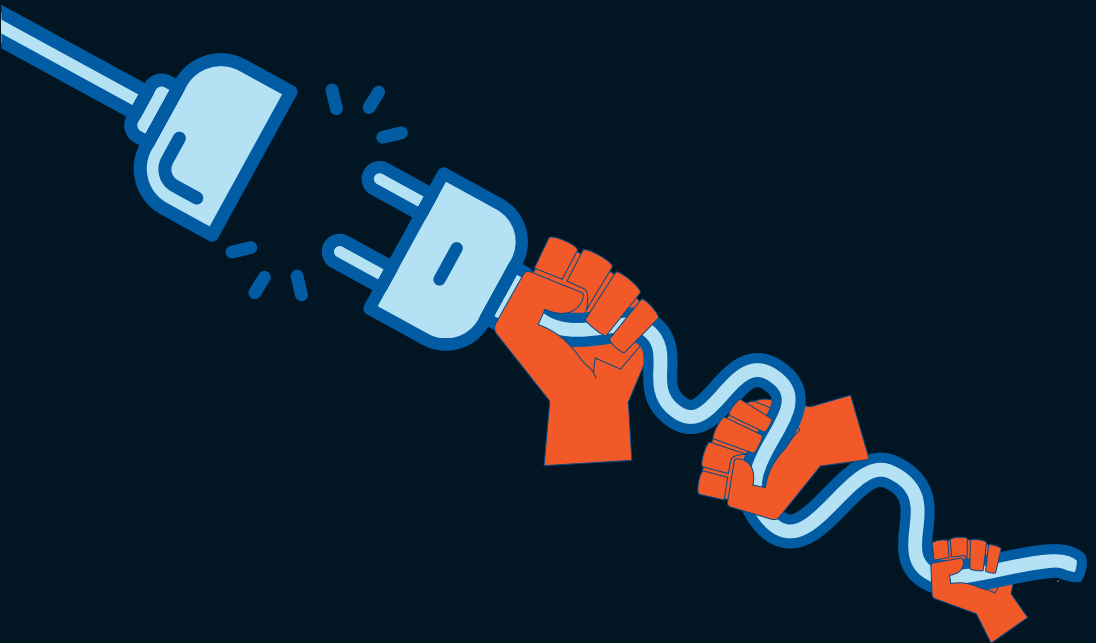CDSMS

ADI KUNTSMAN &
ESPERANZA MIYAKE

PARADOXES OF DIGITAL DISENGAGEMENT

IN SEARCH OF THE OPT-OUT BUTTON

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Preface

As long-term colleagues and collaborators, we began working on the topic of disconnection and opt-out in 2015. Being long-standing, self-professed digital junkies and scholars of digital and media technologies, we have both spent nearly two decades studying how the digital and technological brings people together or tears them apart. Both individually and in collaboration, we have been exploring how digital subjectivities and identities evolve and change; and how relations between technological affordances, social inequalities and political injustices are shaped through each other. And yet, we also began to witness an incredible and often paradoxical transformation occurring in the digital landscape. In amongst the rapid digitalisation of just about everything in life, we also noticed a marked culture of disconnection emerging that excited, terrified, troubled, fascinated and concerned us deeply. As soon as we did, we both came to realise that our own two-decades worth of thinking about the digital needs revisiting; and that digital saturation needs to be challenged and denaturalised – and possibly even refused. This is how we have coined the term 'digital disengagement', and why for us, the possibility and impossibility of opting out has become such a central concern.

Since then, we have explored and critiqued the various problematic paradoxes and conundrums of digital disengagement through a range of funded projects addressing different sites and dilemmas of refusal and opt-out, and we have benefitted from several incredible and inspiring collaborations. In 2018, we worked with Sam Martin – a digital sociologist and a digital analyst with years of expertise in creative digital methods and Big Social Data – on a British Academy/Leverhulme project that explored difficulties of opting out of digital health. This phase in our research forms the basis of Chapter 1. Working together with Sam not only expanded our own methodology and conceptual framework substantially, but also led to ongoing collaboration in research and publications on digital health, data justice and digital methods.

In 2018, we also collaborated with Anya Shchetvina and Polina Kolozaridi, coordinators of the Moscow Club for internet and society enthusiasts. Together with Anya, Polina and other colleagues, we addressed the discourses and practices of digital disengagement in Russia, including the challenges of translation in decolonial cross-cultural theorising. In 2019, Adi worked with Imogen

Rattle, a then graduate student and now a Research Fellow and an expert in environmental politics, sustainability and energy geography, on two separate studies. The first one, in collaboration with the Moscow Club for internet and society, looked at narratives of IT professionals in Russia and the UK who choose to reduce their use of online communication and opt out of social media and other platforms. The second explored current scholarship on environmental sustainability and its unwillingness to consider digital refusal to support the environment. The second project has inspired Chapter 6 of the book.

Bringing all the different strands of our work on digital disengagement together, in 2019 we decided to sit down to write this book … and then the Covid-19 pandemic hit. Completed during the first two years of the pandemic, this book is not explicitly about pandemic digitalities. Yet, the timing of our writing has sharpened the concerns that motivated us to write it in the first place. With the lockdowns, social distancing and remote working came an unprecedented digital surge, and all the questions we have been asking for years now feel prophetic, and even more urgent. What are the personal, social, political and environmental costs of compulsory digitality? What are the relations between compulsory digitality and social injustice? What are the legal, technical, cultural and political barriers to opting out of digital sociality? And finally, can we imagine *otherwise* – can we imagine our present and future free from digital coercion?

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Introduction

In Search of the Opt-Out Button

Today, digital communication technologies are increasingly embraced by industries, governments and everyday users. As both people and public services are imagined as digital or networked 'by default' (Fotopoulou 2016; Mejias 2013; GOV.UK 2013, 2017), engagement – whether civic, consumerist or otherwise – is now predominantly understood as digital. Those disconnected from the digital are seen as 'at risk' of being 'left behind' (Helsper and Galácz 2009; Straumann and Graham 2016). The global Covid-19 pandemic forced societies further into digital reliance, both in tackling the virus via contact tracing and other forms of digital surveillance of public health, *and* in shifting most everyday activities online, to facilitate social distancing and minimise exposure to coronavirus. Since the outbreak of the pandemic in 2019, individuals, institutions, businesses and organisations have found themselves facing a world where digitality has rapidly become compulsory. It was not necessarily the best suitable choice, nor one most considerate of access, equality or efficiency. Rather, it was broadly seen as essential for the necessity, survival and social responsibility of protecting human life. And now, those outside the digital world – disconnected due to lack of access to suitable devices or internet connectivity or forced to the frontlines of the physical world as essential workers – are facing an entirely new form of risk. The risk is no longer solely about being left out of civic or consumerist engagement, rather, it is also about the physical risk of navigating pandemic spaces, times and practices.

Concurrent with the push towards a digital-by-default society, and already occurring before the pandemic, the last decade has also seen a rise in calls to reduce both the range of digital devices and communication platforms, and time spent using them. Such calls are usually issued by those who are already connected, digitally savvy and feel there is *too much* digital connection. Activists

have sought ways to resist platform labour or evade state, corporate and social media surveillance by switching off, adjusting digital tools, and/or moving to non-digital forms of communication. Bloggers have written about putting down their phones to (better) connect to family and friends. Initiatives such as 'digital diets' and 'unplugging days' have mushroomed. Populist experts have warned about 'digital addiction', to which businesses have responded with commercial packages offering 'digital detoxes' and other 'disconnection commodities' – from smartphone 'killswitches' to cosmetic products branded 'Unplugged' and 'Offline' (Karppi et al. 2021).

In the context of new pandemic digitalities, the calls to disconnect, albeit temporarily, have intensified. Mentions of 'zoom fatigue' have proliferated, acknowledging the necessity of video calls yet noting the accumulating negative impact they pose on communication practices, attention, focus, well-being and mental health (Jiang 2020). Disability justice advocates have noted that while remote communication has been highly beneficial for some, it has brought new (or intensified old) forms of ableist exclusion (Beery 2020; DARU 2020). Finally, digital responses to the pandemic – such as contact tracing apps and digital health tools – have also raised legal and ethical concerns over digital invasion, surveillance, and other data rights.

Whether these concerns are understood as neoliberal demands for a 'better life' or as political resistance against the growing power of digitisation, we must take them seriously. In particular, we must ask why the digital still remains the normative point of reference. Today, more than ever, it is an urgent question to consider, and we must rethink the conceptual normalisation of the digital as both the best solution to any emerging problem or crises, and as an assumed, expected form of mediation of social life.

Calling for a more critical approach to digitality and the contemporary compulsion to unnecessarily 'fix things' in our daily lives through technologies and digital 'innovation' (what he calls 'technological solutionism'), Morozov (2013) relates this contemporary propensity to privilege technologies, and the internet in particular, in all spheres of our lives. Referring to 'smart' technologies as offering solutions to remedy 'flawed' human conditions from obesity, to environmental issues, to fitness, Morozov argues that integral to the idea and ideological state of 'internet-centrism' is an underlying core belief that the internet is 'the ultimate *technology* and ultimate *network*' (2013, 23: emphasis added). Hence, 'solutionists' can find even more ways to 'solve problems' enabled by the internet through technological and networked mediation.

Throughout this book, we will show the pervasive nature of what we call *digital* solutionism, to paraphrase and expand on Morozov's formulation. We evoke here Morozov's inspiring statement on 'internet-centrism' to address a general problematic trend within academic and popular discourses concerning 'the digital'. Scholarship of digital media and society has long focused on various forms of *engagement* with digital communication technologies,

devices and platforms. It has described how we engage as patients, citizens, educators and learners, consumers, workers and activists. It has analysed the ways we use and interact with digital platforms and communication devices in public, semi-public and private spaces. It has documented the ways we live with 'smart' technologies that are near, on, or inside our bodies. The possibility of disconnection, refusal or non-use, on the one hand, has only been viewed as an afterthought, an addition, or an exception. *Dis*-engagement from the digital, on the other hand, is rarely considered as anything but an aberration, whether spatio-temporal, demographic, or ideological – but always on the margins, as an oddity that reflects and reaffirms the norm. When looking at a new platform, device or any other techno-social arrangement, most work in digital, internet and social media studies rarely pauses to challenge the digital itself and ask: are these technologies desirable? Can they be escaped? In other words, where is the opt-out button?

Answering these questions is the driving force behind our book. We are writing at a crucial point in time, when the rapid spread of platforms, apps, algorithms and AI are raising fundamental questions regarding datafication, digital rights, individual and collective freedoms, and planetary degradation. In the world of digital saturation – and now that the Covid-19 pandemic has both exacerbated and complicated these points even further – we are situating our book within the emerging field of opting out, refusal, disconnection and voluntary non-use. Scholars in this field have recently begun exploring different ways in which those who are already involved and integrated into the digital world – as opposed to those deliberately neglected and excluded – seek to reduce or even cease their use of devices and communication platforms, usually within a particular context, and with a particular aim (Light 2014; Kitchin and Fraser 2020; Brennen 2019).

While insightful and rapidly developing, current scholarship on the topic as it stands today still has three main limitations, which we will explore in further detail in the following sections of this chapter. Firstly, disconnection is mostly conceptualised in relation to social media, with a heavy focus on Facebook. Secondly, most research to date has focused excessively on user practices and experiences of disconnection, rather than on the technical, economic and political infrastructures that shape the (im)possibilities of opting out. Finally, while addressing a broad range of examples of disconnection, non-use and refusal, what is rarely considered in relation to opting out is the power and agency of the technologies themselves, which inhabit heavily regulated, networked ecosystems of digitality and platform synchronicity.

To address these gaps and offer a paradigmatic framework for the complexity of disconnection, we propose the concept of 'digital disengagement'. Digital disengagement as we coin it here is a term that simultaneously unravels the assumption that social engagement is always necessarily digital *and* challenges the forced incorporation – engagement – of livelihoods, experiences, relations,

services, economies and freedoms into compulsory digitality and connectivity (Hesselberth 2018; van Dijck 2013). This book positions digital disengagement as *simultaneously* a matter of political economy, cultural formations, materiality, technology, legal frameworks and everyday actions. We focus on these formations as they take shape within a Western-centred, capitalist and neoliberal context of digital communication – the politics of disconnection can and does look different elsewhere and requires a separate discussion, beyond the scope of this book.

In our discussion, the emphasis on Western neoliberalism, capitalism and the global digital economy (Chen 2016; Fuchs 2015; Qiu 2016) is crucial for understanding the conditions in which digitality is normalised and enforced. Digital economy, for example, profits not only from the exploitative production of digital devices (e.g., smartphones, tablets, computers), or the ever-growing communication infrastructures (e.g., Wi-Fi, broadband, mobile data) and services (e.g., platforms, apps, the Cloud). Most crucially, we are seeing the rise of 'digital labour' within highly digitised societies: the generation of profit from digital content, subscription services, and, most critically, from data monetisation in what Zuboff (2019) has aptly coined 'surveillance capitalism'.

At the same time, the neoliberal capitalist culture of life and work in a digital economy often invisibilises both the labour itself and the architecture of exploitation, be it through the practices of 'playbour' (Kücklich 2005; Scholz 2013) or the rise of the 'gig economy' (Woodcock 2017) that traffic in hopes of flexible employment while brutally degrading working conditions and evading both tax and employment laws. In this context, digital engagement (and disengagement!) become necessarily tied to corporate regimes that regulate and control global capitalist economies through an internet-centric logic that capitalises on data aggregation. This in turn, requires constant participation and dependency on digital technologies, while their exploitative nature is often skilfully hidden. For example, digital capitalism becomes translated into individualised technopractices of entrepreneurialism; the economy of compulsory connectivity presents as self-care aided by digital technologies; and data monetisation and profitable surveillance disappear from view when endless 'agreements' and 'acceptance of terms' render datafication as users' own responsibility.

Our book is thus informed by, and moves beyond, the extensive, and growing, body of scholarship on the digital economy, digital capitalism and digital labour. Throughout all the chapters, we demonstrate that while opportunities to disconnect and opt out are generally shrinking, the impact of compulsory digitality is not the same on everyone. Digital society, we argue, always classes, races and genders digital architectures and technopractices of digital engagement *and* refusal. Understanding the deep interrelatedness of enforced digitality and social marginality is key here – as Gangadharan poignantly notes, the impact of 'digital coercion' (Gangadharan 2020a, 125–126) is always uneven and tends to reproduce and intensify existing marginalisation and injustice.

Our analysis is therefore not just about questioning how and why digitality is normalised. Rather, our work is also, first and foremost, justice oriented. We ask: who does normalised digitality serve? Who is its captive audience, its unpaid labourer, its depleted resource, its dependent, its victim? Who has the freedom to disengage from the digital, and at what cost?

Our approach here goes beyond individual rights (including those defined by various legal frameworks), placing *digital justice* at the centre of digital disengagement. While remaining attentive to the importance of the *right* to disconnect and opt out, we argue that *individual* digital rights alone can offer only a partial and flawed framework in the era of large-scale datafication and automated decision-making. A *collective digital justice* is imperative when compulsory digitisation segments groups and populations and targets marginalised individuals and communities for surveillance and policing; when it punishes and rewards based on big data analytics; and when it traffics in the collective, accumulated value of digital labour, be it from content production, engagement data or other forms of behavioural profitisation.

Beyond its ability to describe the range and degrees of rights, disconnectivities, contexts, and spatio-temporal formations, digital disengagement thus offers a *new critical theoretical paradigm* to be used in critical digital and social media studies to denaturalise and destabilise the digital. By searching for our theoretical opt-out button, we centre digital *dis*-engagement, conceptualising it not as an aberration, but as a starting point in thinking about sociality, agency, justice and everyday life.

Digital Disengagement Beyond Social Refusals

The last decade has seen a steady growth of academic interest in digital refusal or withdrawal of those living digitally saturated lives; 'Disconnection Studies' is a fast-growing area of research. With only a few publications focusing specifically on devices such as tablets and smartphones (Emek 2014; Maxwell and Miller 2020; Mowlabocus 2016), most research to date attends to digital disengagement in relation to online communication, with a heavy emphasis on social media, especially Facebook (Baumer et al. 2013; Gershon 2011; John and Dvir-Gvirsman 2015; Karppi 2011, 2014; Kaun and Schwartzenegger 2014; Light 2014; Light and Cassidy 2014; Portwood-Stacer 2012a, 2012b, 2012c, 2013, 2014). This is true not only for the body of published work, but for the overall academic discourse – tellingly, whenever we discuss our research on digital disengagement with other researchers or students, the conversation always moves to social media, with someone always declaring that they have just deleted their Facebook account.

A conflation of the 'digital' with 'social media'/social networking services (SNS) reflects on the pervasive nature of social networking, beyond the widespread use of actual platforms and its consequent theoretical understanding.

This is true for academic research but also, as Mejias (2013) argues, is part of the pervasive conflation of 'networks' with sociality more broadly. The increasing normalisation of the digital, coupled with the simultaneous *social mediafication* of all areas in our lives, has two implications for academic research that we wish to challenge in this book. Firstly, we argue that we need to question the ways digital disengagement has become inseparable with the idea of *social* disengagement. Within such a formulation, the digital and the social collapse into a singular, interchangeable concept leading to what Light's (2014) seminal work described as 'disconnective practice' which involves 'potential modes of disengagement with the connective affordances of SNSs in relationship to a particular site, between and amongst different sites and in relation to the physical world' (2014, 17). In other words, digital connectivity and engagement *are defined and naturalised through the concept of social practice.* In this context, withdrawal – the practice of digital disengagement – becomes concerned with the resulting issues and consequences upon users' social relationships (friends, partners, family and work). We argue that digital disengagement can refer to 'disconnective practices' from social media, but also that the concept of the digital itself must first be divorced – denaturalised – from the question of social engagement and social media. Digital disengagement is not always about disengagement from sociality; and social disengagement, in turn, is not always a digital one. Such a separation will open up new ways of thinking about digitality and the ways digital disengagement might have other, broader, social and political implications.

Secondly, and relatedly, an additional conflation resulting from the naturalised link between digitality and sociality which we wish to challenge is the dominance of Facebook as *the* social media site for digital disengagement. With the exception of a small number of studies such as that of Sasaki, Kawai and Kitamura's (2016) examination of 'unfriending' and processes of digital disengagement on Twitter, very few scholars to date discuss digital disengagement on other social media platforms. Even in Light's (2014) work, which explores the migration of disconnective practices played out across various social media platforms, both the results and discussion indicate that Facebook is almost always the starting and comparative reference point: Facebook is presented as the dominant standard for all social media platforms. Empirically, this may be because for many, Facebook has become an environment which ruins and damages, rather than fosters and supports social connections. Conceptually, however, the result is that digital disengagement becomes tied to not only *social* disengagement, but also to *Facebook* disengagement. Within this context, digital disengagement can only be understood if the concept of the digital is aligned to sociality and networked connectivity and, by the same token, sociality is tied to Facebook as a prime communication platform. What does digital disengagement look like on other platforms? Can Facebook ever be the secondary or even tertiary social media site people migrate *to* rather than *from* having

disengaged elsewhere? And more importantly, what are other forms of digital disengagement, beyond social media?

Digital Disengagement Beyond Motivations and Practices

Another characteristic that unites the majority of recent scholarship on disconnection and refusal is the fixation on motivations and practices. Why do individuals leave or opt out, and how do they do it? In *Opting Out of Digital Media*, Brennen (2019) discusses why people choose to reject some technologies while embracing others. Several years earlier, Portwood-Stacer (2012a, 2012b, 2012c) documented a range of media discourses, which explain reasons and motivations for media refusal. Our own work on the topic began with documenting the variety of reasons for disconnection and disengagement (Kuntsman and Miyake 2015; Kuntsman et al. 2019). Other researchers, similarly, played close attention to the extremely diverse nature of motivations for opting out; while some are individualised and self-centred, others are driven by collective, social and political concerns (Andersson 2016; Casemajor et al. 2015; Hesselberth 2018; Portwood-Stacer 2014).

In addition to motivations, scholarship in the field points to a diverse range of experiences and practices that are involved in disengaging. For example, in their discussion of mediated political action, Casemajor et al. distinguish between passive non-participation (the inability to use technology due to incidental or imposed reasons) and active non-participation as 'politically wilful engagement in a platform in order to disrupt it' (refusing to provide platforms with personal data or using platforms against their original aims) (2015, 856). Here, active non-participation, and especially deliberate departure, equates to resistance and refusal – akin to Facebook suicide as a form of protest (Karppi 2011). At the same time, deliberate disconnection can be seen as something positive that 'adds value to our engagement with SNS' (Light 2014, 20–21). Furthermore, many instances of disengagement are *both* 'active' and 'passive', transgressive and reaffirming. Or rather, they are multi-dimensional because they might involve the conscious decision to withdraw – physically, emotionally, socially and so on – from certain normative spaces and forms of sociality and behaviour, whilst also having the ability to negotiate one's connection to and through technology.

The multi-directionality of digital disengagement occurs across time and space, responding to changing pressures of digital use. Light's (2014) aforementioned 'disconnective practice' is particularly interesting here as he discussed the 'personal level of disconnection' and disconnection at work or in public space outside of home and work. The multiplicity of disengagement practices indeed needs to be understood as dynamic and situational, as for example is seen in Light's pioneering work (2014, 17). Similarly, other scholars have noted

the temporality of disconnective practices, which are rarely irreversible and unidirectional. With the exception of dramatic and one-time events such as 'Facebook suicides', digital disengagement as described in current research is seldom about a one-off moment. Nor is it necessarily about steadily moving further and further away from the digital. Baumer et al. (2013), for example, note 'resisting, leaving, relapsing, and limiting' as the four main practices of not engaging with Facebook, where 'relapsing' refers to returning after a period of non-use. Such a return can occur due to changing one's decision because of personal reasons, peer pressure or professional demands; or perhaps because the disconnection itself was time-specific. Similarly, others describe practices of temporary or relational withdrawal: 'unfriending' some people on Facebook (Gershon 2011; John and Dvir-Gvirsman 2015); or reducing the use of devices whilst on a holiday (Mowlabocus 2016).

Despite the empirical richness of studies on motivations, reasons and practices of digital disengagement and the contexts in which they occur, the contain a number of critical weaknesses. Firstly, the focus on practices, while ethnographically insightful, shifts the conversation away from the question of rights – the right to disconnect, the right to not be engaged, and the right to sociality that is not digital. Secondly, and relatedly, discussions focusing mainly on practices and motivations, are in danger of prioritising individual agency at the expense of a structural analysis of political and economic forces, both those that shape collective digital cultures and societies more broadly, and those that specifically constitute possibilities and (im)possibilities of opting out. As Hesselberth (2018) notes in her critical overview of research on technology non-use, scholarship that focuses on motivations for, and practices of, non-use 'lend themselves to a narrative of personal responsibility and the neoliberalist model of governmentality it taps into, in which individuals are unapologetically held accountable for their own (mis)use of technology' (2018, 1998). In light of these shortcomings, our book takes on Gangadharan's (2020a, 2020b) powerful reminder that any discussions of disengagement and refusal need to consider the corporate and political forces that shape both the global digital economy and our everyday digitalities.

Following Gangadharan, we will demonstrate throughout this book that the multi-directionality and ambiguity of digital disengagement is technological, structural and political where any act of disengagement reinforces the very digitality one attempts to escape. For example, as Karppi noted a decade ago in his discussion of Facebook suicide (2011), disconnection from the platform is never fully possible, not only because leaving itself is premediated and controlled by Facebook, but also because the data left behind continues to be used by the platform. Karppi's early note of caution regarding the power of platform and data aggregation, and the limitations of human resistance, is further developed in his recent book (2018), which focuses on the technological and affective bonds used by Facebook precisely to keep its users from disconnecting. Shifting the focus from experiences and practices to the *difficulty and the impossibility*

of disconnections is acutely relevant today when algorithms and data mining infringe powerfully and persistently on individual and collective freedoms. As such, whether it is the socio-cultural structure of demands of connectivity that create a pressure to return (van Dijck 2013); the economic system within which such a return might be enforced at any time after disengagement, by an individual employer and the labour market more broadly (Hesselberth 2018); the structure of a platform (Karppi 2018); or the legal demands imposed by states and institutions, digital disengagement is a complex socio-technical trap. To unravel it, we must pay attention not only to the social institutions that may govern technologies and their users, but also to the technologies themselves.

Networked Technologies and the Material (Im)possibilities of Disconnection

When 'Cyber' Studies first rose to Euro-American academic prominence during the 1990s to the early 2000s (Bell and Kennedy 2007; Featherstone and Burrows 1996), one of the key concerns was how 'the digital' was forcing us to re-conceptualise issues surrounding (de)materialisation. Increasing importance was placed on coding, data and software – to the extent that 'consumption of commodity occurs through coding' (Mackenzie 2005, 86) – where material technologies were becoming obsolete. A decade or so later and 'the digital' has not only overtaken technological materiality but seems to have now passed into 'the algorithmic'.

The recent body of work within Digital Studies has been advancing steadily towards the move from 'the digital' to 'the algorithmic' (Noble 2018), where digital economies, politics, culture and societies are increasingly tied to deterministic and predictive flows and the movement of 'lively data' (Lupton 2015). But inasmuch as scholars (Berry 2011; Kitchin and Dodge 2011; Manovich 2013) have focused on codes, algorithms and online data, there is a return to questioning the role of technology, especially with the everyday proliferation of 'smart' devices. In a digital neoliberal era obsessed with metrics and tracking – the self, others, space/time, productivity and engagement – contemporary life is becoming technocentric again. As Elwell argues, 'computing is folding the material world itself' (Elwell 2014, 233) into an Internet of Things that 'merges physical and computational infrastructures into an integrated habitat' (Weiser 1998, 41–2). Our need for smart technologies that rely on integrated and sensored material systems means that technological materiality – or a New Materialism (Lupton 2016) – is once again at the forefront of academic debate (Greengard 2015; Bunz and Meikle 2018).

In other words, it is not just us humans that are living with and *in* media – as argued by Deuze (2012) – but it is also technological 'things' that live with and in media. Such a theoretical standpoint begins with the idea that people have become entangled in assemblages of objects, described by Lupton as a

'human-body-device-sensor-software-data configuration' (2016, 33). If such integrated systems organise our personal, work and social lives, is it even possible to practice digital disengagement? What does non-digitality mean? How can we divorce digitality from technology? Or does digital disengagement merely sustain the dominance of the mediated and the technological:

> The illusion that we can comprehensively control our media (for example by pulling the plug, pressing the off switch on a remote control, by becoming *mediawise* and developing sophisticated media literacies) in fact preserves media as the primary definer of our reality (Deuze 2012, xiii).

Deuze's (2012) statement resonates with Morozov's (2013) ideas on technological solutionism and internet-centrism as outlined earlier. By being 'mediawise' – which inevitably involves more media – in order to 'escape' digitality, we simply keep preserving digital technologies and operating systems as, indeed, an internet-centric, 'primary definer of our reality'. Instances of unintentional technological preservation can be seen everywhere: from the 'Moment' app which helps users manage screen-time to an anti-surveillance device called 'Cyborg Unplug', which 'detects and disconnects selected devices known to pose a risk to personal privacy' (Cyborg UNPLUG n.d.). Within a similar techno-logic, we witness smart houses that involve tasking technology to limit or disconnect another technology.

In effect, our day-to-day living environments are increasingly designed to delegate human agency – including the practice of digital disengagement – onto digital technologies. We are fast becoming agents simply acting as communication vessels between devices, executioners of an all-encompassing digital and technological solutionist world. In other words, as 'smart' technologies become 'smarter' and rely on networking communities through networked devices, it is imperative we do not to similarly conceptualise the digital in ways that normalise the connection between ontological materiality, human agency and technological determinism. In an era when multiple devices are communicating with each other, where the Internet of Things which is 'not just about networked sensors being fitted to things but how these things gain new skills that are expressed in new forms of communication' (Bunz and Meikle 2018, 1), can disconnection from one piece of technology really equate to digital disconnection as a whole?

An Elastic Continuum of Connection and Disconnection

The growing scale and interconnectedness of platforms, data and other non-human actors involved in digital preservatism and digital solutionism demands that we consider a different way of thinking about engagement and disengagement which may be structured around, but is not fully determined by, the technological. Therefore, we also believe that digital disengagement rests upon

a paradox – or more precisely, paradoxes – which complicate any simplistic dichotomy such as on- or off-line; connected or disconnected. For example, legal attempts to create a more transparent and accountable use of algorithmic decisions paradoxically cements the use of algorithms in decision-making processes to begin with. Efforts to reduce or control the flow of information with the help of everyday digital tools traps the user in their reliance on even more digital technologies. Endless online discussions decrying the dangers of digital communication and displaying unplugging pledges operate as invaluable content generators that support the very digital economy users are trying to criticise. Digital devices and platforms used to admire, monitor and protect the environment – including from too much digitisation – contribute to the growth of carbon emissions and to landfills of e-waste.

Paradoxes of digital disengagement, as we will show throughout the book, are multi-dimensional because each instance of digital disengagement is located at various points of the spatio-temporal, legal, political and material continuum. As such, they impact both our theorising of agency, and our legal and political horizons of rights and freedoms with regards to the digital. Thinking about digital disengagement as a set of paradoxes is an invitation to imagine new possibilities of relations between the concept and practice of opting out; technologies and freedoms; engagement and digitality; power and powerlessness; resistance, privilege and co-optation. In order to understand these issues, we thus introduce the concept of digital disengagement as an elastic continuum. We use the notion of elasticity here to account not only for the persistent nature of digital sociality, which prevails despite growing concerns regarding the negative impact of digital technologies on mental health, well-being, social relations and the environment. Rather, we argue that the elasticity of digital disengagement needs to be understood and examined in the context of power and privilege, where opt-out is located at various spatio-temporal, legal, political and material sites of possibility. Our notion of the elastic is inspired by Weizman's concept of elastic geographies (Weizman 2004; 2017). Conceived in the context of his analysis of the architecture and geometry of military colonial occupation, Weizman proposes the idea of elastic frontiers. He conceptualises questions of power and territory in relation to the elasticity of spaces that continuously shrink and expand, against a simplistic understanding of borders, 'freedom of movement', or binaries such as 'inside-outside'. Although used in a very different context, Weizman's terminology is extremely useful when we consider the simultaneous shrinking and expanding spaces of digital disengagement, where one can be inundated by invites to take part in a digital detox, or install a screen time management app, all the while being unable to withdraw one's data from an app or a governmental registry, access public services by using only pen and paper, or make oneself invisible to racial profiling of digitally enhanced policing. We demonstrate throughout this book that spaces, times and practices of opt-out, and the possibilities of digital disengagement, open and close based on an unequal distribution of economic, socio-cultural and digital capital.

Conceptualising the elastic continuum in this way makes digital disengagement a paradigmatic framework that does not merely denaturalise the digital but also places justice at the core of refusal and opt-out. As such, we also hope that our formulation of digital disengagement will shift the academic field of Disconnection Studies from focusing on *choices of the privileged* – detox, declutter, etc. – into justice-driven digital refusal, resistance and abolition (Benjamin 2019; Gangadharan 2020a; Qiu 2016). Centring the marginalised, the oppressed, the punished and the depleted, digital disengagement as we envision it is committed to dismantling the classist, ableist, racist and environmental violence of enforced digitality.

The Road Ahead

In this book, we offer a set of interdisciplinary interventions that explore the concept of digital disengagement – and its paradoxical nature – across a range of topics and sites: health, citizenship, education, consumption, labour and the environment. **Part I** of this book, **Where is the Opt-Out?** asks how and when do the legal, social and technical spaces of digital disengagement and opting out shrink, becoming impossible or severely limited.

- Is it possible to opt out of datafication of health? **Chapter 1, Digital Health: Data Traps at Our Fingertips**, explores this question by documenting the process of health digitisation and appisation, where opting out of data mining and analytics is squeezed between conflicting legal and economic frameworks, and contradictory logics of 'care', 'public health', 'responsibility' and 'choice'. The chapter demonstrates that even in contexts of formally defined data rights and clearly communicated policies, the depth and complexity of datafication operates far beyond the comprehension of most users.
- Is it possible to escape the clutches of state violence when it is becoming 'digital by default'? **Chapter 2, Automated Governance: Digital Citizenship in the Age of Algorithmic Cruelty**, addresses this question by looking at public services, policing and border control, where many aspects of citizen life are increasingly subjected to algorithmic governance that is often discriminatory by design. The chapter shows that government services increasingly deploy the vernacular language of social media engagement, where everyone is depicted as a client, an audience and a friend, while concealing the racism, xenophobia and the war on the poor within an obscure logic of 'computer says no'.
- Is it possible to refuse disciplinary metricisation in the name of increasing pedagogical engagement? **Chapter 3, Education in the Age of 'Corporate YouTube': Big Data Analytics Meets Instafamous** focuses on the increasing implementation of certain educational tools in Higher Education in the UK and critiques some disturbing key issues relating to the corporatisation

and platformisation of education. We explore the ways in which both learners and educators are turned into (un)willing digital subjects within a neoliberal context, to be self-responsible for monitoring, assessing, analysing and managing the quantified and performative educational self, captured within institutionalised digital systems of regulation.

Part II of this book, **Digital Disengagement between Co-optation and Resistance**, turns to the many forms of disconnection and disengagement, which are so often co-opted into the capitalist loop of never-ending digitality and digital solutionism. We show that when efforts to opt out are trapped in a perpetual return to more digital technologies to solve existing digital woes, they fail to offer any transformative challenge to the world of compulsory digitality, and instead, support and sustain it.

- What happens when digital disengagement becomes a commodified part of consumer culture? From luxury holidays promising digital detoxes to mass celebrations of national unplugging days, **Chapter 4, Consuming Digital Disengagement: The High Cost of Opting Out** explores the neoliberal, capitalist appropriation of digital disengagement as a commodity that paradoxically relies on digital engagement and online participation as a prerequisite to disengagement, trapping consumers eternally within an 'internet-centric' digital consumer culture.
- How hard must we work for digital disengagement? **Chapter 5, The Labour of Digital Disengagement: Time and the Luxury of Opting Out**, investigates the paradoxical nature of digital disengagement as 'hidden' digital and technological labour in everyday digital life, related closely to the question of spatio-temporal regulation. We show that in the neoliberal economy of digital productivity, labour is required both to dis-engage from and to re-engage into the digital world. Furthermore, we also explore how such a paradox must also be understood as one arising from a point of privilege, where one must have the necessary temporal capital to spend on organising one's disengagement practices.
- How can digital disengagement bring about environmental change? **Chapter 6, Digital Disengagement and the Environment: Solutionism, Greenwashing and Partial Opt-Outs**, addresses this question by navigating the tensions between digital solutionism and climate hopes. The chapter reveals that many calls to move away from technology by turning to nature are an empty gesture, trapped in an appropriative logic of nature as commodity, and unable to challenge both the tourist and the digital economy that damage both human and non-human life. The chapter also shows that calls for an environmentally conscious use of digital technologies mostly adopt partial refusals, which prioritise small changes and stability over radical transformation and abolition.

In the **Conclusion**, we return to the key themes of the book and revisit our conceptual propositions in light of the latest developments since the Covid-19 pandemic. We also look at alternative imaginaries and practices of living and working in a digital society, and ask, what kind of opt-out vison might we put forward? What kind of opt-out buttons might we need? Moving beyond the focus on disconnective practices into challenging the compulsory digitality on an economic, cultural, social and technical level, this book, ultimately, proposes a radical move towards a politics of digital refusal.

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Where Is the Opt-Out?

Digital Health: Data Traps at Our Fingertips

Introduction

'There's an app for that!': A catchy internet phrase of the mid 2000s, initiated and subsequently trademarked by Apple, captures what has become an everyday reality for most digital economies. With the widespread use of smart phones, we are increasingly reliant on apps that are either pre-loaded or can be voluntarily/casually and mandatorily/professionally downloaded, to manage all areas of our consumer, work, political and personal lives. The sheer volume, range, speed and breadth of the different types of apps available today demonstrates that an all-encompassing appisation is now an inevitable part of contemporary digital life (Gardner and Davis 2013; Miller and Matviyenko 2014; Morris and Murray 2018).

Apps, and their social consequences, will be discussed throughout our book. In this chapter, we start with the appisation of health– or 'mHealth/mobile Health' as the process is more commonly described in medical circles. At present, countless apps are developed and offered to individual smartphone users to manage 'healthy lifestyles' or to support specific medical and health conditions; the apps are also extensively integrated into both public and private health services provisions (Lupton 2014; van Dijck and Poell 2016). However, the invisible yet detrimental 'by-products' of health appisation, such as infringements on privacy, data monetisation and long-term digital profiling, are rarely understood by the medical practitioners and health service providers who recommend the apps. Nor are these by-products always clear to the users, who are lured by the speed and convenience of 'on demand healthcare', usually advertised as an 'affordable and accessible service at one's fingertips', to use the words of Babylon Health, one of the leading health apps (Babylon

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2016). Health appisation is thus presented as an unquestionably positive process, devoid of dangers and beneficial to all. It is a celebratory framing which both conceals and supports the apps' data economy of 'surveillance capitalism' (Cinnamon 2017; Lehtiniemi 2017; Silverman 2017; Zuboff 2019) that relies on users' willing but often unknowing participation and the continuous personal 'contribution' of their data.

While health appisation may indeed have revolutionised some aspects of health care, its broader, and often perturbing socio-political effects, are yet to be explored in the academic domain of digital health. For example, Deborah Lupton argues that most studies on health apps to date come from medical or public health literature, which focuses primarily on an instrumental approach to apps' effectiveness or medical validity (Lupton 2014). What is yet to be interrogated are '[t]he wider social, cultural, and political roles played by health and medical apps as part of contemporary healthcare and public health practice'– a task she sets out for 'critical digital health studies' (2014, 607). This chapter takes Lupton's call further by examining the appisation of health through the perspective of digital disengagement. Rather than only addressing the way health apps turn biodata into profit through surveillance capitalism dressed as 'smart' and effective healthcare, we turn our attention to how the apps navigate – and often block or limit – the possibility of opting out of health datafication. In this chapter, we approach health apps not just as what Lupton (2014) calls 'sociocultural artefacts', but as *socio-cultural data traps*, elaborate and sophisticated in their technologies of incorporation and engagement, yet incredibly scarce in social affordances and technical mechanisms for letting their 'data subjects' go or allowing them to remove themselves from the database. The central concern in this chapter, therefore, is how opt-out as a legal, social and technical possibility, and as a citizen and user right, plays out within the sphere of digital health. Questions of digital disengagement and opting out of digital health are of particular urgency because of the intimate relationship between health and personal data, which the process of appisation transforms. Before the Covid-19 pandemic, the health field had already been radically transformed by digital technologies. And now this transformation is being further accelerated by the global public health crisis.

We begin our discussion by looking at the current legal and political landscape of digital health and opt-out in the UK, where the publicly funded national health system co-exists with health apps, which are independently developed and mostly privately owned. We then move on to closely examining some health apps' Terms and Conditions, Privacy Policies and app interfaces from the perspective of how opt-out is presented as a legal, technical and practical option. Finally, we discuss the National Health Service (NHS) Covid-19 contact tracing app, its introduction in the UK in autumn 2020, and the way it impacted debates around appisation, public health and personal data. We conclude the chapter by making a differentiation between individual and collective opt-outs. While the former is made possible by legal frameworks, such as the

European General Data Protection Regulation (GDPR), and by some of the apps' policies, design and interface, we will argue that individual opt-outs have no meaning without considering collective and structural forces such as the data economy, or population surveillance. It is then that we introduce an argument that first emerged in our analysis of digital health but continues through the rest of the book: it is imperative that we shift from individual digital rights to collective digital justice.

NHS Digital and the App Library: What Is One Opting Out Of?

As in many other digital economies, the health sector in the UK increasingly expects patients to manage their own health and wellbeing through apps. Health apps are widely offered by private companies and have also been adopted by the public sector and the NHS, especially NHS Digital, 'the national information and technology partner to the health and care system' (NHS Digital n.d.). The incorporation of apps into NHS Digital is the latest development in a longer tradition of online and over-the-phone patient support, designed to reduce GP and hospital workload. It should thus be understood within a broader context of continuous budget cuts in the free national healthcare system, leading to diminishing resources for face-to-face and on-site patient support. Some of this support is replaced with automated services like online symptom checkers, as well as 'social prescribing' where patients are referred to social activities rather than medical treatment, to manage their health, in partnership with patient groups and the voluntary sector (Culture Health and Wellbeing Alliance n.d.). At the same time, this is also part of a general move towards 'self-responsibilisation' for one's health (Juhila, Raitakari and Hall 2017; Lucas 2015; Øvretveit 2015; Morton et al. 2017) within the wider Euro-American neoliberal context, that exists across countries with public, semi-private and private health care.

   In 2018, two major legal developments took place which are pivotal to understanding the current opt-out landscape in the UK. Firstly, GDPR came into force in May 2018 and was fully adopted in the UK, as The Data Protection Act of 2018 (updated to UK GDPR in 2021), despite the UK leaving the European Union. Unlike the earlier UK Data Protection Act of 1988, GDPR explicitly moves towards a legal framework that defaults to opt-out rather than opt-in. The GDPR's overall aim is to increase people's control over their own personal data and 'to protect all EU citizens from privacy and data breaches in an increasingly data-driven world' (EUGDPR 2018). For companies and organisations this means obtaining consent for using and retaining customers' personal data, while granting more rights to the 'data subject' to be informed and control how their personal data is used, as well as to opt out of its use. Secondly, and relatedly, in May 2018 NHS Digital launched its data opt-out programme in line with GDPR guidelines, which aimed to provide 'a facility for individuals

to opt out from the use of their data for research or planning purposes' (NHS Digital 2018).

In spring-summer 2018, NHS Digital gradually moved towards full GDPR compliance, updating information, editing website pages, or creating new ones, and operating some of them in 'Beta' mode. Among the latter was the 'NHS Apps Library'. Originally launched in April 2017 (pre-GDPR), aiming to offer '*trusted* digital tools for patients and the public to manage and improve their health' (NHS Apps n.d.: emphasis added), it moved to a 'Beta' version in 2018. Situated within the online NHS environment, the Library (which was still online in 2021, at the time of finishing this book, although in an updated and constantly changing format) was a place where one could assume that the relatively wide range of health apps offered under its umbrella were, as assured, trustworthy and, at the very least, NHS approved. In reality, the NHS Apps Library was a conjunction of competing interests, including commercial ones – the latter including both small businesses and companies developing apps, and the large platform corporations. Beyond the discursive production of trust, at the time of our research in 2018, the App Library existed as a micro-structure, weaving its own independent web of rules that were neither clear, nor necessarily always GDPR or NHS compliant. Furthermore, the notion of 'trust' only partially included the safety of data. For example, the Apps Library offered an 'NHS Badge': a tick that appeared next to a given app as a sign that it had successfully undergone the process of 'Vetting Apps', which resulted in apps being either 'NHS Approved' or 'Being Tested in the NHS'. The text next to 'Being Tested' stated: 'These digital tools meet NHS quality standards for safety, usability and accessibility and are being tested now with NHS patients to see if there is sufficient evidence to provide them an NHS stamp of approval'. The text next to 'NHS Approved' stated: 'This digital tool is NHS Approved. It meets NHS quality standards for clinical effectiveness, safety, usability and accessibility and has a supportive evidence base' (NHS Apps Beta n.d.).

App assessment ensured that the app met 'NHS quality standards for clinical effectiveness, safety, usability and accessibility, and has evidence to support its use'. The NHS assessed an app's 'safety' according to 'both clinical safety and information safety (Information Governance, Privacy and Security)' (Health Developer Network 2018). 'Safety', here, consisted of conjoining and conflating the idea of health risk and data risk. But while the discourse of 'approval'/'vetting' institutionalises user trust via safety scaffolding, supposedly built into the process of verification, the idea of data safety and what it might mean when biodata is aggregated and mined by apps and platforms remained obscure.

The disparity between the Beta version of the online NHS narrative of health app 'safety' and the reality of data safety became apparent when undertaking an examination of the health apps offered by the Library. When reviewed in summer 2018, 43 health apps were offered by the Library but only a few apps had the full NHS Badge. This meant that some apps may have been clinically 'safe' but were subject to information safety breaches, while others may have met information safety standards but not clinical ones. Most of the apps in the

library had no badge at all; nor was it clear whether the apps were expected to be GDPR compliant. Most worryingly, despite the narrative of trustworthiness, implicit in the notion of NHS 'vetting', being included in the Library only required a simple five-step online application process. This process only involved answering Digital Assessment Questions and was available to any and all app developers. Upon completion of the application process, apps were added to the Library, regardless of the answers provided (Health Developer Network 2018). In other words, the App Library, which at first glance appeared as *the* database of 'safe' apps for the user/patient to consult, in fact presented a broad spectrum of reliability and safety that obfuscated information about degrees of approval, making it difficult to assess which apps could indeed be fully 'trusted'. To complicate matters, the main audience of the Library was not potential app users but app developers: while the page contained a section called 'Information for Developers', there was no such equivalent for users, who were left to assume responsibility for finding information by themselves.

The Library also did not contain any information about the possibilities of opting out of 'unsafe' – or even 'safe' – apps, after they were installed and activated. The NHS Digital Opt-Out Programme (NHS Digital 2018) was the sole place where opt-out was mentioned. However, its focus was narrow and very particular, relating mostly to the use of data in health care and medical research (NHS Digital 2018). Launched in May 2018 and described as the 'new service that allows people to opt out of their confidential patient information being used for research and planning', the Opt-Out Programme replaced the previous 'type 2 opt-out' which required NHS Digital to refrain from sharing a patients' confidential information for purposes beyond their direct care.[1]

Indexed under 'Systems and Services' and placed in the very long list of other – medical and administrative – services, which can be browsed alphabetically but which are not arranged under any other classification, information on 'opting out' was difficult to find, unless one knew exactly what to look for. The page itself was a mixture of clarity and confusion. On the one hand, information about patient data (purposes and benefits of its collection for health care and medical research; types of anonymised and non-anonymised data; and bodies that would have access to it, such as universities and pharmaceutical companies) and the patient's right to opt out was communicated very clearly. On the other hand, the opt-out itself was cumbersome to execute: users were required to overcome several hurdles, such as clicking through multiple pages, downloading and emailing forms or searching for alternative ways of executing their preferences. Such processes would require not only digital access and literacy, but also time, patience and perseverance – in a striking contrast to how opting in is usually communicated in today's digital environments, where 'download', 'subscribe' and 'follow' buttons are large, immediate and consistently visible.

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[1] Type 1 opt-out referred to requests for not sharing one's information beyond direct care, placed directly with the GP and one's local surgery.

Most crucially with regards to this chapter, despite the seemingly clear focus of the Opt-Out Programme, it was not apparent from the Library what exactly the boundaries of patients' rights to opt out were, and whether they encompassed the rapidly growing field of health apps. What were patients opting out *from*? What comprises 'research and planning' mentioned in the NHS data opt-out scheme (NHS Digital 2018)? Research into what? For whose benefit? And how was one's health information being used for this ambiguous purpose? For example, did it apply solely to information collected by on-site GP surgeries and hospitals, or extend to apps providing GP services? Did apps which were 'vetted' by the NHS comply with the NHS Digital Opt-Out Programme? What about apps that were recommended by the NHS but privately owned and run? And what about third parties with which the apps shared their users' data?

Between the Local and the Global, the Legal and the Technical

Moving on from the question of where health apps fit within the broader NHS Opt-Out system, we turn to another conundrum: the relations between national and international legal frameworks, and between legal, corporate and technical regulation. It is crucial to note here that while opt-out is at the heart of GDPR framing of data rights, health apps used in the UK are also part of the global capitalist data economy where such rights are diminishing. How, then, can we understand a European data protection law and (the limits of) its power in the context of global digital platforms and app companies, and their equally global data aggregation? Similarly, what are the impacts and the limits of NHS policies regarding opt-out when they actively collaborate with private, commercial, third-party app providers who may abide by different rules?

One of the ways to consider the conundrum of these geopolitical and socio-legal contradictions was to look at the apps themselves, simultaneously on the level of rhetoric and formal politics *and* on the level of data-related behaviours. In 2018–19, together with a digital health analyst and data visualisation specialist Dr Sam Martin, we studied a selected number of health apps, which seemed NHS-recommended, by either appearing in the NHS Apps Library, or by carrying an 'NHS-endorsed' sign within Apple and Google App stores (Kuntsman et al. 2019). In our analysis, we evaluated, separately and in relation to each other, the following elements: apps' Terms and Conditions and privacy policies as presented on their platforms/websites and within the apps; apps 'permissions' that access other data via one's phone and the tracking of data beyond the app itself; and the way an app handles an opt-out, *after* installation and use.

What we found was telling, not just for research into the UK's health services, but also for any inquiry considering health appisation from the perspective of opting out. We discovered that the information provided about how data was collected, stored and shared, and whether users could request to see their

data, varied across the different apps' Terms and Conditions, but was generally limited. Some apps only stated that such information would be confidential, while others provided some partial details of how and with whom the data was shared. Offering an option of opting out of sharing one's information with various affiliates and partners was rare. The apps also differed substantially when it came to their privacy policies, and it was often noted that the information would be shared with third parties. The latter had their own privacy policies, for which the apps in question would not hold any responsibility. Privacy policies, thus, placed the onus on users who were advised to read third party documentation, even though this was often hard to find or navigate.

Even more interesting was the information – or the lack thereof – on the possibility of taking one's data 'out' of the apps after it had been obtained. Could the user request access to information on which data was being collected and held by the app while they were using the app? Could they opt out of sharing some of their data? And finally, could they withdraw their data after deactivation and termination? The apps' legal documents, once again, differed in how broad (or narrow) their opt-out options were. Some allowed only a limited opt-out – for example, from marketing communications. Others offered the opportunity to review, request or delete data, and charged a fee for such services. Opting out of data aggregation, mining and analytics turned out to be complex and confusing. We noted that the continuum of opt-out stretched across different temporalities, as well as across the networked field of data capitalism, often holding user data in opaque traps. For example, some apps allowed users to stop data collection if they wished to discontinue and opt out of the app's services; however, data already collected could not be withdrawn retroactively. Similarly, in some cases, if an app had a 'cooling off' period of thirty days when the decision to discontinue could be reversed, data collection and analytics would continue in the meantime. Furthermore, if data was shared with third parties, an app's policy would not guarantee it would not remain in the hands of those third parties, even if it contained sensitive personal information. All of these scenarios could potentially create 'data ghosts' that continue to feed the mining and analytics profit machine, even after users have withdrawn from the service.

If the legal documentation we analysed was complex, unclear or downright confusing – despite GDPR guidelines dictating that 'data subjects' must be clearly informed before agreeing to give their data – the apps' actual operation made the process of opting out much harder, if not impossible. Firstly, while some apps offered a clear option to leave and discontinue the service from within their interface, others deployed a range of stalling techniques or generally obscured the steps required for disconnection. The process of deactivating the account and deleting all associated data was made cumbersome-by-design, whether on the level of the interface and/or in terms of legal specificities. The labour burden of finding a way out was placed on the user who needed to navigate multiple screens, search for information on deleting a subscription, or go through a multi-step process of completing forms or emailing customer service.

Secondly, as demonstrated by Martin's detailed technical tracing and visualisation of app 'permissions' and data trackers (Martin 2018), when an app was installed on a phone and embedded in the smartphone ecology of other apps, with the ability to share data across the apps and externally, its intrusive analytics were both extensive and not clearly communicated to users. For example, many permissions requested by the app upon installation (such as access to its camera, geolocation, phone calling features or text and phone records) drew excessive additional information, beyond the actual purpose of the app. In addition to being potentially malicious and open to cyber-attacks, these permissions allowed apps to access and share personal data in unclear and obscured ways. To make matters worse, apps also contained a substantial number of trackers, mining data on the way users utilised them, and sharing data with third party analytics. Passing app data to third parties, cross-referencing data with information from other apps on the phone and combining it with behaviour mining via major platforms such as Facebook or Google analytics, had extensive potential for indirect, yet substantial, intrusion into users' privacy and confidentiality.

Finally, and crucially, this complex web of analytics and data sharing required a high degree of legal and technical knowledge, and IT literacy, to understand, modify or opt out of, which most app users do not possess. Opting out, while being a legally defined option, turned out to be a far more complicated process, creating traps that are not only hard to escape, but often difficult to even recognise. And simply leaving or disconnecting was not necessarily an option. Disconnection would be based on a simplistic dichotomy of either accepting the app's rules of the game in their entirety, or deleting the app, and losing the benefits it might offer. However, due to the complexity of data sharing and ownership beyond each individual app, while a 'delete your account' button within an app may have *promised* an easy fix and a full and *finite* opt-out, the reality of opting out of data traps, once a person had started using the app, was complicated and uncertain. This complexity was and is both individual and geopolitical. Whilst apps' data draws on locality and individuality at a level of an individual patient/user (for example, collecting data on specific personal health conditions, geolocation or local social and health networks), they also operated within global data flows that are governed by international platforms, often headquartered in the US. These platforms' data governance extends beyond the socio-legal jurisdictions of a given locality and country of practice. For example, at no point was it clear to the user whether and how GDPR might come into play when one's data is housed in the US or passed to multiple third parties around the globe. We argue that the architecture of technical obfuscation – such as the one involved in the process of individual opting out – is intertwined with multiple socio-legal grey areas and loopholes that disperse personal data into a collective Big Data pool. Together, they operate as what Pasquale (2016) described as a 'black box society', where techno-social

processes that are central to our everyday life operate beyond any individual user's comprehension or power to control it.

Contact Tracing Apps and Performative Data Consciousness

Two years after GDPR was introduced, the question of opting out of digital health faced a new, unprecedented challenge. In light of the Covid-19 pandemic, concerns about privacy, data profiling and the monetisation of personal data were both heightened *and* expected to take a back seat, as government after government across the globe introduced 'contact tracing' apps to map, record, analyse and control the spread of coronavirus infections. The apps, developed in the early months of the pandemic, were introduced in many countries throughout 2020. While some countries or contexts made the use of the apps compulsory for all citizens, or for those travelling through its borders (AccessNow 2020; Schmid 2020), in other countries the use of contact tracing apps was optional but highly encouraged.

From the moment of their inception, the apps attracted concerns from journalists, human rights activists and academics for their potential to result in expanded state surveillance and corporate control (Das 2020; Everts 2020; French and Monahan 2020; Kitchin 2020; Kouřil and Ferenčuhová 2020; O'Neill et al. 2020; van Kolfschooten and de Ruijter 2020; Yu 2020); together with proactive suggestions of how to navigate what Kitchin called the tension between civil liberties and public health (2020). In May 2020, the MIT Technology Review created a 'Covid Tracing Tracker' – a database on contact tracing apps, including details about how they work and which policies are in place to govern them (O'Neill et al. 2020). Several scholars published rapid response papers, analysing contact tracing apps from the perspective of their efficiency (or lack thereof), geographic distribution, biopolitics of control and the need to make the apps' operation more transparent especially in relation to personal details aggregated in state-controlled databases (Das 2020; Everts 2020; French and Monahan 2020).

The UK was among the late adopters of a contact tracing app. After lengthy deliberations and months of operating a chaotic and often dysfunctional non-app contact tracing system, in September 2020 the 'NHS COVID-19' contact tracing app was finally launched in England and Wales, with separate apps operating in Scotland ('Protect Scotland') and Northern Ireland ('StopCovidNI'). Contrary to fears about increased surveillance, which dominated media coverage in spring 2020, most reports about NHS COVID-19, in both mainstream and social media, were about the app *not* working properly – not installable on older models of Android and iPhones (Hern 2020a); not working in some languages (Hern 2020b); incorrectly reporting the risk levels (Hern 2020c; PapacassKitchen 2020); or sending erroneous exposure alerts to people who barely left their homes (Payne 2020).

When we carried a 'walk through' (Light, Burgess and Duguay 2018) analysis of the NHS COVID-19 app, which included app installation and use, we noted that the interface appeared simple and straightforward. The information on privacy, confidentiality and the rationale for data collection was presented very clearly, for example, explaining why postcode data was required upon registration; why geolocation or Bluetooth needed to be switched on for the app to operate – and that these could always be temporarily switched off at the user's discretion; or how long one's data was kept. Information on withdrawing one's data was also clearly presented and relatively easy to find and execute – in a striking contrast to other health apps we had researched previously.

All the above suggests that the app's interface was continuously performing what may seem like high-level privacy awareness, perhaps in an attempt to alleviate public concerns in light of multiple media reports of heightened surveillance through contact tracing in other countries. The user was repeatedly assured that their privacy was protected and information on their infections or exposures was confidential and anonymised, and was not retained after an opt-out. These assurances, however, were limited to the app alone – as the 'deleting your data' screenshot shows (Figure 1.1), for example, the data was not controlled by the app but by the phone – and here the app's responsibility ended. Beyond this statement, little explanation was given as to what 'data control by the phone' actually meant or how user data was mined by bodies other than the app itself, for instance via in-phone interactions as detailed earlier in this chapter.

In fact, the app's interface provided an *illusion* of control, by allowing the user to temporarily opt out of being traced, by switching the contact tracing function on and off as desired – which might make the user feel as if they could temporarily make themselves invisible. This is in striking contrast to fears regarding the dangers of contact tracing technology – that it could lead to stalking or cybercrime, or would intensify state surveillance of citizens by tracking every move at every given moment – as indeed is the case with contact tracing apps in some countries. However, what remained unacknowledged was the ways in which the app's opt-out options facilitated other forms of data mining, which were not related to coronavirus tracking, nor to the app itself, while ostensibly providing an opt-out optionality. For example, when switching the contact tracing function (back) on, geolocation and Bluetooth were turned on by the app. Yet, when contact tracing was switched off from *within the app*, both geolocation and Bluetooth remained active on the phone, and needed to be switched off manually. Without knowing or remembering to do so, the phone and its data were made more visible and more minable, trapping more data than the user may have ever agreed to; all the while the user may have felt 'invisible' and empowered. Once again, the opt-out of the smartphone *ecology* of data mining was far less straightforward than clicking the 'off' button, making the performance of data consciousness an empty gesture.
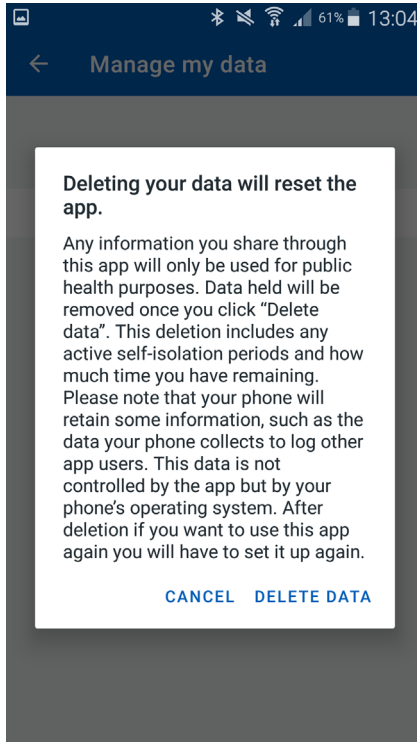
Figure 1.1: Deleting your data. Phone screenshot. Collected 16.10.20 (Source: Adi Kuntsman).

Individual and Collective Opt-Outs

Since the introduction of GDPR, it could be argued that the move to become 'GDPR-compliant' is a step forward towards increased transparency and an improvement in the digital rights of health apps' users, where opting out is becoming institutionalised. As we can see in the case of the NHS contact tracing app, it can even be clearly embedded into the app's interface. Yet a closer look at how such compliancy is implemented – not just through everyday practices, but also at a more granular and algorithmic level of health apps and smartphone ecologies – reveals a fluid and complex web of networked 'data traps' for which no single app could be held responsible. In that respect, GDPR as the legal framework, *and* some apps being seemingly data conscious (such as NHS COVID-19) is both empowering *and* confusing due to the illusion of protection they offer to individual users. Practices and technologies of opting out struggle to find a place within a context that is simultaneously part of the global capitalist data and platform economy, where opt-out rights are

diminishing and personal data is shared easily and excessively, *and* is subject to a new regional and national data protection regulation which places opt-out rights at its centre.

However, a further conundrum is in place: one between individual and collective opt-outs. The process of appisation, which is based on having an *individual* gadget and an *individual* account to support one's health, signals the increasing individualisation and self-responsibilisation of health: self-care, self-management, self-tracking and self-monitoring (Ajana 2017; Kristensen and Ruckenstein 2018; Lupton 2014; Lupton 2016; Neff and Nafus 2016; Sharon and Zandbergen 2017). The process is true for both those contexts where health care is private, and where it is nationalised and free, albeit crumbling – as in the UK.[2] Digital health, then, seems to be about empowering the individual, where responsibility and accountability of one's own health now includes responsibility for one's own personal data: the onus of safeguarding, accepting, refusing and determining ways out always falls to the individual user. And here, the management of one's data is often presented with an *illusion of choice*. This is particularly apparent in how the App Library interpolates the 'you' and the 'self' (Althusser 1971/2001), and in practices such as accepting Terms and Conditions, or in granting app permissions, not to mention the very decision to choose and install an app – an epitome of agentic 'consumer choice' (Bauman 2001; Bol et al. 2018; Borgerson 2005; Schwarzkopf 2018). Even during the Covid-19 pandemic, when concerns about individual freedoms were deemed secondary to the collective cause of fighting coronavirus globally, the app focuses on the individual who seemingly has a choice at every step. At the same time, health apps bring a radically new level of data powerlessness. When health information is shared, and jointly mined, with a search/advertising engine (such as Google) or a social media site (such as Facebook), 'doctor patient confidentiality' becomes all but a symbolic gesture from bygone days. Health appisation gives rise to algorithmic 'care', one based on analytics that might be more efficient, speedy and precise, yet is also relentlessly intrusive and non-private, where no medical information is left untouched, unseen or undisclosed.

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[2]   Although of course, the relations between healthcare affordability and the use of health apps is an important topic to explore. For example, we would expect there to be a difference between a free app (or an app with very affordable subscription costs), which is used by those unable to afford regular healthcare, and an app that is used to complement a free national health care system. One might speculate whether surrendering one's data in return for what seems to be a free medical service would be seen as more acceptable and even welcome by some. Similarly, we can investigate the profit from app subscription charges versus those from data monetisation; how the two types of profit are made clear or invisibilised, and whether/how both forms of app capitalism are understood and legitimated. These are questions that require further research, which is beyond the scope of our book.

More crucially, the broad and extensive sharing of personal (bio)data for analytics and profit means that opting out of, or the use of, health apps is first and foremost about large-scale *collective* datafication and the economy of surveillance capitalism (Zuboff 2019). The latter is still not fully understood by the public, especially when juxtaposed with political/state surveillance. The debates that preceded the launch of the UK's NHS COVID-19 app are a telling example. Before the introduction of the app in September 2020, extensive deliberations took place regarding its design and data management. Initially, the NHSX app was to be adapted to contact tracing, using centralised technology where the data would be hosted centrally on NHS computer servers (Downey 2020). However, the adaptation was delayed, largely due to concerns about privacy and data safety. Eventually, Apple and Google 'decentralised' technology was adopted instead in the development of what became the NHS COVID-19 app, because their contact tracking technology was deemed to be less intrusive (Kelion 2020). Such a dichotomy gestures to a severely limited understanding of data power and surveillance capitalism, where surveillance by the state or national health services is deemed intrusive, whereas dispersed but extensive data mining by major platforms appears 'safer' – even though opt-out of the latter, as we have shown, is all but impossible.

The focus on individual privacy and individual data safety – in the context of contact tracing and more broadly – brings our attention to the conundrum of (seeming) individual data empowerment versus collective data powerlessness that is at the heart of health appisation. While data and privacy management practices are individual, and targeted advertising is also individually tailored, the individual is meaningless in the eyes of algorithmic determinism and prediction. A single user's data has no representative value: monetary and statistic capital lies with aggregated *Big* Data. The digitisation of health exists in the tension between the neoliberal model of the individual whose health and data concerns are personalised into the 'Self', and the digital capitalist model (Fuchs 2010; Fuchs 2014; Fuchs 2015; Schiller 2000), which generates value in the collective (and thus, representationally and statistically 'valid') data of the masses. It is here that we witness what Ajana coined the shift 'from individual data to communal data, from the Quantified Self to the 'Quantified Us', from the 'biopolitics of the self' to the biopolitics of the population' (Ajana 2017).

Within such a context, 'opting out' is subject to oppositional forces: it is a matter of individual rights (and responsibilities) while also, paradoxically, situated within a system that supports, and capitalises on, *mass* value and *mass* data. Legal changes, such as GDPR, are undoubtedly a welcome and much-needed attempt to protect individual rights in the world of large-scale data sharing, mining and profiling. Yet, in addition to exploitable loopholes within supposedly GDPR-compliant apps, which might endanger the individual or even entire

national or regional legal frameworks – loopholes that need to be exposed and mended – a more substantial issue is at stake regarding the effectiveness of legal frameworks such as GDPR. When the digital data economy traffics in Big Data, and when, concurrently, individual data ownership erodes in favour of 'data philanthropy'– a growing shift towards 'surrendering' one's data for the 'public good', where unwillingness to share and concerns for privacy are seen as 'selfish and anti-solidaristic' (Ajana 2017) – legally addressing *individual* responsibility and *individual* protection is not enough and will never be fully sufficient.

Conclusion: From Data Rights to Data Justice

How, then, can we approach, analyse and change the current landscape of the 'socio-cultural data traps' of health apps, and the shrinking space of data opt-out? As a first step, we argue, individual app users and medical and health care providers involved in the digitisation of health need to equip themselves with socio-political *and* technical tools for understanding, mapping and monitoring the datafied operation of health apps. Secondly, and crucially, we must also reframe opting out itself as a matter of 'data justice', and not just a data 'right', one that is placed at the centre of considering the entire data *ecology* and data *economy*, rather than merely addressing individual practices of one user in relation to one app. Here, we align our conceptualisation of digital disengagement with the emerging body of scholarship on 'data justice' (Dencik et al. 2016; Johnson 2014; Iliadis 2018; Taylor 2017) which, as Taylor formulates, should include 'the freedom not to use particular technologies, and in particular not to become part of commercial databases as a by-product of development interventions' (Taylor 2017, 9). Taylor's call is particularly relevant today, where the large-scale, rapid initiatives of digital contact tracing create a substantial commercial gain for both the firms involved in developing the apps, and the large platforms whose decentralised technology is being used.

In order to create a space for both individual rights to refuse to be part of a database (Taylor 2017) and a more systemic, collective refusal of 'biopolitical categorisations that are enabled through Big Data practices' (Ajana 2017, 13), we need to acknowledge that focusing on individual data rights – including the right to opt out – is not and will not be enough. To challenge the structural nature of health apps' data traps, we need to move away from the biopolitics of health commodification more broadly. This does not mean refusing the use of digital technologies in public or community health services. Rather, this is about moving to decoupling equal and just health provision from a compulsory dependency on non-medical digital communication. And when digital tools are truly and urgently needed (and might outweigh individual concerns about privacy, such as in the case of an epidemic), they must be adopted in a thoughtful and transparent way, instead of merely assuming they will work, or are indeed the best solution. Digitisation that is attentive not only to individual

rights but to collective data justice must purposefully strive to avoid exclusionary and discriminatory data harms, on the one hand, and profit-driven data grabs, on the other. In the next chapter, we explore the rift between individual digital rights and collective digital justice further, by looking at digitisation, social mediatisation and algorithmic automation of decision-making in public services, policing and border control.

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CHAPTER 2

Automated Governance: Digital Citizenship in the Age of Algorithmic Cruelty

Introduction

In March 2020, days after Covid-19 was declared a pandemic by the World Health Organisation (Lupton 2022), and shortly before the UK government announced a full lockdown, all secondary and post-secondary school exams, typically sat at ages 14–16 and 18–19, were cancelled (The Uni Guide n.d.). In their stead, national examination regulatory bodies (Ofqual in England, Qualifications Wales in Wales, Scottish Qualifications Authority in Scotland, and CCEA in Northern Ireland) used an algorithm to calculate students' marks. Ofqual argued that awarding results based solely on teachers' predictions would be misleading and would result in inflated marks, whereas the algorithm produced to determine marks would provide a more accurate picture based on a complex calculation that included not just the individual's records but the student's school's performance overall, at present and in previous years (Burgess 2020). This decision had a substantial impact on many young people as these exam results are central to UK college and university entry criteria and individuals' chances of successfully securing a place at their institution of choice. When results produced by the algorithm were announced in summer 2020 it quickly transpired that, in many cases, students attending better performing schools, which were largely located in wealthier areas, received upgraded marks compared to their teacher's predictions, while students from disadvantaged areas and low resourced schools had their marks downgraded compared to their teacher's predictions and lost out on attending their preferred institutions (Akec 2020).

In August, after a wave of protests by young people, objections by teachers and parents/guardians, and a general media storm, Ofqual and the Secretary of State for Education revisited their decision and scrapped the use of what was repeatedly described as a 'flawed algorithm' (Akec 2020; Express and Star 2020; Great Yorkshire Radio 2020; Hussain et al. 2020; Smith 2020; Sussex Students' Union 2020) for England, Wales and Northern Ireland, with Scotland shortly following suit. The decision to deploy algorithms to determine grades came in the middle of a global public health emergency, when many activities had to be cancelled or postponed, and when numerous alternative arrangements had to be quickly conceived, often through a fast-tracked development process, and rushed into implementation. In the case of exams, the hasty nature of these decisions and their immediate and collectively visible impact (hundreds of young people across the country receiving their exam results at the same time, having already been affected by the lockdown and school closures), meant that the deployment of algorithms instead of actual exams received exceptional publicity. Following this collective uproar, the move was relatively easy to undo, especially, one could argue, by the Prime Minister, Boris Johnson, whose handling of the pandemic was generally based on numerous 'U-turns' (Rawlinson 2020). In contrast, the use of automated decision-making processes by state bodies in other areas that deal with people's livelihoods, wellbeing, freedom and survival, has been steadily creeping in and increasing in recent years, in the UK and elsewhere, their strengthening grip less visible, and much harder to challenge.

This chapter examines the growing impossibility of digital refusal or opt-out of algorithmic decision-making and other forms of digitised governance when it comes to the management of civic life, in particular by those most vulnerable to, and/or most dependant on, the state. We begin with a discussion of the UK Government's 'digital transformation' plan. Similar to many other countries' move to 'e-government', the UK plan included moving all public services and their various application processes (visas, welfare, council tax payments etc.) online. It also included communicating with citizens via social media and automating as many decision-making processes as possible, with the help of AI and algorithms. Reading the UK Government's idealised vision of efficient state services, and happily serviced and digitally engaged citizens, against the grain, this chapter contrasts these narratives of e-government with the realities of growing violence inflicted by digital policing, digital welfare and digital immigration management on those most vulnerable to it, and often most powerless to resist.

We position our discussion within the broader concern of what it means to be a digital citizen – not so much around political behaviour such as voting or activism, nor around citizen participation in civic life at the communal, hyperlocal or national level – all of which are more traditional domains of scholarship on digital citizenship (Hintz et al. 2019; Mossberger et al. 2008). Instead, we focus on how interactions between the individual and the state, in areas such as public services, border management and policing, are mediated by digital

platforms, online communication, algorithms and AI. In the field of e-governance/e-government, these new developments have been overwhelmingly welcomed, with much of the work focusing on managerial and institutional efficiency, improvement of public services and citizens' trust, and challenges to development and implementation (Bertrand 2020; European Commission 2020; Reddick 2010; Scholl 2015; Zuiderwijk et al. 2021). Our own analysis is deeply critical of the celebratory approach to e-governance, both due to its solutionist nature, and because it tends to prioritise efficiency over care, and bureaucracy over justice. Instead, we are informed by a growing body of critical scholarship that attends to the relations between digital governance and the rapid expansion of digital state surveillance of the poor and the racialised, the racial and class violence of digital bureaucracy, and the militarisation of digital tools for state xenophobia and racism (Benjamin 2019a; 2019b; Gangadharan 2012; 2017; 2020b; Privacy International 2021; Williams 2018; Williams and Kind 2019).

The State's New Digital Clothes

In 2012, the UK government introduced its strategy for the digital transformation of government and public services. The strategy, 'set out to how the government will become *digital by default'*, (Cabinet Office 2012: emphasis added) and was not dissimilar to many other countries that have that have adopted the e-government model of providing public services through one-stop online platforms, offering 'electronic and mobile services for the benefit of all' (United Nations 2016). The online presence of public services is constantly evolving. At the time of writing in 2021, a series of interlinked pages on the 'gov.uk' website presented the digital transformation strategy as friendly, citizen-facing datafied efficiency, streamlined, service-oriented and empowering:

> We will transform the relationship between citizens and the state – putting more power in the hands of citizens and being more responsive to their needs. The tools, techniques, technology and approaches of the internet age give us greater opportunities than ever before to help government:
>
> • better understand what citizens need
> • assemble services more quickly and at lower cost
> • continuously improve services, based on data and evidence (Cabinet Office 2017).

Set up as 2013–2017 and 2017–2020 strategic plans to move to digital by default by 2020, the policy is centred around the Government Digital Service (GDS), encompassing all public services and 'leading digital transformation' in the

UK (Government Digital Service n.d.). There are several elements to GDS, relevant to the shrinking space of digital disengagement, that are important to mention here.

First and foremost, it is worth noting the kind of citizen/service recipient rendered on the GDS website – a citizen that is not only skilled enough to navigate multiple 'gov.uk' webpages, but also proficient in, and comfortable with, the idea of using social media for contacting the authorities. In GDS, the boundary between official 'gov.uk' webpages and social media ones is consistently blurred. GDS has a blog and also holds, or has held, accounts on Twitter, Instagram, LinkedIn, YouTube, Flickr and Tumblr. Some of these accounts are more active than others, and some are no longer in use. On most of these social media accounts, at the time of writing in 2021, the engagement 'metrics', such as the number of followers, were rather low compared to other organisations or groups using the platforms to communicate with the public. This suggests that, at present, social media is not the primary channel for communication for locating or receiving government information. Nevertheless, it is one that is growing consistently according the GDS website, where the importance of social media engagements is discussed in detail (Government Digital Service 2018b). Currently, GDS does not have a presence on Facebook (explained on their website as due to a lack of resources and the commercialisation of newsfeed algorithms which prioritise paid content); Snapchat (explained as due to Instagram being more popular); or TikTok (justified via the demographics of the platform's users being mostly under 35 and therefore not GDS's 'target audience'). These choices and justifications pose not only the question of which groups are prioritised the most, and why – but crucially, which are ignored and abandoned entirely.

Beyond the demographics of 'engagement', the social mediatisation of governmental services in itself requires us to pause for a moment. How can we read state power, when its decision-making bodies begin to speak the informal language of platform sociality (van Dijck et al. 2018)? For example, GDS blogs use the vernacular style of social media connectivity, most noticeable when they end their posts by issuing the following invitation: 'Be a friend, follow us on @GDSteam on Twitter, @GDSteam on Instagram and Government Digital Service on LinkedIn, and engage with our content!' (Schneider 2020). In the age of the high spread of social media, on the one hand, and corporate platform communication, on the other, such social mediatisation of the state is increasingly blurring the lines between the communal, the corporate and the political.[1] Furthermore, the use of vernacular grammars of 'being a friend' (made popular by Facebook) or a follower (used across most platforms) by government services that hold the authority to make decisions fundamental to individual livelihoods and freedom is a powerful, and powerfully masqueraded, tool of state

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[1] We further discuss the complex relations between social mediatisation and the corporatisation of communication outside leisure and social relations in the next chapter.

rule. At a time when citizens' social media behaviour is increasingly subjected to state surveillance and interrogation, for example by the police (Williams and Kind 2019) or welfare services (Alston and Veen 2019; National Audit Office 2018) one only needs to be reminded that although the platform 'friendship' of liking one's online content is (still) optional, the possibility of 'de-friending' the government online is a dangerous illusion.

All the while, social media surveillance and platform data mining are presented by GDS as the most suitable tools to support and improve public outreach. For example, GDS relies heavily on 'social media listening' (sic) and audience analytics, provided by social media platforms:

> Government departments use *different commercial social media listening tools to monitor for specific mentions of words or phrases to learn what people are saying online.* Pricing models vary from product to product, and often depend on the volume of mentions you want to analyse or the number of user accounts you need.
>
> […]
>
> *Monitoring tools* provide audience insights including demographic data, location and interests.
>
> *Each social media platform has built-in analytics for insights into your audience.* Some will give you more detailed insights that can help you to reach new communities and improve how you communicate with your existing followers (Government Digital Service 2018a).

GDS runs its own social media campaigns and supports various public services to do so too, noting that they 'prefer to measure engagement rather than reach or impressions.' Engagement, here, is of course digital, and is measured through a range of metrics, obtained from Google, social media, and manual analysis (Figure 2.1).

In its Social Media Playbook – a set of guidance on how social media is or can be used in public services – the everydayness of surveillance (monitoring conversations, cross-referencing and analysing multiple types of data, tracking links and drawing on corporate platform analytics etc.) is both laid bare and trivialised, wrapped into the marketing-style language of 'understanding', 'reaching' and 'improving communication'. Becoming 'digital by default' thus traps the user of public services between dependence on the state and its chosen modes of providing services, *and* the datafication of everyday sociality, deeply embedded in corporate platform power and the digital industry.

This datafication and surveillance is both collective *and* individual. It is crucial to remember that digitality-by-default operates through a Janus-faced personalisation. Public services are repeatedly presented as streamlined and easy to use, because they are tailored to individual needs and accessibility requirements and designed to be accessible from all devices and with inclusivity in mind (Allum 2020; Central Digital and Data Office 2021; Service Manual 2016).

Measure and evaluate your performance

To ensure evaluation relates back to our objectives, we monitor insights continually and feed these back into the campaign - rather than evaluating at the end. We prefer to measure engagement rather than reach or impressions. It's a more tangible way of assessing whether people are consuming our content.

We produce a monthly detailed engagement report for internal stakeholders.

There are various ways to measure an objective has been met, and general data source that can provide the measurements.

Metric	Data source
Number of online mentions across all channels	Social media monitoring tool
Reach of hashtag	Hashtag tracking tool/social media monitoring tool
Impressions generated by content on owned social media platforms	Social media platform's native analytics tools
Social media likes and comments	Social media platform's native analytics tools
Social media shares (including Twitter retweets)	Social media platform's native analytics tools
Video views and subscribers	Social media platform's native analytics tools
Blog subscribers	Blog analytics
Number of users adopting campaign hashtag	Hashtag tracking tool/social monitoring tool
Clicks to website	Google Analytics
Downloads/requests for information	Google Analytics
Number of times owned content has been embedded elsewhere	Social monitoring tool
Sentiment	Social monitoring tool combined with manual analysis using a dip test of responses
User generated content developed outside of owned channels	Social monitoring tool

Figure 2.1: 'Measure and evaluate your performance', from Social Media Playbook (Governmental Digital Service 2018b).

Personalisation, at the same time, is anchored in digital monitoring and governance of the individual. Beyond platform mining and monetisation of *collective* data, the receipt of governmental services is grounded in a network of *individual* data capture which one cannot opt out of without potentially losing access to the services provided, or without jeopardising ease of access. For example, biometric data, in the form of voice recognition, has already been used for several years by those accessing services for processing tax credits, childcare and other benefits (HM Revenue & Customs 2018). At present, GDS are working on a datafied, biometrically anchored single profile for all government services (Allum 2020). The rewards promised by this new, and 'constantly improving', form of e-government, must be assessed against the perils of digital personalisation that may appear as optional, well-regulated and safe, but are de facto extremely limiting of the possibilities of opting out of digital services without a substantial loss of services. At times, as will be shown later in this chapter, such opt-out is not possible at all – and this is where the individual inability to opt out is deeply grounded in collective injustice, targeting the racialised and the poor.

Finally, GDS operates through what can be described, using Ahmed's words, as a 'non-performative' performance of transparency (2012). Non-performativity, for Ahmed, refers to statements that do *not* do what they say – in the context of her work this refers to anti-racist statements by institutions that do not

change their institutional racism. Here, we refer to non-performative transparency, where information appears to be present, while the processes of decision-making remain concealed. On its website, the digital transformation strategy provides detailed information on Design Principles (Central Digital and Data Office n.d.), the Digital Service Standard (Service Manual n.d.) and a Technology Code of Practice (Central Digital and Data Office n.d.) for developing digital public services. Here, the heavy emphasis is on *how* the services are communicated, *how* the messages to the public are framed, or even *how* the service is designed (for example, from an accessibility point of view) rather than on what the public services actually do and how the decision- making process itself works. What we see here is a simultaneous process of overinforming and omitting information. On one hand, the site presents extensive information on technical design standards and principles, which is very important to stakeholders or technical professionals, but is beyond the comprehension (and often, interest) of most ordinary service-users. On the other hand, for users, the 'backstage' of the service itself is explicitly invisibilised through the rationale of making the service 'easy and accessible' (Government Digital Service 2016; Central Digital and Data Office n.d.):

> GOV.UK is built on the principle that you *shouldn't need to know* how the government works to use government services. We do the hard work to make things simple for users. That means we make interactions with the government easy, effective and accessible, for example by using language that's familiar to our users instead of complicated legal terms (Allum 2020: emphasis added).

Such concealment is not harmless. As we demonstrate in the next section of this chapter, the technical and procedural blackboxing (Pasquale 2016) of public services processes, and in particular, its architecture of digital tools and its mechanics of decision-making, can make the system impenetrable, and its algorithmic decisions impossible to challenge – all with dire human consequences.

The State's New Digital Weapons

What, then, is the human cost of e-governance for those on the receiving end of digitisation by default – distress, despair, loss of income, poverty, starvation, imprisonment, death? Who are its captive subjects, its dependant victims? One of the key areas in which digitisation of public services has developed rapidly in the last few years is welfare provision. In 2019, the Guardian published the results of an investigation into the rise of 'digital welfare' around the globe, referring to the use of AI, algorithmic modelling, and prediction, as well as other data systems such as biometrics, in processing, decision-making and management of those most vulnerable in their reliance on state support: child, disability and other benefits; social housing; pensions; and employment and income support

(Pilkington 2019). The Guardian's investigation found that the rapid process of digitisation often worked in tandem with welfare reforms, such as the introduction of 'universal credit' (UC) in the UK[2] a single 'point' system replacing a range of benefits (income support, housing benefits, tax credits etc.), a change which for many resulted in a substantial reduction in the amount received.

The UC reform did not merely change the calculation of which type of support individuals are entitled to, but transformed how welfare is accessed, making the claim process harder, while making the denial or underpayment of benefits easier, 'automating poverty' and 'punishing the poor' (Pilkington 2019). As of the late 2010s, most universal credit applications need to be completed online, despite many of the recipients not being digitally literate, lacking access to a suitable device, or even unable to write (Booth 2019). Beyond issues of digital accessibility, the application process itself is incredibly complicated and obscured, making it practically impossible to understand the process or challenge decisions which are fundamental to one's livelihood, finances and survival. As the Child Poverty Action Group stated in their report, entitled 'Computer Says 'No'!':

> [t]he information provided via the UC online account (the main way claimants manage their UC claim and communicate with the Department for Work and Pensions (DWP)) does not make it clear that UC is a decision-based system, which has consequences when claimants need to challenge decisions relating to their claim (Howes and Jones 2019).

In digitising welfare services, the Action Group notes, the algorithmic decision-making process is blackboxed not only from recipients but from helpline staff who do not have access to a full calculation of awards and are thus unable to either explain the process or change its outcomes. This lack of transparency is coupled with plentiful evidence on numerous 'errors', some of which are acknowledged by DWP itself (Wall 2019) – errors that are echoed globally, where a glitch in the system, a wrongly ticked box, or even a case of misplaced, lost or mismanaged data, results in distress, loss of welfare support, homelessness, starvation and even death (Howes and Jones 2019; Murphy 2019). However, it would be a mistake to dismiss (or fix) these as merely 'flaws', 'errors', or what Noble (2018, 6) calls 'data aberrations', in an otherwise effective and efficient system. The welfare system itself has a long history of structural racial and classed violence, in the UK and elsewhere (Boushel 2000; Neubeck and Cazenave 2001; Lewis 2000). And now, as several journalists and NGO investigators have powerfully demonstrated, the design of a welfare system that is algorithmically driven *and* digital by default in the ways citizens communicate

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[2]   Although UC is a UK-wide benefit system, it is managed separately in Scotland, via gov.scot rather than the gov.uk site (Scottish Government n.d.).

with the state, is the new face of state cruelty, dressed in the language of efficient public services.

Similar cruelty is at the core of the digitisation of policing. Reminding us that technologies are neither neutral nor merely replicating social injustice, but are racist and discriminatory by design (see also: Benjamin 2019a, 2019b), British criminologist Patrick Williams demonstrates how the digitisation of policing generates biased outcomes, because it is based on fundamentally biased data. In his extensive research of racialised policing in the UK and Europe, Williams notes that the data-driven criminalisation of people of colour, and in particular Black people, is based on the marriage of racist criminalisation such as racialisation of suspicion and being 'matrixed' because of skin colour, or being made guilty by association, (Williams 2018) and the 'encroachment of technology' (Williams and Kind 2019). The latter refers to an extensive and all-encompassing network of digital identification technologies (mobile fingerprint units, biometrics, automatic number plate recognition, facial recognition, mining of social media content, phone location data), connected to multiple databases and coupled with predictive analytics. Combined together, these technologies are leading to a devastatingly high level of over-policing and over-convicting of Black and other communities of colour, and other forms of short and long term 'data harms' of both individuals and communities (Williams and Kind 2019). Williams' analysis echoes similar scholarship carried out in the US context (Benjamin 2019a, 2019b; Gangadharan 2012, 2020a; Noble 2018), linking long histories of racial and class violence to discrimination and oppression and to what Benjamin poignantly coins 'carceral technoscience' (2019a).

An examination of increased digitisation of welfare and policing in the UK shows that digitisation of state-citizen relations is based on a deliberate and complex weaponisation of digital technologies and data embedded into the very heart of e-governance.[3] So what happens to e-governance when it is challenged? What happens in moments of rupture or critique – and thus possible opt out of the digital, as for example, with the case regarding exam results in summer 2020? At around the same time as the exam results furore, the Home

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[3] Gangadharan makes a similar argument regarding the US context, showing that forced adoption of digital technologies in workplaces, welfare and law enforcement has detrimental impacts on the lives of marginalised and oppressed communities. Her discussion is based on the premise that marginalised groups lack opportunities to advocate for equality because of 'the shift from public decision making, which affords a measure of transparency, accountability, and democratic legitimacy, to private sectors, which typically lack all three' (2020a, 128). The UK case demonstrates another angle to this problem, where the seemingly public decision-making processes take place at the intersection of shadow privatisation of governmental IT contracting and public policy that is discriminatory and cruel despite having a democratic legitimacy.

Office was challenged by human rights groups for its use of a racially biased algorithm (McDonald 2020a). For several years, the Home Office – which, tellingly, introduced its 'hostile environment' policy around the same time as the launch of governmental 'digital transformation' (set in 2012 and implemented from 2013) – was using algorithmic decision-making for processing visa applications.[4] The algorithm was 'streaming' applications by nationality, offering 'speedy boarding' to applicants from rich, white countries such as the US, Canada, Australia or Western Europe, while 'poorer people of colour get pushed to the back of the queue', as noted by the digital rights group Foxglove (Foxglove 2017). Further to the streaming itself, the Foxglove team argued, the 'algorithm suffered from "feedback loop" problems known to plague many such automated systems – where past bias and discrimination, fed into a computer program, reinforce future bias and discrimination' (Foxglove 2020). After a set of legal challenges, brought by Foxglove and The Joint Council for the Welfare of Immigrants (JCWI) over several years, the Home Office agreed to scrap the algorithm in 2020 (McDonald 2020b).

The Home Office's decision was widely celebrated as a victory and an acknowledgement of systemic racism in tech design (BBC News 2020). This was an important milestone in the battle to opt out of biased tech. Yet, just as in the exam results case, ditching one 'bad' algorithm can dangerously obscure the systemic violence by design of digital governance of people's lives, and the marriage of racism, xenophobia and the war on the poor and the disabled with powerful technologies that are integrated in the lives of everyone, but impact everyone differently. As Noble and many others (Benjamin 2019b; Isaac 2018; Kitchin 2021; Lum and Isaac 2016; Williams 2018) remind us, the 'errors' we seem to 'expose' are never accidental. Rather, they are part of systemic 'discrimination [that] is [..] embedded in computer code and, increasingly, in artificial intelligence technologies that we are reliant on, by choice or not' (Noble 2018, 1). When the majority of everyday interactions with the state are digitised, and when such digitisation, in turn, cements the power of discriminatory tech, the disappearing space of opt-out, and the need to reclaim it, becomes central to questions of collective social justice.

Imagining Alternatives

The rise of digital public services and the overall digitisation of citizen's lives has also resulted in the rise of critique and resistance. The lead effort among these is the demand for transparency in digital services and processes, by

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[4] The 'hostile environment' – a UK racist policy towards immigration, aimed to make the country inhospitable to migrants, and was presented by the Home Secretary Theresa May in 2012 (Kirkup and Winnett 2012).

organisations supporting specific groups (such as Child Poverty Action Group or JCWI mentioned in this chapter), or by those explicitly focusing on digital rights, such as Foxglove. Frontline journalistic investigations, both in the mainstream media such as the Guardian, and in groups such as The Bureau of Investigative Journalism, are also inquiring into governmental 'IT contracting' and the resulting lack of transparency and accountability with regards to public spending (Black and Safak 2019). Indeed, as noted by Pasquale, the call for algorithmic accountability is a growing field of concern for lawyers, journalists, computer and social scientists, and policy makers as well as activists, and that the growing use of algorithms and AI is also leading to new legislation and regulatory frameworks around the auditing and transparency of algorithmic decision-making processes (Pasquale 2019).

However, algorithmic accountability also contains a dangerous paradox. While potentially protecting individuals affected by 'errors', and while making the public more aware of algorithmic involvement in policies and services, improving the work of an algorithm through accountability and auditing processes is a form of digital solutionism, cementing and strengthening digitisation itself. Furthermore, algorithmic transparency itself does not solve the issue of systemic discrimination. As Williams and Kind (2019) remind us, the impact of biometrics, AI and other digital technologies disproportionately affects minority communities in the UK and Europe, who are already over-policed, and now even more so through technologies that are discriminatory by design. These technologies mis-identify Black and other people of colour at a much higher rate, bringing the long history of racism in policing and law enforcement into technology driven geographic and demographic over-criminalisation. A similar analysis is made by contributors to *Captivating Technology: Race, Carceral Technoscience, and Liberatory Imagination in Everyday Life* (Benjamin 2019a), who discuss at length how digital technologies are embedded in carceral regimes in the US and globally. Long-standing histories of harm, erasure and oppression are not merely receiving a new incarnation through discriminatory tech. Rather, as Benjamin argues, racist and classist social control explicitly propels investment in discriminatory designs.

Moving beyond algorithmic transparency, Pasquale suggests that we need to move towards a second wave of algorithmic accountability: 'while the first wave of algorithmic accountability focuses on improving existing systems, a second wave of research has a*sked whether they should be used at all—and, if so, who gets to govern them*' (2019: emphasis added). Following Pasquale, we propose to expand this formulation to the notion of *digital accountability*, where digital disengagement is precisely the paradigm for asking questions such as, do we need this particular technology/device/app/tool to begin with, and if we do, where would a way out be? Furthermore, digital accountability must not merely take systemic injustice into account but use it as its starting point in the abolition of racist tech (Benjamin 2019a, 2019b; Williams 2018) and of 'digital technologies that punish and police marginalised people' (Gangadharan

2020a). As Williams poignantly notes, opposing racist digital policing, and racist tech more broadly, cannot stem merely from opposition to surveillance and infringements on privacy, but must be embedded in an anti-racist and justice-oriented approach. In a similar vein, Benjamin calls for the abolition of all carcerality (2019a). Finally, Gangadharan (2020a) emphasises that digital refusal and collective civil disobedience against technological coercion must centre the experiences of marginalised communities. Such an approach, while systemic in its orientation, also, crucially, comes from below, and leads us to the other alternative to digital encroachment of the state, with which we conclude this chapter.

The second alternative is digital self-defence – a broad term that describes a range of mostly grassroot, bottom-up initiatives to protect individuals and communities from digital surveillance and tracking. The logic of digital self-defence is starkly different from that of cybersecurity – even though both focus on safety and protection in the digital world. The militarised logic of cybersecurity usually involves centralised control (state and/or corporate), hierarchical power, authorised expertise and often also invokes a sentiment of war – 'us vs them', 'rules of combat', and other frameworks that centre and justify violence and suppression, while assigning legitimacy to structural powers. Digital self-defence, on the other hand, prioritises empowerment, non-hierarchical knowledge and protection of those vulnerable to state and/or corporate power. Examples of digital self-defence are countless, and can include NGOs and community-oriented projects such as 'Our Digital Bodies' (ODB 2016), a collective based in marginalised neighbourhoods in the US that tackles digital data collection and human rights and fosters individual and community-based forms of digital refusal (Benjamin 2019b; Gangadharan 2020b, 2020c), or 'RosKomSvoboda' (Роскомсвобода 2014) – a Russian NGO supporting internet self-regulation, digital rights and freedom from state censorship (the name literally meaning 'Russian Communication Freedom', a paraphrasing of RosKomNadzor, the name of Russia's 'Federal Service for Supervision of Communications, Information Technology and Mass Media') (Роскомнадзор n.d.) Digital self-defence also encompasses individual practices such as make-up that helps evade facial recognition systems; advice and guidelines to avoid data aggregation by withholding personal information or obscuring algorithmic analytics (for example, via 'algorithmic jamming' (Wood 2020)) and deliberately erratic search behaviour; protecting one's identity via fake digital profiling (Heuer and Tranberg 2013) as well as community-based technical education around encryption; and hacktivism.

Conclusion: From Digital Violence to Digital Self-Defence

Informed and inspired by the growing body of scholarship on the militarisation of digital tools for state xenophobia, racism and the war on poor, this chapter took this discussion further by framing the debate on the digitisation of injustice

and algorithmic violence through the question of digital disengagement. The chapter was driven by the following question: what are the possibilities of opting out of digitisation of civic life, who are they afforded to (if at all), and at what cost? Throughout the chapter, we have pointed out that the spaces of civic digital disengagement – access to non-digital public services, or the right to not be subjected to algorithmically managed decisions – are profoundly shaped by social inequalities and are rapidly shrinking. By looking at examples of welfare, policing and border control, we argued that it is imperative to account for the growth of algorithmic violence when digital technologies are adopted within all spheres of everyday life, while having a very different impact on individuals, depending on one's privilege or marginality. We ended this chapter with a discussion of alternatives to current digital governance that are not about merely allowing individual opt-out, but centre equality and collective justice. These included frameworks for transparency and accountability on both legal and technical levels, as well as digital self-defence in the form of bottom-up organising to empower those most vulnerable to the forces of digitisation and algorithmic cruelty.

Ironically, digital self-defence is premised on the advancement of digital literacy. However, unlike digital solutionism which we address in Part II of the book, digital self-defence creates empowerment in contexts where opportunities to opt out are shrinking, but without rendering the tech as necessarily desirable. Digital disengagement, here, is not about disconnecting from online communication or devices in order to take a break or improve one's well-being. Rather, it is a nuanced and focused toolkit for combatting digital violence and digital coercion in their own territory and with their own tools (or with a remake thereof). In doing so, one might disengage from certain expected practices of digital citizenship such as voluntary submission of personal and other information; knowing or unwitting contribution to databases; or compliance with other forms of technologically enhanced structural violence. The actual practices of digital self-defence might range from simply being aware and careful, to actual electronic/digital civil disobedience (Benjamin 2019b; Critical Art Ensemble 2001), to 'reimagin[ing] technoscience for liberatory ends' (Benjamin 2019a, 13), depending on context, country, one's position of marginalisation, and of course, the technology used. What is crucial here is that digital disengagement undoes and disrupts the logic of digital power by navigating the digital field itself.

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Education in the Age of 'Corporate YouTube': Big Data Analytics Meets Instafamous

Introduction

Media and popular discourses often highlight the negative effects of digital technologies on children's mental, emotional and physical development, and engagement. However, over the last 10–15 years, educational establishments in 'the West' have been increasingly embracing the digitisation of education and e-learning systems in the name of *increasing* engagement. The very architecture of digital educational systems – from Virtual Learning Environments (VLEs) to educational apps – rewards 'good behaviour' in ways that further encourage digital engagement. Such a digitally mediated process becomes quite literally a technology of the learned self, as 'good students' and 'good teachers'. For example, many VLEs log the exact times, dates and areas that users (which includes both learners and educators) have logged on and accessed content; this is one of the ways in which 'student engagement' is monitored digitally and centrally to keep track not just of student attendance, but also to monitor which classes are most effective in engaging students online. A failure to engage digitally is a failure to learn and a failure to teach. Such a correlation ultimately turns both learners and educators into (un)willing digital subjects within a neoliberal context, to be self-responsible for monitoring, assessing, analysing and managing the quantified and performative educational self, captured within institutionalised digital systems of regulation.

Focusing mainly on the increasing implementation of certain educational tools, like the rather aptly named video-sharing platform, 'Panopto', in Higher Education (HE) in the UK,[1] this chapter critiques disturbing issues relating to

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[1] In the UK, 'Higher Education' refers to tertiary education, following secondary education at school (typically students leave secondary school and thus enter Higher

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the corporatisation and platformisation of education. We argue that teaching and learning increasingly intersect with two forces brought together through digital engagement: on the one hand, corporatised platform culture with its Big Data logic at its analytical and profiteering core; and on the other hand, the neoliberal Instagram culture revolving around promotional and performative online practices. We wish to destabilise this node in order to question the increasing impossibility and lack of space in opting out from such a digitally defined educational structure that has implications beyond pedagogy, including infringements on privacy and the question of intellectual rights.

Panopto: The 'Corporate YouTube'

Panopto, in the words of the company, is a place to 'upload and host your videos in a secure "Corporate YouTube"'. As this statement suggests, the idea is that those producing pedagogical content – lectures, training and/or coursework and assignments – can record, edit and upload their educational videos for a specific 'audience' within a 'closed' internal but integrated institutional system. The whole process mimics the mechanics and design of the popular and mainstream video-sharing platform, YouTube. According to the company website, Panopto was initially a project emerging from Carnegie Mellon University and, at the time of writing, claims to be serving 'more than 5 million end users in businesses and universities around the world' (Panopto 2012). Panopto's educational origin is reflected in its website page dedicated to their list of 'customers' which include a range of North American (including Ivy League) and British Universities (including Red Brick), alongside commercial companies (e.g., Nike, General Electric) (Panopto 2015). There might indeed be an eagerness from corporate and educational institutions to implement pedagogical e-tools like Panopto, but their self-defined term 'Corporate YouTube' raises two key interrelated issues: the corporatisation and platformisation of education, both of which are presented as improving teaching, learning and administrative practices. We will focus on the various modes of digital engagement these two processes enforce, asking what possibilities of digital disengagement might be available to learners and educators in this corporate and platformised context.

Whilst the pedagogical, organisational, financial and behavioural benefits of e-learning and the digitalisation of education have been studied and their implementation encouraged (Hoyle 2002; Wan et al. 2008; Uskov et al. 2016), the implications of the corporatisation and platformisation of education within a neoliberal context need further consideration, especially in relation to questions of (self)surveillance, (self)discipline and (self)monitoring. What are the sociocultural, behavioural, pedagogical and economic ramifications for learners and

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Education at 17–18 years old) and comprises of Universities and Further/Continuing Education institutions.

educators in a world where 'Corporate YouTube' is fast becoming the norm? In the following chapter, we explore how a 'Corporate YouTube' culture of education emerges at the intersection of two symbiotic forces working together to affix the learner and educator into a position where digital engagement is the core value of success: firstly, the global, profit-driven digital ecosystem which has designed and consequently shaped modes of digital engagement in ways that place Big Data and user analytics at its monetising core; and secondly, the self-promotional and self-tracking digital culture inhabited by influencers and micro-celebrities which necessitates the quantification of performance. We argue that it is this dual force that makes opt-out difficult, as any acts of digital disengagement become equated with 'failure' at teaching and learning: after all, who would want to jeopardise their education as learners, or their job as teachers?

Educational Analytics: Data Mining and Measuring Pedagogical Success

In *The Platform Society: Public Values in a Connected World* (2018), van Dijck et al. dedicate a whole chapter to discussing how platformisation has affected the very idea, philosophy, values and practices of education. The authors discuss the ways in which the dominant global tech corporations (the 'Big Five' consisting of Microsoft, Apple, Google, Amazon and Facebook) have capitalised on and commercialised education. These corporations have done so by providing not only the digital ecosystem to host various digitalised, integrated and synchronised educational practices, but the actual hardware/software to support and facilitate these (e.g., Microsoft provide the computers and other hardware, and MS Office/Education packages, including their video streaming platform, MS Stream). Even an 'independent' company like Panopto is still structured by these same corporate and profit-driven large tech corporations, interdependently relying on integration within their digital ecosystems. For example, making a point that videos 'shouldn't exist in a silo' (Panopto 2020b), Panopto boasts how it operates through unified communication and system integration, listing other popular systems used in educational institutions such as Zoom, Skype for Business and Slack.

Highlighting that educational platforms are corporately owned and propelled by algorithmic architectures and business models, van Dijck et al. (2018) argue that the datafication, selection and commodification of education inevitably 'uproots or bypasses the values that are fundamental' to 'knowledge-based curriculum, autonomy for teachers, collective affordability, and education as a vehicle for socioeconomic equality' (2018, 3). To provide an example, Panopto offers the ability to turn on Google Analytics for 'in-depth' statistics, which unsurprisingly, requires the institution/user to have a Google account. Educational analytics, similar to analytics relating to citizenship (as discussed in Chapter 2), have become intertwined with – or perhaps incorporated and collapsed into – corporate and globalised Big Data analytics. Here, through the normalisation of platform-based digitality, the distinction between learner/

educator and 'user' (or even 'viewer') becomes blurred into monetised and profitable units of personal data. In embracing the digitalisation of pedagogy, educational institutions may have created a more accessible, streamlined, interactive and 'engaging' teaching and learning environment, but only from within the integrated digital and technological systems as designed, situated and ultimately regulated in a corporate and profit-driven globalised network. How does such a 'Corporate YouTube' culture impact on pedagogical practices? Where does it leave those who are not engaged with educational platforms?

Taking digital disengagement as our starting point, we want to push van Dijck et al.'s (2018) ideas further and problematise not only the political economy of corporatising and platformising education – which collapses educational analytics into user analytics in the context of a digital capitalism that profiteers from the monetisation of Big Data – but most of all, critique the naturalisation of digital engagement with pedagogical 'success'. 'Corporate YouTube' culture is encouraging an educational system which increasingly only recognises learning and teaching through compulsory digital *engagement*, for it is digitality that forms the basis of metricisation, quantification, datafication and analytics that operates within a Big Data logic of the large tech companies (e.g., Key Performance Indicators, Research Excellence Framework, h-index, National Student Survey scores). Such a configuration measures *digital* and not pedagogical engagement – according to corporate Big Data logic – and inevitably forces digital disengagement into becoming a sign of failed performance. A case in point occurred in early January 2021 when it was reported that, amidst announcements of significant redundancies, some UK universities were planning to decide which jobs should be cut using quantitative 'new performance measurements' that were likened to practices found in 'big city corporate firms' (Fazackerley 2021a). Here, disengaged learners and educators 'fail' because they are not engaging metrically with digital tools or appropriate digital systems of qualification.

As we have seen a myriad of times throughout this book, the solution offered to address learners' and educators' 'failure' is, of course, digital: for example, the enhanced monitoring of 'progress' via tracking platforms is designed to 'support' and supposedly 'help' both learner and educator to identify problematic areas, not through direct qualitative means, but through assessment of digitally present quantitative data. Whilst the possibility of opting out of digital pedagogy becomes a near impossibility – short of facing expulsion, dismissal or disciplinary action – the disengaging subject is placed into a paradoxical loop of digital solutionism. Furthermore, as shall be explored in Part II of this book, regarding the self-feeding nature of consumption and labour of digital engagement, what begins to emerge here is also a self-perpetuating circuit of self-digital engagement that ensures its subjects remain firmly embedded within compulsory digitality: if digitality is equated to success, this forces the learner-educator subject further into digitality, self-responsible for investing in the search for ways to improve and succeed in their digitality.

This loop of digital solutionism has a profound impact on how educational data and, in particular, learning analytics are shaping the learning and teaching subject. According to Johnson et al. (2016), 'learning analytics' can be defined as, 'analytics aimed at learner profiling, a process of gathering and analyzing details of individual student interactions in online learning activities' (Johnson et al. 2016, 38). Whilst we do not deny the benefits of improving the teaching and learning experience through self-reflective actions that respond to data and pedagogical metrics (Smale and Regalado 2017), what concerns us is the normalisation and language surrounding 'learner profiling' (and 'educator profiling' by extension) as they come dangerously close to the kind of digital profiling practices used by large companies as part of corporate and/or state surveillance. If surveillance indeed consists of data collection with the 'explicit purpose of influencing and managing the data target' (Ball 2006, 297), then learners and educators increasingly become '*data* targets' subject to profiling and both institutionalised and self-surveillance. As such, like all other areas of life which have become quantified within the compulsory neoliberal digital context – from Fitbits, to Uber, to social media hits – the learner-educator subject must not only generate but also respond to educational 'lively data' (Lupton 2017), to somehow 'improve' their digital ac-'count'-ability by altering their behaviour in ways that can be reflected *digitally*. In other words, it is more the datafication of pedagogy – rather than the digitisation of it – that has created a culture of self-responsible self-surveillance, self-tracking and self-monitoring in education.

For example, Panopto offers access to in-house analytics which enable video creators (and their institutions) to view user statistics through numerical data measuring digital engagement (note, not necessarily pedagogical engagement): number of views and downloads of an uploaded video lecture by day; unique viewers; minutes engaged; rankings of videos/folders most viewed across the board. As mentioned earlier, here is an example of quantifying *digital* engagement, not necessarily pedagogical engagement, but nonetheless this digital data becomes a technology of the disciplinary learning and/or teaching self. In discussing the Panopticon, Foucault explores the importance of both visibility and unverifiability; inmates must be induced into a state of conscious and permanent visibility, but at the same time, must never be able to verify whether or not they are being watched at any one moment (Foucault 1977). In the case of Panopto, not only are viewing statistics visible to the video creator, but also to the wider audience of the institution (e.g., the department, School, colleagues, individuals in power); similarly, despite compulsory transparency, the video creator can never easily know how/when/by whom their 'numbers' are being monitored (or not) as there is no equally transparent way of accessing and verifying that part of data visibility. The monitor is being monitored, and thus must self-monitor, all whilst enabling the generation of, and self-generating, big educational data.

It is within this paradox that there lies troubling issues relating to the disciplinary educational self: a docile self whose digitality must be monitored

whilst they must also increase their digital self-engagement in order to be responsible 'good learners' and 'good educators'. A failure to engage digitally is a failure to learn and a failure to teach. Such a correlation ultimately turns both learners and educationalists into (un)willing digital subjects: on the one hand, (self)-monitored, -assessed, -analysed, -managed and captured within institutionalised digital systems of regulation that rewards 'good behaviour' in ways that encourage digital engagement, a process that becomes quite literally a technology of the learned self; on the other hand, a datafied and quantified self, captured into a platform culture, where learning analytics travel beyond the data-generating educational institutions, to be monetised and capitalised. Within this context, because digitality and pedagogy have become so intertwined, it has become an impossibility to opt out of one without the other; that is, learners and educators cannot opt out of the digital without opting out of the pedagogical. This means the forceful and complicit participation within this self-disciplinary digital surveillance culture.

Insta-Teacher: Performance Monitoring the Performance of Pedagogy

In the previous section of this chapter, we explored the ways in which 'Corporate YouTube' forces the educational subject into measuring pedagogical success through digital engagement. We argued this problematic process is situated at the capitalist nexus of Big Data and educational analytics that not only encourages a data-responsive culture of self-responsibility, self-surveillance and self-discipline, but ultimately capitalises on the resulting data generated. Beyond profit and analytics, another interrelated consequence of 'Corporate YouTube' is how educational platforms – as designed and/or existing within the global, corporate digital ecosystem – also encourage internet- and social media-logocentric behaviour and expectation in teaching and learning: intersecting the corporatised platform culture that revolves around a profit-driven Big Data logic in education is also a promotional culture that operates through a social media logic. Welcome to the 'YouTube' of 'Corporate YouTube': the world of micro-celebrities, influencers and Instafame in education.

In discussing the proliferation of Facebook beyond its original confines as 'just' a social media platform, Helmond (2015) argues that platformisation 'rests on the dual logic of social media platforms' expansion into the rest of the web and, simultaneously, their drive to make external web and app data platform ready' (2015, 8). The same dual logic has begun to permeate through educational institutions. On the one hand, the platformisation of education has seen the increasing use of educational platforms that imitate the social media environment (which we will explore in a moment). On the other hand, there is also an increasing acceptance and normalisation of social media platforms as an educational platform in themselves. A prime example of this is Facebook

for Education, an online resource hub run by Facebook which states that it aims to provide everyone with 'the opportunity to take part in a global learning community. We want to enable people to activate around change, collaborate in more meaningful ways, and explore innovative new technologies' (Facebook 2018). Similarly, there is an increasing use of general social media to formally share knowledge, curriculum resources and/or discussions from both students and educators. In other words, the platformisation of education revolves around a social media logic that is designed to inadvertently and inconspicuously strengthen the digital ecosystem of infrastructural power as held by the 'Big Five' through its reliance and sheer embeddedness within them.

In turn, this very process of creating a 'platform ready' educational environment has encouraged social media technopractices – from language, to culture, to behaviour – to become a dominant and expected part of teaching and learning interactions: from being able to add cute augmented reality (AR) filters to your Zoom profile (originally made popular on Snapchat); uploading socially interactive video content on Panopto or MS Stream (as on YouTube, Twitch or TikTok); or amassing 'followers' who 'like' your uploaded lecture videos and comments posted, just as you would on Instagram, Facebook or Twitter. In other words, not only do VLEs mean that teaching and learning become necessarily about *digital* engagement, *digital* participation, *digital* social interaction and *digital* performance of the self as practiced on social media (as shall be discussed in greater depth in Chapter 4 on consumer culture), but also, these very social media affordances mean that teaching and learning practices increasingly mimic an internet and social media environment through sheer design and architecture.

For example, video-sharing platforms like Panopto mirror YouTube's social media-logo-centric design, architecture and language: learners ('viewers') can 'give informative feedback' by rating the videos made by educators ('creators') via clicking on a star system (Panopto 2021), much like a buyer might rate a product on Amazon, or an Uber customer the service provided by their driver. Learners and educators are encouraged to share, post comments and participate in discussion posts under the video in a similar participatory manner to YouTube (and most social media platforms). Other educational platforms such as MS Stream even have a like/favourite button (in this case, a heart icon) which also provides a numerical count, and video posters can even amass 'followers' via a 'follow' button, conveniently located under the content creator. Much in the way that educational analytics and Big Data user analytics become conveniently collapsed into one another as a necessary process of digitalising education, here we witness a cross-sector 'context collapse' (Vitak 2012) where the differences between 'social media user' (and thus consumer) and 'learner/educator' have also been collapsed, flattened out into one interactive network using common language and shared practices embedded within the context of a consumer-oriented neoliberal digital culture.

Furthermore, 'Corporate YouTube' is a culture that arises not just from a digital society in which social interaction is practiced through 'like' and

'subscribe' buttons, but is also about a very visual performance – for social media and the internet is predominantly a visual realm – of the educational self in a way that is situated within the self-promotional culture of the Instafamous. Such a heavily visual culture can potentially lead to exclusionary practices; for example, those with learning/visual disabilities or different non-visual learning styles (Kent 2015). Ultimately, recording lectures and video content becomes less about the documentation of knowledge and instruction, and instead, more about performance: with 'likes' and 'follows' to prove it, creating video content is now increasingly about a carefully organised, regulated, edited and staged performance of the educational digital self. Indeed, it is about the corporatisation of not just the platform but of the subject as a commodity, with fee-paying 'clients' as students who can review, rate and evaluate in a highly visible and interactive manner.

> The VLP [virtual learning platform] is considered to be one of the modern applications of technology in renovating education because it works to increase students' interactivity and technological competencies with learning process management and performance monitoring (Ahmed & Hasegawa 2019, 365)

The digitalisation of education has meant that 'student interactivity' has now increasingly become collapsed into 'social media interactivity'; similarly, there is a collapse between performance in terms of learning analytics ('performance monitoring'), and performance in terms of the visual presentation of the self. Whilst there is a tradition of 'famous academics' – like Professor Brian Cox, the physicist and TV presenter – who gain scholarly celebrity capital through the presentation of the self via public-facing media, what is also beginning to emerge is a new generation of everyday academics who must step into a digitalised culture of education that is part of a consumer-oriented socio-visual realm of micro-celebrities performing everyday selves through social media platforms.

In discussing micro-celebrities, Senft states that 'a successful person doesn't just maintain a place on that stage; she manages her online self with the sort of care and consistency normally exhibited by those who have historically believed themselves to be their own product: artists and entrepreneurs (2013, 347). As influencers and micro-celebrities have taught us, to increase social engagement one must invest time, money and resources into developing online strategies and techniques in digitalised self-branding and self-promotion. Universities in the UK increasingly offer digital media skills – editing, lighting, sound production – with the sole purpose of enhancing student engagement through digital engagement, with similar strategies used by micro-celebrities creating visual and digital narratives that are consistent, 'authentic', emotive, intimate and interactive (Abidin 2018; Herskovitz and Crystal 2010; Marwick and boyd, 2011a; 2011b; Senft 2013). In effect, education is increasingly about

managing digital pedagogical content, digital pedagogical analytics *and* the branded digital self as presented online.

Discussing Twitter's 'favouriting' action and its 'heart' icon, Bucher and Helmond argue that Twitter not only standardises 'a mode of engagement across its services ('liking'), but also affected the perceived range of possible actions linked to these features of the platform, or its affordances' (2018, 235). Such features might make these educational platforms user-friendly and potentially engage 'the digital natives' through the use of a popular digital vernacular, just like social media. However, these platform affordances enforce digital engagement through a compulsory sociality that is embedded within an internet-centric culture of the Instafamous generation where the mediated and branded self becomes currency exchanged within a shared attention economy that values digital engagement. How many hits? How many views? How many followers? Am I sufficiently face-tuned for this video? Is my green-screen background sufficiently well lit?

Within this context, pedagogical 'success' is thus not only quantified by pedagogical analytics that monitor performance (the previously mentioned 'performance management'), but also needs to be qualified in ways that require closely monitored pedagogic performativity ('impression management') evolving around a social media logic of branding and popularity that has created a generation of YouTubers and the Instafamous. Situated digitally, culturally and socially alongside this world of social media and Instafame, the educational data subject is increasingly self-responsible and self-(ac)countable for presenting pedagogical 'success' in the form of quantifiable digital engagement – the 'learning process management and performance monitoring' – but they must also *represent* this success through the presentation of a visually appealing, socially interactive, mediated and performative digital self: performance management and impression management have become all but interchangeable.

In the world of social media celebritisation, teaching and learning is thus becoming a carefully calculated digital and labour-intense performance; it is no longer just about work invested into learning and teaching, but an additional and necessary digital performance of this work. This additional labour creates a digital double-bind for the teaching and learning subject: the digital performance has become naturalised to mean pedagogical performance. Within this context, if an educator opts out through digital disengagement, or otherwise 'fails' to perform 'correctly' according to the social media code, this 'failure' also becomes double-bound: a 'failed' educator *and* the 'failed' micro-celebrity, where pedagogy and celebritisation are both collapsed into one another in ways which are monitored and rectified digitally (e.g., training on blended learning, increasing student engagement online and so on). As such, the need for a digital environment to monitor and 'enhance' education thus creates additional labour of pedagogical data management and pedagogical data production in the process of populating these VLE sites and engaging with platforms like Panopto.

Opting In for Digital Disengagement

As millennials and 'digital natives' have been pushed through the education system in the last 10–20 years, the idea of 'student engagement' – getting the learner to be active in their learning – has been increasingly tied to the question of digital engagement. From 'blended learning', 'mixed media delivery', to the VLE, educational models have been encouraging teachers and educational establishments to embrace e-learning as being more accessible, pedagogically effective and organisationally efficient, but most of all with the underlying belief that it increases 'student engagement' (De La Flor et al. 2018; Papa 2015; Roffe 2002; Seale 2014). As with most spheres in life explored throughout this book, the digital has thus been hailed as the 'technicolour dreamcoat' that educators should wear in order to solve the problem of supposedly bored millennials who do not understand analogue or that which is not conducted or delivered through a screen ('what's the point of going to the library for a hardcopy book when I can just read it on my phone at home?').

During the Covid-19 pandemic, this technicolour dreamcoat suddenly turned into an unwanted but necessary straitjacket for many. Furthermore, digitalities that might have been more commonplace in HE (from Panopto to webinars), suddenly became a necessity across all educational levels as primary and secondary school students studied remotely from home. One of the countless numbers of humorous English-language memes and images to have circulated online during 2020 was of a young girl, dishevelled as if straight out of bed, watching a laptop screen and looking overwhelmed, exhausted (her uncombed hair makes her look as if she has had a bad night's sleep) and bewildered, if not even somewhat distraught. The caption beneath it reads: 'When you're 5 yrs old & it's your 1st day of school ever and they expect you to know how to read, type and send emails'. Beyond the humour, responses to this post indicate that this image and caption epitomised the travails of digital engagement at home for both adults and children more generally, as well as specifically what the digitalising of education – whether referring to online home schooling through to the solitary use of e-resources – has meant for both students and educators during lockdown.

The very digital tools for education that had previously been celebrated during the pandemic quickly became (and in some cases still continue to be at the time of writing in 2021) a source of exhaustion, bewilderment and anxiety as they replaced not just direct learning experiences, but all the other auxiliary teaching and learning experiences typically part of in-person schooling, including playtime/socialising, support, and graduation ceremonies, right through to physical activities (such as Physical Education, and fieldwork). Student and digital engagement very quickly became frayed at the edges: digitalisation of education only works if there are human actors – in this case adults who are taking care of children, usually within a school environment – who

have the time and resources to support such a process. In this sense, digitalisation is not just about analytics, metrics and platforms, it is about real analogue human labour.

But unlike paid and contracted human labour, pandemic labour, invested in ensuring digitalisation was possible within the home, was both invisible and unaccounted for financially, temporally and even spatially, as people negotiated new divisions within the domestic space. Whilst some specific workplaces and schools may have practiced varying degrees of flexibility during the pandemic, at a nationalised level there was very little discussion of changing (e.g. slowing down, reducing work, replacing activities) school/paid labour workloads and schedules that acknowledged the invisible human labour (and stress) that supported the digital response to the pandemic: from parents/guardians and students having to acquire different and new technologies and/or digital skills – in itself pointing towards problematic issues surrounding privilege, equality and access – right through to the redefining of kinship structures and relations.

Furthermore, even when schools were eventually forced to fully open in the UK after the initial lockdown(s) (unlike universities), there remained a lack of significant discussion and acknowledgement regarding the extra labour needed to attend to both the online and offline temporalities that the pandemic had created. Whilst hybrid and blended learning practices were thus presented as pedagogical 'solutions' that would involve partial digital (dis)engagement, these did not consider the fact that such practices require twice (if not more) the amount of work to support such a negotiated hybrid status. The extra labour that is needed is very much critiqued by the Zero Covid movement, who very much advocate for political engagement through disengagement with governmental policies. In their statement about schools they note:

> There is a concerted propaganda offensive against our teachers and parents, with headlines screaming, 'Reopen our schools.' But the schools aren't closed! Teachers have been working heroically, at risk to their own health, teaching at-risk children and the children of key workers, while simultaneously teaching all the other children online (Zero Covid 2021).

In the context of governmental concerns to 'keep the country going' and 'keep the country safe', the continuum of digital disengagement was thus *non*-elastic, unable to flex, or to take into account the various types of extra human labour needed to digitalise survival.

Running concurrently to such popular media narratives surrounding the difficulties of teaching and learning almost entirely through digital engagement, another counter-narrative began to emerge in the UK towards the end of summer 2020. As the UK began to near the start of another academic year, following its first national lockdown in spring 2020, during which most schools closed and universities shifted to remote teaching, people began to ask: will

schools re-open? Will they remain open? Will classrooms run in the same way? What will education in HE look like? In the midst of such questions, student-based activists, politicians and journalists began to question whether school and university students were really receiving a 'full' education and learning experience through online delivery. For example, referring to those attending university during 2020 in the UK, British Labour MP Andrew Adonis tweeted: 'I don't think students should have to pay £9,000 this year if they are not receiving full tuition' (Adonis 2020). This received a variety of responses ranging from students agreeing regarding costs, especially those in student accommodation; teachers outraged by the dismissal of teaching and the implications that the teaching provided was below standard; and concerned parents wondering why the British Government had allowed universities to be open at all. Clearly, this was an issue beyond this particular tweet and moment in time: in January 2021 students launched a tuition fee strike, demanding a partial refund; international students similarly refused to pay their tuition fees as 'learning mostly in their bedrooms has not justified prices of up to £29,000 a year' (Bundock 2021; Fazackerley 2021b; RCA Action Group 2021).

Such tweets and student responses reveal how, despite the institutional literature and popular perception that millennials need constant digital engagement in order to absorb any information, 'real life' is valued not just as an experience of digital disengagement in a world saturated by the digital, but also as an integral part of the 'student experience'. This point was most notable in heated discussions that took place in January 2021 when many students complained that universities were charging higher fees than The Open University and other online long-distance courses whilst offering what they saw as the same online experience (Ryan 2020) – the irony here being that, prior to the pandemic, the problem of 'enriching the student experience' was almost always 'solved' through digitality and technology. These discussions clearly indicate that simply throwing digitality at millennials is not a 'solution', thus exposing the difference between the digitalisation of education and the digitalisation of educational experience.

New digitalities brought about by the Covid-19 pandemic have subverted and denaturalised – at least during the pandemic – the relationship between student engagement and digital engagement. Similarly, the enforced digitalisation of all areas of teaching and learning – including and especially the experiential aspect of pedagogical practice – has also delineated what had increasingly become a context collapse between user/consumer/follower/student. To ensure survival, the pandemic brought about an all-encompassing process of digitalisation across all areas of life, leading to a context collapse where digital (and physical) boundaries broke down, merging into a form of digital homogeneity. This in turn has led to the need for the re-separation and re-demarcation of boundaries that define our different practices, roles and spheres in life. In this way, the pandemic has not so much opened up a space for opt-out but the *need* for opening up a space for 'opt-out': both students and educators now want to

not just 'opt out' of the digital but are actively 'opting-in' to digital disengagement. In this sense, it has taken something as drastic as a global pandemic to explicitly bring to light how the digital and technological are not always the solution, and if they are, that there is always a cost – in time, experiences, emotions, energy and even health.

Lecture Capture and the Captive 'Data Double': The Persistence of Data and Digital Rights

So far, we have explored and critiqued the ways in which educational tools like 'Panopto' bring together the Big Data logic of corporatised platform culture that centralises profit, and the social media logic belonging to a neoliberal Instagram culture that revolves around the presentation of the self-branding, promotional and performative self. In particular, we argued how the problematic collapse between pedagogy and micro-celebritisation has meant that 'success' and 'failure' at educating and learning is increasingly measured through *digital* and not pedagogical engagement, operating through a combination of Big Data and social media logic. Such a process inevitably forces learners and educators to not only undertake the additional labour of performing pedagogy *digitality*, but also forces digital disengagement into becoming a sign of 'failed' pedagogical performance.

   We would now like to discuss what might perhaps be the most chilling aspect of the corporatisation and the social mediatisation of educational platforms. In addition to the problematic naturalisation between pedagogical engagement and digital engagement, compulsory digitality in the name of pedagogical 'success' often means the enforced surrendering of not just personal pedagogical data, but also, personal biodata in the form of one's identifiable self as digitally captured by software like Panopto. Unions and academics involved in teaching within HE have raised concerns surrounding lecture capture. The moral, ethical and legal lines that define the regulations around ownership of video content – both in terms of the pedagogical content as well as of the lecturer themselves as digitally captured – are somewhat blurred, making this a very grey area indeed.

   For example, Panopto's website states, without a hint of irony, 'Succession Planning: Let Your Experts Retire — Not Their Expertise', where generations to come can supposedly still reap the benefits of recorded content long after the expert has retired, or been made redundant, or is otherwise unavailable (Panopto 2017). Indeed, the chilling example of Professor François-Marc Gagnon from Concordia University is a case in point, still 'teaching' students digitally from beyond the grave through recorded lectures (Kneese 2021). Within such a configuration, the digital educational subject performs and embodies the knowledge, yet ironically becomes obsolete as their body and their data become divorced, expendable yet at the same time individualised to a point of

biometric replication. Even if the individual chooses to opt out of the digitalised education platform altogether, their digitalised self must necessarily continue to perform in the pedagogical afterlife. How can such a subject 'opt out' of having their personal data captured when it is attached to their pedagogical content as determined by the platform and social media logic?

The very practice and philosophy of opt-out is based on a disengagement from the digital, some kind of separation and departure; but in effect, such a process also means the *further* decoupling – and thus loss of control – of the individual from their data. Indeed, as Haggerty and Ericson (2000) argue in relation to 'surveillant assemblages', human bodies are abstracted from 'their territorial settings, separating them into a series of discrete flows' that are 'then reassembled in different locations as discrete "data doubles"' (Haggerty and Ericson 2000, 605). Even after opt-out, our 'data doubles' persist online like digital shadows, deterritorialised and (ab)used by other individuals or corporations that ultimately profiteer from them financially, socially and in other ways that in most cases infringe on the original individual's rights, as 'contextual integrity' (Nissenbaum 2004), inevitably, has been collapsed.

Whether it is the deceased professor (the ultimate 'opt-out') who keeps on working and delivering lectures from beyond the grave through their recorded teaching content, or the self-tracked biodata inputted on a digital health app by a woman who once wished to track her pregnancy until she had a miscarriage, their personal data persists and persists through an internet-centric and platform-ready time-space. Their 'data doubles' are qualitative and quantitative – images, vocal sounds, texts, biometric data to metadata – and indeed, have been both violently generated and removed from an individual, yet at the same time, also forever cruelly connected to the individual in ways that are attributable and trackable if necessary. In other words, digital disengagement might opt the human subject out from compulsory digitality – destabilising and decentring the digital as a normative starting point – but it does not necessarily opt the data subject out of compulsory digitality. In fact, the individual paradoxically may have even less control over their 'digital double' *because* of their choice to opt out. But the question here is not whether digital disengagement is thus a liberation or a trap, it is about the persistence of data: why does it persist? Who benefits from its persistence?

Such questions are in many ways about the social legality of personal data and ownership, for these are ultimately about issues of control and rights. For example, if we return to the deceased professor's recorded content, two issues arise: firstly, the data of their actual teaching content (e.g., slides, ideas); secondly, their personal data as captured by e-tools like Panopto. Socio-legal issues relating to intellectual rights, copyrights and performance rights – and the lack of protection against infringements – have been debated and critiqued as early as 2013 by unions and staff (not to mention, increasing workloads and performance management), especially when lecture capture, 'blended learning' and e-learning came to the fore (UCU MMU 2013; UCU n.d.). For example,

the University of Bath issued guidelines for staff members covering the various legal rights and issues when using lecture capture. The recorded materials are covered by copyright ('Copyright in the words of the lecture (once fixed by the recording) also belongs to you and you have automatic performance rights'), whilst the University *also* 'has a licence to use your lecture materials and the recorded lecture as provided in the IP Policy. Your "moral rights" are also preserved which provides you with assurance that your materials will not be adapted and you will be credited when the University uses them' (University of Bath 2015).

However, such copyrights, intellectual rights and performance rights do *not* take into account the rights over an individual's biodata. Whilst students are protected (they must be informed before a recording begins), the performing lecturer has very little choice to opt out other than to surrender some aspect of their biodata – even if it is just their voice – that will persist as their 'data double' even beyond death, as in the case of Professor Gagnon. His actual personal biodata (voice, face, gestures) had been digitally recorded for educational purposes, but in an age of smart technologies where vocal, facial and gestural recognition are fast becoming the norm, the potential for the reassemblage of a 'data double' outside of the educational context (e.g., for use in opening a secure device, or accessing an account) is an alarming concern. When most of the UK's educational sector has been throwing around buzzwords like 'blended learning' and 'asynchronous learning', there has been very little debate regarding protection from 'data double' identity theft. What are the safeguards against this? Would intellectual rights, copyrights and performance rights protect against the potential abuse of a 'data double'? What we have here is thus the double-edged sword of digital pedagogy that allows very little room for opting out, both as learners/educators whose 'success' is measured through digitality, and as data subjects whose pedagogical data becomes subsumed within the larger analytics that inform and perpetuate platform and corporate culture.

Conclusion: We Don't Need No Education?

Through an examination of the various e-tools and platforms like 'Panopto' used (or enforced) in Higher Education in the UK, this chapter has investigated some key problematic issues arising from the combined forces of a corporatised platform culture and neoliberal Instagram culture. Using Panopto's own tagline of being a 'Corporate YouTube', we looked at the ways in which education increasingly operates through a combined Big Data logic that is centred on profiteering analytics, and a social media logic that values promotional and performative online practices.

Regarding the 'corporate' of 'Corporate YouTube', we problematised the political economy of corporatising and platformising education, a process which collapses pedagogical and user analytics in the context of digital capitalism.

We critiqued separate key points. Firstly, there is something deeply troubling – philosophically, ethically and otherwise – about an educational system that is defined and underpinned by a Big Data logic which ultimately seeks to profiteer from the monetisation of user data. Here, the same issues relating to surveillance, control and regulation of data within the context of corporate, digital capitalism have made their way into education. Furthermore, what does it say about an educational system that now increasingly relies on and is embedded within the same digital infrastructures and technologies that are ultimately governed by the mega tech corporations?

Secondly, although implemented to enrich educational environments and proven to improve teaching and learning practices, the platformisation of education has led to the increasing naturalisation and conflation of digital engagement and pedagogical engagement, student interaction and social mediatised interaction, user analytics and learning analytics. These processes have encouraged an education system and culture which increasingly only recognises learning and teaching through compulsory *digital* engagement. Such processes of pedagogical metricisation have thus led to the (self)disciplining and (self) regulation of datafied subjects, rather than educational subjects. Within such a context, opting out of the digital becomes equated to pedagogical 'failure' as a learner and/or educator, with real-life consequences, such as expulsion from a course or dismissal from employment, for failing to 'perform' *digitally*.

In conjunction, we also examined the second force – the social mediatisation of education – which arises from the larger context of a digital society that is increasingly 'platform ready' and 'social media ready'. We argued that these two processes have led to the adoption and integration of social media technopractices – from language, to culture, to behaviour – into education, to become a dominant and expected part of teaching and learning interactions. From practices such as 'like', 'follow' and adding augmented reality filters, this chapter explored how VLEs and other e-tools mimic the social media environment in ways that further reinforce digital engagement, social engagement and the visual presentation of the self. Furthermore, this visual presentation of the educational self increasingly borrows from techniques used by micro-celebrities, part of a consumer-driven self-branding and promotional culture: the 'YouTube' of 'Corporate YouTube'. We argued that within this context, pedagogical 'success' becomes equally about performance, not just in terms of quantified and metricised 'performance indicators' but in terms of performativity and impression management. The micro-celebritisation of teaching and learning means that the educational data subject increasingly becomes self-responsible and self-(ac)countable for performing their own pedagogical 'success' in ways that collapse performance management and impression management into each other.

Finally, we also explored the sinister result of the ways in which learning technologies increasingly capture different kinds of data from learners and educators and thus infringe on privacy, intellectual and other socio-legal rights in ways that still remain a rather undefined 'grey area'. The question of collecting

biodata – from lecture captures – is one that needs urgent attention, along-side existing discussions surrounding intellectual property and copyright. How much (or how little) control learners and educators have over their own data, and how this may be (mis)used – subject to surveillance, monetisation and even identity fraud – are questions that still need sustained discussion.

Ultimately, as with all other areas in life, opting out of the digital in education has detrimental real-life consequences. Yet what is perhaps more dangerous in the case of education is that historically there is a perception that the very philosophy, values and practices of education are indeed 'something higher' to strive for, beyond politics and money. This obfuscates the problematic issues surrounding institutionalised data collection, surveillance, regulation and datafied control, which are all underpinned by the neoliberal, capitalist drive that propels mass platformisation and social mediatisation in the name of profit and promotion. Within this context, there is very little room for opting out, both as learners/educators whose 'success' is measured through digitality, and as data subjects whose pedagogical data becomes subsumed within the larger analytics that inform and perpetuate platform and corporate culture.

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Digital Disengagement between Co-optation and Resistance

Consuming Digital Disengagement: The High Cost of Opting Out

Introduction

Whilst the chapters in Part I explored the sheer (im)possibilities of opting out and the very 'problem' of being trapped within compulsory digitality, this chapter opens up a new and related investigation into some of the 'solutions' which society, institutions, organisations and businesses have offered to enable 'escape' from the digital – particularly those which have been commercialised and commodified. From luxury holidays promising digital detoxes to the mass celebrations of the National Day of Unplugging, the idea of digital disengagement has gained enough socio-cultural momentum to attract businesses sensing a marketable trend reflecting the zeitgeist of the digital age. Running concurrently with contemporary consumer narratives of 'mindfulness' (Bonifacic 2021; Marchant 2021; Tuchow 2021), digital disengagement is now part of consumer culture, a commodity that paradoxically relies on digital engagement and online participation as a prerequisite to disengagement (e.g., online registrations and courses, social media posts encouraging users' digital disengagement).

This sinister paradox is what traps consumers eternally into an internet-centric digital consumer culture: over-consumption of the digital leads to the consumption of digital disengagement, which contributes back into the digital sphere for more consumption and prosumption. Over the course of this chapter and the next, we explore the paradox of digital disengagement within the context of a neoliberalist consumer society where consumerism and labour become a means of double-binding the individual through digital engagement. In this chapter, we examine this paradox and process from the perspective of consumerism and commodification, whereas the following chapter will focus more on the sheer labour needed to perpetuate and maintain the cyclic digital

double-bind that ensnares the individual into further digital engagement. As such, in the following, we explore how, trapped in an eternal cycle of being a self-perpetuating digital labourer-consumer, opting out thus becomes not only a commodified product but the very mechanism that ensures the cycle keeps revolving without a circuit-breaking mechanism. Furthermore, we also critique the ways in which such a process of consuming digital disengagement is often highly racialised, involving social differentiation *and* distanciation from those Others upon whom Western digital disengagement relies.

Cyclic Digital Double-Bind

The paradox of digital disengagement in the context of a neoliberalist consumer society operates through a system whereby individuals are double-bound to a capitalist system that profiteers from *both* their digital engagement as labourers (production) *and* their digital disengagement as consumers (consumption). There are two main ways in which the individual is enforced into this dual commitment to maintaining, reinforcing and propagating compulsory digitality in the name of profit and capitalist expansion: the first involves the producer-consumer axis intersecting with work-leisure; the second involves a more nuanced and perhaps insidious process where the producer-consumer is engaged in an online process of prosumerism (Toffler 1980; Ritzer and Jurgenson 2010) that involves digital self-saturation and self-consumption within the online leisure sphere.

From Labourer to Consumer: The Digital Detox Holiday

Need a break from sensory overload? Want to detox your brain as well as your body? Break free of your devices and go on a digital detox holiday. Digital detox is the latest trend in Spa and Wellness travel. Nowadays we are more globally connected than ever before, but life in the digital age is far from ideal. Half of Brits admit to checking work e-mails while on holiday, while a third regret spending so much time on them. The negative psychological and social impact is apparent. We are connecting with technology and in turn disconnecting from human interaction.

Our ability to stay balanced in this time of exponential technological growth and create healthy relationships with our digital devices will determine the future of humanity. By switching off your digital gadgets it allows you to switch off from life completely which is the best way to de-stress and reconnect with yourself and those around you without any interference. It also gives you a chance to fully relax and enjoy the sights and scenery and to savour your well-earned break.

> At Healing Holidays we offer a wide range of spas, clinics and retreats
> which adhere to digital detox. Book your retreat today
> (Healing Holidays 2015).

From large corporations, to NGOs, to universities, we live in a world where
most institutions' social and financial success is tied to their ability to increase
engagement between its workers and its informational, technological and digi-
tal infrastructures. The intensification of compulsory digitality can result in the
increasing need to disengage from it. Many employers recognise how labourers'
individual and group productivity is affected by excessive digital engagement,
and furthermore, UK law makes it mandatory for employers to enforce and/
or encourage occasional breaks away from the screen to avoid unproductivity
and ill-health (Health and Safety Executive n.d.). Indeed, as the advert for a
company offering luxury digital detox holidays dramatically states above: 'our
ability to stay balanced in this time of exponential technological growth and
create healthy relationships with our digital devices will determine the future of
humanity' (Healing Holidays 2015). Coupled with the constant digital engage-
ment that is expected from many workers – especially those who rely solely
on digital engagement for their income, such as those undertaking precarious
work through the gig economy, as will be discussed in Chapter 5 – increased
digital engagement also feeds into a culture whereby individuals must put
additional work and effort into the responsible self-management of their work/
engagement and leisure/disengagement time.

   For those wishing to escape compulsory and excessive digitality, digital dis-
engagement thus seems to be the perfect 'solution', and indeed, presents itself as
a strategic starting point from which to potentially destabilise the entire digital
economy through a conscious opting out that would provide a 'breaking point'
within the cyclic double-bind. But within the neoliberalist context of digital
dependence, digital excess has led to an individual and collective *need* for digi-
tal disengagement. Once such an (artificial) need is identified – even created –
through the very digital and capitalist structures that profiteer from the value
given, this need for digital disengagement can then be nurtured into a market-
able demand and supplied through its commodification and fetishisation. As
such, rather that presenting itself as a space for opting out, digital disengage-
ment has become conscripted to serving the economy by becoming a 'need' that
is commodified: the commodification of digital disengagement becomes part of
a perfect capitalist process that double-binds the individual to digitality as both
producer and resulting consumer (Jenkins 2006; Ritzer et al. 2012; Toffler 1980).

   One of the most profitable ways in which digital disengagement has been
commodified is through the ever fashionable 'digital detox holiday'. Costing on
average between £350 to £600 per night, digital detox holidays are usually all-
inclusive luxury packages consisting of 'wellbeing' activities (e.g., yoga, spas,
massages), wholesome dietary offerings and Wi-Fi-less accommodation for

the traveller in remote destinations (e.g., Bali, Malawi, Chile and rural Italy) that promise self-reflection and inner peace away from the digital. A lucrative part of the holiday market, digital detox holidays often sympathetically bring to attention (paradoxically, online) the 'negative psychological and social impacts' of digital living in the twenty-first century: 'nowadays we are more globally connected than ever before, but life in the digital age is far from ideal […] we are connecting with technology and in turn disconnecting from human interaction' (Healing Holidays 2015). The solution provided here is not a digital one, and appears to counteract the digital by offering the exact opposite: disconnection and disengagement ('By switching off your digital gadgets it allows you to switch off from life completely which is the best way to de-stress and reconnect with yourself and those around you without any interference' (2015)). But is this a counteractive solution, or paradoxically, a further reinforcement of the digital that is complicit with the very system that produced the problem?

As suggested, digital detox narratives commodify and popularise digital disengagement in ways that encourage an artificial demand, one that necessitates the neoliberal consumer to make an 'empowered choice' by practicing the *consumption of* digital disengagement, rather than practicing digital disengagement. As such, the commodification of digital disengagement, idealised as a 'break away' from digital work to non-digital leisure, interpolates the labourer back into the same capitalist system. This time, the individual is not a labourer contributing time (a point which we will discuss in greater depth in relation to digital labour in Chapter 5). Instead, the individual is a consumer contributing their wages, their free user-generated content for websites (for example, by sharing photos of their digital detox), and their free consumer data and profile for monetisation within the digital economy (Cheney-Lippold 2017; van Dijck et al. 2018; Fuchs 2014; van Dijck and Nieborg 2009). This completes the loop: engagement not only encourages but *pays* for disengagement. In this sense, Healing Holiday's website is right, the digital detox is 'well-earned' but equally, it is also money well-spent. In addition, by referring to digital detox as 'a latest trend', such narratives attempt to create a disassociation between cause and effect: turning digital disengagement into a matter of lifestyle and an 'empowered' consumer choice conveniently hides the interdependent relationship between the individual's role as labourer and consumer that traps them eternally within a continuum of compulsory digitality.

In this sense digital engagement/disengagement pivots upon the producer/consumer axis: when workplace guidelines promote a healthy 'work-life balance', it is less about the dichotomous temporal relationship between work and life, and more about the individual's ability to embody the role of producer and consumer in interchangeable ways. As Light states, disconnection is indeed 'something that we do in conjunction with connection' where 'connection and disconnection are seen to be in play together' (Light 2014, 3–4); here, what we see is that this interplay is also defined by the interdependency between production of the digital and consumption of the non-digital.

But is this interplay so symmetrical? Can all workers have such an equal distribution between digital work produced and non-digital leisure consumed? We argue that the commodification of digital disengagement is, like the packaged holiday, both a racialised and classed luxury. Firstly, inasmuch as specialist holiday companies present digital detox as a 'new trend', these holidays stem from a long history of packaged holidays arising from the commodification of leisure at the turn of the twentieth century (Cormack 1998; Polat and Arslan 2019) which have always been both classed and racialised. The promotional narrative of digital detox holidays inevitably ties 'exotic' locations – 'exotic' to the usually middle-class Anglo-European consumer – to the idea of the non-digital: for example, the Healing Holidays advert discussed and quoted earlier includes an image of a highly stylised and magazine-ready white, tanned woman lying down in her swimsuit, overlooking a generic and expansive green landscape in the distance. As such, the relationship between 'Westernisation' and 'digitisation' are naturalised. By the same token, 'non-Westernised' locations – 'natural, simple and untouched' – become at once exoticised and commodified as a product for classed, raced and gendered consumption: the imagery and language used in such digital detox holiday promotions use representations of – and thus are predominantly aimed at – white, child-free, middle-class women. Digital detox holidays demonstrate the ways in which digital disengagement brings problematic narratives and processes of neoliberal consumerism, colonialism and capitalism together under the guise of wellbeing and care.

Secondly, as mentioned earlier, digital disengagement comes at a (usually high) price, one that requires sufficient financial, social and cultural capital. Why pay for digital disengagement when one can take a walk in the park for free? Thus, the act of paying for digital detox is part of a conspicuous consumption (Veblen 1889/1994) as practiced by certain members of a classed society who have the financial, social and cultural capital (Bourdieu 1984) to consume digital disengagement; indeed, we argue that paying for digital detox holidays is a 'trend', something more to do with taste and lifestyle than it is to do with being a conscious activity. The commodification of digital disengagement is thus classed as it is racialised, gendered and ableist, and opt-out within this context is hierarchical, available to those who have the economic, socio-cultural capital to convert a practice into a matter of taste and 'trend'. As such, digital disengagement is more a consumer and social *status*, where the neoliberal worker not only enjoys but shows how they have been sufficiently 'rewarded' by the fruits of their own digital labour. In this sense, digital disengagement operates through a social hierarchy that hinges upon privilege (as shall be explored in the next chapter in relation to platform workers, and the financial and temporal costs of digital disengagement) but also, as an act of social differentiation: 'I am making 'good' consciously digital and consumer choices' enacts a performative social distancing from those Others who are 'failing' to opt out 'appropriately' as good citizens, labourers, consumers, educators, environmentalists and users engaged in digital disengagement.

Feeding Your Addiction: Self-Saturation
of the Digital Anti-Consumer

Running alongside commercialised digital detox holidays and other businesses offering digital disengagement as a consumer choice, there are also a growing number of online community-led, seemingly non-profit initiatives celebrating and encouraging conscious digital disengagement. For example, the National Day of Unplugging (NDU) is an online awareness campaign, where 'participation is open to anyone who wishes to elevate human connection over digital engagement' (National Day of Unplugging n.d.). To this end, the NDU website provides resources, tips and events to help individuals, organisations and educationalists with their conscious act of 'unplugging'. But, as with most online ventures and activities, this 'participation' in digital disengagement is not a solitary, or indeed, a non-digital one: it often includes digital and social engagement, from the now all-too-normal pop-ups inviting website visitors to subscribe to their mailing list; sharing buttons to all social media sites; organised online gatherings discussing digital disengagement; to a full promotional gallery of selfies, showing people holding downloadable placards that read 'I unplug to...'

Almost all aspects of the website inevitably lead to further engagement, rather than disengagement, with the digital; this paradox comes into force precisely because *public* and *digital* participation become prerequisites to digital disengagement. In other words, digital disengagement is staged and becomes a part of a participatory culture that *has to be* connective, networked and public (Jenkins 2006; Fuchs 2010; Varnelis 2008; Jenkins et al. 2016) by default.

> Tethered to technology, we are shaken when that world 'unplugged' does not signify, does not satisfy (Turkle 2011, 11).

As prophetic and literal as Turkle's words are, digital disengagement – being 'unplugged' – can only be signified, understood and satisfied through digital engagement. The NDU selfies of digital disengagers holding placards proclaiming 'I unplug to...' (downloadable from the NDU website), is an example of how digital disengagement on its own has become an empty sign, one that can only be satisfied and filled with the 'meaningful' act of actualising the digitally disengaged self *online*, at once performative, shared, aestheticised, branded and *digitised*. As Khamis et al (2016) argue, online media is 'an exceedingly consumer-centric space, because individuals actively and autonomously seek out the resources they are most interested in – and therein lies the 'need' for self-branding' (Khamis et al. 2016, 194). Collective initiatives like NDU, indeed, become consumer fodder for the self-feeding and self-consumption needed for online self-branding in the shape of selfies and hashtags, where digital disengagement becomes a (self)brand, a style, a form that is governed and structured by the very architecture, language and culture of social media, everyday technopractices and globalised platforms. Acts of digital disengagement

become reduced to just another online selfie, status, like and update incorporated into wider online narratives and practices; within this configuration, opt-out becomes a mere *simulacrum* (Baudrillard 1994) of disconnection, one which can only be materialised through the veneer of online artefacts.

Furthermore, digital disengagement becomes meaningful only when it is realised, shared and performed online with a globalised, affected and networked public. As NDU states, 'for over 10 years, we have been unplugging together as a global community': here, digital disengagement requires participation that is anchored into networked publics (boyd 2011; Varnelis 2008), which paradoxically, feeds into and intensifies the online connectedness that is being problematised in the first place. To participate online is to acknowledge and be acknowledged by others (boyd 2004; boyd and Marwick 2011), and only then does the self become 'real'. Similarly, acts of digital disengagement as encouraged by groups like NDU become part of an online sharing culture (Agger 2012; boyd 2014; boyd and Marwick 2011, 2014, 2018) that circulates meaning through its affective network of intimate publics (Berlant 1998, 2008; Carah et al. 2018). But such affective processes of digital disengagement not only normalises the sharing of the private (digitally disengaged) self through pictures, contact details, words and analytics, but also ensures the individual returns to a state of digitality. If digital disengagement can only be realised through a globalised social connection and performance online, opt-out becomes simply yet another mode of social and digital connectivity, constituting a pseudo-opt-out rather than an actual opt-out.

But what is perhaps even more disturbing about such paradoxes of consumer-driven digital disengagement arises from what Turkle describes as the 'anxieties of disconnection, a kind of panic' (2011, 16). Here, driven by disconnection anxieties (such as Fear Of Missing Out (FOMO)), the individual becomes responsible for producing more points of digital and social connectivity (e.g., posts, selfies, hashtags, apps) which ultimately feeds the individualised but global need to practice digital disengagement, in itself another site for digital consumption and production. As such, the social connectivity of opting out and the anxieties of opting out from the social become collapsed into one another, a self-feeding and self-perpetuating feedback mechanism with no escape. In other words, the digitally over-saturated individual is actually a *self*-saturated individual. As discussed earlier, the consumption and production of digital disengagement is one that hinges upon the work/leisure axis. But the need to escape from work-related digitality is perhaps more systematically enforced (i.e., a waged worker is duty-bound to email) than the need to escape from leisure-related digitality (i.e., the same waged worker connecting with friends via social media during their lunchbreak). The digital saturation resulting from the latter is in some ways more problematic because it is self-enforced and driven by a digital society and culture that creates 'disconnection anxieties'. In this context, any discussion of 'opt-out' becomes difficult: one may want to opt out from the digital and over-(self)saturation, but one may not want to

opt out from the social. As digital and social engagement have increasingly become intertwined, in this situation, opting out is what feeds the culture that has created disconnection anxiety.

As shall be discussed in Chapter 5, when digital disengagement falls within what is perceived as 'leisure', the labour of digital disengagement is usually affective, and therefore is often hidden. Just like the ways in which playbour (Kücklich 2005) exploits the blurring of 'play' and 'labour', work and leisure (De Kosnik 2013), consuming digital disengagement often requires similar processes of affective labour that similarly blur the lines between digital consumer and producer. As digital consumers are incorporated into production processes (through user generated content on sites like NDU), so too are digital disengagers who produce *and* consume anti-consumption, and ultimately, become responsible for the propagation (not to mention profitisation) of compulsory compulsive digitality. Without users' labour, digital engagement and user generated content, platforms are not financially sustainable; as such, even as a non-profit (as a grassroots, social movement for social good), organisations like NDU profit indirectly from digital disengagers' engagement with their site and system. This sinister paradox is what traps consumers eternally into a cyclic double-bind of the self-feeding self that is hooked into an 'internet-centric' (Morozov 2013), digital consumer culture: over-consumption of the digital leads to the consumption of digital disengagement, which contributes back into the digital sphere for more consumption and prosumption.

Consuming Digital Disengagement During Covid-19: Social Distancing and Contactless Connectivity

In the UK, shops which were deemed essential enough to be able stay open during the various lockdowns enforced as a result of the Covid-19 pandemic (groceries, pharmacists, garages) asked customers for 'contactless only' financial transactions. Whilst this is a literal request – to use contactless payment methods (involving a simple tap of a card, code or scan with no PIN entry required) rather than cash – it also serves as an appropriate metaphor for digital disengagement during lockdown: everything had to be contact-less (i.e., involve no physical sociality) and be subject to technological and digital mediation. In fact, these two forces seem to define the general transformation and impact of Covid-19 on consumer culture and consumer practices. On the one hand, social distancing and the need to 'stay home' meant a resulting rise in global unemployment by 33 million as businesses large and small shut down due to a lack of consumer activity (International Labour Organization 2021). On the other hand, because of enforced technological and digital mediation, most of the Anglo-European world saw soaring profits experienced by certain sectors of the market, most notably in the areas of home entertainment (Nintendo, Netflix); sportswear and sports equipment; home/DIY goods; delivery services; cleaning products; and health (Espiner 2020; Gompertz and Plummer

2020; Sillars 2021). These economic, socio-cultural and political impacts of lockdowns have indeed destabilised existing understandings of consumer culture and practices that now need careful theoretical recalibration. The consumption of digital disengagement is no different, raising new lines of critical enquiry that we shall briefly explore next: firstly, how has social distancing reconfigured previously commodified spaces for consuming digital disengagement?; and secondly, can 'real' and 'quality' sociality that so many seek through digital disengagement be achieved when digitality becomes the only means of connectivity?

'Stay Home, Protect the NHS, Save Lives'[1]

In the UK, social distancing – certainly at the onset of the pandemic in 2020 – was not only encouraged by the government and health authorities but also enforced (via the police and punitive fines) as a means to protect the health and wellbeing of individuals and society. This directly counteracted previous consumer narratives that equated health and wellbeing with social proximity achieved through digital disconnection. The very spatialised and (anti)socialised nature of lockdowns meant that the very spaces and social practices that were previously commodified for the consumption of digital disengagement were shut down: indeed, digital detox holidays were cancelled, as were in-person NDU events and other such initiatives. Lockdowns meant that even pseudo-opt-out consumer choices presented through the commodification of digital disengagement were no longer available as individuals had to 'stay home' – unless they were key workers who were not afforded this option – and in most cases stay even more digitally engaged for survival (e.g., through online shopping, receiving news, conducting businesses, education, managing health). Where then can people consume digital disengagement?

   Pre-Covid-19, consumer-based digital disengagement narratives relied on presenting 'nature' as the antithesis of digitality (as we shall explore in Chapter 6 through our discussion of the environment), whereby being outside of heavily networked and connected smart homes and cities, and away from devices were seen as the answer. During the pandemic in the UK, being out in 'nature', or outside at all unless for 'responsible' reasons (i.e., exercise or necessities), meant either breaking governmental regulations, risking potential illness or death and/or being socially irresponsible. In this sense, previously racialised, gendered and classed Othered spaces of consuming digital disengagement, available to only those who could access and 'afford it', were temporarily destabilised. The Other held no titillating fear/exotic appeal, but instead became something to be feared (who could forget US President Donald Trump's constant reference

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1   In the UK, the government campaign and slogan during lockdown was 'stay home, protect the NHS, save lives' in reference to being collectively socially responsible to ease the pressure on the National Health Service. Once lockdown was eased, the slogan later changed to 'stay alert, control the virus, save lives'.

to Covid-19 as 'the China virus'?[2] (Hswen et al. 2021)). As discussed earlier, before Covid-19, only those who had financial and socio-cultural capital could afford to 'switch off' and buy their escape into physical spaces far removed from their daily and work lives; the rest had to stay socially and geographically immobile, static workers without the means to so easily 'switch off'. Covid-19 turned this on its head: now, 'staying home' – albeit connected – was a luxury, something key workers or otherwise vulnerable members of the population had little or no choice in. Must opt-out always be unequal, hierarchical and exclusive?

Finally, digital disengagement, along with all other usually external consumer practices thus had to become domesticated: digital disengagement needed to 'stay home'. What lockdown brought into sharp relief is the spatiality – and the access – of digital disengagement. Along with gym equipment and entertainment systems that people purchased en masse – with products going instantly out of stock – to replicate the outside world at home, digital disengagement was confined to the limited 'private' sphere of the home (Gompertz and Plummer 2020; Noor 2020). Divorced from its spatial capacities, disengagement became more reliant on *temporal* rather than spatial disconnection. The question then became less about 'where can I practice digital disengagement?' but more '*when* can I practice digital disengagement?': *when* can I have a break from the screen, *when* do I go out for my precious once-a-day-only exercise and/or restricted outdoor activities that take me away from my digital technologies back home? Such questions themselves are of course reserved for those who have the stability of family support, a home and jobs that can be carried out remotely.

From Failed Solitude to Enforced Solitude

One of the most common motivations behind people's desire for conscious digital disengagement, and the consumer advertising around businesses and initiatives like NDU, is the promise of disconnection from the virtual and re-connection with the 'real' and 'human' (off-line, face-to-face contact is seen as 'quality time') (Kuntsman and Miyake 2015, 2019). This is in contrast to what Turkle describes as our increasingly intimate reliance on yet, ironically, isolating relationship with, robots (Turkle 2011). Ironically, lockdown and the very nature of social distancing meant that 'real' and 'human' socialisation was no longer possible beyond those immediately within the same household. Here, the previously mentioned 'anxieties of disconnection, a kind of panic' (Turkle 2011, 16) experienced a perverse reversal and conversion of effects: anxieties of disconnection were now replaced but also became part of anxieties surround-

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[2] Donald Trump's Twitter account was permanently suspended on 8th January 2021 due to the 'risk of further incitement to violence' after the Capitol riots on 6th January 2021. No action was taken against his account following his tweets which referred to Covid-19 as 'the China Virus' (Twitter 2021).

ing the contracting of Covid-19. Communication *had* to be technologically and digitally mediated to be as immediately 'safe' as possible.

This double-anxiety changed people's relationship to both digitality *and* digital disengagement. The pandemic meant socio-digital connectivity was no longer a case of 'failed solitude' (Turkle 2011); rather, an enforced solitude was imposed, one which could only be remedied through the consumption of the digital as a way to fill the social void. From Zoom to Skype to other Voice over Internet Protocol (VoIP) services, people turned to digitality in order to cling onto a sense of humanity – that which lay beyond the four walls of confinement. In this sense, the sociality of opting out discussed earlier was no longer about a collective and participatory performance of disengagement from the digital, but instead, the digital became a means of disengaging from the 'reality' of Covid-19 and lockdown solitude, where the digital represented 'quality time' with society. Within this configuration, the previously discussed relationship between intimate publics and the online, public performances of private acts of digital disengagement became less about the propagation of socio-digital normativities and more about the enforcement of digital governmentality (Badouard et al. 2016; Barry 2019): people had to re-engage (for example, rejoin social media) or remain digital to remain social, informed and disciplined citizens, where opt-out truly was not a legal, medical and social option. During lockdown periods, especially in the first months of the pandemic, making communal videos together (e.g., sing-a-longs posted on social media), joining group video calls, and other collective technopractices of everyday life became the *only* way to be together, the *only* way to experience sociality.

Furthermore, this state of physical confinement led to the monopolisation of platformisation and centralisation of power over synchronous sociality by a certain few online services and companies that capitalised on this digital necessity. From journalists/reporters, educators/learners, judges/jurors to friends and family, all synchronous socialisation – as close to 'live' and 'real life' communication as possible – became shaped by the sheer architecture of Zoom, Skype and Microsoft Teams in the same way that asynchronous communications have been shaped by the likes of Facebook, Twitter, Instagram and other major social media platforms (as explored in Chapter 3, in relation to social mediatisation, platform affordance and pedagogic communication). The design of these services aims to mimic 'real life' social contexts (e.g., 'breakout rooms', 'raise hand', 'end meeting for all' functionalities) but also presents a hybrid space that can only be digital (emoticons, muting audio-visuals). The fact that these same platforms/services were used for both personal *and* work-related communication meant that lockdown represented, for many, an oversaturation of not just digitality but very limited platformativity and the consequent performances afforded by them. Even the language, process and micro-practices of opting out from these necessary digital socialisations were governed by the architecture and design of these services (e.g., 'muting'; 'end the meeting for all'). During the pandemic, we became literally captive consumers in need of these major services for 'live', face-to-face virtual communication.

Conclusion: The Self-Fulfilling and Self-Consuming Prophecy of Opting Out

By exploring the various consumer-oriented 'solutions' offered to the 'problem' of digital excess and dependency, this chapter has explored not just the conflation between digital disengagement and the consumption of digital disengagement, but also the very cyclic nature of consuming digital disengagement – a point which we will return to in the next chapter. Firstly, we examined the paradox of digital disengagement within the context of a neoliberalist consumer society, where individuals are double-bound to a capitalist system that profiteers from both their digital engagement as labourers (production) and their digital disengagement as consumers (consumption). Trapped in an eternal cycle of being a self-perpetuating digital labourer-consumer, opting out thus becomes not only a commodified product but the very mechanism that ensures the cycle keeps revolving without a circuit-breaking mechanism. Here, we also critiqued the ways in which such a process of consuming digital disengagement is often highly racialised, involving social differentiation *and* distanciation from those Others upon whom Western digital disengagement relies.

Secondly, we examined another cyclic double-bind within the very process of consuming digital disengagement. An internet-centric logic has made most forms of practices in contemporary life (at least in the so-called 'West') – including the practice of digital disengagement – not only participatory and social in nature, but also one that involves online consumption as aligned to everyday tactics of self-branding and online identity. This consumer-driven neoliberal actualisation of the self inevitably leads to a self-enforced but socially structured over-consumption of the digital, which leads to the paradoxical need for the consumption of digital disengagement; this in turn, contributes back into the digital sphere for more consumption and prosumption. Hence the loop is complete – even opting out is a complicit, commodified digital process within the unbreakable circuit – where individuals are forever self-trapping themselves within cycles of digitality that provide both the problem and solution to one's own digital demise.

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The Labour of Digital Disengagement: Time and the Luxury of Opting Out

Introduction

In the previous chapter, we discussed the double-bind of digital disengagement, which necessarily relies on and enforces a cyclic interdependence between being a digital labourer and consumer. We explored this loop from the perspective of consumer culture, and the (self)consumption and (self)commodification of digital disengagement, within which questions of opting out in itself comes at a financial and social cost. Here, as soon as the digital labourer decides to disengage from the digital, they are faced with a consumer choice of readily available and commodified digital disengagement products from apps to digital detox holidays. This neoliberal and capitalist structure that supports digital disengagement paradoxically ensures that the feedback mechanism acts as a continuous loop that traps both the labourer and consumer in an unbreakable circuit that provides the illusion of opting out. Continuing on from this point, in this chapter we explore a further paradox that exists within this paradox, that focuses more on aspects of labour: not only are we trapped forever in the labourer-consumer praxis, but we must engage in further digital labour in order to switch between being a digital labourer and a consumer of digital disengagement. In this chapter, we examine the actual labour required during processes of digital disengagement – whether through a digital detox app or holiday – investigating the paradoxical nature of digital disengagement as 'hidden' digital and technological labour in everyday digital life, related closely to the question of spatio-temporal regulation.

As discussed in the previous chapter in relation to the eternal self-feeding digital labourer-consumer double bind, compulsory digitality has contributed to an ever-increasing need for tools – *digital* tools – to help manage over-digitality

and enable digital disengagement. This in turn creates more digital labour con-sequently feeding into digital exhaustion (and the need for disengagement). This paradoxical loop must be understood in relation to questions of digital labour in the context of neoliberal digitality: on the one hand, digital disen-gagement 'frees' and 'empowers' the individual through disconnection and greater control over their time and life, albeit temporarily; but on the other hand, the digital labour required to participate in digital disengagement in itself reincorporates the individual back into the continuous plateau of compulsory digitality, thus creating a digital labourer who must continually manage their digital workload. But the story does not end there. There is also an additional workload the digital disengager must shoulder whilst engaged in digital disen-gagement: the processes of *re*-engaging back into what are the normalised and naturalised structures of digitality, whether these are work or social platforms that digital disengagers must ultimately 'return back to'.

Finally, we also argue that such a paradox must also be understood as one arising from a point of privilege, where one has to have the necessary economic *and* temporal capital to spend on organising one's disengagement practices, digital or not. Whilst digital exhaustion might be an increasingly 'universal' condition in Western societies that leads to what is perceived as the 'need' for technologies of digital disengagement (such as apps), the unequal distribution of digital-temporal capital means that digital disengagement itself – and the apps – is a luxury that not all digital labourers can afford. This chapter thus also considers the various ways in which 'digital labour' – from the office worker wanting 'time out', to precarious workers, to affective labourers organising fam-ily life – and the (im)possibility of opting out is situated at different intersec-tions of digital disengagement. The following presents a critical analysis of vari-ous apps that aid digital disengagement. This chapter theorises the impossible but necessary relationship between digital labour and digital disengagement, bringing into sharp focus the inseparability of time, labour and digitality.

Moment Family: Digital and Affective Labour

> In so many ways, your phone makes your life better—and profoundly easier […] But more and more, your phone works against you […] It pulls you away from what matters most—your family, your friends, your passions. Even yourself. Simply put, *your phone steals your time*. Moment *gives you back that time* (Moment Health Inc. 2014: emphasis added).

As explored in Chapter 4, promotional consumer narratives surrounding dig-ital disengagement often pose the 'problem' of contemporary living and the increasing dependence on the digital, with a (paradoxically) technological and/or digital tool being promoted as supposedly providing the perfect 'answer': the

convenient, technological and digital solution. Within such narratives, one of the key ways in which digital disengagement is qualified is through the notion of time, as demonstrated by the above quote from the 'Moment' app – a name in itself promoting a spatio-temporal necessity for the consumption of digital disengagement – paradoxically, the very device that 'steals your time' is also needed to 'give you back that time'. Here, it is not the actual connection with 'your family, your friends, your passion' that is being valued, but it is the time-space needed to enjoy these. Within this configuration, time becomes the value product; the app then acts as a mindful and vigilant Robin Hood, equalising the gap between the 'time-rich' and 'time-poor' (Wajcman 2015).

The words of Bittman et al., writing more than a decade ago, still ring true – if not are even more pronounced: 'if mobile phone use is responsible for eliminating 'dead time', then it might be expected that making frequent use of the phone (whether for work or leisure) might contribute to a sense of increased time pressure' (2009, 275). What is particularly alarming here is not just the idea of having to fill 'dead time' – increasingly equated as time not spent doing something digitally productive – reclaiming time from the very thing that stole it in the first place, but that the time-thief-reclaimer is also the very cause of needing time. Are our phones our time thieves or our time reclaimers? Who are the time-rich and who are the time-poor? As with all the other paradoxes explored throughout this book, the bartering of time becomes necessarily digital and technologically mediated; the management of time is part of a culture of self-tracking, self-monitoring ('easy-to-understand screen time tracking') that generates more digital data that, ironically, one needs to manage, where this invisible digital labour is simply naturalised as part of a neoliberal project of self-discipline and improvement. Downloading an app may be a solution, but one that generates even more data and even more *labour*.

One could argue that the management of time has always been part of the self as a reflexive project (Giddens 1991) – and labour itself of course. However, what we are witnessing through these apps is not only the management of the temporal self through technology, but the additional labour of also having to manage the technology in order to then manage the self, not to mention the management of personal data generated through such a process. This is essentially a triple labour – juggling the self, the technology and the data – which is needed to find that time-space for a digitalised digital disengagement. Not only do digital disengagement apps lure and then trap the user into the previously discussed cyclic labourer-consumer double-bind, but as if to add salt to the wound, the user must *work* for this process to happen in their own (non-paid) time. In other words, regardless of whether such apps are free (and they mostly are 'free'), the user 'pays', not just through personal data that is collected, but through the actual labour required to manage digitally-mediated digital disengagement.

The triple labour caused by the technologically-mediated regulation of time – the self, the technology and the data – is further intensified by apps like 'Moment Family', a related app produced by the same company which enables

a designated individual to 'manage your entire family's screen time' through 'the comfort of your own phone' (Moment Health Inc. 2016). As wholesome as domesticating digital disengagement might seem, hidden beneath the existing and already invisible affective domestic labour involved in managing everyday family life, there is the additional digital labour of managing the device and other people's data. Who will provide the affective labour for the individual family member responsible for the 'entire family's screen time'? Creating a hierarchy for the regulation of time – whilst presented as a 'caring' aspect of domestic wellbeing – paradoxically forces an individual to not only be further ensnared into the digital (app) and technological (smartphone/screen), but it also creates an unequal distribution of time capital within that family: the rest of the family become more 'time-rich' at the cost of the designated family app-manager's screen time increasing, and their becoming more 'time-poor' as a result.

Furthermore, and as referred to earlier, the very apps that people use to help them with digital disengagement in turn leads to a process where 'real life' time is found only by adjusting digital time – where the digital is the default and starting point – rather than adjusting digital time based on real life time. For example, we set and regulate screen time through apps like 'Moment' *first* in order to 'reclaim real time' that is non-digital: why not the other way round? This digi-centric logic means that our perception of time and our temporal organisation of everyday life is structured by the very architecture of the platforms used, as discussed in Chapter 2 in relation to educational e-tools that shape our practices, interactions and the space-time of our working and everyday lives. For example, examining how an app like Moment is designed reveals that beyond issues of capitalising on the increasing thirst for digital disengagement, there are also more sinister factors at play that equally intersect with questions of 'invisible' labour: the free labour we provide to app companies by way of our personal and usage data. Moment tracks not just the total amount of an individual's screen time, but also breaks this down to how much time is spent on individual apps. It shares this information with third parties – including social media sites such as Facebook (stating 'the social network or third party may also automatically collect information') – for 'obtaining insights into usage patterns of the Services' (Moment Health Inc. 2018a).

Beyond the immediate issue of corporate surveillance, data mining and digital profiling – commonplace in the ways apps are embedded into our personal devices designed to data mine, track and digitally profile their users, as discussed extensively in relation to health apps in Chapter 1 – what is equally problematic is how the triple labour needed to manage time, devices and data ultimately becomes part of the free labour users provide for major corporations like Apple, Amazon, Google, Microsoft and Facebook. Because the 'Big Five' provide the platform ecology for the operation of disengagement apps, any digitally-managed digital disengagement will necessarily involve free data

and free labour engagement with these companies: the apps are free, as is our digital labour.

Similarly, Moment also compares your personal statistics (i.e., screen time) to that of others, a gamified structure that supposedly encourages motivation through competition and social interaction. In reality, such a 'platform ready' feature that clearly operates through a social media logic, means social media sites are justified in the mass collection of such data. In fact, one of the features Moment boasts about openly – almost blind to the irony – is that upon down-loading the app, it enables the user to 'create and join groups of friends or family members to keep each other actionable & receive coaching in tandem' (Moment Health Inc. 2018b). This is exactly the same paradox we witnessed with initia-tives like the National Day of Unplugging, explored in the previous chapter, where digital disengagement is almost always digitally social and practiced.

But in terms of labour, similar to the critiques raised in discussions sur-rounding playbour (Kücklich 2005; Scholz 2013) – the increasing blurring of 'play' and 'labour' – the fodder for marketing analytics we provide to apps like Moment unknowingly in itself raises further questions of exploitation: Moment even openly promotes the fact that it 'runs in the background to automatically track your phone use – no need to open the app' (Moment Health Inc. 2018b). In this sense, the gamification of such an app – from creating leader boards necessitating social interaction or seemingly making digital disengagement 'fun' and thus obscuring the labour needed – ensures the mass production of free data and free labour. Playbour usually involves the problematic exploita-tion of the breakdown between leisure and labour. In the case of the labour needed to digitally manage our lives – the labour of digital disengagement – the process is also part of a neoliberal trajectory which naturalises the self-respon-sible labour needed to become more productive through the effective and affec-tive management of our own time: a similar app, Freedom, actively promotes itself as enabling users to 'reclaim focus and productivity' (Freedom 2014).

In other words, digital disengagement – even if it is related to consumerism and leisure –becomes not even about reclaiming our time for the 'important things in life' (like spending time with family and enjoying our hobbies), but about the ultimate goal of being *productive* as labourers: we return again to the cyclic double-bind of the digital-consumer trapped forever in their digital hamster wheel. In this sense, the question of 'exploitation' becomes obscured and thus more problematic: after all, we are only trying to improve our lives, right? In the words of the Freedom app, 'social media, shopping, videos, games [...] these apps and websites are scientifically engineered to keep you hooked and coming back. The cost to your productivity, ability to focus, and general well-being can be staggering' (Freedom 2014). Indeed, the 'cost' of regain-ing our productivity is paid for not only by our leisure time, but also by our expending time on the digital labour needed to use the Freedom app. As such, we may be opting out of digitality as a means of self-care, but ultimately, we

are still opting into (if not co-opted into) the overall capitalist and neoliberalist regime of having to be efficient and self-sufficient labourers through the ironical (digital) work needed to opt out.

The Labour of Digital Re-Engagement

> Anyway, you can use the Big Red Stop to schedule a repeating time that all of the ping, pang notifications from your phone get silenced and all of your friends who make contact get a personalised message saying when you plan to be back. Once your time is expired your phone automatically reverts to normal, you can get back to Facebooking like crazy, and of course all your messages are there (The Big Red Stop 2015).

Whether it is searching for a suitable digital disengagement app, downloading the app, setting up accounts (Facebook sign-in anyone?) to enable the app to work, synching devices, managing the app once installed, the sheer amount of time spent digitally managing devices in an attempt to disengage is, in itself, a paradox, as already explored. But, as we have discussed throughout this book, opt-out times, spaces and practices are almost always never permanent; possibilities of opt-out shrink and expand according to the spatio-temporal, social and economic capital afforded at a given moment. Sooner or later, when the opt-out space begins to close again – or where one must close it due to social, family and/or work commitments – there is a reversal of processes in re-engaging with the digital that requires equal if not more amounts of digital labour.

Consider another digital disengagement app, The Big Red Stop. Although no longer available, it is one of many to have initially started a trend back in 2015 when digital disengagement apps began to emerge to prominence; many of these original start-up apps have given way to more corporate apps such as Screen Time for iOS or Digital Wellbeing for Android phones. The app allowed the potential digital disengager to 'just hit the big red button and anyone who messages you receives a text or Twitter message letting them know you are taking a #bigredstop and when you will be back' (The Big Red Stop 2015). In effect, the 'big red button' represents opt-out, the moment where one is practicing digital disengagement. However, as the excerpt clearly states, there is an inbuilt expectation that 'you will be back' and things will 'revert back to normal'. The terms 'back' and 'revert' point to the 'return' to a 'normal' starting point, a starting point that is digitally defined. This is precisely what we have critiqued and problematised throughout this book: digitality has become so naturalised and normalised as the starting point that a move away from it must be temporary, beyond which digital-, techno- and social media-logic dictates it as being an aberration. Digital disengagers are expected to indeed 'be back' to the 'normality' of digitality.

What is equally problematic is how the processes of 'reverting back to normal', of *re*-engaging back into what has become the normalised and naturalised structures of digitality, requires equal if not greater digital labour. Not only do those who have attempted to disengage have to reverse whatever settings and processes they may have put in place in an app – whether this is manually done or 'automatically reverts' as is the case of Big Red Stop – or if they have been on a digital detox holiday, then, in the very process of 'turning the phone back on', they also have to attend to the digital accumulation of when they 'get back to Facebooking like crazy, and of course all your messages are there'. The last point the Big Red Stop makes here inadvertently is, indeed, 'all your messages are there'. This is because the digital forms not just the 'normal' but *the collective*, as enforced through the global structures of the digital ecosystems within which institutions and individuals have built their compulsory but utterly naturalised presence. As such, opt-out is individualised and personalised, existing upon a very specific time-space of digital disengagement; the digital 'baseline' is unwavering, and moving temporarily away from this digital baseline – by setting autoreplies and away messages as our digital place holders – does not stop the flow of data traffic, indeed, the regulation and monitoring continues despite our absence.

When digital disengagers 'return back to normal', the space and time for engagement might be 'normal' but the temporarily paused digital accumulation must now be compressed into a compact space-time that must be attended to immediately, whether these come in the shape of notifications, emails, social media messages and interactions and so on. In other words, re-engagement is never just about 'picking up from where one left off' but involves a considerable amount of 'catching up' that is ultimately the 'cost' of opting out, even temporarily. Digitality is constant. As such, opt-out cannot be constant if we are to be part of a society that collectively conforms, perpetuates and is complicit in maintaining a 'starting point' that is necessarily digital.

The Luxury of Opting Out: Who Has the Time?

The question of exploitation and the obfuscating of labour, and even the 'reverting back to normal' of digitality becomes even more acute when we begin to consider questions of agency and structure i.e., the individual's agency and ability to viably choose to opt out from the digital structure of labour. Who has the time? Who has the right? Whether exploited by the 'Big Five' or not, apps like Moment or Freedom seem to be targeting those who can 'afford' to occasionally take time off: those who have some spatio-temporal and financial resources to make such a supposed 'empowered choice' (even tied to consumer choice, given these apps are commodified). However, for those whose entire livelihood is governed by apps through necessity, or because they have few other options available to them – for example, precarious workers engaged in the platform

economy – digital structures of labour allow little or no agency in 'real life' economic terms; the choice to opt out has a direct impact on their livelihood, leading to loss of resources, networks and ability to survive. In the next section, we want to explore a different aspect of labour in terms of those whose livelihoods depend on digital labour, where the question of opt-out cannot easily be bought by money or time.

For most workers across various sectors, the digital usually takes on the role of an 'assistant', subservient to the human worker. Terms like 'e-tools' and 'digital support systems' point toward a concept where the pragmatic purpose of the 'robotic companion' (Turkle 2011) is to serve the labourer, helping to somehow 'relieve' or at least 'streamline' the existing workload (in some cases, the digital has even replaced the labourer, as many companies turn to automated and AI systems in order to cut labour costs out altogether). The prevalence of e-tools is particularly needed in agile working practices that are increasingly becoming part of corporate and other institutionalised settings: agility and homeworking certainly requires the digitisation of labour to 'enable' and 'assist' the worker to make their time flexible and more malleable according to their own individual needs, which ultimately becomes about maximising efficiency and productivity to address the employer's needs. However, for the precarious gig worker, the digitisation of labour is less about the flexibility or malleability of time-space, instead it is about stretching out labour in as many ways and directions as possible for maximum profit, just to survive financially (precarious workers are notoriously badly paid with very little or no employment rights and support (Department for Business, Energy & Industrial Strategy 2018)). By the same token the digital is less about assistance and more about subsistence, where it is a necessity in order to survive, let alone succeed, rather than a necessity to make life easier. Consider the Uber driver who relies on their apps, sometimes on multiple devices (in themselves another outgoing expense) and accounts, just to cast a wider net in order to increase the chances of work – and thus increase their time engaged in the labour of finding labour – within a given time span. Is the role of the digital in managing their time equivalent to that of, for example, an employee with a stable and permanent income who has been granted flexible working hours and can work from home? For precarious workers engaging in digital labour for survival, smartphones are not robotic companions, the precarious workers *are* the subservient human robots themselves, not hierarchically above the devices – as in the case with, for example, office workers on a permanent contract – but on a par with the devices: both subservient to the office worker who needs an Uber ride, or food delivered to the office.

What is problematically paradoxical are the ways in which the gig economy and platform work specifically interpellate the precarious worker as an entrepreneurial individual with the concept of choice: the choice to supposedly work for yourself, in your own time and to your own working patterns, as if promoting agile working practices akin to the office worker on a permanent contract,

working from home to suit their personal needs. 'These Apps Are an Uber Driver's Co-Pilot', ran the title of a *New York Times* (Weed 2019) piece on Uber drivers, complete with an image of a driver's dashboard showing the use of both Uber and Lyft apps in order to maximise profits. The article quotes Ryan Green, Chief Executive of Gridwise, a mobile app that provides important data for drivers stating, 'we want to equip them to make the best decisions.' These platforms promote the idea of choice, supposedly helping 'empowered' precarious workers to make the 'best decisions', unfettered by corporate structures that would otherwise quash sparks of individualism and freedom: a theme that runs consistently through all chapters in this book.

But clearly, from reports that have emerged of precarious workers sleeping in tents or being subject to abuse (Lusher 2017), this 'choice' is an illusion, and a dangerous one in the case of these workers who have little legal, social, civil and spatio-temporal protection. The reality is that precarious workers cannot financially afford not to work constantly so whilst opt-out is a technical option, it is not a viable one. But perhaps most sinisterly, opt-out is not even a technical option in that the apps themselves are designed to not 'let go' of those who choose to disengage. Much in the same way that social media users find it notoriously difficult to technically dislodge themselves from social media platforms long after deactivation (e.g., because of endless notifications, suggestions, reminders to lure the user back), precarious workers are also subjected to aggressive, automated nudges, and penalties for daring to disengage (Rosenblat and Stark 2016). Similarly, digital engagement is rewarded: the 'algorithmic boss' ultimately encourages its 'employees' to technopractice self-discipline in ways that make digital engagement a technology of the supposedly profiteering self (Bishop 2020). Ultimately, opting out involves additional invisible labour of self-management, in itself a strain on already scant resources of time available to precarious workers.

Prassl argues that part of the result of the invisibility of labour within gig economy platforms is how 'stories of uneven rights, compensation and safety are not aberrations, but rather constitutive of the roles and ideologies of high-technology work' (2018, 6). The gig economy relies on the malleability of digital time-space (work whenever, however), and paradoxically, operates precisely because the (im)possibility of opt-out is not dichotomous and flexible: inasmuch as it can open and close, it can remain closed almost permanently for some who have no means to create pockets of digital freedom. Indeed, the reason why the 'stories of uneven rights, compensation and safety' are part of the gig economy is because digital disengagement is something that requires labour, time, space and resources that are not available to all. Only *some* have the privilege to access opt-out, to increase its space and time – as we have seen with apps such as Moment and digital detox initiatives – because for the rest, there is no time-space left to engage in the labour of digital disengagement.

Opting out for precarious workers is thus in itself situated at the intersections of class, race, gender, sexuality, ability and other inequalities that mean it is not

only labour that becomes invisible, but the notion of privilege too (Apostolidis 2019; Gray and Suri 2019). It is a privilege to be able to opt out, where the space, costs and time needed to open up such a choice is based upon an unequal distribution of digital and temporal capital: who has enough 'time-wealth' to manage their supposed 'time-poverty'? There is a difference between individuals who are able to manage their 'time-wealth' by shifting the balance between various different time-accounts – helped by apps like Moment – and individuals from vulnerable groups in society who do not even have that temporal (not to mention literal) bank account in the first place; the 'normal' kinship and network structures that entitle them to state, community and/or familial protection and support; or have limited access, skills and ability to seek support other than through the digital.

As such, being in a position to have to contend with the triple labour of managing an app like Moment or Freedom, as discussed earlier, in itself becomes a privileged and expanded space for opt-out – which does of course incur its own costs as discussed – when considered alongside the limited space for opt-out for a precarious worker in the gig economy. The labour of digital disengagement is problematic in its invisibility and in its placing of digitality as a normative starting point that people must work to get out of, and equally, work to return back to. A further critical point here is that this labour of digital disengagement in itself is also a privilege, one that is not accessible to all and relies on a further unequal distribution of digital and temporal capital.

Covid-19: The Visibility of Privilege

As we have been exploring throughout this book, one of the major transformations that Covid-19 imposed on different societies across the globe is not just the increase and meaning of digitality in our lives, but the shift in boundaries of labour and social inequality that digitally demarcate across intersections of class, race, gender, sexuality and ability. As most developed countries' economies relied on the mobilisation of a digitalised workforce[1] – Chapter 3 explored the various consequences of digitalising labour within Higher Education, for example – new inequalities began to emerge as a consequence of platformising work life as people 'worked from home': from gendered inequalities arising from women having increased workloads due to home-schooling and/or increased care responsibilities (UN Women 2020), to classed inequalities relating to technological access, seen for example in the shortage of laptops per household according to socio-economic status (Vilbert 2020). This is not to say that these inequalities did not exist before, they simply became more noticeable – or perhaps, as people realised the things they had been taking for granted,

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[1] Developing countries did not necessarily have the appropriate infrastructure to support the mass digitalisation of the workforce. See United Nations 2021.

that *privileges* because more visible; in the words of Chan (2020) discussing distal futures and labour within the context of the pandemic:

> The race towards digital productivity during the pandemic was buoyed by new and existing structures of labour inequality [...] virtual workplaces and the capitalist futures they make possible are accessible unevenly to those whose privilege affords them the means to participate in these emergent spheres of digital life (Chan 2020, 13.5).

The irony being that it took a pandemic to force more people into experiencing work in the way precarious workers have already been subjected to for some years: constantly and relentlessly controlled, regulated and monitored by the digital. More crucially, it is only when institutions experienced some of these pandemic-imposed inequalities at a systemic level – that enforced shrinkage of the space to opt out – that such inequalities were declared important enough to be widely considered and wide-reaching attempts were made to address them. For example, within the context of the UK, the Government's furlough scheme to help businesses (mostly in the hospitality sector which could not, by nature, digitalise its operations) in some ways protected a certain portion of the labour force that were more vulnerable (such as low-wage workers), albeit excluding others, such as those on maternity leave or job seekers. Similarly, the Government introduced a scheme whereby low-income households could apply for laptops and tablets for children to use for educational purposes during school closures (GOV.UK 2020). Such schemes may certainly address *some* inequalities – although certainly not all, and may even create new ones – but these still obfuscate the privilege of the digital itself; or rather, the exercising of that privilege through the digital, the privilege that enables 'white-collar workers [to] migrate their labour online' and 'low-wage "essential workers" risk their health for wages in ways that the labour market does not adequately compensate for' (Chan 2020, 13.5).

If we return back to the question of the space, time and cost of 'opting out', what the pandemic has thrown into sharp relief is not only how the scale and flexibility of digital disengagement depends on the size of a given individual's expendable spatio-temporal income, but also its quality, its modality, its type: in the world of lockdown where the outside remains unsafe, privilege rests only with those who can afford *not* to operate synchronously – as must the deliverer of goods, hospital workers, carers and so on – and instead, lies with those who can afford the digitality needed for asynchronicity. And if working synchronously from home (e.g., a business Zoom meeting), then the privilege lies with the cost and space needed for such a buyout in the form of a safe indoor working environment (space), with a secure internet connection and the technologies to access it (cost). As such, this is not just about time-wealth, but it is also about the transaction value, the rate of currency that this time can buy the individual out of.

But here, if we return to the precarious workers and those whose lives depend on the platform economy and labour – the Uber drivers, the Deliveroo

couriers – there is yet another layer of privilege to peel back. Because of lock-down restrictions, many precarious workers became unemployed and were in effect forcibly opted out of digital labour (Matilla-Santander et al. 2021; Ravenelle et al. 2021). As neither 'white-collar workers migrating labour online', nor the 'essential workers' who, whilst risking their health, were nonetheless earning some kind of income, precarious and migrant workers faced a double inequality of being digitally dependent but without the temporal capital of syn-chronicity to gain any profit. When social distancing is an issue, even the spatial ability – or the lack of it – to conduct one's job becomes part of the privilege to which precarious workers are not necessarily privy.

Conclusion: The Hamster Work-Wheel of Digital Disengagement

The abundance of apps like Moment, or digital detoxes and collective initiatives like the National Day of Unplugging discussed in the previous chapter, make it clear that society is becoming increasingly preoccupied and conscious of how excessive digital labour can lead to a need for (the consumption) of digital dis-engagement: hence the digital labourer-consumer double-bind discussed over the course of these last two chapters. However, what is less clear and some-times invisible – and thus problematic – is how digital disengagement in itself requires *more* labour. Identifying and solving 'the problem' of digital excess through the digital is a paradox, and the labour needed to self-perpetuate this paradox – that is, eternally turning the digital labourer-consumer wheel – is the problem of this paradox.

The labour of digital disengagement thus raises critical issues. Firstly, digital disengagement through apps like 'Moment' supposedly 'empowers' the indi-vidual through disconnection, but the digital labour required to operate and maintain such apps in itself reincorporates the individual back into the con-tinuous plateau of compulsory digitality. Secondly, the digital labour of digital disengagement in itself is a multi-pronged and multi-tasked operation that is ultimately defined by and further naturalises the digital: from the management of digital devices, the management of the app itself, and the management of the personal data generated, various forms of self-management are required in order to manage one's actual space and time of digital disengagement. Thirdly, there is an additional workload the digital disengager must shoulder when re-engaging back into what are the normalised and naturalised structures of digitality; here, the expectation that one must 'return back to normal' makes opt-out a temporary relief that requires responsibility, rather than opt-out being a right and default.

Finally, the labour of digital disengagement must also be understood as one arising from a point of privilege, where one has to have the necessary economic and temporal capital to spend on organising one's disengagement practices. As the case of platform labourers discussed in this chapter demonstrates, this

unequal distribution of digital-temporal capital means that digital disengagement itself – and associated apps – is a luxury that not all digital labourers can afford, one which Covid-19 has increasingly made more visible. In all these cases – whether it is the office worker or Uber driver – opt-out thus remains something that must be 'worked for' and remains not as a point of departure and return, but as a point of transit: this is why the cyclic double-bind of the digital labourer-consumer turns and turns, giving the illusion of opting out whilst forever staying trapped in digitality.

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CHAPTER 6

Digital Disengagement and the Environment: Solutionism, Greenwashing and Partial Opt-Outs

Introduction

This final chapter turns to the relations between digital disengagement and the environment, continuing the notion of digital disengagement and its paradoxes. As many scholars have pointed out (Brevini 2022; Chen 2016; Cubitt 2017; Emejulu and McGregor 2016; Gould 2016; Maxwell and Miller 2020; Qiu 2016, Velkova 2016), digital communication technologies inflict significant damage on both humans and the environment. These impacts vary considerably and include the ever-growing extraction of rare minerals needed to produce digital devices; the toxicity of the production process and of the e-waste left behind after their short lives, made disposable by design; the rapidly increasing energy demands of AI deep machine learning; and the carbon and heat emissions of internet traffic and more specifically, of data farms, needed to sustain every click, every website, every tweet, every Big Data database, every 'smart' network and every bitcoin. These activities have profound impact on land, water, landscape and atmosphere, *and* on people and communities. Yet, despite staggering levels of evidence, these damages are often overlooked, paradoxically precisely when digital technologies are placed at the heart of 'green imaginaries' – popular, political and scientific narratives that are centred around environmental protection, sustainability and other 'eco' values. Environmentally oriented digital disengagement, too, often finds itself in the trap of digital solutionism and techno-utopianism.

We begin our discussion by returning to the idea of 'digital detox' as discussed in detail in previous chapters. Here, we examine more closely how the 'digital detox' imaginary juxtaposes digital communication technologies with a 'green'

and 'safe' environment, away from the harms of digital life. We ask what exactly is viewed as toxic in the notion of 'digital detox', and why the environmental toxicity of digitisation itself is overlooked. We then turn to green imaginaries in academic research and the digital industry, asking whether and when do they consider reducing or abandoning the use of digital technologies for reasons of environmental harms and their global injustice. We finish the chapter by looking at the impact of the Covid-19 pandemic on how digital technologies are (re)imagined in relation to the environment.

Escaping the Digital into the Pastoral: The Semiotic Extractivism of Digital Detoxes

A Google Image search for 'digital detox' results in a screen filled with splashes of green, pictures of flowers, trees, or grass, and scenic photographs of serene landscapes (see Figure 6.1).

Some of the images displayed after a search for 'digital detox' simply deploy the colour green, semiotically coded as denoting nature and the environment (Won and Westland 2017): examples include a green Post-it note with the
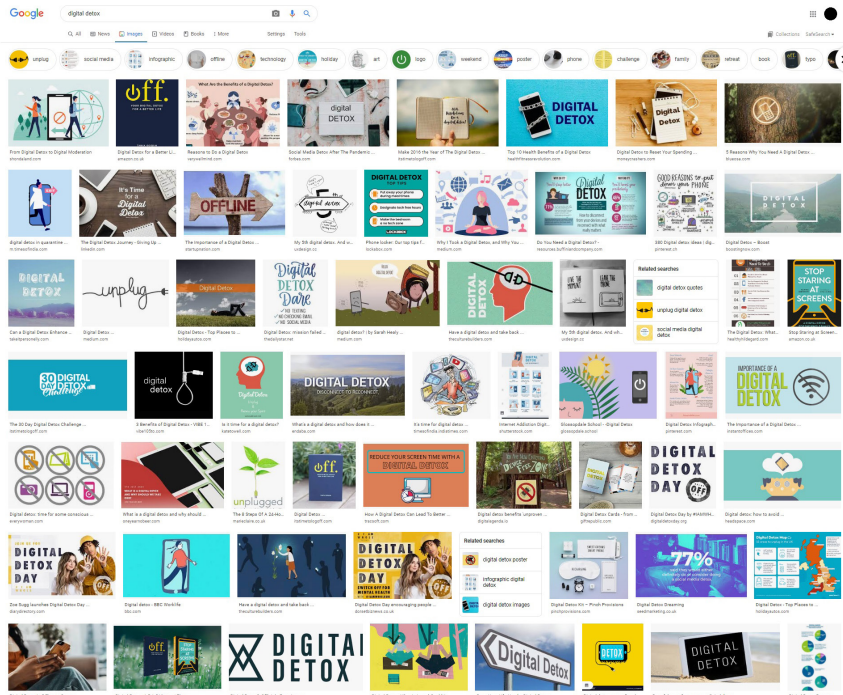
Figure 6.1: Google Image search results for the term 'digital detox'. (Google Images 2020)
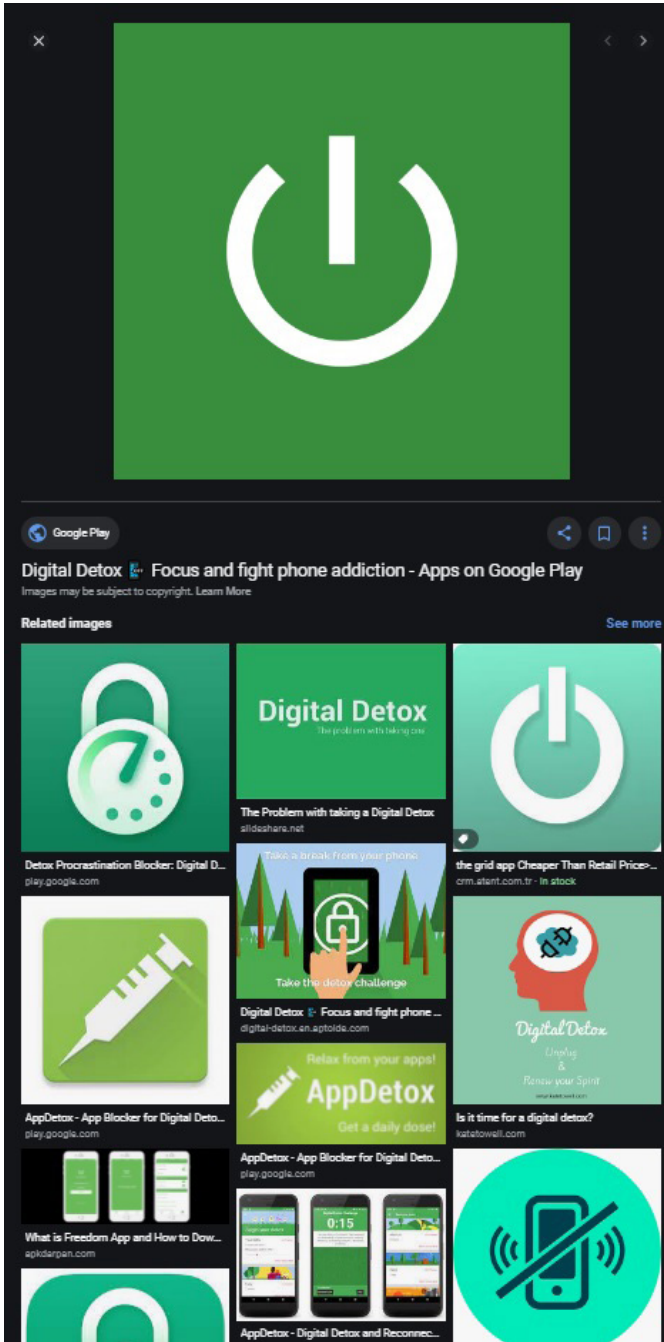
Figure 6.2: Image preview and 'related images' in Google Image search results for the term 'digital detox'. (Google Images 2020)
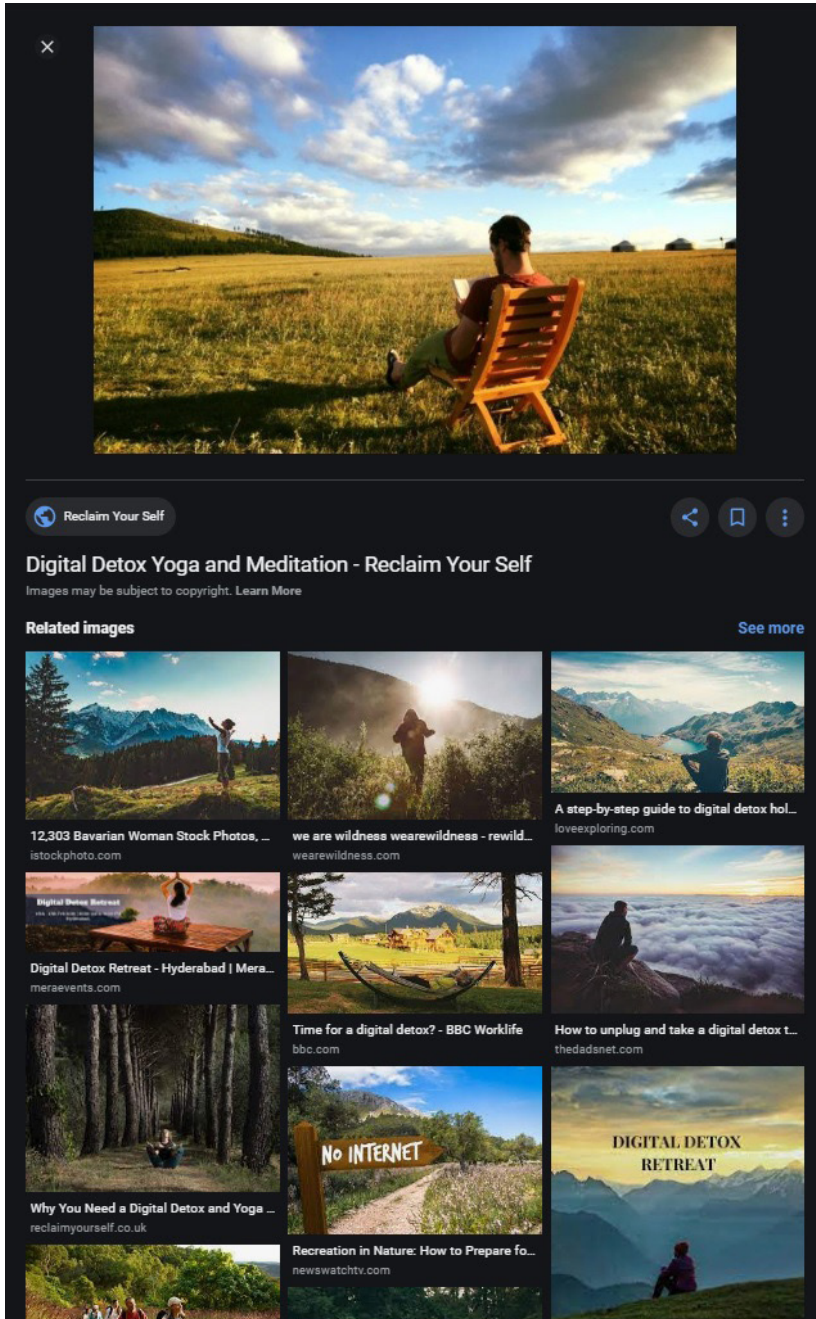
Figure 6.3: Image preview and 'related images' in Google Image search results for the term 'digital detox'. (Google Images 2020)

word 'unplug'; a green 'off' button; or a plain green background.[1] Other images returned contain beautifully photographed landscapes: sunsets, beaches, fields, forests, rivers and mountains. Only a few words are added to these photographs, usually in the form of short titles or slogans. Sometimes, there are no words at all. Yet other images use either a combination of photography and graphics, or graphics alone, to create a clear visual juxtaposition of nature and technology. For instance, a forest rises up behind a hand that is holding a smartphone, depicting a 'lock' icon. A woman, depicted in bright colours, is shown leaning towards a huge, shining flower, her face illuminated by its glow; she is surrounded by smaller monochrome figures, who hold devices that emit a small amount of light – nowhere near enough to brighten the darkness. A massive tree trunk, showered in sunrays, seems to shine from within; on it we see a small, wooden-carved sign declaring 'no phones'. Bright green leaves are growing from an unplugged USB-cable-turned-stem.

The slogans revolve around the idea of departing from the digital: 'Disconnect to reconnect', 'Take the digital detox challenge', 'Unplug', 'Off'. And as we scroll through the algorithmically curated collection of slogan-wrapped visuals, each preview leading to further clusters of related or similar images (Figures 6.2 and 6.3), our screens are awash in green icons or digitally orchestrated nature. The latter appears untouched by technology, while in reality it is scrupulously photoshopped to perfection. The green colour returns over and over again, in an echo-chamber that renders digital disengagement as synonymous with (connecting to) nature. But is it? Or rather, what exactly is envisioned when disconnection is presented as an escape to nature?

Some of the websites listed in the search lead to digital detox holiday packages on major booking platforms such as TripAdvisor:

> Every day more and more information, we need both? We are confident that no. That's why we created DIGITAL DETOX Week (Digital Detoxification). This is where you will find the best connection, with *nature*. Back to the pure state. Connect with mountain and combined with your favorite activities. We offer everything you need so you can enjoy a carefree week and too much information. With all that, we'll welcome you with a basket of fruit, vegetables, bread, water, juices, creams, chocolates and other products more (TripAdvisor n.d.: emphasis added; spelling original).

Others link to smaller businesses, specialising specifically in retreats in remote locations where one can 'take a proper break from technology', a break which can instead be filled with 'yoga, good food, refreshing *nature* and downtime':

> UK Digital Detoxes: [Teacher's Name] teaches Jivamukti yoga and leads our UK yoga and digital detox weekends. You'll stay in a 17th century

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[1] 'Green' is also commonly equated with being environmentally friendly, giving a rise to the phenomenon of greenwashing (Miller 2018).

manor house, hidden away in a traditional country village an hour north of London. On this yoga weekend we invite you to switch off your phones, leave your ipads and laptops behind and enjoy three days of peace and quiet in the countryside.

Mongolia Digital detox: There is no phone or internet reception at our Mongolia camps, only occasional solar power and the nearest town is three hours away. It is so quiet you can hear birds fly! You will be completely without contact with the outside world while you are on your yoga retreat (Reclaimyourself 2020).

These and other similar sites are not solely dedicated to digital detox and disconnection – rather, they offer an extensive menu of choices of trips and destinations (the Retreat website, cited above, has categories for 'adventure', 'yoga', 'foodies', 'sunshine', 'digital detox' and more). 'Nature', here, is a resource to be consumed; and of course, as such, it is also a brand (as discussed in Chapter 4), mobilised to promote tourism and hospitality businesses, as long as there is a demand for them. In the process of branding and marketing, 'nature' becomes an abstract idea– it can be anything and anywhere. It is offered as one of several commodities, together with fruit, vegetables, chocolates, yoga and downtime; but rarely an actual place, with actual landscapes (often ravaged by the tourist industry and gentrification). These are places devoid of living and non-living beings – unless the place itself needs to be characterised as non-digital, in a colonial imaginary of remote wilderness without technology.[2] Either way, there is very little nature actually included in the digital detox idea of escaping to nature.

Once we move away from holiday packages to other websites located via the Google Image search, we find even fewer traces of natural environments behind the pictures that led us to these sites in the first place. Many of the pages do not refer to nature at all. With a rare mention of 'going on a walk' as one of the many things to do instead of being on social media or otherwise staring at one's phone, the sites discuss mental health, information overload and digital addiction; offer tips on how to set up and follow 'disengagement' habits (Andrews 2018; Cherry 2020; Marie Claire 2015; Parikh 2019; Rossi 2015); describe experiences of disconnecting (to be more productive, of course) (Walpert 2019); or even present apps to manage the detox (Urbandroid 2021) – all in line with the consumer trap of never-ending digitality which we have discussed in the previous two chapters. Often, the only reference to nature or the outdoors is the one image which led us to the website in the first place.

If we look at the multitude of webpages dedicated to digital detox, the 'greenness' of disconnection is thus both overwhelming and phantom. Deceivingly,

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[2] Mongolia in the example above. See also Chapter 4 for a more detailed analysis of racialised and classed notions of 'non-Western', 'exotic' locations of digital detox retreats.

nature is repeatedly visualised as *the* choice of where to escape from technology, and what to do *instead* of engaging with technology. It is a touristy choice, though – one embedded in a colonial and capitalist logic of objectification and commodification, where 'nature' is a status symbol, a luxury to be consumed while seeking wellness, rather than a space to live in, or even a treasure to be protected. This commodified nature is cleansed from its human (and non-human) inhabitants. Crucially, it is also cleansed from any signs of labour involved in sustaining and serving these sites of nature; from social and environmental damage, often brought by the globalised 'wellness' industry; and from the material and immaterial impacts of the digital infrastructure itself, which is needed to organise, promote and manage such retreats (for of course, to offer a retreat away from digital technology, one needs an extensive web and social media presence as well as other means of digital communication). The reference to nature, in other words, is an empty gesture – it is merely a symbolic resource in the visual attention economy (which, in turn, is tied to the economy of tourism and leisure on the one hand, and the data economy, on the other). Ironically, but hardly surprisingly, the semiotic extractivism of the digital detox imaginary resembles the extractivist nature of tourism itself – where material resources and cultural practices are consumed, commodified and appropriated, often emptying their communities from natural resources as well as political and economic power (in the guise of providing jobs and supporting the economy).

   While the notion of digital detox clearly carries no actual environmental agenda beyond consumerism, what about other green imaginaries, which are explicitly oriented towards environmental change, such as the idea of environmental sustainability?

Are Digital Technologies Here to Save the Planet?
Environmental Sustainability and Digital Solutionism

In spring 2017, *Sustainability Science*, an academic journal dedicated to exploring how sustainability takes shape at the intersection between natural and social systems, published a collection of articles entitled 'The game-changing potential of digitalisation for sustainability: possibilities, perils, and pathways'. The collection's Introduction describes Big Data and digitisation as key 'game changers' in moving towards a more sustainable future: 'digital technologies in the form of e-health services, robotics, or emission reduction solutions could help individuals, organisations, and nations achieve a more sustainable planet in light of the Sustainable Development Goals' as set up by the UN (Seele and Lock 2017, 183; United Nations 2015). In the rest of the Introduction, the authors map the ways in which digital technologies could hold tremendous potential in developing planetary and human sustainability, in environmental, social and economic spheres. Sustainability, the editors argue, will need to adapt to the developments of the digital age, whereas digitisation itself is the 'driver that changes sustainability' (Seele and Lock 2017, 183–4). To illustrate

this, contributors to the collection describe various perils and benefits of digital technologies. While briefly acknowledging the former, they predominantly focus on the latter, when looking at citizen e-participation in environmental projects (He et al. 2017); geographic information systems (GIS) and digitised data regarding innovation of water systems (Widener et al. 2017); sustainable ICT-based education in developing countries and, in particular, the creation of digital content (Tabira and Otieno 2017); Big Data stakeholders as stakeholders of sustainability in the digital age (Seele and Locke 2017); and the knowledge society and digitisation (Stuermer et al. 2017). Taken together, these articles do indeed encapsulate the main areas where digital technologies and sustainability meet: engaging and educating citizens via digital communication; using digital tools for sustainable innovation; and utilising digital knowledge (and, increasingly, Big Data). Yet, they contain very little critical meditation on the question of whether, and to what extent, the digital *itself* might be unsustainable.

This collection of articles is only one example of the broader field of scholarship across a number of disciplines where digital technologies are seen as being at the service of sustainability projects: from tools of sustainable innovation and eco-efficiency that effectively manage and monitor resources; to powerful technologies of gathering and communicating information about the environment including environmental harms; to communication technologies tasked with changing consumer and citizen behaviour towards 'greener alternatives' (for a detailed systematic review of this literature, see Kuntsman and Rattle 2019). A similar thinking characterises another area where digital technologies are rapidly and increasingly embraced as environmental saviours: smart cities. Although ecology is usually *not* the cities' primary focus – rather, smart cities' websites and policy briefs discuss the infrastructural efficiency that serves the economy, governance and citizen needs (Kuntsman 2019) – they are also presented as projects that will ultimately help the environment. Smart cities will, according to their websites, streamline the collection of waste by using smart bins with sensors; run smartphone-operated bike-rental schemes; control traffic with the help of apps and dashboards; offer paper-free e-government services; or even help asthma-suffering children by digitally communicating the level of air pollution in playgrounds and instantly alerting citizens of potential dangers (Libelium 2019). Academic literature on smart cities radiates similar techno-optimism, putting forward notions of 'sharing cities' (McLaren and Agyeman 2015); 'green growth' (Kim 2018), 'green infrastructure' (Vasenev et al 2020), 'progressive urbanisation' (Gassmann et al. 2019), 'sustainable urbanisation' (Mukherjee 2018), 'green technology innovation' (Tomar and Kaur 2020), 'resilient cities' (Galderisi 2018), 'smart future' (Dastbaz et al. 2019) and more. 'What smart solutions can make life in cities safe, comfortable and environmentally friendly?' (Springer Geography 2020) – the researchers ask, over and over.

Both the literature on sustainability and smart cities displays a range of approaches to the digital. Most authors are optimistic and hopeful, although

there are also some critical and sceptical voices. Yet even when warning against the environmental costs of manufacturing and operating digital devices, platforms and environments, or when cautioning against the unintended effects of efforts to change people's behaviour, or when describing how the devices' improper use or disposal results in toxic e-waste, barely any authors advocate for reducing – not to mention opting out of – digital solutions due to their environmental harms (Kuntsman and Rattle 2019). If dangers or concerns about the environmental toll of digital communication are outlined, it only leads to suggestions about *how to do it better*, not whether to reduce the level of digital saturation. More precise tools, further research into their design, critical thinking, or better education for better user practices are discussed – but never a refusal or an opt-out.

Stubborn insistence on the almost magical promise of digital technologies is another powerful example of digital solutionism, where – as demonstrated in previous chapters – digital technologies are seen as the best, and often the only, way to solve problems, including problems that were created or exacerbated by digital technologies themselves. In the case of environmental issues, digital solutionism creates a form of paradigmatic myopia towards the material harms of digital dependency, a powerful and powerfully enforced blindness that persists despite a wealth of existing scholarly critique. The notion of paradigmatic myopia is crucial, for it is not the absence of evidence of environmental digital harms that is at stake (the fields of geography, environmental science, human health etc. have them in abundance), but rather, the insistence on the immateriality – and the 'greenness' – of the digital. This insistence is simultaneously ingrained in the power of the global digital economy (Chen 2016; Fuchs 2015; Qiu 2016) *and* in cultural beliefs and media practices that accompany and sustain it. As several scholars have noted, the digital economy rests on the 'planned obsolescence' (Chen 2016; Gould 2016) of digital devices, purposefully designed to have a short life span and be replaced frequently.

In addition to its economic hold (where, for example, repair is always more costly than upgrade/disposal), planned obsolescence is supported by consumer trends, cultures of communication, and by what Good (2016) has poignantly called 'symbolic annihilation'. In her detailed analysis of media representations of iPhones, she noted the iconic formation of the iPhone as a seamless dream, co-constituted through a consistent erasure of the stories of e-waste and other environmental damages which the technology generates. Furthermore, as critical media and communication scholars remind us, the culture of digital economy rests on a deliberate and consistent decoupling of 'digital labor' (seen as immaterial, 'virtual', data-based) from environmental degradation, even though the two are deeply intertwined (Casemajor 2015; Emejulu and McGregor 2016; Fuchs 2008). Within this logic, as Fuchs (2008) states, environmental problems continue to be seen as technological, rather than social, perpetuating the myth of the 'sustainable information society' and the myth of the digital as a 'game changing' saviour of sustainability hopes.

Blindness to the material harms of digital technologies still prevails in media studies today. In particular, its English language, white and Western-centred mainstream, does not tend to examine digital communication's complicity in environmental degradation. Nor does it tend to account for the materiality of the digital and its human toll when discussing culture and communication (unless the latter is specifically focused on the environment, or conditions of digital labour). Despite decades of critical voices from feminist, post-colonial, diasporic and 'global South' scholars (Aristarkhova 2005; Gajjala and Gajjala 2008; Nakamura 2000; Oguibe 2004; Sandoval 2000), mainstream digital communication studies have largely enjoyed – and continue to enjoy! – the luxury of ignoring the deeply material consequences of the digital since such consequences mostly impact those in the Global South and the disenfranchised, racialised and colonised communities in the Global North (Chen 2016; Cubitt 2017; Emejulu and McGregor 2016; Qiu 2016).

There are, of course, a number of notable exceptions. Maxwell and Miller, for example, argued over a decade ago for the need of media studies as a field to develop 'eco-ethics' (2008). Emejulu and McGregor (2016) state that education for what they coin 'radical digital citizenship' must attend to the materiality of digital technologies and centre understanding and resisting of resource extraction and labour exploitation in the Global South, and displacement and gentrification of racialised communities in the Global North, on which the digital economy rests. Writing at around the same time, contributors to *Carbon Capitalism and Communication: Confronting Climate Crisis* (Brevini and Murdoch 2017) offer a thorough analysis of the relations between communication, capitalism and environmental degradation, including the impact of digital communication on power supplies; increased consumption and built-in obsolescence; e-waste; pollution; and rapidly growing energy demands in future projections. Another collection, entitled *Sustainable Media* (Starosielski and Walker 2016), similarly situates digital communication 'within a multiscalar resource economy of extraction, production, distribution, consumption, representation, wastage, and repurposing' (Starosielski and Walker 2016, 1). In doing so, the collection draws attention to 'slow violence' – violence out of sight – inflicted by seemingly immaterial digitality, by addressing media as extractive and drawing on energy and other resources.

And yet, even within this critical scholarship lies a paradox. For example, despite the environmental commitment of its editors and the global scope of the chapters, *Sustainable Media* is ultimately driven by a belief in the power of media as a 'means to come to terms with and help ameliorate the ecological harms produced by industrial processes' (2016, 3). Similarly, the contributors to *Carbon Capitalism and Communication: Confronting Climate Crisis* foreground the power of communication to tell the untold 'back story' of the media industry and communication devices, as well as to address climate change and confront climate denial. And even Emejulu and McGregor, pioneering in their intervention into digital citizenship as embedded in material and environmental

responsibility, place hopes for social protest, transformation and justice back onto digital communication.

Awareness rather than refusal, adjustment rather than abolition – these are so far the main organising principles in the emerging debates about environmental responsibility and digital communication. Where does that place digital disengagement? Looking at the array of discourses on environmental sustainability and the digital in a range of disciplines, our critical questions, therefore, remain whether, and how, questions of digital disengagement can enter the conversation about environmental accountability and 'eco-ethics'? How and when can we evoke the drive to 'refuse, reduce, reuse, and recycle' in relation to digital communication?

Partial Refusals

'But we cannot give up the digital entirely!' is a frequent comment we hear when speaking about our work on the environmental harms of digital communication or attending presentations and talks by others working on this topic. Comments such as this evidence the hopes invested in the transformative potentials of online communication, while also demonstrate the powerful economic, social and *affective* grip of compulsory digitality – one that we challenge throughout this book. Whether 'giving up entirely' is indeed possible is a question we cannot answer, though we do offer some thoughts on the matter in the Conclusion. In the meantime, what about environmentally motivated *partial* refusals and ways to reduce and reuse? These have long existed on the fringes of the digital economy in both the Global North and Global South, usually driven by poverty, necessity and creative survival. For example, repairing and reselling second-hand electronics, or scavenging an e-waste site and repurposing its components. Yet it is the wealthy centre of the capitalist digital economy that urgently needs to reconsider and reduce both production and consumption of digital technologies to fully address the planetary costs of our digital living.

To consider the environmental potentials of digital disengagement, we turn to several examples of partial refusal coming from the heart of the digital industry. The first is the Website Carbon Calculator, a project that addresses the need to reconfigure energy-taxing web design. The calculator illustrates how webpages can be environmentally 'dirty' and encourages developers to shift to renewable energy sources and less energy-consuming website design, and by 'inspire[ing] and educate[ing] people to create a zero carbon internet' (Wholegrain Digital n.d.c). 'How is your website impacting the planet?', we are asked when arriving at https://www.websitecarbon.com, a plain but thoughtfully designed page. At the centre of the page is an interactive element: visitors are invited to calculate the estimated carbon footprint of a website by inputting a webpage address and pressing 'calculate'. The Website Carbon Calculator provides a short rationale for doing so: 'the internet consumes a lot of electricity. 416.2TWh per year to

be precise. To give you some perspective, that's more than the entire United Kingdom. From data centres to transmission networks to the devices that we hold in our hands, it is all consuming electricity, and in turn producing carbon emissions' (Wholegrain Digital n.d.c).

In addition to the carbon calculator, the website features a call to action: 'Here's three things you can do now: Switch to a Green Host, Make your Website more efficient, Plant trees to reduce carbon impact' and a link to the business behind the project, a London based design agency called Wholegrain Digital (Wholegrain Digital n.d.a), promoting its services while also advocating for a partial digital refusal as a matter of energy accountability. The agency's co-founder, Tom Greenwood, has recently published a book describing the energy demands and carbon footprints of web design choices, and guiding the industry through alternatives that are carbon-efficient (Greenwood 2020).

Wholegrain Digital makes environmental sustainability its key mission, stating: 'if the internet was a country, it would be the world's sixth biggest polluter. As a digital agency, we are world leaders in greening the web and committed to being one of the world's most sustainable businesses'. The manifesto, created in partnership with others in the digital industry who are committed to sustainability in their practice, is movingly global in its approach:

> **We need a sustainable internet**
> We all share and use the web, just as we all share and live on this planet. This manifesto is a public declaration of a shared commitment to create a sustainable internet.
>
> The planet is experiencing unprecedented climate change and the Internet is both part of the problem and the solution. From websites to cryptocurrencies, the Internet consumes large amounts of electricity in data centres, telecoms networks, and end user devices. If the Internet was a country, it would be the 6th largest polluter in the world and is expected to grow considerably by 2030.
>
> If we embrace sustainability in our work, we can create a web that is good for people and planet. By signing this manifesto you declare your commitment to create a greener web (Wholegrain Digital n.d.b).

The manifesto is a much-needed intervention, placed right at the heart of the digital industry and challenging many of its technical principles, which are taken for granted and rarely questioned. Instead of corporate greenwashing that invests in the *appearance* of being green, the manifesto calls for actual change, on the granular level of design and programming – and comes with a vision, too. That said, Wholegrain Digital's conceptualisation of the planet seems to have no concrete people or places. Thus, while calling for environmentally responsible practices, there is no call for accountability for how the 'problem' of the internet is affecting communities around the globe in profoundly different ways. There is no reference to the extractivist logic of global digital capitalism

that serves the Global North and drains the Global South; nor any inclusion relating to the (often inhumane and literally poisonous) human labour involved in operating the internet. The web, here, is universal. As an imagined country in its own right it bears no connection to the violent geopolitics of digital toxicity. Who, then, will this partial refusal of 'dirty' web design actually benefit? Who is the unnamed inhabitant of the promised greener web? How can we make sure that the move away from 'dirty' webpages does not become yet another example of privilege-centred 'detox', attentive to the one being detoxed, but oblivious to the global injustice required to sustain it?

Another example of a partial refusal is Fairphone – a Dutch-based social enterprise established in the early 2010s to create smartphones that are durable and fixable (Qiu 2016). Fairphone's mission is premised first and foremost on the refusal to dispose – a challenge to disposability by design of the global smartphone industry.[3] But it does not stop there. Unlike the universal notion of the sustainable web discussed above, Fairphone is committed to both environmental *and* social justice. 'We care for people and planet' reads the 'Our mission' section of Fairphone's website (Fairphone n.d.c). The company strives to reduce both resource extraction and e-waste; commit to using only conflict-free raw materials; and ensure fair working conditions during phone assembly (Qiu 2016). Furthermore, whilst focusing on both the human and the environmental sustainability of producing their phones, Fairphone aims to impact the entire industry: 'From responsible material sourcing to advocating for workers' welfare, we share all our results freely and set new standards for the entire industry' (Fairphone n.d.a).

The transformative mission of Fairphone is discussed at length by Qiu (2016) in his book, *Goodbye iSlave* – a powerful and moving monograph dedicated to examining the inhumane world of digital capitalism and of Apple smartphone production in particular. For Qiu, Fairphone's vision is an example of a true challenge to the violence, corruption and lack of transparency of the global smartphone supply chain. Although a small company, unlikely to overtake, or even compete with, tech giants such as Apple, Amazon or Google, its commitment to people and the environment might hold a promise for justice in the global digital industry. 'What Fairphone set out to achieve was nothing short of creating an entire global eco-system of design, supply, assembly, and e-waste processing, while involving and engaging consumers effectively' (Qiu 2016, 162).

Here, looking at the actual and imagined users of Faiphone might be insightful. Maxwell and Miller, authors of *How Green is Your Smartphone?*, state that Fairphone is perfectly suitable for environmentally conscious 'consumers, trying to limit their carbon footprint' (2020, 114). Qiu similarly notes that the

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[3] Fairphone's refusal to dispose can be seen as an early bird of broader legal changes, such as the recent EU law of 'the right of repair', introduced in March 2021. The law dictates that electronics, including computing devices, are designed to last at least a decade rather than made to be disposed of in 2–3 years.

Fairphone community consists of mostly tech-savvy users, 'concerned about corporate responsibility' (2016, 165). And here comes a potential limit to Fairphone's transformative potential. Both statements focus on individual, and individualised, practices – which, as we have argued in previous chapters, are always in danger of appropriating and depoliticising digital refusal by reducing it to a feel-good consumer practice. Indeed, one may argue that Fairphone produces a commodity that sells progress and clear consciences without the need to do or change much (a feel-good practice at a hefty price of £400 – although substantially cheaper than an iPhone).

While celebrating initiatives such as Fairphone, we must therefore also raise several critical questions. First and foremost, can a 'fair' smartphone change the global culture of compulsory connectivity while remaining its active participant? (a sustainably made phone is still embedded in the toxic materiality of the global digital infrastructure). For Qiu, one of the most celebrated features of Fairphone is its preinstalled disconnection app, EnjoySomePeace, which puts the phone on silent and disconnects it from the internet for a chosen period. 'An abolitionist timepiece this is, simple and functional, in the shape of a well-designed app', he writes (2016, 165). Is this indeed a true tool of digital abolition – a phone that has a disconnection app built into it – or yet another form of digital solutionism that we have discussed extensively in previous chapters?

Secondly, can Faiphone empower global solidarity and challenge the North-South divide and its racial injustice when it comes to its refusal to dispose? This is an ongoing mission, one for which both the company and its users are responsible. Here, the images displayed in the Fairphone online shop (Fairphone n.d.b) are quite telling. One of the images shows a young Black person's hands, palms up, holding a small pile of minerals. Another image shows the phone's screen, displaying photos of two young white women – mostly selfies, but also some serene landscapes. On the one hand, such images, especially when placed next to each other, document *and* normalise the racialised global division of labour/consumption, by celebrating it – as long as it is 'fair'. Black people are working outside, mining rare metals to make the phone, while white people are enjoying leisurely outdoor time with friends, and capturing it on their (ethically manufactured) phone. Yet, the page also contains an important *different* image of repair and reassembly, which challenges both the distinction between labour and consumption *and* its racial and geopolitical mapping. We see the hands of a young white person, in what looks like a home or a school, taking the phone apart to repair or replace its components. Not a repair shop or an assembly line labourer, but a geographically and financially privileged phone user, taking the responsibility of care and repair. Against the appropriation of digital disengagement into Western-centred greenwashing and neoliberal individual betterment, projects such as Fairphone can and should become catalysts of 'radical digital citizenship' (Emejulu and McGregor 2016)– a practice that is both accountable to the material harms of the digital inflicted on humans and the environment and committed to actively and continuously changing it.

The Pandemic and Beyond

When the UK, like many other countries around the world, introduced quarantine and social distancing measures in March 2020 due to Covid-19, the lion's share of people's everyday activities moved online. This inadvertently created a profound yet ambiguous impact on the environment. On the one hand, the sudden drop in aviation and motor travel, and the shift to remote working, led to an unprecedented reduction of greenhouse gas emissions and dramatically improved air quality, albeit only temporarily (Air Quality Expert Group 2020; Le Quéré et al. 2020; Monks 2020). At the same time, the increase in video-conferencing, streaming and cloud storage for personal and professional use has created strenuous demands on the capacity limits of broadband and mobile services (Marks 2020). Tellingly, in March 2020 the European Commission asked streaming companies to place bandwidth limitations on their activities to alleviate the strain and to protect communication infrastructures (BBC News 2020). However, these limitations were minimal, with most streaming companies using the increased demand for video streaming to justify their growth, despite the spike in their carbon footprint (Marks 2020).

The 'green imaginaries' in the early months of the pandemic took an interesting turn. For many people, unable to travel or even leave their dwellings during lockdowns, digital communication became a site of newly formed relations with landscapes and animals, through a wealth of 'virtual visits', live streaming and other forms of digital spectatorship and interactions (see, for example, Schultz-Figueroa 2020; Turnbull et al. 2020). Although a new phenomenon in terms of the scale of quarantine, closures and isolation, the mobilisation of digital tools to connect with nature resonates strongly with the digital solutionism of sustainability education (Dogbey et al. 2014; Giusti et al. 2012; Howard 2015; Kalogiannakis and Papadakis 2017; Schaal and Lude 2015), where apps, devices and games act as key mediators in connecting to one's environment.

But pandemic green imaginaries did not stop there. In the midst of a general rise of fake news and disinformation related to the pandemic – what was described by many as the 'Covid-19 infodemic' (World Health Organization 2020) – one could also see the rise of an 'environmental infodemic' (Kinefuchi 2020). This included news and social media stories of 'healing nature', which presented a mixture of true and false information about the reduction of air and water pollution and improved conditions for wildlife – a particularly viral example was a hoax regarding sightings of swans and dolphins in Venice's canals. As Kinefuchi (2020) aptly argued, such stories and their socio-political impact were deeply problematic, firstly because such stories promote the idea that 'nature' can heal fast (undermining the vast extent and scope of the current environmental crisis). Secondly, the environmental infodemic on social media juxtaposed nature with people, where humans need to disappear in order for nature to 'heal'. Allison (2020) has further demonstrated that the rise of

environmental fake news in the early months of the pandemic was weaponised by eco-fascists – far-right environmentalists that merge ecological concerns with white supremacy and ethnonationalism. Such a coalition, as Haritaworn reminds us, is far from new: 'as environmental justice activists have long argued, the fantasy of pristine landscapes freed of humans lends itself to an eco-fascist imaginary (Brown 2020; Gosine and Teelucksingh 2008). In this greenwashed variation on White supremacy, nature recovers by ridding itself of humans, but never all equally' (2020, 12.4: citations in original text).

Indeed, inequality, racialisation and injustice are at the heart of pandemic digitalities and their material impacts on *both* human and non-human life. Platform capitalism has expanded and flourished since the start of the pandemic – due to the sharp rise in the routine use of digital communication in every sphere of everyday life, the use of AI and robotics for many essential tasks, and, of course, the unprecedented scale of adopting contact tracing and other related technologies of public health management and surveillance. All of these have created, and continue to create, a substantial strain on resources, infrastructures and energy. The rapid expansion of digital infrastructure and technologies, such as mobile phones, broadband and data farms, exposed their – now deemed 'essential' – workers to both the ruthlessness of global capitalism, and the Covid-19 virus itself (Brazier 2020). The rising use of digital consumption is intimately tied to the rise of digital labour and its already inhumane conditions (Brevini 2022; Cao 2020; Khreiche 2020; Qiu 2016). The same is true for the toxicity of rapidly growing e-waste: devices and gadgets, disposable by design, are poisoning lands and communities, already devastated by racism, settler-colonialism, imperialism, and their extractive economies of profit before people. As Aouragh et al. (2020) remind us, racial capitalism is central to our understanding of how extractive infrastructures of both resources and human labour shape the invisible violence of pandemic digitisation, in particular for racialised workers and subaltern communities in both the Global North and the Global South.

Conclusion: Digital Disengagement as Radical Environmental Responsibility

This chapter was driven by the following question: can digital disengagement bring a positive environmental change? We began answering it by looking at the idea of 'digital detox' as an escape to nature, where excessive digitisation was imagined as toxic, whereas the natural world was depicted as simultaneously clean and cleansing. Reading this imaginary against the grain, this chapter showed that, despite its symbolic orientation towards nature, digital detox discourse carries no actual environmental agenda, and no account of the material *environmental* toxicity of the digital. This toxicity is different from the metaphorical notion of 'toxic' digital habits, and is about the physical destruction of land, water, air, animal habitats and human health. Digital environmental toxicity is based on 'resource extraction and labour exploitation' (Emejulu

and McGregor 2016, 134), which is unevenly distributed and mostly affects communities in the Global South. And yet, these are invisibilised and ignored. Instead, digital detox promotes and centres wealthy, Western and often imperialist individual wellness that is symbolically, physically and infrastructurally extractivist (Aouragh et al. 2020), just like the digital economy itself.

In searching for digital disengagement within the field of environmental sustainability, we have shown that both the academic and industry discourses on sustainability are ultimately based on digital solutionism. The notion of 'digital solutionism', discussed extensively throughout the book, has been particularly useful in this chapter to explain how digital technology comes to be perceived and promoted as an environmental saviour, while cleansed from recognition of, and accountability for, its own environmental harms. In this context, could the digital industry ever shift to reduce, reuse, recycle – and possibly even refuse? We searched for answers in several examples of partial digital refusal – a phone that refuses human and material disposability, and web design that refuses carbon heavy internet consumption. These examples, we argued, were limited in their impact, and yet they can and should become catalysts for digital material accountability that is committed to both human life and the planet.

As in previous chapters, this final one ended with the Covid-19 pandemic. We started writing this chapter in summer 2020 when much of the mainstream view was that pandemic digitality was environmentally beneficial (Arora et al. 2020; Henriques 2020; Watts 2020).[4] At the same time, a number of critical voices began emerging, including scholars who have long worked on the extractivist materiality of the digital, and were now watching it accelerate on an unprecedented scale. As we are entering the third year of the pandemic (at the time of this book's production, spring 2022), the question of the *materiality* of the digital – including its environmental harms – is crucial. Environmentally motivated digital disengagement, though, seems as imperative as it is inconceivable. The atmosphere created by an ongoing global health crisis acts as a catalyst for cementing digital solutionism, with media corporations, tech giants and the entire platform economy on standby to grab the gain from the new digital normal. Not surprisingly, hearts and minds are expected to follow. It is no wonder that bringing up digital disengagement in the context of pandemic communication usually triggers arguments about access and the digital divide, which in turn is used to shut down consideration of the possibility of digital reduction, as if the call to reduce digital consumption is directed at those who are excluded, rather than at those who are digitally abundant. Asking to reconsider the normalised reliance on digital platforms for every aspect of (post) pandemic life is often met with defensive fury. And a suggestion that more digital tracking tools may not necessarily be a panacea for the global health crisis is seen as blasphemy.

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[4] While some rapid response research on the topic is currently taking place, it is in the early stages and would require more time.

At the same time, the immediacy of the ongoing Covid-19 crisis acts as a tool for obfuscating the racial and global nature of environmental injustice. It is crucial to remember that it is the high-income countries that are the lead culprits of digitisation's environmental toll. The question of environmentally oriented digital disengagement is therefore, first and foremost, a geopolitical one. It is not about blocking access to digital tools and technologies for those on the disenfranchised side of the digital divide. Rather, it is about the responsibility of the privileged and the over-digitally-saturated. It is the 'first world'/Global North, high-income countries that must act to reduce the harms of digital (and other) overconsumption, for example, by turning to 'digital sobriety' and 'lean ICT' – technology design and use that minimises energy consumption (Marks 2020, The Shift Project 2019). Digital disengagement, embedded in environmental justice that is also a racial justice, will only be possible if we turn away not only from the extractivist world of digital solutionism, but also from individualised, Western-centred and whitewashed notions of safety and wellness *and* eco-fascist environmentalism. Digital disengagement must become a form of collective turn against the harms of the digital world we are living in. The call for radical digital citizenship (Emejulu and McGregor's, 2016) – and radical digital environmental responsibility – is now more urgent than ever.

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Conclusion: Paradoxes and the Elastic Continuum of Digital Disengagement

So *Is* There an Opt-Out Button?

Throughout this book, in our search for the opt-out button, we made a range of interdisciplinary interventions that explore the concept of digital disengagement within the contexts of health, citizenship, education, consumption, labour and the environment. The various chapters within this book have shown the ways in which efforts to opt out across most areas of life are embedded within a socio-cultural, economic, infrastructural and techno-practical logic of social media and digital solutionism. This means that many opt-out efforts ultimately fail to offer any transformative challenge to the world of compulsory digitality, and instead, only support and sustain it as the fundamental central point of reference, mediation and return. Further, and crucially, the shrinking or disappearing spaces of opt-out makes digital disengagement a privilege reserved for the select few, whilst costing others their livelihood, freedom and even lives.

Part I of this book explored how the legal, social and technical spaces of digital disengagement and opting out are shrinking, becoming impossible or severely limited, and asked what are the individual and collective implications of this shrinkage? In Chapter 1, for example, we argued that the appisation of health services turns smartphone apps – the 'mundane software' (Morris and Murray 2018, 7) that has penetrated all aspects of everyday techno-sociality – into seductive data traps, which lure in their users with the promise of effective, affordable and instant health services available at their fingertips. At the same time, such apps also create a network of data sharing and data mining, which can be complex and cumbersome for the individual to understand or resist. We showed that apps' infringement of privacy and data rights is not always communicated clearly and fully; nor is it necessarily comprehended by the health care

providers who may advocate for such apps. Most recently, the coronavirus pandemic and the resultant rapid adoption of contact tracing apps has cemented a particular, and rather limited, understanding of apps' data grabbing, often seen through the lens of centralised state power versus individual control of one's Covid-19 related information, with the role of platform power and the global data economy and their spin-off profits often remaining unacknowledged in public debates. Finally, we suggested that while existing legal frameworks, such as GDPR, are a welcome development in the field of digital rights, their impact is ambiguous and uncertain, for while they protect *individual* data rights, the data economy of apps traffics in the collective value of accumulated information. Thus, we argued that it is imperative that digital disengagement is based on collective data justice, rather than individual data rights.

Benjamin, in her book, *Race After Technology: Abolitionist Tools for the New Jim Code* (2019), makes a similar critique of GDPR and its individualised focus, as it fails to address the systemic racist and other discriminatory biases of digital data – the 'New Jim Code'. The protection of individual digital rights by GDPR stops when it comes to 'crime and security', frameworks that are inherently racialised, criminalising Black and POC (People of Colour) communities. 'What looks like an expansion of data rights for individuals rests on the ability of governments to revoke those rights from anyone deemed a public threat' (2019, 188), notes Benjamin, in her insightful argument about systemic digital injustice that cannot be remedied individually. In our own analysis of digital rights and digital justice, in Chapter 2 we turned to the field of digital citizenship, public services and AI-led governance. Here we documented the ways in which UK public services have shifted to being 'digital by default', a process known as e-government. E-government prioritises online services, connecting databases and deploying AI for a range of decision-making processes, while also speaking the language of voluntary digital engagement and connectivity, promising streamlined services and the freedom to choose how to engage. At the same time, digital encroachment of combined databases, the use of discriminatory data and other racist tech, and the black-boxing of AI-led decision-making processes, in particular in areas of dire importance such as welfare services or immigration and settlement, makes it abundantly clear that any possibility to disengage is tied to national privilege (citizenship), racial privilege (whiteness), and class and wealth privilege (not depending on state support for survival). We demonstrated that the growing adoption of algorithms for decision-making processes in the UK serves as a case of 'Emperor's New Clothes' for long-held and long-lasting forms of state cruelty in areas such as racial profiling and racial policing, the war on the poor, and border control. While offering a more convenient or streamlined service to those more privileged – who are also less dependent on the state and have more opportunities to escape digital-by-default governance – it leaves no room for opting out to those whose lives are most dependent on violent techno-governmentality. We

concluded the chapter by urging for the necessity of alternatives that are grounded in justice-led digital abolition and grassroot digital self-defence.

In Chapter 3, we focused on the ways in which the educational sector, within the context of Higher Education in the UK, is increasingly implementing digital tools and systems in an effort to supposedly improve efficiency, access and pedagogical engagement. We argued that this general move towards blended and e-learning results in a simultaneous corporatisation and platformisation of education. It turns the teaching/learning subject into digital subjects embedded within a neoliberal system governed by both a Big Data and social media logic. We critiqued how digital engagement and pedagogical engagement are collapsed, where the pedagogical subject must self-monitor and be monitored *digitally*, and, most problematically, be measured through a Big Data and social media logic that values quantified numerical impacts of digital performance (e.g., number of recorded video 'likes', or the h-index impact factor). 'Failure' to comply and perform numerically through digitality becomes equated with 'failure' to learn and teach. Opting out of the digital thus becomes difficult – if not impossible – as it has become so naturalised with the educator's job. Finally, we problematised the ways in which the conflation of the pedagogical and digital subject represents a wider issue concerning the persistence of data, where the human subject is forever divorced from, but also wedded to, their 'data doubles', which keep performing and existing long after the human subject may have opted out of digitality. We demonstrated that, rather than resulting in *more* control of one's data – how it is collected, shared and used, whether it is kept or destroyed, and how it can be used and misused – the process of digital disengagement creates a further decoupling of the individual from their data, leading to *less* control over its 'afterlife'. We called this process a decoupling of data selves from their subjects, whose 'data doubles' continue their digital lives regardless – and despite of – the subject's efforts to resist or refuse compulsory digitality.

Part II of this book documented the many forms of digital disengagement, which are co-opted into the capitalist loop of never-ending digitality and digital solutionism. Chapter 4, for example, explored one of the most explicitly capitalist-driven loops in the form of a cyclic double-bind involving the self-feeding consumer and labourer of digital disengagement. Here, we described how the individual, trying to take a break from the digital, is forever trapped in a self-perpetuating cycle where the problem of one's digital over-consumption is 'solved' not through the practice, but the *consumption*, of digital disengagement. We analysed this cycle through examples of digital detox holidays and initiatives such as National Unplugging Days. These require further digital engagement (through digital performances, social networking, or digital admin), are temporary by necessity and/or require resources whether financial, temporal or otherwise. As such, the consumer of digital disengagement must not only pay for their own digital disengagement with resources earned as a

(digital) labourer, but they must also return back to the 'normality' and normativity of the digital from their consumer experience of disengagement as 'newly refreshed' labourers, only to start the cycle again. Here, opt-out becomes a form of self-entrapment, where digital disengagement represents an empty consumer sign that is self-fulfilling and self-perpetuating in ways that support and maintain the dominant capitalist and neoliberal structures of digitality.

Chapter 5 explored the question of the sheer amount of labour needed in the whole process of digital disengagement and then re-engagement back into the normative digital, which ultimately always forms the centre, starting and end point of digital (dis)engagement. Through our critique of digital apps that supposedly 'solve' the problem of over-digitality, we revealed the ways in which the management of these apps require various forms of digital labour that are often gendered through discourses of affective care: from managing the device, managing the data, and ultimately managing the self and the family. Furthermore, we also explored the labour needed in 'returning back to normal', in the form of data simply 'waiting' or 'continuing' whilst the pause button had been hit. This, once again, ties digital disengagement to questions of 'data doubles' who continue and persist beyond the opt-out. We ended the chapter by looking at changes in digital labour, and the shifting and increasing visibility of digital privilege, during the Covid-19 pandemic. By exploring precarious and platform labour, we also addressed the racialised and classed aspects of digital disengagement. We argued that opting out is a privilege resting upon the unequal distribution of digital and spatio-temporal capital, only affordable to some and unattainable to others.

Concluding the discussion of digital solutionism and the trap of digitality, Chapter 6 turned to the materiality of the digital, and to its environmental harms. We showed that despite the widely available evidence of environmental damage brought on by the digital economy, due to mining and extraction, e-waste, high energy consumption and carbon emissions of data-driven activities, and toxic and exploitative labour conditions, academic and policy discourses on environmental sustainability continue to glorify digital technologies as environmental saviours and are unwilling to consider environmentally motivated digital disengagement. We then discussed several imaginaries and discourses that do put forward such a motivation. We have demonstrated that they range from semiotic extractivism and greenwashing that lacks any actual environmental commitment, to racialised colonial fantasies of exotic 'non-digital' lands, devoid of actual people. We then turned to several examples of partial refusals from within the digital industry – a refusal of 'dirty' web design that is high in energy consumption and carbon emissions, and a refusal of digital disposability. We showed that such initiatives have a real transformative potential, but can often sustain and cement our reliance on the capitalist digital economy instead of refusing it. Examining the prevalence of digital solutionism, our analysis turned to the necessity of critical racial and decolonial analyses of

eco-fascism. We argued that it is imperative to conceive digital environmental justice as a form of material accountability that resists racial capitalism and extractive digital economies and is committed to both human and non-human life, without privileging one over the other.

Beyond Disconnection

Throughout this book, we re-conceptualised digital disengagement in ways that move beyond current debates within the field of Disconnection Studies, which approaches the subject as mostly about disengaging from social media platforms, and primarily as consisting of individual practices and experiences of disconnection. For example, as we explored in Chapters 2 and 3 in relation to the ways in which the digital forces interaction from the user – whether the 'user' is a citizen or an educational subject – in very particular and predetermined ways, both engagement and disengagement are shaped by the *social mediatisation* of digital life. This is not just a practice of communicating via social media, but a technology of commodification, forced connectivity and the obfuscation of political and economic power. Social mediatisation, as we showed, creeps in through the informality of the vernacular language of 'friending', 'liking' and 'following', now used not only by individual users but by state bodies and governmental services. It enters our life through the micro-celebrity logic of online performance and self-promotion, now shaping university teaching and learning. It cements its presence through the corporate logic of never-ending quantification and tracking, where governmentality and surveillance capitalism are now consistently masquerading as performances and measurers of care, success and knowledge.

In addition, we argued that most research on the topic of disconnection and opt-out so far focuses on human agency, individual human rights and human practices, rarely considering disconnection through the lens of power and politics, and rarely considering the agency of the technologies themselves. As we highlighted throughout the book, these technologies inhabit multiple networked ecosystems of digitality and platform synchronicity that are simultaneously heavily regulated and open to loopholes and violations. To address this complexity, we explored digital disengagement and opt-out as a field of legal, socio-political and technical contestations. We argued that neither individual choices nor legal frameworks protecting individual rights are enough to understand and challenge the horizons of opt-out as they change and evolve. Instead, we need to pay attention to the power and agency of the technologies themselves; their discriminatory design; their networked data behaviours within various techno-social ecologies; their global circulation that often moves through legislative loopholes; and their 'black-boxed' nature, where automated decisions are often hard to understand and audit, and even harder to challenge.

Today, data is aggregated, analysed and kept by multiple (yet interconnected) databases, locally and globally; algorithms determine decisions regardless of whether one agreed to be algorithmically analysed or not; and 'smart things' are everywhere, and always already networked. In such a context, while digital technologies are often presented as individually empowering, as absolutely necessary, and as the best solutions to all problems, one's options of escaping the digital – in shared, private, as well as in public spaces, in education and healthcare, in public services and border controls – are narrowing, or are becoming incredibly time-consuming and difficult. For example, withdrawing one's data collected by apps demands navigating legal documents, such as various privacy policies by not just apps but also the third parties they work with; filling forms; submitting requests; checking progress; and verifying which data is still kept, where and for how long. Digital disengagement thus becomes a self-generated burden. To ease the process, the same burdensome digital technologies come to the rescue, by offering more digital tools, enabling one to be 'consciously digital' (Dedyukhina 2015), to 'digitally declutter' (Graham-Smith 2017), to track one's screen time or one's spyware and so on. In some respect, it may seem that there is literally no digital disengagement without digital solutionism. Furthermore, it appears that being able to detangle oneself from the world of networked digitality and datafication is impossible. Returning to Karppi's warning, voiced over a decade ago, regarding the impossibility of Facebook suicide (2011), this book calls attention to how the corporatised, neoliberal world of digital connectivity and platform-based services traffics not merely in data, but in data doubles. Ghosts, phantom subjects, digital golems – their diligent digital labour continues to serve the economy whether their human subjects want them to or not, or rather, precisely when their subjects have left, having digitally disengaged. Or died. In other words, although short breaks from digitality are both encouraged and commodified, actual opt-outs are both hard to imagine and difficult to execute.

In the Introduction, we argued that digital disengagement is inherently paradoxical and operates as an elastic continuum. In this final chapter, we further consider how paradoxes of digital disengagement relate to questions of co-optation and resistance, culture and economy, power and powerlessness. We then show that the elastic continuum of digital disengagement shrinks and expands spaces and times of digitality and refusal according to privilege – both predetermined and acquired. Digital disengagement itself becomes a capital, intertwined with structures of temporality, sovereignty and freedom. As we consider the unequal distribution of digital disengagement, we argue that it is imperative to shift the discussion from the universal notions of connection/disconnection to the politically specific and contextualised, and from individual opportunities and practices to collective accountability and digital justice. We conclude this book by looking at what might remain when, or if, we leave the digital behind, and what kind of collective opt-out buttons can offer us alternative futures.

Revisiting Paradoxes of Digital Disengagement:
Resistance, Compulsory Connectivity and Co-optation

In their discussion of mediated political action, Casemajor et al. write about the paradox of online non-participation as a form of resistance. They note that '[a] conclusive exit from the digital spheres entirely, in an ultimate bid to resist surveillance or capture, might also pre-emptively deny any possibility of an internal engagement which might positively configure technologies toward desirable forms of participation' (2015, 863). Such a stance is one that often forms the basis for critiques against digital disengagement in its broad range of manifestations, from temporary disconnections to long-term or permanent deletion of accounts, from sabotage of platforms to collective days of unplugging, all of which are seen as a missed opportunity to engage *differently* with the digital, transforming its pitfalls. Concerns about 'missing out' on more promising forms of digital participation, or on the opportunities to change digital cultures from within are often linked to a more philosophical question of 'what form of free will can be exercised by not participating' (Casemajor et al. 2015, 864). At the heart of such an approach, however, lies the naturalisation of engagement as digital, which is precisely what our book is challenging. Our critical reading of how digital technologies are repeatedly conflated with sociality, social participation and even resistance, are offered here to dismantle assumptions about the inherently positive potentiality of digital technologies.

Beyond concern with missing an opportunity to resist the digital from within, digital disengagement operates through another paradox: the impossibility to disconnect beyond the digital; or rather, a circular return to it. As Hesselberth has aptly noted, the paradox of disconnectivity is that it does not exist without connectivity (2018, 1995). This is what van Dijck (2013) called the normative 'culture of connectivity', where even disconnection itself is practiced through a form of connection; and what Mejias, in his critical discussion of the sociality of digital networks has coined 'nodocentrism' – a 'pervasive application of the network as a model or template for organising society' (2013, 9). But the key aspect of the circular return, as we have shown, is not just about a cultural/social expectation to connect, rather, it is the digital labour (Fuchs 2014; Scholz 2013) involved in online performances of disconnection. The self-promoting disengager who returns online to tell the story of having unplugged, is providing free content for the website which promotes disengagement. User generated content (e.g., selfies, stories, comments, testimonies, pledges) on such websites mean that digital disengagement is not only a temporary technopractice, from which one has to come back and report, it is also a resource, a labour force whose ongoing work is essential to sustaining the very world of digitality one is trying to oppose. With no selfies, stories, comments and pledges, there would be no followers, no sharers and no visitors to these websites. Without the social media users – even those talking relentlessly about the need to leave – there is no data that feeds platform capitalism (Srnicek 2017; Codagnone et al. 2018).

It is by understanding digital disengagement as embedded in the capitalist, neoliberal and data hungry mode of digital communication as dependent on users/prosumers' (Ritzer 2015; Ritzer and Jurgenson 2010) ongoing labour of data and content generation that another paradox becomes clearer: the persistent co-optation of digital withdrawal into circuits of digitality and digital dependency, precisely by the very digital structures one is trying to leave. The co-optation of disengagement into digital solutionism cements our reliance on the digital, not merely to 'solve' every possible problem, but specifically to address problems brought on by the digital itself. At the same time, a reliance on digital solutions co-exists with the process of rapid shrinkage of opt-out spaces, as all our chapters have demonstrated. This makes compulsory digitality and digital dependency persuasive, pervasive and evasive, turning opt-out into a commodity, a capital and a privilege. As part of the process, the very idea of 'disengagement' is becoming naturalised as necessarily digital. Due to the all-encompassing digital processes discussed in this book – from platformisation, social mediatisation to datafication – disengagement from any social, economic, political and cultural sphere becomes inevitably and increasingly about *digital* disengagement. We thus argue that it is necessary to dismantle and destabilise the very notion of digital disengagement and opt-out itself, and to question what forms of inequalities arise from their own paradoxical digital reliance. Such issues bring us back, full circle, to a concept we introduced at the beginning of this book: digital disengagement as an elastic continuum.

An Elastic Continuum Revisited: Expanding and Shrinking Possibilities of Opt-Out

As we discussed in the Introduction, digital disengagement is not necessarily dichotomous – connected/disconnected or networked/unnetworked. Nor is it unidirectional– engaged and then disengaged; opted in and then out. Rather, digital disengagement is an elastic continuum that encompasses a broad range of contexts, practices, motivations and affordances. Many of these are addressed extensively in current scholarship on disconnection and opt-out: leaving to return, abandoning one platform but migrating to another, establishing time limits on device use, or even reorganising the presence of the digital in one's life. The wealth of empirical studies on disconnective practices that has mushroomed in recent years attests to the complexity and flexibility of our relationship with technologies, where engagement and disengagement are structured, but not fully determined, by the technological.[1] The elasticity of digital

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[1]   Arriving independently at similar conclusions, in her overview of scholarship on disconnection and refusal, Hesselberth argues that 'the gesture toward disconnectivity is not so much about the refusal or dislike of "technology," but rather "operates as an affirmative force that holds the capacity for transformation" (Rossiter 2004, 21)' (2018, 2007: citation in original).

disengagement is multi-dimensional because each instance of disengagement is located at various points of time and space, linking our off- and on-line practices to various socio-technical environments and platform architectures, always in relation to multiple human and non-human actors.

The seeming dichotomy of co-optation and refusal is elastic, too. As we demonstrated throughout this book, practices of digital disengagement are never absolute – in fact, digitality relies upon on them *not* to be so, to ensure a 'return' to the digital – and almost always rely on a partial, co-opted and/or negotiated act of refusal. One of the questions brought up by this partiality is whether such an opt-out is ever effective. For example, we seriously considered – and doubted – forms of partial digital disengagement in Chapter 6, when discussing environmental concerns and alternative practices in the digital industry. Can these forms of partial refusal, embedded in ideas of corporate responsibility, sustainable business and fair labour, offer any real alternatives to the environmental and human extractivism of digital capitalism? Or are they complicit in sustaining it, by making it appear better and thereby masking its violence? Similarly, in considering challenges to digital public services in Chapter 2, we pointed out that even the alternatives such as algorithmic accountability bear complicity in accepting and reaffirming the use of digital technologies by governments and corporations.

The elastic continuum, here, is not merely one of degrees of refusal – how much time was spent off-line, how much e-waste was reduced, or how transparent can and should algorithmic decision-making be. Rather, it is about the condition where protest, resistance, compliance and co-optation co-exist, often in ways that are not immediately apparent. For example, in Chapters 4 and 5, we explored the cyclic double-bind of the labourer-consumer in various examples of digital detox and appified management of one's 'digital time'. We showed that digital disengagement is less about either/or, on/off or opt out/opt in dualisms, but instead, is embedded within socio-cultural, financial and infrastructural systems of digital seduction and oppression. A digital detox is an elastic expansion of compulsory connectivity, seductively allowing a temporary escape from its grip. It is tempting for it simultaneously promises a break from the oppressive world of digital work, and a transformative return to it. The elasticity is what allows break outs and returns to remain cyclic, forming an infinitely self-perpetuating loop. *This* is the trap of digital solutionism, as it ensures the cycle of digital engagement-disengagement-re-engagement is forever repeated and anchored firmly in obligatory digitality.

The elasticity of digitality and digital disengagement has become particularly apparent in the wake of the Covid-19 pandemic, which has laid bare the magnitude of existing social inequalities with regards to both connection and disconnection – as earlier scholars in the field remind us, it takes privilege to opt out (Portwood-Stacer 2014; Marwick 2011; Scholz 2013). New pandemic digitalities have made visible the previously less noticeable *economy* of digital disengagement by bringing into focus the question of resources – financial, spatial and temporal – needed to opt out. Digital disengagement might *appear* free – indeed, a digital detox app

might be 'free' (notwithstanding how we 'pay' with our own user and personal data), or the time we decide to spend 'unplugged' from the internet might be 'free'. However, in order to exercise that freedom, the digital disengager needs the appropriate and expendable resources, firstly, to create a space-time of opt-out without serious financial and social repercussions; and secondly, have the means to delegate the otherwise unattended labour – digital or otherwise – to other people and/or objects. Without such resources an opt-out is impossible. It is here that Wajcman's work on the 'acceleration of life in digital capitalism' (Wajcman 2015) is particularly useful, when she places time sovereignty – one's ability to choose how to allocate time – at the centre of social justice. Wajcman reminds us that the experience of time pressure is not determined by the technology itself, and thus is not solvable by means of a digital detox of a reduction of screen time. Rather, an individual must be 'time rich' (Wajcman 2015) – a temporal capital that is in a direct relationship with the economic one: if you can pay for a service then you have the time to use that service of digital disengagement.

The capitalisation of digital disengagement was exacerbated during the pandemic when lockdowns and other social distancing measures were introduced to contain the spread of Covid-19. The relations between temporal (and spatial) sovereignty, (in)justice and life and death became more apparent than ever; in the words of Chan, 'the race towards digital productivity during the pandemic was buoyed by new and existing structures of labour inequality' (2020, 13.5). Who had the spatio-temporal and practical means to choose to 'stay home to save lives', as the UK public information campaign put it? Who, on the other hand, was burdened with more digital labour outside of the safe confines of the home? Those most 'digitally overworked' and 'Zoom fatigued' – and thus most loudly seeking a relief from the digital – were also the more privileged, able to remain at home, safely shielded from the virus, while continuing to work and maintain financial stability. By contrast, the precarious workers and platform labourers, who are disproportionately racialised minorities and migrants (Aouragh et al. 2020), had neither safety from the virus, nor the time or ability to disengage from the digital, on which their livelihood depended. Their dependency on apps and platforms did not offer the same advantages that digital connectivity brought to those staying at home, whether in the form of access to digital education for children, or online leisure and wellbeing activities that had mushroomed since the start of the pandemic. And the institutional and corporate remedies to digital saturation – and more specifically to the digital saturation of temporality – added insult to injury. It was only because of the pandemic, when remote working and excessive digitality began affecting office workers and senior managers on a sudden and massive scale, that various accessibility solutions, and health and wellbeing services, emerged (including those addressing the need to reduce and regulate screen time). Few, if any of these solutions and services were available before the pandemic to support precarious, low paid workers and platform labourers.

As the first year of the pandemic made explicit, the continuum of digital disengagement cannot be analysed universally without attention to privilege and marginality, social power/powerlessness and oppression. It is privilege that can make the elasticity of disengagement more *flexible and malleable*, offering respite from compulsory digitality. It is privilege that can transform disconnection into *more free time*. Without resources and social power, the elasticity is far less forgiving – in fact, it can be deadly. For some, the continuum of digital disengagement can be a path to creative flexibility and potentiality. But for others, it is an evasive, yet powerful and infinitely adaptable trap. This is because connectivity's violent hold has limitless capacity to masquerade, escaping regulation and accountability in a world where injustice, discrimination and exploitation are married to compulsory digitality.

Opt-Out as a Path Towards Collective Justice

The social, political, economic, legal and cultural structures of compulsory digitality – from 'digital by default' policies to the social pressure to participate in online sociality – may only ever allow partial opt-outs. These can even stretch elastically into entire 'cultures of disconnectivity' and 'disconnection as lifestyle politics' (Kaun and Treré 2020); and develop whole markets of 'disconnective commodities' (Karppi et al. 2021). But what about systemic exits? Throughout the book we have argued that one of the few ways in which we can attempt to systemically denaturalise the digital is by centralising collective digital justice and developing alternatives from below – as, for instance, the example of digital self-defence activism, discussed in Chapter 2 in the context of the systemic bias of discriminatory tech and racialised surveillance. We have shown that, while supporting digital freedom and safety, the logic of digital self-defence is radically different from that of cybersecurity – working from below rather than from above, and prioritising non-hierarchical, non-militarised solidarity.

In recent years, we are seeing more and more examples of such bottom-up organising, offering opt-out as a form of protest by those most disempowered, rather than as a form of commodity for the privileged. Many of these emerge in the sphere of gig work, such as Deliveroo couriers and Uber drivers, where oppression is built into, and operates through, constant connectivity (Scholz 2016). Indeed, many gig workers are using the idea of logging out as a form of resistance. It is a tool that is equally powerful and difficult to execute collectively, due to gig workers' structural isolation: when they work for an algorithm, it is nearly impossible to meet other drivers and unionise. Some find creative ways around the system's digital cruelty, as for example described by Woodcock (2017) in his ethnography of Develiroo and Uber drivers, who, by placing food orders via the app or by ordering rides, were able to meet up with other drivers and couriers. During the Deliveroo workers strike in London in 2016, which was supported by Uber drivers, 'log out' was the protestors' actual

chant on their spontaneous picket line. Woodcock, an activist academic and ethnographer of gig economy and workers' resistance, described the chant as 'the "gig economy" equivalent of downing tools' (Woodcock 2017, n.p.).

Logging out can be more than just a chant. Many Uber drivers, for example, try to log out to await a surge in price – and can even do so collectively to artificially inflate fees by creating a 'lack' of drivers, which then automatically signals higher demand and higher prices. Uber, in turn, defines such log outs as 'fraud' in its 'Community Guidelines', and automatically punishes anyone logging out during shifts. Defining logging out as a violation of contract and a basis for dismissal makes it a worker's right and places it at the centre of the fight for justice in the platform economy. Uber's 'robo-firing' – an algorithmic process which does not disclose which data is being collected and used by the platform about its workers – was collectively challenged by drivers from the UK and the Netherlands (Bernal 2020). This was one of several cases where employment law and data protection laws, such as GDPR, were deployed to push back against workplace digitality and digital oppression. Tactical refusal, selective engagement and defection are indeed becoming key tools of the 'uber-worked and underpaid' gig workers (Scholz 2016).

Equally important is the organised resistance by those who are developing, building and managing such digital tools of oppression. One beautiful example of such resistance is a solidarity of US based tech workers who published their 'neveragain' pledge in the early days of Trump's administration:

> We, the undersigned, are employees of tech organizations and companies based in the United States. We are engineers, designers, business executives, and others whose jobs include managing or processing data about people. We are choosing to stand in solidarity with Muslim Americans, immigrants, and all people whose lives and livelihoods are threatened by the incoming administration's proposed data collection policies. We refuse to build a database of people based on their Constitutionally-protected religious beliefs. We refuse to facilitate mass deportations of people the government believes to be undesirable (Neveragain.tech n.d.).

Further details of their pledge include the refusal 'to participate in the creation of databases of identifying information for the United States government to target individuals based on race, religion, or national origin'; advocacy to minimise the collection and retention of data that 'would facilitate ethnic or religious targeting' and scale back existing attempts to do so; seeking legal processes and support for the vulnerable; and, when unable to prevent unethical practices, speaking out and whistleblowing.

Actions such as this are key to understanding the responsibilities of those who are privileged and empowered by the digital economy and are complicit in

its operation. While the possibilities of disengagement and refusal are rapidly shrinking for those most vulnerable to digital violence, a refusal to build and sustain tools of digital oppression is more important than ever. Furthermore, a pledge by tech activists also reminds us, that while digital oppression persists, refusal and disconnection, even when done collectively, are not enough. It is within this context that we need to understand, embrace and support activist, policy, legal and academic initiatives that address digital injustice structurally and collectively, via a range of frameworks for data sovereignty, data justice and digital abolition. Work emerging in this area is all-encompassing, weaving together everyday struggles and multi-layered analysis; culture and economy; research and coalition building.

For example, in the context of Indigenous sovereignty and settler colonialism, the use of data emerges as one of the key sites of struggle against informational imperialism and digital colonialism (Kukutai and Taylor 2016; Mann et al. 2019), leading to projects such as a policy framework of Indigenous Data Sovereignty (Walter et al. 2020), or Indigenous Data Sovereignty software (Indigenous Innovation 2020). Some of these initiatives focus on technology development and use, for example the principles of FAIR: findable, accessible, interoperable, and reusable; and CARE: collective benefit, authority to control, responsibility and ethics (Indigenous Innovation 2020). Others address the architecture of colonial policymaking and education, within which the Indigenous Data Sovereignty emerges, and develop principles of Indigenous Data Sovereignty as a way of centring Indigenous knowledges and communities, using data in good, rather than harmful, ways (Kukutai and Cormack 2020; Lovett et al. 2020; Walter et al. 2020).

Unlike the notion of sovereignty, other work has emerged that centres the idea of abolition. For instance, in his book, *Goodbye iSlave: A Manifesto for Digital Abolition*, Qiu focuses on 'digital abolition' in Asia and globally, as a proposed move against Apple's exploitative conditions of labour which, he argues, are akin to slavery (Qiu, 2016). Consisting of workers' resistance, alternative gadget production (such as Fairphone), digital education as well as programmed disconnected time, digital abolition as Qiu envisions it is simultaneously resisting the murderously degrading working conditions of iPhone assembly lines in China; the environmental and social costs of mining in Congo; hazardous e-waste processing in Bangladesh; and mindless global consumerism, compulsory connectivity and digital dependency. Drawing on the actual history and legacy of slavery in the US, rather than on slavery as a metaphor, Benjamin powerfully lays out 'abolitionist tools' for 'the New Jim Code' – a digital/data/code incarnation of centuries-long US anti-Blackness (Benjamin 2019). Benjamin's digital abolitionism is about centring Black lives, building solidarity through digital defence, avoidance and the dismantlement of racist tech. It draws on grassroot research whilst also supporting resistance and empowerment through algorithmic accountability and electronic scrutiny. At the same

time, digital abolitionism, for Benjamin, is about reclaiming digital tools *for* social justice, and *for* Black lives, including a 'justice-oriented, emancipatory approach to data production, analysis, and public engagement as part of the broader movement for Black lives' (2019, 192).

The initiatives for digital sovereignty, on one hand, and digital abolition, on the other, strive to protect and empower those most vulnerable to the violences of the digital, be those the material conditions of digital production and work, cultural and environmental theft, or algorithmic racialisation. Crucially, they also make us particularly attentive to geopolitical, historical and contextual specificities of struggles for digital justice, against both individualised frameworks for digital rights, and universal notions of digital freedoms, which ignore the interrelatedness of the digital with other forms of oppression and injustice.

Future Pathways Beyond Digital Inevitability

Our intervention into the world of compulsory digitality joins the current landscape of critical digital scholarship in considering questions relating to digital technologies in relation to structural violence; data and social injustice; labour exploitation; the corporatisation of knowledge; diminishing freedoms; and environmental degradation. What our book aims to add is a paradigmatic re-orientation and a shift in perspective that is not merely critical of the digital per se but calls for undoing the normalisation and naturalisation of digitality and digital inevitability. We use the notion of inevitability here to describe a frame of thinking where 'the fact of the future being digital is predetermined, fully accepted and rarely challenged, and so the only matters debatable are strategies of achieving justice in distributing digital resources and access' (Kuntsman 2021, 75). We are not diminishing the crucial efforts for digital accessibility, digital self-defence and digital abolition. As we have argued throughout the book, these efforts are pivotal in sustaining *collective* digital justice that centre the disenfranchised and marginalised, digitally and otherwise (Benjamin 2019; Gangadharan 2020), while simultaneously being attentive to ways in which digital tools, technologies and data can be key for liberation. And yet, as we are finishing this book, we end it with another question: what can be imagined *beyond* the digital?

The digital has become so internet-centric and so naturalised that we seem to no longer be able to conceptualise – let alone even challenge – its normativity without, paradoxically, using the digital. Whether Uber drivers engage in collective resistance through mass log-outs, internet communities engage in collective 'unplugging' days, or even our own book title which refers to 'the opt-out button': our practices, languages and metaphors of digital resistance in themselves are so deeply ingrained within the digital, there seems to be very little scope for imagining and actualising opt-out beyond the digital structures

that define our lives. The question then is, how can we even begin to undo this? Is our future indeed inevitably digital?

One approach would be to embrace these digital tools of digital disengagement. From hacktivists and cyberpunks to algorithm jammers, digital civil disobedience has a long history of resistance from 'within', where the figure of the 'politically-minded hacker' has been one presented as a digital alternative (Scholz 2016, 152). In this sense, digital subversion in itself is arguably a form of digital disengagement; not necessarily a disengagement from the digital, but a disengagement between the digital from social, economic and ideological infrastructures of governmentality, control and power. However, singular acts of digital rebellion are still temporary – albeit disruptive – and point towards the tensions between individualised data rights and collective data justice. Indeed, as Scholz (2016) questions in relation to hacktivist practices: 'where are the massive occupations of far out-of-the-way data centers?' (Scholz 2016, 152). In other words, digital disengagement needs to be realised collectively from both outside *and* within the tech corporations that regulate and control the very digital structures that perpetuate and monetise digital engagement. These issues relate back to our conceptualisation of the elasticity of the continuum of digital disengagement, and the need to think further about collective, viable and more permanent solutions.

It is at this point we also make one final intervention. Throughout this book, we have problematised society's propensity for digital solutionism, critiquing the ways in which the digital is problematised only as a symptom, rather than the cause. However, we now would like to go one step further and question digital solutionism itself: do we need a solution? Can there be 'a solution'? 'Finding a solution', whether this is digital or non-digital, is to conceptualise digitality dichotomously (problem/solution; digital/non-digital) and to ignore the elasticity and complexity of opt-out and disengagement. In this sense, this book is not offering solutions: we are not advocating 'living off grid' without devices or Wi-Fi; nor are we throwing up our hands in the air in resignation, succumbing to digital inevitability and its troubles ('just live with it').

Instead, we are calling for the decoupling, denaturalisation and destabilisation of the digital as the starting and ending point for all. We do not need to reject scientific progress, or ignore the usefulness of digital media and technologies where it creates new access, opportunities and solidarity tools for those fighting oppression. But what we do need is a fundamental change of perspective in how we think about digital technologies as a synonym of desired futurity. Each time we imagine or plan a future, instead of considering digital solutions as the default option, we should undo the metonymic connection between 'futures' and 'digital'. Rather than asking, how should a particular new technology, device or platform be designed, governed and used, we should ask instead: what are its consequences? Where are the possible ways out of this digital plan for those whom it may not fit? And most importantly, what are the alternatives?

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Index

PARADOXES OF DIGITAL DISENGAGEMENT

Our lives are increasingly governed by smart technologies, platforms and algorithms. However, their implementation is often embedded in social oppression and injustice and the ability to resist digital impositions is distributed unevenly. The injustices of digitisation have become even more pressing since the Covid-19 pandemic. This book challenges our increasing dependence on the digital by putting forward the concept of 'digital disengagement', explored across six areas: health; citizenship; education; consumer culture; labour; and the environment.

The book critiques issues of digital surveillance, algorithmic discrimination and biased tech, corporatisation and monetisation of data, exploitative digital labour, digitalised self-discipline and the destruction of the environment. As an interdisciplinary work, it will be useful to scholars and activists in media and communication studies, sociology, health, consumer culture and environment studies.

"Essential reading for those who want to move beyond personal digital detoxes to challenge and transform our digital society and economy." **Professor Rob Kitchin, author of** *The Data Revolution* **and** *Data Lives*

"A must read for those wanting to resist the (digital) exclusion of the marginalised, and the (digital) banishment of the vulnerable." **Dr Patrick Williams, author of** *Data-Driven Policing: The Hardwiring of Discriminatory Policing Practices Across Europe*

"Rejecting digital inevitability, this book compellingly shows how collective digital justice is imperative." **Dr Benedetta Brevini, author of** *Is AI Good for the Planet?*

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