Dialogues in Data Power: Shifting Response-abilities in a Datafied World

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Introduction

How and what responsibilities are shifting in a datafied world? Who is doing the shifting and how do diverse groups of people experience and respond to these shifts? How can we realize 'response-ability' (Haraway, 2016) in research and beyond as a sense of shared agency and mutual responsiveness that goes beyond individual interests, encompassing the well-being of communities and more-than-human worlds? This book responds to these questions through a series of dialogical chapters between scholars in critical data studies (for example, Kitchin and Lauriault, 2014; Iliadis and Russo, 2016; Dalton et al, 2016; Hepp et al, 2022). We have come together across disciplines, geographies, and modes of engaging with – what we call – *data power* to explore, discuss, and challenge pressing issues and emerging themes in our growing interdisciplinary endeavour to make sense of and interfere with processes, imaginaries, and effects of datafication.

The book's title is Dialogues *in* Data Power and not *about*, as we take our own positionality and entanglements in the ever increasing datafied world as a starting point. The book itself is an experiment in facilitating interdisciplinary dialogue and collective scholarship among 80 researchers through nine collectively authored chapters. Contributors to each chapter were invited based on their presentations at the 4th Data Power Conference which attracted 175 participants and took place in June 2022 simultaneously in Canada, Germany, the UK, and online.[1] In a series of workshops for each of the chapters, the invited contributors explored their various perspectives, experiences, and responses to the chapter's theme. They then collectively wrote a joint introduction to the chapter, as well as individual sections that provide their own perspective. This responsive process led to what authors in different chapters refer to as a 'kaleidoscope' or 'braid' of scholarly

engagement. The process, hence, did not aim to provide a conclusive view on any given theme but allowed for a *diffractive writing* of multiple and also differing or disagreeing perspectives. To further increase the dialogue, we also invited scholars – mostly from outside the Data Power realm – as discussants for the individual chapters. Their task was to provide a response and situate the arguments in their own research. Through this form, we have created a space for dialogue and mutual encounter that is difficult to find otherwise in such an interdisciplinary field. We do not have any formal association, there are only a few conferences and academic publications that attract this wide variety of academics working on datafication in such diverse disciplines as media and communication studies, information studies, STS, information systems, software engineering, data science, law, education, age studies, cultural anthropology, critical geography, and gender studies. At the end of this book, we present and reflect on our experiences with this kind of scholarly writing process.

Chapter overview

Overall, this volume encompasses nine collectively written chapters which we summarize below. We then proceed with a *diffractive reading* across the nine chapters and identify five cross-cutting themes relating to shifting response-abilities in a datafied world.

1. Configuring Data Subjects. The first chapter examines how individuals become subjects of datafication within data-driven systems, emphasizing the importance of historical, social and power dynamics. It questions data objectivity by exploring different domains in which individuals come to be configured as data subjects, such as self-tracking, ageing, disability, and autonomous vehicles.

2. Children as Data Subjects: Families, Schools, and Everyday Lives. The second chapter examines the increasing digitized surveillance of children's lives in three contexts: 'sharenting' in the USA, Italian family privacy practices, and English secondary schools. It explores themes of neoliberalism, subjectification, risk, and decision-making. The chapter advocates for a data justice approach to counter the datafication of childhood, emphasizing the need for governmental regulation and inclusive decision-making involving children's voices.

3. In/visibilities in Data Studies: Methods, Tools, and Interventions. This chapter examines research practices of rendering data visible and the inherent power dynamics and imbalances that accompany them. The authors have developed a dialogue in three interconnected parts, each focusing on the intersection of in/visibility and power: (1) the challenges of producing knowledge about and with data; (2) empirical case studies analysing the consequences, methodological opportunities, and challenges of data visibility;

and (3) tool-based interventions aiming to bring alternative data framing and narratives to the fore.

4. People's Practices in the Face of Data Power. The authors of this chapter present and discuss changing power dynamics between state, citizens, and industry, with individuals having little control over data collection and algorithmically informed decisions that govern their lives. The chapter explores emerging power imbalances and points to possibilities of agency through practices of consent and refusal, to citizen participation, and other forms of data activism. In doing so, the authors contribute to reshaping data power 'from the bottom up' and propose a people-centred and radically contextualized approach for our data futures.

5. Practitioner Interventions in Data Power. This chapter explores the different identities and responsibilities within the data ecosystem, from data scientists to policy makers, highlighting tensions and reflections on the work of these different data practitioners. Authors explore what data work looks like in practice and through which ethical, legal, and societal considerations practitioners orient their work.

6. Critiques of Data Colonialism. The authors in this chapter engage in a critical intervention of Couldry and Mejias' (2020) concept of 'data colonialism'. Bringing contrasting perspectives to the discussion, the authors put forward arguments that offer fundamental critiques of the data colonialism concept, as well as examining how it might be extended to address issues of environmental injustice and historicized into the power relations of medieval feudalism. Together they problematize a simple reading and application of the 'data colonialism' concept for understanding contemporary data power.

7. Environmental Data Power. This chapter examines the relationship between data and the environment, through an exploration of the practice of environmental sensing, data-driven representations of climate change, and the environmental impacts of data centres. The authors ask: how does 'environmental data power' as a concept that encompasses all of these practices and contexts operate across various registers? In bringing together varied cases based on their independent research, the authors add to the growing conversation about data and environmental justice.

8. Data and Technological Spatial Politics. This chapter brings together a group of authors that have been working on independent research projects examining the Montreal neighbourhood Parc-Ex, where local activists oppose processes of gentrification and displacement driven by an emerging AI ecosystem meant to boost Canada's innovation and platform economies, with other researchers exploring the spatial politics of data and technology at a global scale. Through their combination of macro and micro analysis of the spatial politics of data and technology, they identify three forms of data power that help them understand agency within these spaces: hegemonic data power, powering data, and data counter-power.

9. A Canon Is a Blunt Force Instrument: Data Science, Canons, and Generative Frictions. This chapter is collectively authored by a group of academics from three Dutch universities and from a diverse set of disciplines. It emerged from a keynote dialogue at the 4th Data Power Conference. The authors take their different disciplinary backgrounds and research fields as starting points to ask how different conceptions of the same term – here AI and trust – can be generative or problematic for critical engagements with data-driven technologies.

Cross-cutting concerns: shifting response–ability

Each of the individual chapters hence provides an interdisciplinary engagement with different emerging and important themes in critical data studies. We now turn to five cross-cutting concerns about *shifting response-abilities in a datafied world* that we identified across the chapters: (1) the responsibilization of individuals and communities through processes of datafication, (2) the abilities of individuals and communities to respond to data power, (3) the endeavour to design responsible data-driven systems, (4) questions around what responsible data studies research may look like, and (5) how we as critical data studies scholars can become response-able to each other.

First, contributions in this volume articulate concerns about the *responsibilization of individuals and communities* who are subject to an increasing datafication. Here responsibility is shifted to the individuals and/ or communities who experience data power. For example, in Chapter 1, 'Configuring Data Subjects', Nicole Dalmer considers the responsibilization of older adults through data-driven technologies. Older persons self–track their lives and bodies to become more self-knowledgeable, they simultaneously also become more responsible for their well-being in a public discourse that more often than not positions older populations as a burden and threat to our healthcare and social systems. The authors of Chapter 2, 'Children as Data Subjects', discuss the responsibilization of guardians vis-à–vis an increasing datafication of children's lives. Here responsibilities are assigned to parents or teachers as 'responsible mediators' to ensure children's safety and privacy.

A second and related concern across the chapters is the *ability of individuals and communities to respond to data power.* In Chapter 2, authors consider for example a 'data justice' approach as a 'potential resistance and response to the datafication of childhood'. The authors in Chapter 4, 'People's Practices in the Face of Data Power', call the ability to respond 'collective agency'. Examples that authors list include community data activism, modes of participatory governance, and citizen participation. This requires understanding and supporting the conditions under which individuals and

collectives are able (or enabled) to respond to data power. Here collective response-ability refers to the ability to refuse, resist, and challenge regimes of data power. Authors explore what kinds of resources are required to do so, where to find them, or how to create them collectively. Catherine D'Ignazio adds to the authors' contributions in her response the heterogeneous activist practices that do not respond against data power, but use data science as an 'imperfect informatic tactic in a deeply asymmetrical environment'. It is a practice that is part of a broader 'constellation of efforts that are working towards the restoration of rights, the healing of communities, and the longer-term work of structural transformation'. Dan McQuillan summarizes this similarly in his response: 'Resistance is more than collective refusal, it is a commitment to possible alternatives.' In Chapter 8, 'Data and Technological Spatial Politics', several contributors explore community activism through a case study of Montreal, where local activists oppose processes of gentrification and displacement driven by an emerging AI ecosystem meant to boost Canada's innovation and platform economies.

Third, responsibility has become a – to some extent token – *promise for designing and implementing data systems*. Phrases such as 'responsible AI' or 'fairness, accountability and transparency' point to the increasing awareness of the industry but also data science practitioners about their responsibility in producing systems that do not inflict harm on individuals, communities, and the environment. In Chapter 5, 'Practitioner Interventions in Data Power', the authors consider the responsibilities and resulting interventions of professionals engaged with data work – from data scientists (in training) to civil servants, journalists, and activists. Authors ask: Who, why and how do practitioners working with data as part of their professional practice feel responsible? To whom/what do they feel responsible? In Chapter 9, 'A Canon Is a Blunt Force Instrument', the authors consider their educational responsibilities in teaching data science and related subjects. In addition they explore differently assigned responsibilities for the design and regulation of data-driven technologies. Concerns related to environmentally responsible design are addressed in Chapter 7, 'Environmental Data Power', but also in Chapter 6, 'Critiques of Data Colonialism', in which Benedetta Brevini critiques the concept of data colonialism in relation to environmental justice. Collectively, authors examine the various environmental harms that may arise as a result of the design of digital infrastructure components such as data centres and submarine cables, as well as observing the energy required to power AI models. They call for a better understanding of these forms of 'energetic data power' when considering the infrastructural design, and introduce environmental justice critiques that aim to address some of these issues.

A fourth way in which shifting response-abilities are important to authors, are the ways in which *we – as researchers – engage responsibly with our research*

participants and are response-able to what we witness and learn. Donna Haraway (2016) proposes a feminist ethics of response-ability as attending to affect, entanglement, and rupture. With Haraway, critical data studies scholars can ask how we may 'cultivate the capacity of response-ability' (p 35). In particular in Chapter 3 'In/visibilities in Data Studies', authors consider questions of methodology and engagement in critical data studies. They forefront the question of how our methods, tools, and interventions produce visibilities and invisibilities of and within data power. Their guiding questions include: 'How do we chart the contours of visibility for something as ephemeral and capricious as data? How do we evaluate what we can see – its truth, its accessibility and its social value? How do we make sense of when and for whom data visibility is productive?' Chapter 6, 'Critiques of Data Colonialism', is exemplary of scholarship that grapples with questions of how research responds adequately to the lived experiences of historic and contemporary colonized populations. For example, Clément Le Ludec provides insights into a case study of low-paid data workers in Madagascar, while the chapter's discussant Andrea Jimenez argues that the ambiguity of the term data colonialism is not just a 'conceptual problem' but has 'material implications'. Here Haraway (2016) can provide guidance when she urges researchers to consider the response-abilities that arise from their practice and calls on them to 'stay with the trouble'. This can lead to 'viral response-abilities' (p 114). Research methods are contagious and mutate, and researchers in critical data studies may want to consider how we can spread methods for (more) critical engagement and careful intervention (Springgay and Truman, 2018). Ultimately this points to our response-ability for configuring the apparatus of research (Barad, 2007) and struggles over what research will count as a legitimate account of datafied realities (Haraway, 1988).

A fifth way in which response-ability plays out in this book, is *how we become response-able to each other.* Chapter 9, 'A Canon Is a Blunt Force Instrument', demonstrates one such endeavour to enable generative responses that grew out of the keynote panel of the 4th Data Power Conference. The authors are all based at Dutch universities, but are part of very different disciplines – spanning from law and philosophy to software engineering and data science. In their contribution they state: 'We talk, and sometimes even discuss our research with one another. But do we also understand each other? What would that even mean? When we talk about "data", do we talk about the same thing? Is that even necessary?' In their chapter, the authors explore and juxtapose 'canonical objects' in their teaching such as 'artificial intelligence' and 'trust', and consider the role of such objects for dialogue across disciplines. The chapter is a showcase for how the collective 'we' of critical data studies scholars can become response-able to each other and the wider communities that intersect with our work. Our book is hence

an attempt to respond to each other and our research in a different form and process. In particular in an interdisciplinary and emerging field like critical data studies, where professional associations are non-existent, degree programmes are only emerging, and conferences such as Data Power or Data Justice are still relatively few, we need spaces for dialogic encounters. The process of writing this book and coming together in our chapters, en*able*d us to follow an approach to 'slow science' (Stengers, 2018) in which we carefully explored each other's standpoints, experiences, and perspectives in order to find a common ground from which we can embark to not only critique but to shift data power.

For all five concerns, authors emphasize the importance of *historically developed and manifested power inequalities*. For example, authors in Chapter 5, 'Practitioner Interventions in Data Power', consider how 'contemporary uses of data are built upon longer histories of unjust, capitalist, and colonialist ways of knowing and controlling'. Denis Newman-Griffis argues in Chapter 1 that data have always both a history and a purpose. The chapters also demonstrate that part of our ability to collectively respond to data power may be based on knowledges and experiences of the past. In particular, authors in Chapter 6, 'Critiques of Data Colonialism', situate current data harms inflicted on marginalized and minoritized groups, in historical injustices, power inequalities, and extractivist logics.

So, what might we learn from our diffractive reading of the nine chapters of this book? We have demonstrated that authors raise concerns about who or what is doing the shifting of responsibilities but also attend to different kinds of abilities to respond in the face of data power. Overall, this points to the ways in which data power and different forms of response-ability are intricately linked. For critical data studies this leads to a set of new and potentially guiding questions for our research and educational practices: How can we enable ourselves and others to respond to the challenges and potential harms of datafied societies? What forms can and should our response take? For example, what responsible data practices may practitioners need to develop? What forms of collective response may individuals and community organizers develop in the face of data power? How well are our legal systems equipped to respond and regulate our increasingly datafied world in the interest of those who become data subjects and are impacted by data-driven decision-making? We believe that answering these questions can only be a collective endeavour.

Ultimately *critical* research requires the cultivation of 'response-ability' which is more than critique, because 'it requires the risk of being from some worlds rather than others and helping to compose those worlds with others' (Haraway, 2016: 178). We believe that the chapters of this book demonstrate that after more than a decade of critiquing 'big data', 'datafication', and more recently 'artificial intelligence', the field of critical data studies has moved

forward to also formulate alternative visions of more just and sustainable datafied futures. Critique in data studies has not 'run out of steam' (Latour, 2004), but as this book demonstrates, found new abilities to respond and assume response-ability.

For now, we entrust the reader to explore the various threads of the individual chapters and their contributions as an engagement with an ongoing dialogue. Before we close the introduction and to facilitate the reading, we give a brief summary of 'how to read the book'.

How to read the book

Each of the collectively written chapters consists of an introduction that was jointly written by the author teams. This introduction sets the theme, a provocation, or the main question of the chapter as well as an overview of the chapter's structure. Each chapter then consists of four to seven sections in which individual authors or author teams explore the theme, provocation, or main question from their perspective. Collective writing does not require consensus and is not based on an individual author but is an emergent process that allows exploration of a multiplicity of perspectives, experiences and positionalities to facilitate dialogue (Jandrić et al, 2023). The individual sections are hence complementary and may present diverging perspectives. To summarize their dialogical encounter, each chapter collective provides a brief conclusion with what they consider to be the main points. The conclusion is followed by one or two responses of discussants who situate the arguments in their own research and complement the perspectives presented. Depending on the number of chapter authors, we either invited one or two discussants.

Hence, in line with the book's title *Dialogues in Data Power*, the format facilitates dialogue between the collective authors and discussants, and makes these dialogues visible for the reader. We believe that this will strengthen the overall endeavour of the field of critical data studies and demonstrate an inclusive and supportive innovation in academic practice as this dialogic format introduces readers to succinct arguments within critical data studies while also appreciating the breadth of interdisciplinary perspectives across the field.

Note
[1]   See also www.datapowerconference.org

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