industrial revolution, there is constant technological development, and we as humans tried to accommodate to changing situations. Every day, all our effort is concentrated on how to survive this day under different

conditions. I cannot send e-mails because my mail program is obsolete; I can't install a new program, because my computer is obsolete; I cannot buy a new one, because I don't have Internet connection, etc. I spend day after day just trying to accommodate to these changes. Today we are witnessing the disappearance of the division of labour: you have to do everything yourself on the Internet, become your own doctor, taxi driver, and so on. What our civilization is about is basically the sheer material survival of mankind.

The protection of human beings is very closely related to the protection of artworks. Actually, the museum was installed at the same time and by the same people who thought of human rights. Human rights are actually the rights of the artwork: there is this body that has to be protected, and so you cannot use it, you cannot mistreat it, etc. All you can do is look at it, and speak about it. And that is precisely what is established in the museum: you look at art, you speak about it, but you cannot use it. Human rights are basically art rights.

Now it seems to me that human beings are more and more left to themselves. We feel like Mowgli, or Tarzan, so that we have to look for ourselves what is dangerous, how we can improve our chances, and so on. Children are raised this way, with a very cautious and frightened attitude. If I remember my own young years, I was absolutely not frightened, but today my own students are scared to death. They have the feeling that if they lose, they'll simply perish; it is sheer fear for survival. They no longer believe in the social conditions for survival. It is an interesting period in human history. But there's no place to think of innovation, only of survival.

III. Innovation and acceleration

TL: A more recent plea for societal innovation and progress has been accelerationism, as explained in Nick Srnicek and Alex Williams' much-discussed *#Accelerate Manifesto* from 2013. They argue that capitalism has become a source of stasis rather than of innovation. Rather than working against the accelerating powers of

capitalism – as in the different slow-movements, or romanticizing localism and authenticity – we should speed up even further, so as to let capitalism crash against its own limits and go beyond it. How do you consider this proposal, or how in general would you describe the relationship between acceleration and innovation?

BG: There is no acceleration, there is just more pressure. Moreover, you are not the subject of this movement. The problem of accelerationism is the belief that you can appropriate this movement and steer it. That is impossible. Even our friend Deleuze didn't believe that. He believed we can enjoy acceleration, but he didn't believe that we could control it, or appropriate it.

TL: In their recent book *Inventing the Future. Postcapitalism and a World Without Work* (2015), Srnicek and Williams further argue that left politics has abandoned the idea of progress and modernization, leaving them in the hands of neoliberalism, while retreating to a localized and romanticized 'folk politics', as they call it. In their view, the left should reclaim the future, and the category of the new is the instrument to do so. They write: 'If the supplanting of capitalism is impossible from the standpoint of one or even many defensive stances, it is because any form of prospective politics must set out to construct the new.' (75) How would you respond to this?

BG: I think that the moment we are experiencing now creates illusions of this type in the minds of young people. They believe that they are something like living start-ups. It's a new neoliberal illusion. Our whole development will lead to stagnation. First of all, the globe itself is a symbol of stagnation: it circulates, while progress is linear. Today we speak not about universalism, but about globalization. But globalization is circulation and that means that we already reached the point of stagnation. The stagnation is not obvious for most people, because there is still a middle class, with its traditional institutions: the universities, the museums, etc. But as soon as these collapse, the middle class will also collapse. I sometimes tell my students that every day they spent at the university makes them poorer, because the people who have money, from Madonna to Bill Gates, never went to school. So, we will come to a very traditional situation of poor and rich, and this will

produce the return of left ideas. Because, as long as you think that you can individually cross the bridge between poor and rich, as long as there is still a bridge to cross, you will always be neoliberal. You can think what you want, but you will try to do so. But if the gap is too wide, like in the 1920s and 1930s, like in Fritz Lang's *Metropolis*, then the only answer will be left ideas.

TL: What will these left ideas produce, then? A new middle class?

BG: We will see, we don't know that. I am like Marx: never predict what that revolution will produce. He was always against French utopianism. But I think it will produce a new Soviet Union. Not precisely in the same way, but to the extent that the Soviet Union was basically the administration of stagnation. In the contemporary competitive world, it was difficult to keep it. But if the whole world becomes stagnating, then the question of world revolution can come again, the question of international socialism can come again, the question of world administration and world state can come again, all the Hegelian/Marxist/Kojevian line will come again. Right now, it is suppressed by this running to nowhere. The feeling of that may be exciting, but it is a certain period of time, and it will not last very long.

TL: So, if I understand you correctly, you say that the left doesn't need new ideas, because these ideas are already there.

BG: Yes. In many ways we are back in the nineteenth century, and that is the rhythm of the European culture: the seventeenth century was reactionary, the eighteenth century was progressive, the nineteenth century was reactionary, the twentieth century progressive, etc. If you look at the reaction of the nineteenth century to the French Revolution, first of all, everybody believed that the Republican democratic regime collapsed because they could not succeed structurally, and secondly everybody believed the revolutionaries were morally evil because they killed children and young women on the guillotine. Both this moralization and the disbelief in the capacity of survival were general throughout the nineteenth century, but at the end everybody was democratic. Now you know how history works, there's nothing new:

now the Soviet Union is totalitarian, terrible repression, women and children killed, and it was impossible, it could not survive. But in 70 or 80 years it will be completely reversed. So, we should simply relax and wait, for in time we will be disappointed by neoliberal illusions and utopias, look at the reality of life, which is miserable, and then look at the models, not of the better life, but how to organize miserable life.

TL: Like in the saying of Brecht, that communism isn't the equal distribution of wealth, but of poverty.

BG: Of course. And it is as bad as any other social system, but it has at least one advantage, that I understood when I went to the West. You really didn't have *Angst*, this prominent insecurity, and this sheer fear of not surviving the next day. On this very basic level people felt themselves totally secure and protected. And I believe this desire for stability, protection, and security will emerge again.

Today you see it on the right. Why is that? The West believes it has won the Cold War against socialism and communism. But who exactly are the winners? It is neoliberalism and religiously coloured nationalism. Now they are fighting each other. But they will try to find a compromise, because they have a common feature, and that is competition. Neoliberalism believes in the competition of everybody against everybody, and the other in the competition of one ethnic group against the other. Both hate universalism, and both hate the ideas of solidarity and cooperation. They honestly believe that what is best should be defined by competition, and if you don't arrange a harsh competition you won't know what is the best, or who is capable of winning. The problem is that, as I believe, man isn't capable of anything at all. The problem of nationalism and neoliberalism, then, is still the illusion of humanism, that humans can be creative, competitive, determine their own lives, can be responsible for themselves, and so on. They believe there is this kind of potential in human beings to deal with and manage any burden, going through any difficulty and making it: the American Dream. But it's all a huge lie, and the challenge is to see it as a huge lie that was only invented to terrorize people. To say to them: why are you poor, you have to make an effort, you have to struggle,

you have to constantly improve and update yourself. Somehow, and at a certain point in time, we have to be relieved from this blackmail.

When I was a child and responsive to these things, I was always fascinated by these Russian posters, saying: let us reach the level of the current day. This presupposed that we are somehow always behind. Stalin, who was a good thinker and much more honest than everybody else, said: when we really understand Marxism and Leninism, we should accept that our situation is always a bit ahead of our ability to reflect on it. So, our thinking is behind our real situation. And that is precisely what connects capitalism and socialism, this belief in the powers that are faster than we can think.

IV. The future of the new

TL: Let's return once more to the concept of the new in relation to the art world. In the Dutch book of essays on your work, Dirk van Bastelaere argues that the concept 'entropy' you use in *Logik der Sammlung* (according to which the collection constantly extends and absorbs that which it is not) should – in line with your own economic jargon – be replaced by the concept 'inflation', which is less neutral. Inflation would then mean that the increase in artistic innovations (and hence the culturalization of profane domains) implies at the same time a decrease in value of these innovations. (Bastelaere et al. 2013, 85). Do you agree with that diagnosis?

BG: If we follow our earlier line of thinking, that is if the whole system of selection and representation collapses, then the new will have no value at all. It only makes sense if you have the archives and institution – and the critique of institutions is part of it. Without the institutions, the critique of institutions obviously makes no sense. Art that leaves the museum [*e.g. street art, land art, performance art, community art, TL*] always has to return to the museum in the shape of documentation. So, whatever you do outside of the museum, also in contemporary art, has cultural value only if it is afterwards represented in the museum in the form of documentation.

TL: In an interview I did with Luc Boltanski (Celikates and Lijster 2015) he argued, following Isabelle Graw, that the economic valuation of art works can never persist without the aesthetic valuation by critics, curators, artists, etc. If the two merge this is also destructive for the economic valuation. Do you agree with this analysis, and should this reassure us that market forces could never take over the art world completely?

BG: I think that art becomes more and more like a luxury product, like china or perfume. Everyone can make art, but not everybody makes a living from art. But if you don't make a living from art, it doesn't mean that you're not an artist. If you speak about professional art, you speak about making a living from art. Then it becomes simply a segment of the general market, and it's the same as Armani design and so on. If you look at creative districts in China, you see design, cutlery stores, fashion, art galleries, all together. But then it has nothing to do with general society.

TL: Is that so different from seventeenth century Holland, when art was also a luxury product?

BG: The institution of the museum, as you know, was created after the French Revolution. The revolutionaries took the objects of use from the aristocracy and instead of destroying them, they disenfranchised them and exhibited them, but forbid their use. It was a decision in between iconoclasm and iconophilia. What Duchamp later did was a repetition of this gesture – it is the same gesture.

This museum is a public space. Privatization recreates the situation as it was before the French Revolution, but then we can no longer speak of public institutions and we lose historical consciousness. So the problem is not if Isabelle Graw or someone else finds some painting beautiful, according to a certain aesthetic theory. The question is: Is a certain artwork historically representative, so that it can be put in the museum? For a private collector, this question has no relevance, because it is his taste that matters, and not the archival importance. After writing *Über das Neue*, I was invited to Switzerland, where they organize schools for leading European collectors. I told them I considered these collections as installations and not

as museums, because the installation is the assemblage of objects according to a certain taste. At the moment you privatize, you get involved in private passions and relationships that have nothing to do with an archive.

I tend to think that the model I proposed is probably a model for secularized culture that started with the French Revolution and ended with the end of communism. Now this system of culture in general collapses – it still survives of course, this process of collapsing takes very long, and maybe the archives survive in another way. The first libraries were private collections, the first art collections were in the pyramids, and they survived. So maybe they will survive in a certain way, in so far as they survive the current model.

Notes

1] Boris Groys (1992) *Über das Neue. Versuch einer Kulturökonomie*. München: Carl Hanser. References in this text are to the English translation published in 2014: *On the new*, transl. G.M. Goshgarian, London and New York: Verso.

2] This brings Groys' theory of artistic innovation close to Jacques Rancière's idea that aesthetics and politics are both characterized by *la partage du sensible*, the redistribution of what can be seen, heard, etc. See Rancière (2010).

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Biographies

Boris Groys

Boris Groys (1947) is a philosopher, art critic and curator. He studied in Leningrad and Moscow, and did his PhD in Münster. He lectured in Vienna and Karlsruhe, and since 2005 is Global Distinguished Professor in the Faculty of Arts and Science, New York University. He published numerous books, including *The Total Art of Stalinism* (1992), *Art Power* (2008), *Introduction to Antiphilosophy* (2012), and *In the Flow* (2016).

Thijs Lijster

Thijs Lijster (1981) studied philosophy at the University of Groningen and the New School for Social Research in New York. Currently, he is assistant professor in the philosophy of art and culture at the University of Groningen, and postdoctoral researcher at the Culture Commons Quest Office of the University of Antwerp. He published *De grote vlucht inwaarts* (Bezige Bij, 2016) and *Benjamin and Adorno on Art and Art Criticism. Critique of Art* (Amsterdam University Press 2017), and coedited

De kunst van kritiek. Adorno in context (Octavo 2015) and *Spaces for Criticism. Shifts in Contemporary Art Discourses* (Valiz 2015). This interview is a prepublication for the book *The Future of the New. Artistic Innovation in Times of Social Acceleration*, which is to be published by Valiz publishers in spring 2017.

Black Transparency in the Era of Post-Truth

Patricia de Vries

On the left the Lake of Deep Conviction.
Truth breaks from the bottom and bobs to the surface.
Wisława Szymborska – *Utopia*

Review of Metahaven (2016) *Black Transparency: The Right to Know in the Age of Mass Surveillance*. Berlin: Sternberg Press, 205 pp.

In 2016, Oxford Dictionaries announced ‘post-truth’ as the word of the year after it had witnessed a spike in its usage in the context of a politically charged year. Metahaven’s *Black Transparency: The Right to Know in the Age of Mass Surveillance* (Sternberg Press, 2016) could be read as an elegy for this award-winning word, which allegedly describes our current predicament. Over the last decade, Metahaven, an Amsterdam-based research and design studio staffed by Vinca Kruk and Daniel van der Velden and founded in 2007, has become an international brand, generating its own genre in design with a particular mix of politics with avant-garde aesthetics and graphic design. This has led to multiple international exhibitions, presentations and publications of essays and books. *Black Transparency* – part zine, part literature review, part essay – probes how transparency as a principle intersects with spin, political activism, design, architecture and internet (pop) culture. In the book, the authors reflect on the implications of “the geopolitical architecture of “planetary-scale computation,”” a concept taken from Benjamin Bratton with which Metahaven refers to the “overlying of the world with digital

networks” (3). The internet in this centralized structure, has become a geopolitical disruptive weapon (90). Metahaven grieves the loss of the early internet, and expresses hope for a “relocalized internet governed by its citizens” (112). The politics at play in *Black Transparency* are a mixture of positions. A nostalgic approach to the internet, combined with a high premium on transparency. Add a dash of libertarian paranoia towards the establishment, sautéed with a ‘fix the internet’ attitude of the hacker culture. Parts of the book read like an ambivalent, and at times stammering, farewell letter to a lost love. The jilted party is the transparency movement, more specifically, the whistleblowing platform WikiLeaks: “[w]hat once was an “intelligence agency of the people” gradually became transparency’s shipwreck” (48). Metahaven has been championing WikiLeaks since 2010, in part through a visual investigation of the politics and aesthetics of transparency. In 2011, they designed WikiLeaks merchandise: buttons, band-inspired T-shirts with file names leaked by WikiLeaks, and translucent silk scarves with ‘WikiLeaks’ printed on them. The profits were donated to WikiLeaks. *Black Transparency* includes images of the merchandise, as well as info-graphics mapping out the ascent of WikiLeaks onto the geopolitical stage, and the celebrity-cult that surrounded it at the height of its fame in 2013.

At the core of *Black Transparency* lies the authors’ critique of the modern state: nominally democratic governments conceal their fundamental reliance on secrecy. Secrecy is spelled out as “an informational privilege enjoyed by those in power” (2). The state’s informational privilege has increased thanks to “preemptive electronic surveillance of potentially every global subject, [...] expanding the state’s monopoly on violence into precognitive policing of all thought and action” (3). The state’s spying capabilities are aided by our fondness of everything “smart,” and our yearning to be seen. The modern surveillance state signifies a structural change in the governance of democratic societies, Metahaven contends (3). It “recedes into neo-feudal rule by tech-overlords and extra-legal sovereigns” (57). The horseman of this neo-feudalism is the public-private nexus, a “Holy Alliance that binds old-style *arcana imperii* to the latest cloud technology” (57).

Against this backdrop of “unprecedented online surveillance by governments” black transparency is a “frontal attack” on the autonomy of a state “that wants more control” (2,3). What makes black transparency ‘black’ is the *method* of disclosure; how information becomes available is “of decisive importance to its political impact” (1). “[D]emocratic change” can be effected when the disclosure of information is uninvited, unexpected, and seemingly spontaneous. The “*involuntary transparency*” of black transparency sides with the unpredictable and anonymous disclosures of organizations like WikiLeaks, and whistleblowers such as Edward Snowden and Chelsea Manning (xiii). It is designed to reveal “truths that are hidden under the cloak of state secrecy” (38). Black transparency reveals its secrets with the aim of embarrassing and destabilizing the security complex of the state (6), and does so “in defense of the public” (4). Black transparency reveals three things at once: the secret itself, the frantic panic of its keepers once the secret is released, and, thirdly, the spin around its disclosure (62). The ‘black’ in black transparency further means “more or less, “in darkness” as opposed to “in the light,”” (4), with which they mean to remain hidden, unidentified, and opaque. All antidotes to global surveillance go under shades of black, Metahaven argues (3). The examples given are: the Blackphone, Dark Wallet, cryptography, the Dark Web, and #BlackLivesMatter. In an age of mass surveillance, an allegiance to (encrypted) anonymity is seen as an act of resistance: anonymity for the powerless, transparency for the powerful. In the opening pages of *Black Transparency* Metahaven argues that “there is no transparency without enlightenment,” and “under transparency the state loses the informational privilege [secrets] that allows it to maintain itself” (xiv). However, already in the introduction of the book they foreshadow black transparency’s demise: “Symbolically, black transparency meets its end in Russia [...] where nothing is true and everything is possible” (6).

Black Transparency has been a few years in the making – two of the six chapters have been published on *e-flux* in 2012. The book as a whole reflects how transformative those years have been for Metahaven. The first chapters sing of a love of WikiLeaks, echo the – by now – worn-out slogans of the transparency movement, and the old Enlightenment meme that truth shall prevail. The last three chapters argue that we have become captives of cloud computation, surveilled by centralized

corporations, and that spin and propaganda appears to be more powerful than truth. But before we get there, we need to read through a fairly long tribute to the transparency movement. In the chapter titled “There is no Organization, There is Only You”, Metahaven contends that “Information is Power” (27). “Knowledge is Power” (24). “Transparency is Absolute Power” (24). If we are to believe Metahaven, transparency is designed to “confront liberal democracy with its hypocrisy” (31) and uncover the world’s injustices and conspiracies (26). It lays bare the “secret machinations of the powerful” (56). Transparency, they claim, holds power accountable through “action driven by understanding” (37). Informing the public, as a means to “undercut the government” can cause “far-reaching forms of democratic change,” Metahaven suggests (2). These parts of the book may leave the reader desiring for a more tightly edited plea to this modernist Enlightenment value.

As a counterpoint, there is a wealth of critical literature both on WikiLeaks and on the transparency movement that could have been engaged with. Eve Kosofsky Sedgwick, for instance, questions the naïve assumption that knowledge in the form of exposure will motivate people into action. “It’s strange that a hermeneutics of suspicion would appear so trusting about the effects of exposure,” she writes (Sedgwick 2003, 138f). “[A]s though to make something visible as a problem were, if not a mere hop, skip, and jump away from getting it solved, at least self-evidently a step in that direction” (139). Mark Fenster makes a similar point. He critiques the cybernetic assumptions of the transparency movement in which “the state is defined by its “streams of information”” (Fenster 2015, 153). Disclosure is here understood as “the transmission of information from state to public, and assumes that transmission will banish public ignorance, magically transform public discourse, and allow the true public to appear and triumph” (152). In an article in *New Republic*, Lawrence Lessig is concerned with the ideological signature of transparency. People’s responses to information are inseparable from their interests and desires, he asserts. “What we believe will be confirmed, again and again” (Lessig 2009). Information is mediated, as Richard Grusin argues, and “mediation is itself immediate”, “life itself is a form of mediation” (Grusin 2015, 132). In *Publicity’s Secret* (2002) Jodi Dean claims that transparency and secrecy form a false dualism. She critiques the reduction of politics into revealing what is concealed –

considering that great miscarriages of justice happen in plain sight, in the realm of the hypervisible. Clare Birchall complicates the intractable relation between transparency and secrecy. “[T]ransparency can have the same effects as secrecy, and secrecy can flourish in “transparent” realms” (7). Furthermore, Geert Lovink and Patrice Riemens argue in “Twelve Theses on WikiLeaks” that the black box strategy of transparency activists, aiming to be opaque in order to force transparency upon others, amounts to “little more than *Mad* magazine’s Spy vs. Spy cartoons” (Lovink and Riemens 2010). The first chapters of *Black Transparency* might have felt less dated if it had addressed how Metahaven’s notion of ‘black transparency’ is situated in a wider body of knowledge.

Power and knowledge do not form an automatic nexus that can be triggered by more information. The cybernetic notion that with the right information systems will adapt and change is unfortunately flawed. We often become caught up in rationalizations that only confirm what we think we know; we see what we believe. Bringing more information to the surface does not necessarily produce truth, let alone instigate structural transformation. Can political life be reduced to information? Is it knowable, or, for that matter, inherently teleological? According to transparency advocates, with the right information you can make purposeful adjustments, even systemic changes, to our political realities. Disclosures decrease the ability of a regime to hold on to power. This, too, expresses a fear of contingency and losing control. Equally problematic is the quasi-missionary propensity to bring to light the dark secrets of government, inform the uninformed masses in order to make the world a better place. This conjures spirits of truth-bearing institutions imposed on societies. Instead of challenging their own will to know, or the kind of subjectivity transparency produces, Metahaven swaps one absolute for another, and, as this part of the book stands, comes close to propagating the very kind of practices they aim to discredit.

The plot thickens in the final chapter of the book “When Pixels Become Territories”, in which black transparency finds its end. The chapter reflects on the image economy surrounding the 2014 war between Ukraine and Russia. Metahaven argues that the conflict was for an important part fought “on internet server farms”

(155). The war was characterized by “alternative explanations,” (162) “energized, recreated, and post-produced through social media, image manipulation, fiction writing and role playing” (155). During the conflict, Russian workers at the St. Petersburg-based Internet Research Agency (IRA) were paid to post thousands of pro-Russian comments on Western media articles about the war. In the summer of 2014, *The Guardian* reported of 40K comments a day on its Russian and Ukraine related articles. Some of the other unlikely foot soldiers in this proxy cyber-war were a Moscow-based design studio, a Vietnamese amateur illustrator, a WikiLeaks retweet of a conspiracy theory, some leaked documents, a nationalist anime YouTube music video chock-full of political spin, in addition to coverage on the are by a labyrinth of state-owned Russian media outlets. In this dazzling, premeditated, networked mess, it is impossible to make sense of truth, Metahaven decries. Their inspirator, WikiLeaks, is “allied with a power that should be its target,” they lament (164). “Planetary-scale computation [...] is transforming geopolitics in ways we are yet to understand,” Metahaven claims (155). “[T]he world in general never appeared as opaque as now,” they insist (6). Empowered by networks of planetary-scale computation, “[f]antasy and reality, fiction and fact, are made equivalent” (164). Such a post-truth condition, in which “nothing is true,” is “immune to black transparency’s most fundamental critique of the state” (164). Black transparency has become “part of an order where fantasy and reality coexist” and cannot provide a way out of this conundrum (167).

What we are left with is propaganda, Metahaven maintains. And indeed, memewars, fake-news, alternative facts, ransomware, and conspiracy theories about foreign hackers proliferated during the 2016 ‘Brexit’ referendum, and further accelerated during the 2016 US election. Our lives today are dependent on computational systems that are deeply connected, interconnected, embedded and integrated. The under-examined yet palpable capabilities and fragility of these networked systems have caused some to feel more vulnerable. Has the Enlightenment model of politics come to its logical end? Has the post-truth society outpaced the information age? Have the central mediators of authority of the twentieth century run aground?

Metahaven sets out a zealous set of stipulations and questions. Confronted with their own assumptions of certainty, stability and truth, Metahaven seems anxious to see whistleblowers and transparency activists end up in a knife-fight with ‘alternative facts’ and fake news ready to be believed and widely shared on media platforms by their ideological cohorts. If spin and memes are more decisive than factual content, how can we make sense of truth? And who has the power of interpretation?, Metahaven asks in their *cri de coeur*.

Perhaps we need to ask a different question. For many “minorities” – a tremendous misnomer, as minorities form a majority – the basic institutions of authority of the twentieth century failed to provide a common ground to begin with. They know what it means to be exposed to reactionary power politics – and for that matter to racism, classism, and sexism. For decades, feminists, postcolonial, queer and gender theorists, poets, and artists alike have been challenging the presumed universal subject of Enlightenment. For decades they have been deconstructing the power structures inherent to knowledge production. For decades they have questioned the androcentric, ethnocentric and ideological assumptions of what constitutes Truth in the first place. “‘The modern liberal subject’: by now it seems, or ought to seem, anything but an obvious choice as the unique terminus ad quem” (Sedgwick 2003, 139). Instead of linearly opposing the power structures of Truth, instead of swapping one Truth for another (*mine is better than yours*), these thinkers have pointed to the historical contingency of all ‘facts’, and continue to defend complexity, arguing for the need of new ontologies and epistemologies, and radically inclusive narratives. What is more, as Audre Lorde, who pulled no punches, argues in *Sister Outsider* (1984): “the master’s tools will never dismantle the master’s house” (Lorde 1984, 112). It may temporarily beat the master at his own game, but it will “never bring about genuine change” (112). And if this makes you feel uncomfortable, you are too attached to the master’s house, Lorde maintains (112).

Black Transparency ends with an anecdote on Pussy Riot’s anti-Putin ‘Punk Prayer’ performance in a Moscow cathedral in 2012. Metahaven considers the Russian feminist punk band the logical successor of black transparency. Pussy Riot’s interventions “trigger responses that are themselves disclosures,” Metahaven contends

(168). To what end?, we may ask. Post-truth is not remedied by disclosures, by generating more proof as alternatives to the alternative facts, nor by fighting propaganda with propaganda, truths with counter-truths. Reality is irreducible to ‘facts.’ Are we willing and able to step out of the power structures that produce post-truth, even if this means a loss of power? Are we willing to compromise (our) Truth? Compromise does not mean one cannot have (and fight for) strong convictions. Compromise means increasing your ability to relate, and this entails taking into account your obligation to and interconnection with other people and things, known and unknown.

Any counter-strategy that could attend to networked propaganda, the optimization of bias, trolls, meme-wars, echo chambers, and other machinations of power, would first have to make peace with the uncertain, the unfounded – without actual examples, without field guides, pointing to uncharted territory beyond rules. Perhaps we should ask: how to shift the focus, not to bring in the promise of greater transparency or Truth, but to recognize blackness as an inherent condition of truth? How to position ourselves as open to other ways of seeing and knowing? To do the work of dismantling the master’s house means first admitting the loss of mastery.

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Biography

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Patricia de Vries is a PhD candidate at Erasmus University Rotterdam, a lecturer and researcher at the Institute of Network Cultures, and editor at Felix & Sofie. She reads and writes about algorithmic epistemologies in the arts. More about her can be found at networkcultures.org/contesting-capture-technology

The Parameters of Platform Capitalism

Niels van Doorn

Review of Nick Srnicek (2016) *Platform Capitalism*. Cambridge and Malden: Polity Press, 120 pp.

When reflecting on the impact of digital technologies on capitalism, what exactly are we referring to when we use the term ‘capitalism’? Is it an economic system wedded to a particular mode of production – one rooted in private property, market competition, and the profit motive? Is it a juridico-moral constellation whose normative framework grounds and protects the competitive pursuit of property and profit? Or rather, is it in essence a political theory whose logic of “possessive individualism” (Macpherson 1962) is internalized by subjects operating on the assumption that the market will allow them to flourish in freedom? Such questions regarding the identity and scope of capitalism may seem to express a merely theoretical concern, yet they do in fact shape the kinds of research that can be conducted, insofar as they delineate what (institutional) actors and processes can be included as legitimate objects of study. Although many critics would likely agree that capitalism is a dynamic and heterogeneous assemblage which incorporates all three aspects suggested above, the adjudication of their respective pertinence – and thus the extent to which each receives scrutiny – will undoubtedly be informed by disciplinary interests. Moreover, it is capitalism’s very heterogeneity and dynamism

that complicates any attempt to grasp it as a monolithic whole, so as scholars we necessarily opt for particular approaches that foreclose others.

One therefore cannot fault Nick Srnicek for providing an unapologetically economic reading of the most recent transformations in capitalism’s *longue durée*, which have been propelled by the rising ubiquity of digital platforms ranging from Google, Facebook, and Amazon to Uber, Airbnb, and Deliveroo. In *Platform Capitalism*, Srnicek offers his readers a sharp, concise, and historically sensitive account of what is and isn’t new about companies that mobilize platforms both as a technological architecture and a business model for gaining a competitive advantage and to create novel forms of value. In doing so, he usefully counters much of the hype that has inevitably accumulated around the platform concept, yet – as I will argue below – his focus on platform companies as primarily economic actors also obscures a number of ways in which these companies, and platform capitalism more generally, are transforming societies on a global scale. Srnicek justifies his narrow approach in the book’s introduction, by distinguishing it from existing studies on the digital economy which, despite their numerous contributions, have neglected “economic issues around ownership and profitability” or have detached such issues from their history (Srnicek 2). In response, *Platform Capitalism* “aims to supplement these other perspectives by giving an economic history of capitalism and digital technology, while recognizing the diversity of economic forms and the competitive tensions inherent in the contemporary economy” (2-3). The three chapters that comprise Srnicek’s slender volume realize this aim by subsequently looking at the past, present, and future of platform capitalism. Ultimately, according to Srnicek, this conceptual approach “is important for how we think strategically and develop political tactics to transform society” (7), although his analysis unfortunately stops short of developing such tactics in any detail. After considering the arguments put forward in each chapter, I will suggest that this omission can be partly attributed to the book’s lack of engagement with what exceeds the parameters of its business-centric assessment.

Past

Chapter 1, “The Long Downturn”, sets out to “historicize emerging technologies as an outcome of deeper capitalist tendencies” (7) by attending to three relatively recent events that presumably express such tendencies: the response to the economic downturn of the 1970s; the expansion and subsequent implosion of the dot-com bubble around the turn of the twenty-first century; and the aftermath of the 2007-8 financial crisis. I write “presumably” here not so much to question Srnicek’s account as to highlight the point that it matters what story is being told about capitalism, for it determines how we apprehend and evaluate the agents driving its change. For Srnicek, capitalism is essentially marked by “generalized market dependency” that ensures a “systemic imperative to reduce production costs in relation to prices” for goods and services, which requires the constant optimization of labor processes and productivity through technological innovation (11). This narrative concerning capitalism’s core tendencies, which focuses on competition between firms while largely limiting the role of national governments to the creation of monetary policies that stimulate investments in private assets, will turn out to inform his later assessment of platform capitalism – for better and for worse.

What I appreciated about Srnicek’s analysis in this chapter is his effort to show how capitalism as a mode of production crucially depends on both technological and financial support in its ceaseless quest for capital accumulation. The three moments he takes as exemplary expressions of capitalism’s will to power/profitability are connected by the fact that each represents a next phase in the ongoing restructuring of the modern corporation into an agile business entity, whose contemporary expression is the platform company. Such a business entity concentrates on high value-adding activities while divesting itself from “downstream” employment liabilities through technology-enabled outsourcing and subcontracting practices that remotely manage its fissured supply chains, (ostensibly reconfigured into so-called “value ecosystems” in today’s platform economy).

Moreover, this restructuring has been shaped by the increased role of financial markets and instruments, which in turn have been bolstered by deregulation and

loose monetary policies. As Srnicek rightfully points out with respect to the spectacular growth of venture and equity capital investment in tech companies during the 1990s, these policies did not only lay the groundwork for the digital economy but also precipitated the 2001 stock market crash as well as the sub-prime mortgage crisis. Yet he also ignores some important processes and actors, which produces some critical blind spots in his account.

For instance, he does not pay attention to how financialization has affected business practices and objectives, especially in relation to human resource management. Although he mentions the importance of shareholder value in corporate decision-making, there is no discussion of how the proliferation of share repurchasing, or the increased role of financial service provision which shifts corporations’ core business from producing goods/services to rent-seeking, have had deleterious consequences for labor (Lazonick 2010; Thompson 2016). Furthermore, while Srnicek notes that unions during the 1980s “faced an all-out assault and were eventually broken” (17-18), he does not explain how this assault was the result of concerted government efforts. As Peck and Theodore (2012, 746) have noted, in the US these efforts “crystallized in the Reagan administration’s economic program, which not only authorized wide ranging welfare retrenchments, while taking the fight to organized labor in the form of antiunion stances and policies, but also articulated a normatively positive discourse of labor market ‘flexibility,’ while (directly and indirectly) sanctioning the expansion of contingent labor practices.” In other words, national governments do more than create favorable monetary policy; they are active (*activist*) agents in capitalism’s evolution, shaping the conditions for capital accumulation and labor organization. This is not just a matter of companies taking advantage of deregulation and doing what they must to cut costs and meet their bottom line, as Srnicek’s story implies. This is about neoliberal governance as a dynamic mode of intensive regulatory experimentation that reconfigures relations between business, finance, and labor while also reimagining the role of the state. Interestingly, Srnicek does not once refer to neoliberalism in this book, which may signal his distaste for the term or his reluctance to consider capitalism as a mutating *political* project – now increasingly concerned with governing by debt (Lazzarato 2015) – rather than solely a mode of production.

Present

Chapter 1 ends with a portrayal of “the present conjuncture” as defined by fiscal austerity, corporate tax evasion and cash glut triggering risky investments, and growing job and income insecurity (Srniczek, 34-35). This sets the scene for chapter 2, “Platform Capitalism”, in which Srniczek focuses his narrative on the rise of platforms as the new technology for extracting, processing, and analyzing data, which have become a central source of profit generation and competitive advantage in the digital economy. If this seems like a bit of a leap that’s because it is, as the chapter offers no discussion of how each of the last three recessions (1990-91, 2000-02, and 2007-09) was followed not only by a “jobless recovery” (Peck and Theodore 2006), but also by a new stage in the development of networked information and communication technologies: the World Wide Web, the so-called “Web 2.0”, and pervasive mobile internet connectivity. Each stage featured experiments with new forms of capitalist value-creation and extraction in the face of waning economic growth, yet what ultimately ties these experiments together is their quest to orchestrate increasingly frictionless markets by optimizing the distribution of information (or its proxy: data) as well as the management and prediction of human behavior (through data analytics). Each stage, then, can be understood as a particular yet cumulative articulation of behavioral economics with cybernetic reason. Srniczek does not address this development, however, and while he mentions the massive investments in internet infrastructure during the 1990s boom, I particularly missed an appraisal of Tim O’Reilly’s (2005) influential “Web as Platform” idea, which both envisioned and reflected a reconfiguration of the web into a programmable, data-driven, and “social” architecture. Despite this oversight, Srniczek offers a useful description of platforms as a new kind of firm that owns and manages a computational infrastructure which intermediates between different user-groups and governs their interaction possibilities, while “displaying monopoly tendencies driven by network effects” (48; see also Bratton 2016: 41-51). The rest of the chapter is dedicated to an overview of the emerging platform landscape, presenting and evaluating five platform types: *advertising*, *cloud*, *industrial*, *product*, and *lean* platforms.

Space constraints prevent me from attending to each in detail, so instead I will only address his argument concerning the latter type. His main criticism of lean platforms such as Uber, Airbnb, and other “sharing economy” start-ups is that their business model is unsustainable and they do not add anything new to the digital economy. Whereas other platform types have amassed significant assets in the form of hardware and other fixed capital (think of Google’s server farms), allowing them to gain a competitive advantage and become profitable, lean platforms operate according to what Srniczek calls a “hyper-outsourced model” that renders them dependent on third parties – most notably cloud platforms like Amazon for computing and storage capacity, and users for household assets (Airbnb) as well as labor power (Uber) (76). While this assessment is proving to be increasingly accurate, as lean platforms are tentatively starting to invest in physical assets, I think it also neglects a novelty that is quite important. Peer-to-peer markets do not seem to concern Srniczek much, but they should, because beyond their potential to dominate various industries, lean platforms are fundamentally transforming how people consume and produce goods/services. By allowing them to instantly access and monetize any potential asset, they diffuse market logics and entrepreneurial rationalities – i.e. the spirit of neoliberal capitalism – into new territories. Likewise, these platforms are altering working conditions and labor market norms across the board. While Srniczek is correct to argue that today’s gig economy is “effectively an acceleration of the long-term tendency towards more precarious employment, particularly after 2008” (79), this does not mean that platform-mediated labor just entails more of the same. For example, temporary-staffing companies such as Randstad are now experimenting with digital platforms to expand and diversify their operations as global labor market intermediaries, increasingly moving toward a data-intensive and zero-liability “workforce-as-a-service” model (Van Doorn 2017). Even though many lean platforms will undoubtedly be forced to fold in an ultra-competitive field with decreasing VC investment, the more successful ones will consolidate and converge just like other types of platforms, meanwhile stimulating profound changes in how people work (think algorithmic management) and generate an income.

Future

This brings me to the book's final chapter, "Great Platform Wars", in which Srnicek lays out what he views as platform capitalism's primary tendencies and challenges in the (near) future. Here his narrow approach to capitalism as essentially revolving around inter-firm – or "intracapitalist" (95) – competition is most pronounced, which results in some perceptive yet ultimately rather limited observations about the shape of what is to come. The tendencies he discusses, which are understood to be driven by platform companies' innate proclivity to monopolize, include the expansion of data extraction and analytics into all spheres of life, the need to safeguard one's strategic position within value ecosystems, the progressive enclosure of these ecosystems into "silos", and the convergence of companies toward similar markets. Subsequently, the identified challenges mainly deal with the obstacles different types of platforms are facing as they attempt to achieve profitability in various industries, despite their competitive advantages. What I found most thought-provoking in this part of the book were Srnicek's brief speculations on new business models which focus on rent-seeking in a "post-advertising environment" where platforms are facilitating a shift from consumer ownership to access. A possible corollary of this shift could be "a massive expansion of micro-payments, as the IoT (Internet of Things) enables every good to be turned into a service that charges by the use: cars, computers, doors, refrigerators, toilets" (124). Whereas most analyses of the platform economy tend to assume the insatiability of the data-driven advertising industry, thereby assuming the durability of the "free" social media model and the partnership between platform companies, advertisers, and data-brokers which sponsors this model, such a constellation cannot be expected to survive indefinitely. And when (not if) the data bubble finally bursts, powerful platform companies like Google and Facebook will need to radically alter their monetization strategies – a necessity that is not lost on these companies, both of which continue to diversify their portfolio.

So is the era of "everything-as-a-service" upon us? Is this hyper-extractive and ultra-contingent model the future of capitalism? How will this impact our lives as well as our livelihoods, and what can we do to resist or deter this future – *if* we'd

be so inclined? In the last few pages Srnicek considers some alternatives, ranging from stricter regulation and platform cooperatives – which he quickly dismisses – to creating collectively-owned platforms whose services are offered as public utilities. But these suggestions are little more than afterthoughts and, besides the question of how platform coops are different from "platforms owned and controlled by the people" (128), it is entirely unclear how one would go about mobilizing "the state's vast resources" to build "postcapitalist platforms" whose control over collected data would nevertheless remain "independent of the surveillance state apparatus" (ibid.). Moreover, this assumes a clear distinction between the imperatives of public institutions, such as (supra)national governments, and private (platform) companies, which has become increasingly untenable since the rise of neoliberal statecraft. One example is the European Union's Digital Single Market strategy, which has embraced the "collaborative economy" as a site for economic growth and aims to facilitate platform-based market innovations across Europe. Platform capitalism is more than a new version of a legacy system based on competition and profitability; it is also an updated political rationality. Platform companies know this very well and are fully invested in shaping its outcomes, having moved from regulatory arbitrage – i.e. taking advantage of legal loopholes – toward regulatory capture and policy entrepreneurship on multiple levels of government.

On a local level, meanwhile, we see the proliferation of self-proclaimed "Sharing Cities" experimenting with public-private partnerships in order to supplement and improve public services via private platforms. Such initiatives can be seen as a response to the growing pressure on municipalities to take on more responsibilities while faced with waning resources, where platforms for peer-to-peer services like meal-sharing are filling gaps in public provisioning while also stimulating local entrepreneurship and social cohesion. This brings me to my final remark with respect to Srnicek's argument: beyond a mode of production capitalism is also, crucially, a mode of *social reproduction*. This means that to understand the future of neoliberal capitalism mediated by platforms we will also have to examine how these technologies reconfigure what Nancy Fraser (2014) has called "Marx's hidden abode": the deeply gendered, classed, and racialized organization of care and maintenance work that has remained invisible in most economic analyses, due to

its largely informal nature, while it sustains labor power and capital accumulation. This would necessitate an expansion of *Platform Capitalism's* parameters, acknowledging the ways in which platforms, as new institutional forms, are pervading our everyday lives while reshaping relations – and further blurring lines – between the market, the state, and civil society. I believe that such a strategic move would allow us to develop more capacious political tactics than have thus far been offered.

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Biography

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Fantasies of Neoliberalism: From the Clerical to the Entrepreneurial Subject

Jan Overwijk

Review of Ulrich Bröckling (2015) *The Entrepreneurial Self: Fabricating a New Type of Subject*. London: Sage Publications, 256 pp.

The newly translated habilitation thesis of Ulrich Bröckling, *The Entrepreneurial Self*, forms an impressive and commendable overview of the forces of subjectification shaping entrepreneurial subjects of the neoliberal capitalist era into entrepreneurial selves. The subject, in this Foucauldian study, is no longer a transhistorical figure, but is itself constituted through power relations and modes of governing, moulding and taking advantage of it. Studying this subject, then, comes down to an examination of these creative fields of force. Analysing these fields of force, the study of the entrepreneurial self also tells a story about the nature of neoliberal capitalism. Neoliberalism seeks to universalise the principles of competition found in capitalist markets throughout society. It recognises, however, that such markets do not suddenly appear and run all by themselves. They need competitive subjects to complement them: entrepreneurial selves.

Bröckling's rich monograph is an exercise in the research field called 'studies of governmentality', following in the footsteps of figures such as Michel Foucault and Nikolas Rose. Governmentality – or the “conduct of conduct” – points to

programmes and techniques that aim at changing, steering and guiding the behaviour of human beings. Governmentality does not mean fully controlling or determining the conduct of the subject, but structuring its field of possible action (Bröckling 2016, 8-9). It is this structuring that forms the object of Bröckling's investigation. The resulting 'genealogy of subjectification' presented in this book is thus less a comprehensive description of what an entrepreneurial subject looks like, but, rather, an account of what forms of knowledge, methods, techniques and practices are mobilised to actively shape this subject (Bröckling 2016, xiii and 3).

One of the defining characteristics of the Foucauldian 'studies of governmentality' is their extension of the notion of government, which now becomes 'governmentality', beyond the locus of the state. For Foucault, power cannot be located in a clearly demarcated entity, exercising it in a top-down fashion. Rather, power is dispersed through lowly and contingent relations of force. In looking for the specific knowledge and social techniques constitutive of the entrepreneurial self, then, Bröckling does not simply analyse an authoritative philosophical treatise or the exercise of power by a centralised source. Instead, he traces a 'convergence of lines' from heterogeneous contexts and lowly cultural sources. In this way, Bröckling structures the book in three sections. First, he addresses the methodology of the *Studies of Governmentality* and begins to gather some evidence for the thesis that the neoliberal subject is hailed as an entrepreneurial self. Then, there are two parts: Bröckling first draws up the picture, or rather 'rationality', of the entrepreneurial self as it emanates from various theoretical sources. Then Bröckling focusses his attention on four “strategies and programmes” drawn from concrete practices, namely creativity, empowerment, quality and projects.

Bröckling starts the book by delineating some of the contours of the entrepreneurial self from self-help books, training manuals and management programs, which are examples of 'social technologies' aiming “to organize life around the entrepreneurial model of behaviour” (Bröckling 2016, 21). Concretely, Bröckling points to what the German sociologists Voß and Pongratz describe as the 'entployee': a new type of labour in post-Fordist production. The entployee is a labour force entrepreneur who is required to increase self-organisation, self-rationalisation and

self-monitoring as well as to autonomously economise their personhood. This sociological notion coincides with demands made on neoliberal subjects in management literature, such as Tom Peters' and Robert H. Waterman's bestseller (1982) *In Search of Excellence* and Gifford Pinchot's (1985) *Intrapreneuring*. Much like the entrepoyee, the 'intrapreneur' (contraction of intra-corporate entrepreneur) is a figure that is not just described as but also praised for its readiness to take risks and its drive for innovation. Impressively, Bröckling situates categories like 'entrepoyee' and 'intrapreneur' in a far broader context of magazine articles, bestseller self-help books, Thatcherite 'enterprise culture', management literature, and the advent of the 'new economy' of post-Fordism.

Beyond the sphere of management and organisation, Bröckling also observes in the self-help literature an ethical injunction to view one's whole life as an enterprise, i.e. as "Me Inc". In this case, the self is not merely hailed as an entrepreneur only at work, but always and everywhere. In the second part of the book, Bröckling goes into four widespread notions which have materialised in organisational culture, namely creativity, empowerment, quality management and the project. These are interesting topics, and Bröckling treats them in great detail and clarity. However, he fails to mention why he has specifically picked out these four rather than others, such as disruption or network. After all, these are also important buzzwords and expressions of the Californian Ideology in the management-scene of the information age. As a result of this, his treatments of these topics feel more arbitrary and less convincing than the more conceptually oriented chapters of the first part. These early chapters, on the rationality of the entrepreneurial self, aim to show that these contemporary convergences upon some sort of entrepreneurial image of the subject are not coincidental. Rather, Bröckling demonstrates convincingly that the normative ideal of an entrepreneurial self forms part of the rationality of a family of economic theories grouped together under the label of neoliberalism. He does this by presenting the reader with an impressively clear and concise tour through a variety of theoretical currents in economics, notably ordoliberalism, human capital theory, and Von Hayek's neoliberalism (later on, Bröckling also turns to contract theory and transaction economics). What these neoliberal theories or theorists all share, so argues Bröckling, are three fundamental convictions. First,

neoliberalism argues for market mobilisation. That is, the market is viewed as the most efficient and just mechanism for resource allocation; the market mechanism should thus be universalised by instituting it in various social sectors. Secondly, neoliberalism deviates from classical liberalism in that it views not exchangeability but competition as the essence and main virtue of capitalist markets. Thirdly and finally, neoliberals maintain that neither markets nor competition come about naturally, but must be actively instituted and sustained. Combining these three theses, we may say the political mission of neoliberalism consists in creating and managing the social conditions in which markets and competition are able to come about. In this way, the crux of Bröckling's argument becomes clear: "If the thrust of neoliberal government is toward generalising competition, modelling society as a whole on the market, then it will ineluctably come to mould subjectivity on the figure of the entrepreneur" (Bröckling 2016, 60).

Bröckling's observation on the constellation of forces that mould the entrepreneurial subject, then, implies a wider claim on the basic structure of contemporary, neoliberal capitalism. It makes clear that the neoliberal dream of market universalisation does not merely mean the wish to institute markets in all the various spheres of society, for example through the privatisation of the public sector. It also means neoliberalism wishes to universalise the market from the public sphere of work to the private sphere of leisure. For the subject is not just an entrepreneur when he/she is sitting at his/her desk at the office, he/she is an entrepreneur of his/her entire life, "Me Inc". Seen in this way, universalising the market through the governing technique of subjectification becomes a particularly effective way of inserting 'human capital' into the economic system. This technique of subjectification is itself a major component of neoliberalism.

The product of this technique of subjectification, the entrepreneurial self, is an essential element of neoliberal governmentality; it belongs to the 'social conditions' which must be instituted in order for neoliberal capitalism to function effectively. Accordingly, Bröckling calls the idea of the entrepreneurial self a 'real fiction', the kind of story which supplies "systems with the agents they need in order to operate" (Bröckling 2016, 11). As such, Bröckling's image of the entrepreneurial self tells

us nothing about actually existing subjects, but, rather, more about the forces of subjectification as we find them in actually existing neoliberalism.

It might, in this respect, seem strange that a book entitled *The Entrepreneurial Self* does not primarily deal with a self at all, but rather with its genealogical production. Bröckling self-consciously refrains from claiming anything about the effectiveness of the power structures which govern the subject, i.e. from claiming that subjects in fact have become entrepreneurial selves. This means, first, that he does not claim that subjects in today's world behave like entrepreneurial subjects and, second, that he does not attempt to say that subjects experience the lifeworld as governed by the call to act like an entrepreneur. One can laud Bröckling's self-restraint here, but one may also wonder whether he does not make it too easy for himself by ignoring the question of to what extent the notion of an entrepreneurial self resonates with the intuitions of those who live and act in contemporary capitalism. Could he not at least have referred to the kind of studies which have attempted to make the sociological, rather than the genealogical, claim about neoliberal subjects, such as Richard Sennett's *The Corrosion of Character*? Moreover, does the plausibility of Bröckling's claims not rest on the fact that the force field of entrepreneurialism resonates with our actual experience? What makes Bröckling's account intuitive is not just the presence of his theses in 'high' theory and 'lowly' management programmes, but also in the actual effects of this complex of prescriptions on the behaviour and experience of neoliberal subjects.

Having said that, let us look at what, according to Bröckling, constitutes an entrepreneurial subject more specifically. To this end, Bröckling distinguishes four functions of the entrepreneur as a macroeconomic category. These functions are respectively: the entrepreneur as speculator, innovator, risk-bearer and coordinator. First, the notion of the entrepreneur as speculator is put forward in reference to economists Von Mises and Kirzner, who both stress that human beings are not just utility calculators, but also possess alertness to opportunities such as arbitrage, a price difference in the same commodities in different markets. The defining feature of the entrepreneur here, then, is her spontaneous alertness to such opportunities of speculation. Secondly, with the entrepreneur as innovator, Bröckling points to

the works of Schumpeter, and his conception of the creative destroyer. Here the entrepreneur is a figure who exhibits leadership and establishes new combinations in production and distribution. As opposed to the rationalising and imitative manager, she is the instigator of novelty and difference in opposition to routine and staleness. Thirdly, the entrepreneur can be seen, as in the account of Frank H. Knight, as a risk-bearer. Knight here points to a fundamental uncertainty with respect to human action and knowledge. Rational action cannot be calculated with a straightforward utility function, but is stricken by a fundamental contingency. The entrepreneur, in opposition to the wage labourer and manager, bears this contingency in order to enjoy profit, and in this way she also assumes responsibility. Fourthly and finally, the entrepreneur fulfils the function of the coordinator. Her judgements and decisions regarding resource allocation and coordination attempt to be more efficient than, and therefore different from, business as usual, in which inefficiency is always the rule. In this way, the entrepreneur as coordinator is an agent of change.

Now, according to Bröckling, what unifies these separate, but not entirely unrelated, accounts of what the entrepreneurial function is, is that it is centred around such values as the new and the unknown rather than around the old and the known: "The theories we have analysed above all distinguish the entrepreneurial function from that of the calculating, instrumentalist, rationalist manager" (Bröckling 2016, 75). This proclaimed shift from the rationalist clerk to the innovative entrepreneur fits neatly with a commonplace description of present-day capitalist modernity as having moved from a conception of the capitalist subject as a Weberian-Marxian cog in the machine to an artistic, creative and autonomous post-'69 subject. It fits in with the proclaimed shift, in other words, from the old to the 'new spirit of capitalism' (Boltanski and Chiapello), or from solid to liquid modernity (Zygmunt Bauman), organised to disorganised modernity (Lash and Urry), or industrial to reflexive modernity (Ulrich Beck). For Bröckling, the terms of neoliberal governmentality are marked by this shift from rationalist clerk to the entrepreneurial self.

Biography

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