

# Understanding and Improving Human Data Relations

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## Abstract

PCs, smartphones, and cloud computing have transformed the world: In our daily lives, we interact with many businesses and public services who (often to reduce costs) rely on data collection and processing rather than face-to-face user

interactions to inform their decisions. This creates an *imbalance of power* between those who hold personal data and the individuals about whom data is stored, who cannot easily see their data or examine how it is used. This *Digital Civics* PhD research explores, from an individualist perspective, the lived experience of this imbalanced and data-centric world. Through two qualitative case studies across public and private sectors, it discovers desires for visible, understandable and useable data, and for transparent relations with data holders that enable oversight and involvement. Case Study One focuses on *Early Help* social care: Through four workshops with supported families and social workers, perspectives on civic data use are understood. *Shared data interaction* is explored as a means to empower individuals while maintaining an effective care relationship. Case Study Two is a three-month study exploring 10 participants' experience of using *GDPR data access rights* to view their own data, resulting in insights into individual needs and the challenges of data-centric service relationships, and recommendations for improvement of policies and practices. Expanding upon prior work in *Personal Information Management*, *Human Data Interaction* and *MyData* personal data ecosystems, and informed by parallel industrial experience, a new research agenda for improving ***Human Data Relations (HDR)*** is established. The thesis then explores the *practical pursuit* of this agenda from an technologist's adversarial design stance. Drawing on first-hand knowledge acquired from the author's expert participation in research projects at BBC R&D and Hestia.ai/Sitra, *the landscape for future research and innovation* is mapped out in terms of obstacles, designerly insights and activist strategies.

## Dedication

*For my children Rosie, Joey, and Zach; my nephew Elliott; and my nieces Amy and Lyla. My wish is that that you and your generation might soon experience a future where technology can truly help people and empower them to thrive, and where personal data drives human flourishing more than corporate profit. I hope that this research can contribute to a better future for you all.*

## Acknowledgements

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