Four Speculative Design F(r)ictions: Designing for Personal Data Awareness

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Human Data Interaction (HDI) takes place within a data economy characterised by power imbalances that favour giant corporations that rely on deceptions comprising a form of privacy theatre. We present speculative design f(r)ictions as critical framing devices to help people engage with, reflect upon and understand obfuscated personal data processes, towards supporting their awareness and agency around personal data sharing. We discuss four concept designs we developed following workshop activities.

Additional Key Words and Phrases: HDI, digital traces, speculative design f(r)ictions

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1 INTRODUCTION

As a relatively new area of research, HDI seeks to address challenges that are already deeply enmeshed across society. When Mark Zuckerberg described early adopters of Facebook as "dumb fucks" [1] for obligingly handing over their personal data, he was referring to extractive processes where corporates see 'users' as their producers of a mineable, monetisable resource. This raw data allows insights into thoughts, experiences, relationships, physical movements and physiology. Yet many people are resigned [5] to their role as contributors to this new economy, sensing little if anything can be done to halt or reverse these processes.

Cumulative Revelations, investigates the potential consequences of apparently harmless digital traces left behind from everyday digital interactions. Traces can be intentional (e.g. self-tracking and then publicly sharing running routes) to semi-hidden (metadata about one's behaviours and interests over time). Some, like social media posts, arise through conscious actions while others are outside direct control (e.g. Companies House disclosures). Inferences can then then be drawn by others to form judgements. Traces are immensely complex webs that stretch across multiple platforms and span entire lifetimes and beyond.

The systematisation of data in design has a long history, going back to early systems design and cybernetics [2] [10]; and subsequently enquiry into their potential in subordinating humans [3] [4]. More recently, IoT, HCI and design researchers have talked of data as a design material [7]; as protocols to be appropriated and re-imagined [6].

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While data is the raw unprocessed material produced from digital activity, information is what is processed from it, with the potential to convey meaning. While data may be inert, information is ideological in that it has power to (mis)inform depending on how it is expressed, received and interpreted. Information is virtually imperceptible, beyond the sporadic touch points in online interactions that foreground its transactional nature – such as terms and conditions agreements. It is characteristic of the hyperobject – viscous, sticking to us across digital contexts – and often presenting itself in the real world. It is nonlocal; globally distributed. It is phased – in that we do not ever see the whole – only a discrete part. Finally, it is interobjective in that it consists of many different sources, but is not readily describable as being of only one source. Information at a micro (individual) scale, is entirely different from that at a macro (global) scale [9].

Keeping track of digital information is difficult because it is complex, widely dispersed and largely invisible. A key challenge then is how we situate designers between humans and their data. Should we adopt a collaborative approach, nudging individuals toward more reflection? Alternatively, might we respond to disingenuous industry practices by disrupting the surveillance economy? Below we propose four speculative design f(r)ictions to demonstrate an approach or framing device for researchers to investigate and understand relationships between individuals and their individual and collective information, and to help produce roadmaps towards more agentic data futures.

2 DESIGNING WITH AND FOR PERSONAL DATA'S (IM)MATERIAL MANAGEMENT

To examine the potential of design approaches in helping people recognise and make sense of their digital traces we first ran design workshops, following which we proposed four speculative design f(r)ictions. Laschke et al [8] argued that critical design practice should focus not on maximising scalability but on helping people to realise goals, "which they find worthwhile to pursue but hard to implement" (p.2). These speculative design f(r)ictions, as concepts with brief explanations, are presented for further discussion at the workshop, with a view to iterating their design for future workshop use.

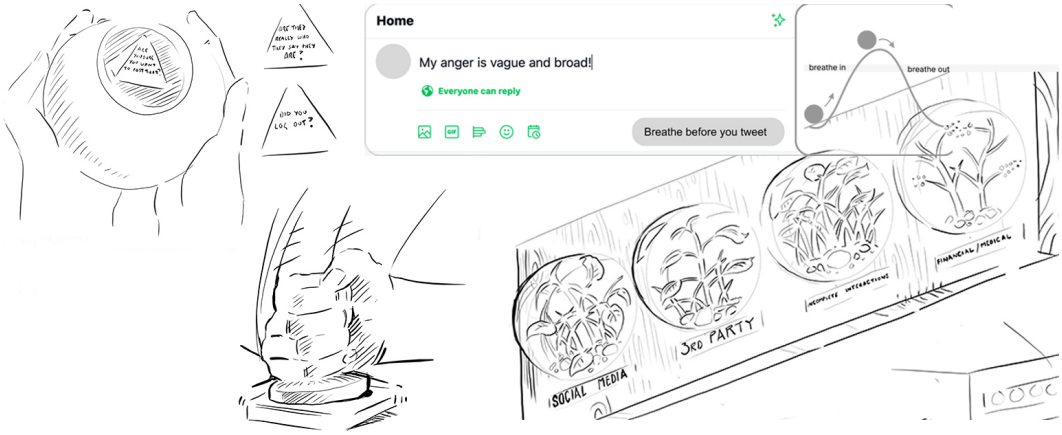

Fig. 1. From left: *Data 8-Ball* plays upon the decision making device whereby the ball is shaken in response to being posed a question; it then offers advice, which may or may not be useful. *Delete Dis* is a physical desk button that sits alongside the computer; press once to delete one's last post, twice to delete all posts for that day and three times to erase one's entire social media presence. *Breathe Before You Tweet* encourages posters to undertake a simple breathing exercise, and reflect before posting.*Data Terrariums* asks: How would we care for our data if it was expressed as something we should cultivate and nurture?; each terrarium is linked to one's online activities: what does it mean to thrive, or wither, in this context?

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