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Activism, Refusal, Expertise: Responses to Digital Ubiquity

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Declaration

I hereby declare that this thesis has not been and will not be submitted in whole or in part to another University for the award of any other degree.

Abstract

In this thesis I explore if and how digital technologies capture human potential in terms of economic value, and how this shapes imaginaries, subjectivities, and forms of relationality. I investigate 'digital ubiquity' as both an *epistemological and material condition*, and how this is manifest in the discourses that theorise, narrativise, advocate and oppose digital technologies in their many facets. I relay these considerations to Mark Fisher's notion of capitalist realism, and address how and where digital technologies - as extensions of capital - materialise capitalist realism as a ubiquitous force in everyday life (2009, p. 2). I consider how these dynamics influence imaginaries for the future, and whose politics and futures are privileged via the epistemic and material conditions of contemporary digital environments.

The thesis is comprised, chiefly, of three critical case studies, each offering a response to various dynamics associated with 'digitally ubiquity'. The first case study explores an ethnography I undertook at a 'digital detox' camp, which was a space that invited its participants to relinquish use of their digital devices and discussion of their professions for a four-day period. Here, I examine the pertinence of why a 'detox' from digital technology and work were encompassed with one another, and how the participants of the 'digital detox' understood digital technologies - or the lack thereof - to influence their behaviours, interpersonal relationships, and senses of self. The second case study explores prospective 'blockchain for good' initiatives, which are often offered as forms of techno-solutionism to issues surrounding financial inclusion and digital identity. I focus primarily upon how relationships between bodies and digitality are articulated within 'blockchain for good' discourses, and how these relationships speak to specific structures of power: not simply in terms of an intensification of big data by Western apparatuses, but also in terms of the epistemological and ideological 'erasures' that emerge when populations are rendered digitally legible in this way (Vazquez, 2011). The final case study explores the discourses employed by a left-wing think-tank entitled Autonomy, who critique the role of work within the UK and pose suggestions for prospective 'post-work' futures. Here, I continue my considerations around interrelationships between work and identity formation. I further explore if and where neoliberal discourse is invoked within Autonomy's work, reflecting upon how this relates to articulations of 'radical' politics within a cultural context of 'capitalist realism'.

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1.0 Introduction

The contemporary dictionary definition of the term 'ubiquity' is 'the state or capacity of being everywhere, especially at the same time' (Dictionary, 2020). A look at its etymology will reveal that - perhaps unsurprisingly - the term has theological routes. According to the bible, 'ubiquity' was first used by Martin Luther to describe the 'omnipresence of God or Christ' within the story of the Last Supper, where Jesus picked up a piece of bread and remarked 'this is my body' (Schaff, 2003; Harper, 2018). There have been many interpretations of the meaning of this statement, but the position of Martin Luther maintained that it referred to the 'omnipresence' of the body of Christ. All things, Luther deduced, are permeable to the body of Christ, rendering his presence capable of passing through even the smallest of atoms. This process, however, was believed to be non-reciprocal. While the body of Christ was considered to be present in all things, all things were not present in the body of Christ; Christ was both immanent and transcendental. The relationship between the 'ubiquity' of Christ and humanity articulated here was thus hierarchical, and suggested that any human understanding of Christ could only ever be partial and incomplete. 'Ubiquity' understood in this way, then, was present in everything that could be encompassed in the human imaginary; it was material and immaterial; and it was totalising.

When conjoined with the terms 'digital' or 'computing', 'ubiquity' usually refers to environments that are saturated by a prevalence of networked information technologies (Greenfield, 2006; Iansiti & Lakhani, 2014). Just over a decade ago, Greenfield used the term 'everyware' in reference to the 'ubiquitous information technology' that he anticipated would appear in 'many different contexts and take a wide variety of forms', and would 'affect almost every one of us, whether we're aware of it or not' (2006, p. 9, emphasis added). Internet-of-Things devices, cloud computing, sensor technologies, blockchains and biometrics are now just a few spheres that help compose these environments, and contribute toward the translation of space, time and bodies into machine readable information. It is useful to the ideas presented in this thesis, I believe, to consider what might become of some of ubiquity's earlier theological connotations when transposed into contemporary computational contexts. Although meaning of course shifts over time, there are resonances between its earlier theological meanings and some of the connotations of 'digital ubiquity'. The theological framing of 'ubiquity' suggests that: its relationship to humans is hierarchical; it knows humans in a way that humans cannot know it; it is both material and

immaterial; and it is totalising. While these connotations surrounding 'digital ubiquity' are not ones that I personally concur with, I would suggest that they indicate something pertinent about the contemporary moment, and how life and matter are often understood within it.

When I undertake a Google search containing the words 'digital ubiquity' at this moment of writing, the most relevant results go by titles such as 'Digital Ubiquity: how Connections, Sensors and Data are Revolutionising Business', or 'Why Companies Need to Understand Digital Ubiquity' (appendix 1.1). Although - due to reasons that are likely to become clear throughout the course of this thesis - I rarely use Google nowadays, I had anticipated that these search results would either echo my own user data to some degree, would provide information that was more closely aligned with my personal politics, or, at least, would derive from scholarly literature of some kind. Whether it was because I had taken adequate care with regards to shielding my own user data from large corporations (unlikely); that Google's own politics favour these search suggestions; that the term belongs predominantly to the tech industry; or, simply, that the search algorithm did not deem results outside of these vantage points to be relevant - the results mostly stem from corporate perspectives, and refer to relationships between digital ubiquity and economisation. The writers of the most frequently returned article inform their readers about how Google, Amazon Web Services, Salesforce and Workday are all intimately involved with the development of 'cloud-native' software that is serving to significantly improve 'efficiencies' within enterprise (Iansiti & Lakhani, 2014). 'Even Domino's, the pizza company', they write, 'is building digital capabilities, mobile technologies, and analytics to enhance innovation and meet consumer expectations' (ibid).

While it would be entirely premature to state anything conclusive from the above discourse, it does offer a gateway into some of the core subject matter of this thesis. Terms such as 'efficiency', 'innovate' and 'consumer' have become some of the buzzwords of neoliberal capitalism, and it is precisely where these politics intertwine with the material conditions of 'digital ubiquity' that I situate my focus. To state however that digital technologies are intimately entwined with, or pivotal to, the functioning of neoliberalism is nothing new. Mbembe, for one, directly attributes neoliberalism to this moment in history in which humanity falls under the domination of Silicon Valley and digital technologies (2017, p. 3). Digital technologies are essential to the operations of globalisation and finance, and help facilitate many of neoliberalism's governmental practices (Foucault, 2007): namely, those pertaining to population, police, security, circulation, and political economy (Venn, 2009). It is these structures that have come to shape who is seen and who is not seen; what is legitimate and what is illegitimate; what is named and unnamed.

Where my interest lies, more specifically, is around neoliberal *governmentality*, and how it is established with and via digital technologies. I explore whether digital technologies capture human potential in terms of economic value, and how this influences forms of cognition, relationality, imaginaries and subjectivities. I investigate 'digital ubiquity' *as both an epistemological and material condition*, and how this is manifest in the discourses that theorise, narrativise, advocate and oppose digital technologies in their many facets. I consider how economic activity is sustained, then, *not* just through the corporate and state apparatuses that influence and govern incarnation within everyday life, but rather how these forms of power become outsourced, established, re-established and *embodied* via the material and epistemic structures of contemporary digital environments.

There have been a whole host of terms coined to describe the ideologies that sustain economic activity. Two that I believe to be particularly pertinent to the ideas presented in this thesis are Fisher's 'capitalist realism' (2009) and Boltanski and Chiapello's 'new spirit of capitalism' (2005). For Fisher, the term 'capitalist realism' pertains to the imaginative constraints that he understood to be imposed by capital; to the overarching sense that 'not only is capitalism the only viable political and economic system', but also that alternatives to capitalism lie outside of contemporary imaginaries altogether (2009, p. 2). Capitalist realism thus refers to the narrowing space to even *think* outside of capital, and points toward the (almost) absolute reification of capitalistic understandings of the world, and ways of operating within it. Boltanski and Chiapello's 'new spirit of capitalism' likewise pertains to the ideologies that encourage an engagement with capitalism, referring to the ways in which people find justifications for their actions, and the meanings that they ascribe to such actions, under a capitalist order (2005, p. 3). They note

If, contrary to prognoses regularly heralding its collapse, capitalism has not only survived, but ceaselessly extended its empire, it is because it could rely on a number of shared representations – capable of guiding action – and justifications, which present it as an acceptable and even desirable order of things: the only possible order, or the best of all possible orders. These justifications must be based on arguments that are sufficiently strong to be accepted as self-evident by enough people to check, or overcome, the despair or nihilism which the capitalist order likewise constantly induces (Boltanski and Chiapello, 2005, p. 10)

While 'neoliberalism' is a broad term that has shifted across the course of its history¹, I will loosely typify the contemporary neoliberal worldview here as one that distinguishes all aspects of life and matter in terms of market value (Hamann, 2009; Mbembe, 2017). This neoliberal order is first and foremost an *economic* order, which has evolved from a set of Eurocentric legal and political structures that privilege forms of dominance based on quantification and categorisation (de Santos, Nunes and Meneses, 2007; Mbembe, 2017). Glendinning outlines

I define neoliberalism in general, then, as the outlook of a community of ideas that seeks *the limitless extension of the norms of conduct of one domain of life to the whole of life.* Its emancipatory claim is that it will achieve the optimal flourishing of the whole of life by co-ordinating and controlling it in terms dictated by the norms of that one domain (2015, p. 9, original emphasis)

Echoing some of the thoughts already outlined by Fisher (2009) and Boltanski and Chiapello (2005), Read further usefully defines neoliberalism as a 'restoration ... not only of class power, of capitalism as the only possible economic system, [but] a restoration of capitalism as synonymous with rationality' (2009, p. 32). Neoliberalism refers both then to an economic framework, geared toward deregulation, privatisation, and the enhanced power of the market; but also to the establishing of a set of social conditions that stimulate the construction of neoliberal subjects; of a neoliberal *governmentality* (Foucault, 2007; Hamann, 2009). Governmentality, as I use it in this thesis, refers to the 'attempt to shape human conduct by *calculated means*'; to the 'intervening in the delicate balance of social and economic processes no more, and no less, than is required to adjust, optimise, and sustain them' (Murray Li, 2007, p. 275; Foucault, 1991; p. 93). This is distinguished in terms of individualism, self-interest, and a subject's capacity for rational choice; citizens are established as 'free' and *autonomous*, and are encouraged to understand themselves as 'morally responsible for navigating the social realm using rational choice and cost-benefit calculations grounded on market-based principles, to the exclusion of all other ethical values and social interests' (Hamann, 2009, p. 37).

'Digital ubiquity', meanwhile, has drastically expanded what can be encompassed within the sphere of economisation. Research across a series of areas has drawn attention to the operationalisation of hierarchy and bias via corporate and state use of big data, highlighting how such apparatuses are inseparably entangled with, and supported by, specific cultural knowledges and assumptions (Hall, 1996; Mignolo, 2000; Vazquez, 2011; Browne, 2015; Mbembe, 2017). The growth of

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¹ It is beyond the scope of this thesis to give a detailed overview of neoliberalism's history. For more detailed accounts, see Foucault, 2007; Hamann, 2009; Mirowski, 2013.

biometrics, data wearables, and the vast architectures of surveillance that perpetuate streets, wrists and pockets have continued to miniaturise the means through which thought and bodily movement become quantified. Self-tracking movements have actively pursued ideals of self-improvement 'through numbers' (spearheaded, uncoincidentally, by *Wired* magazine big-names Kevin Kelly and Gary Wolf) under the rationale that 'real change will happen in *individuals* as they work through self-knowledge... of one's body, mind and spirit... a *rational* [path]: unless something can be measured, it cannot be improved' (Kelly, 2009, cited in Moore, 2018, p. 6, my emphasis). Such logics have expanded far beyond the spheres of self-tracking communities: 'self-knowledge through numbers' is the ideology that perpetuates the abundance of fitness and wellness apps that are orchestrated to 'improve' how we eat, drink, sleep, work, exercise, communicate, and think (Cederström and Spicer, 2015). These digital devices not only bind neoliberal ideology increasingly intimately to vast spheres of existence, but also tie individuals and populations - to growing degrees of precision – to unprecedented forms of corporate and state control.

'Digital ubiquity' thus upholds multiform modes of power: it sets the terms for the movement of bodies in space, and provokes certain forms of thought and behaviour within such spaces. Securitisation, border controls, militarisation and policing set categorical limits upon the movement of bodies that have been immensely intensified through big data (Aradau & Blanke, 2016). Relatedly, the accumulation of big data, made possible by digital technologies, has helped further the knitting together of psychology and economics, provoking new forms of behaviourism and governance (Jones, 2017; Bassett, 2018). Spheres such as neuroeconomics and behavioural economics have gained a great deal of momentum over recent years, which both claim to make use of 'empirical evidence relating to brain activity' to help explain and entice specific forms of economic behaviour (Wilkinson, 2008, p. 17). The human brain, within these spheres, is depicted and interpreted in economic and computational terms, and is measured and assessed according to a subject's capacity for making 'self-interested' and 'rational' choices (Wilkinson, 2008, p. 5; Jones, 2017). These behavioural economics models challenge 'traditional' economic models that understood the human mind purely in rational terms, and posit that subjects can be 'nudged' into making 'optimal decisions', should they be inclined to act 'irrationally' (Jones, 2017; Fireman, 2016).

In this regard, writers such as Thaler and Sunstein are key. They have helped bring libertarian paternalist notions of 'nudge' into public discourse, which is underscored by the notion that corporations and governments can encourage users to behave in certain ways, without violating maxims pertaining to 'freedom of choice' (2008). Libertarian paternalism rests on the premise that

'an agent is unable to make a wholly rational decision and that she is impaired in her cognitive and affective capacities, and therefore must be intervened upon or administered' (Archer, forthcoming). Such rhetoric asserts that 'nudge' does not coerce, but rather encourages users to make 'better' or more 'rational' choices that are more closely aligned with economic interests (Jones, 2017). As the writers of an article in one business-oriented computing journal contends, 'people have cognitive *limitations*, so their rationality is bounded, and heuristics and biases drive their decision making' (Schneider, Weinmann, & Brocke, 2018, emphasis added). In these terms, those with lesser 'cognitive limitations' are those who are more likely to make choices that maximise personal benefit and minimise potential costs (Salecl, 2011). This, of course, is deeply embedded in the neoliberal worldview, which stresses that 'the poor have only themselves to blame, because of their backwardness, underdevelopment or their inadequacies as economic subjects' (Venn, 2009, p. 207).

This 'knitting together' of 'living-being and formations of capital' (Murphy, 2017, p. 13) is not, however, an untrodden path. Postcolonial and de-colonial thought remind us of the long-entrenched history of human objectification and commodification; of the *translation* of life into systems of meaning that are readable and controllable for those in power (Mignolo, 2005; Vazquez, 2011). Mbembe notes,

Historically, race has always been a more or less coded way of dividing and organising a multiplicity, of fixing and distributing it according to a hierarchy, of allocating it to more or less impermeable spaces according to a *logic of enclosure*. [...] Race is what makes it possible to identify and define population groups in a way that makes each of them carriers of differentiated and more or less shifting risk (2017, p. 35)

Here, it must be stressed that I am not equating the forms of control that are manifest in contemporary digital environments to those made manifest in histories of colonial violence: to do so would be insulting and reductive; it would overlook many of the nuances that have contributed toward each sphere of experience; and it would expunge earlier technologies from histories of colonial violence, and racist violence from technologies. Rather, what I mean here is that today's digital architectures are bred out of a Eurocentric worldview that measures, categorises and divides, out of a set of epistemological and material structures that have privileged, and continue to privilege, the maintenance of social inequality and capitalist power. Contrary to long-iterated discourses of science and technology's objectivity and neutrality, it must be foregrounded that, regardless of how seemingly seamlessly the 'digital' is bound to the fabric of existence, ideology always permeates the means and terms of what is recorded, and what is subsequently produced.

Having now introduced in the form of an overview some of the overarching themes that will feature in this body of work, I will now turn to the following section, which will detail some of the inspirations and thoughts that led to my writing of the thesis.

How I Came to Write this Thesis

1.11 Neoliberalism and 'Epidemics' of Anxiety

During my Master's degree, I instigated a mental health campaign, which is where I first started formally grappling with how surveillance architectures and commercialism interact with forms of political participation. The campaign was part of an attempt to generate visibility and awareness around the mental illness sufferers who had been, or were, struggling to attain support from the NHS due to funding cuts. It was during a political moment in the UK in which the Conservative Party had recently won the majority vote, and it seemed as though austerity politics had succeeded in cementing its position within the UK for the foreseeable future. I had certainly initiated the campaign from a very idealistic frame of mind, and as a self-orchestrated project with no financial backing, it largely fell flat². What had begun to form as a result, however, was a desire to understand the role of digital technology within forms of social change; relationships between digital technology, cognition and political participation; and how these dynamics were, and are, intertwined with sets of broader social, cultural and political frameworks.

At a similar moment in time, there was growing media rhetoric around what was - and still is - being described as cultural 'epidemics' of anxiety, depression and poor mental health (Bedell, 2016; Atkinson, 2018; Donnelly, 2018). I have, for a long time, felt sceptical of the ways in which mental health is framed and broadly understood within the West, both in terms of the compartmentalisation of various mental 'disorders', and how non-Western approaches to mental health treatments are discursively framed as 'alternatives' (see Davar, 2016, p. 14-19). With regards to these issues, Mark Fisher's accounts have felt very poignant. In these he left us with the vital lesson that mental health is in vast need of politicisations (2009; 2014). Before taking his own life in 2017, he had woven his personal experiences of depression into his works *Capitalist Realism: Is*

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² The campaign invited users to submit a 'cut out' selfie, as part of a collaborative artwork that would draw attention to those affected by cuts to mental health services on the NHS. The campaign featured on a range of social media platforms, as well as a main website domain, and campaign posters were distributed around the city of Brighton in the UK.

There No Alternative? (2009) and Ghosts of my Life: Writings on Depression, Hauntology and Lost Futures (2015), where he argued that the 'epidemics' of mental struggle that permeate the contemporary moment cannot be adequately addressed or alleviated if understood as a private problem that is experienced by individuals. For Fisher - a perspective with which I wholeheartedly concur - the medicalised framework that shapes how mental health is broadly understood within the West abstracts causality from the experience of mental illness, and again divides vast networks of experience into reductive categories, paving the way for experiences of mental anguish to be seated within pre-existing systems of bureaucracy (Bennet, 2005). What Fisher described as the 'privatisation of stress' (2009, p. 19) has felt very apt, and neatly summarises neoliberalism's relationship to mental health, in terms of each: its rationalisation; its medicalisation; its pharmaceuticalisation; and now even its commercialisation. In Fisher's accounts, the relatedness of the so-called mental health 'epidemic' to neoliberalism's maxims of individualism and personal responsibilisation is made clear (ibid).

It did not - and does not - feel coincidental then, that over the last few years we have witnessed an abundance of 'wellness' products emerge within the commercial sphere. Amidst the aforementioned plethora of self-tracking apps aimed at 'self-optimisation through numbers', the commercial West is now littered with colouring books, yoga classes, meditation workshops, early morning 'health raves', and a whole abundance of other wellness schemes and products, which each revolve, to some degree, around the self-management of one's health. Writers such as Pearl, for example, offer analyses of the emergence of early morning 'sober raves' that have become increasingly commonplace within economically affluent cities (2014). While rave culture, he argues, can be understood as the ultimate rejection of work, breaking down the body in pursuit of hedonistic pleasure, the early morning health rave 'confines transgression to a padded room', in pursuit of the 'regime of productivity' (ibid). Cederström and Spicer's cultural diagnosis of the 'wellness syndrome' draws upon similar themes, arguing that such 'optimisations' of one's health are intertwined with a moral imperative that is closely bound with ideologies of economic growth (2015).

Many have also offered critiques of the wellbeing schemes that have become increasingly commonplace both in and outside of workplace environments. Flemming and Sturdy's ethnography of a call-centre outlines some of the management techniques that were utilised within this environment; they note that 'wellness' practices were often utilised as a way of 'distracting employees' attention away from the stultifying effects of [...] otherwise low discretion

environment[s]' (2010, p. 178). They highlight how discourses of 'play', 'authenticity' and 'being oneself' were utilised as a way of 'capturing the emotional and social skills of workers' and enhancing the quality of their emotional labour (ibid, p. 178). These management techniques are underscored by a recognition that aspects of the labour process have a detrimental impact on the mental health of workers, which could then impact the amount of loyalty that workers feel toward the workplace and curtail productivity. Flemming and Sturdy conclude that the opportunities for self-expression offered by the call-centre were 'inextricably linked to enhancement of control and domination', and, when compared to more Taylorised manufacturing settings, further aspects of the self were considered to be 'an open economic concern' (ibid, p. 192, 196).

Such notions have long been part of the ethos of tech-giants such as Google, who have famously tailored their office spaces to establish the 'happiest, most productive workplace in the world' (Stewart, 2013). Treadmills at desks, 'scribble walls', the imitation of a 'college campus' aesthetic, the prospect of a four-day working week, and free food available at all times are just a few of the techniques employed by Google to enhance the productivity of its workers (ibid). In accordance with the politics of 'nudge', employees are encouraged to make healthy eating choices, with healthy snacks presented in transparent jars, and sugary snacks in translucent jars with prominent nutritional labels (ibid). Such strategies are again tightly bound with ideologies of 'wellness', and the maxim that 'healthy bodies are productive bodies' (Cederström and Spicer, 2015, p. 4). The co-aligning of wellbeing and capital in this way is part of a wider cultural framework in which illness represents an inability to work; citizens are framed as either 'economically productive or economically needy' (Davies, 2011). Mental health has become a central concern of economicpolicy, whereby depression represents a 'distinctly neo-liberal form of psychological deficiency, representing the flipside of an ethos that implores individuals to act, enjoy, perform, create, achieve and maximize' (ibid). 'Wellness' initiatives allow employers to adapt to declines in productivity stemming from poor mental health, intended at reducing dissatisfaction, revolt or abstinence. In this respect, I would like to take forward a question that is posed by William Davies in his account of The Happiness Industry, who asks: 'what if the greatest threat to capitalism, at least in the liberal West, is simply a lack of enthusiasm and activity?' (2015, p. 105).

1.12 Digital Technology and (a Lack of) Human Agency

With regards to the underpinnings of the thesis, another key point of interest was around public debate that drew links between digital engagement and cognition. Recurring themes within these public debates often revolved around relationships between digitality and social fragmentation, the

growth of individualism, 'epidemics' of poor mental health, the growth of modes of 'hyper attention', and a dwindling in human agency (Carr, 2011; 2014; Hayles, 2007; Sullivan, 2016; Bedell, 2016; Lewis, 2017). Pieces of writing that were particularly provoking for me in this regard were written by Nicholas Carr, who posited that digital technologies were having a significant impact upon his sense of self, as well as his understanding of what it meant to be human (Carr, 2011; 2014). In an article entitled 'Is Google making us stupid?', Carr argued that the Google search algorithm was 'tinkering' with his capacity to retain mental information and concentrate on literary texts for sustained periods of time (2007). His own cognition, that he understood to be shaped by his engagement with literary texts, had become fundamentally 'altered' by the reading strategies that were being encouraged by the Web. I would posit that Carr's position is very much one sided, and privileges the forms of reading that came to afford him his own cultural capital:

Thanks to the ubiquity of text on the Internet, not to mention the popularity of text-messaging on cell phones, we may well be reading more today than we did in the 1970s or 1980s, when television was our medium of choice. But it's a different kind of reading, and behind it lies a different kind of thinking – perhaps even a new sense of self (ibid)

Similar themes emerge in his work The Glass Cage: Automation and Us, in which he warns readers of 'automation's human consequences', and considers technological developments such as Google's self-driving car to be 'reset[ting] the boundary between human and computer' (2015). This, he notes, is due to the capacities for judgement that were being exemplified by the Google car; it was exhibiting characteristics that psychologists, economists and himself had previously considered to be exclusively 'human'. While, once upon a time, 'we used to do things for ourselves', Carr's work presents a dystopic forecast of what happens when 'we defer to the wisdom of algorithms' (2015). He draws upon two types of knowledge that have 'long' been distinguished by economists and psychologists to elucidate his argument: tacit and explicit (ibid). Carr associates tacit knowledge with the forms of learning that emerge from doing, providing examples such as riding a bike or reading a book; forms of knowledge that he claims cannot 'be expressed as a simple recipe' (ibid). Explicit knowledge, meanwhile, he defines as 'processes that can be broken down into well-defined steps', and, accordingly, are capable of being translated into code (ibid). This is the distinction that he believes has, until recently, defined the difference between humans and machines. 'How', he asks, 'do you translate the ineffable into lines of code, into the rigid, step-by-step instructions of an algorithm?' (ibid). This question is underscored by a belief, or a hope, that the 'ineffable' does indeed exist; that the mysteries that perpetuate our inhabitance in the world are not reducible to the logics of computational capital.

He argues that the Google car, however, has come to exemplify some of the characteristics that had previously belonged to the realm of tacit knowledge. While, he notes, this does not mean that machines possess tacit knowledge ('people are mindful; computers are mindless'), the Google car's capacities of gaging whether to turn left or right, turn on the breaks, or to stop at sets of traffic lights challenges this model of understanding forms of learning. He writes,

But when it comes to performing demanding tasks, whether with the brain or the body, computers are able to replicate our ends without replicating our means. When a driverless car makes a left turn in traffic, it's not tapping into a well of intuition and skill; it's following a program. But while the strategies are different, the outcomes, for practical purposes, are the same (Carr, 2014)

Carr recurrently speaks of fears of AI exhibiting characteristics that he had once been considered to be 'uniquely human', and of 'dependencies' upon this or that technology to undergo day-to-day tasks (ibid). The presence of AI, Carr argues, has led to a milieu in which 'humans' have been rendered less intelligent, and less capable of undertaking tasks that did not previously require digital assistance. Narratives such as these also occur in Andrew Sullivan's piece 'I Used to Be a Human Being' (2016), in which he makes frequent references to the more 'human' moments in his life which preceded his habitual engagement with the Web. His self-diagnosed technology addiction led him to attending a silent meditation retreat, where, after fifteen years, he would finally 'live in reality' (ibid). This, he notes, was part of a choice he had to make, between living 'as a voice online' or as a 'human being in the world that humans had lived in since the beginning of time' (ibid). In a vein that echoes some of the narratives offered by Carr, Sullivan nostalgically privileges predigital moments, which he repeatedly constitutes as more 'human', or more 'natural' (ibid). Frequently, within pop-technology accounts such as these, 'humans' and the 'digital' are situated as two distinct ontological spheres, where the 'digital' is understood as something that hinders or challenges a purported uniqueness of the experience of being human, articulated in terms of its capacities to understand, remember, learn, and concentrate.

While I do not, to any degree, dispute that there are complex relationships between digital devices and user cognition, what is problematic about these debates is that they depend upon binaristic understandings of human and technology, and divorce the impact of the so-called 'digital' from its surrounding multiplicity of cultural, political and social factors. It is also worth noting how the notions of 'addiction' and 'dependencies', highlighted above, are again tied with broader discourses of wellness, health, and productivity. On this tack, writers such as Paul Lewis for *The Guardian*

have made claims that our 'minds can be hijacked' by digital technologies themselves, and similarly substantiates such claims through invoking medicalised discourse (2017). 'As well as addicting users', Lewis writes, 'technology is contributing toward so-called "continuous partial attention", severely limiting people's ability to focus, and possibly lowering IQ' (2017). He continues, 'one recent study showed that the mere presence of smartphones damages cognitive capacity – even when the device is turned off' (ibid, emphasis added). Further to medicalised discourse of addiction then, these claims are further justified through using the language of scientific method; 'one recent study' is used as the qualifier for ambiguous claims around smartphones 'damag[ing] cognitive capacity'. Such forms of 'scientific' legitimation pose questions surrounding representation, narrative and discourse, and how they are intertwined with technocratic understandings of life and matter within the contemporary moment. These are again bound with a moralising narratives; to be 'addicted' is to be distracted, unhealthy, and ergo, unproductive. Such discourses - discourses of technoscientific expertise - will be a core focus point of this thesis. I examine how they shape what is construed as real; how what is real is bound with certain sets of perceived effects; and how this dynamic shapes imaginaries and initiatives pertaining to what comes next.

1.13 Norbert Wiener's Cybernetics

My readings into Nobert Wiener's cybernetics were also fundamental in forming some of the foundational thoughts of this thesis, and provide some historical context to the technoscientific understandings of the mind iterated in behavioural economics models, highlighted previously. Described by some as a *theory of everything* (Pickering, 2010), cybernetics played a significant role in shaping cultural understandings of the mind in terms of binary logic and rationalisation. It was a universalistic conception of the world in which 'the gathering and interpretation of information' was used as a way to understand the commonalities between technical and biological systems (Turner, 2006). Cybernetics understood both humans and machines to be 'goal-seeking mechanisms that learn, through corrective feedback, to reach a stable state', and lay some of the groundwork for understanding human behaviour in terms of information (Hayles, 1999, p. 65, emphasis added; Dubberly and Pangaro, 2014, p. 4). It was, as Wiener described, a behaviouristic theory that concerned the 'extent to which answers that we may give to questions about one set of worlds are probable among a larger set of worlds' (1950, p. 12, emphasis added).

Cybernetics became fully established within the context of post-war America, and was a key focus of the interdisciplinary Macy conferences held between 1946 and 1953 (Bassett & Roberts, 2019;

Archer, forthcoming). These conferences hosted scholars from a range of disciplines, including psychiatry, sociology, anthropology, mathematics, statistics, neurophysiology, physics, psychopharmacology and statistics, and were held, as Peter Csermely describes, with the purpose of 'understanding [the] control of human behaviour' (2012, emphasis added). Hayles describes the conferences as 'claim[ing] to be a universal solvent that would dissolve traditional disciplinary boundaries', where these disciplines joined together to 'remap' understandings of the body according to a 'science' of information (1999, p. 85). Particularly influential participants in these conferences included: Claude Shannon, whose paper, A Mathematical Theory of Communication, was pivotal in the development of Norbert Wiener's cybernetics (1948); Warren McCulloch, neurophysiologist and cybernetician whose work explored 'how neurons worked as information-processing systems' (Hayles, 1999, p. 7); and John von Neumann, mathematician and physicist, who, as Adesalu writes, held the belief that 'new technology is always basically beneficial, even if sometimes hazardous; people simply have to adapt to the inevitable march of progress' (1981, p. 172; Hayles, 1999, emphasis added).

Norbert Wiener was a mathematician at the Massachusetts Institute of Technology (MIT). His work built upon Shannon's *A Mathematical Theory of Communication*, which was one of the first papers to view communication in terms of statistics, and, pivotally, introduced the concept of the binary digit. It also promoted the idea that 'information and entropy were related in physical terms', which paved the way for Wiener's work on cybernetics (Conway and Siegelman, 2005; Turner, 2006). Their understandings of the relationships between information and entropy, however, differed: while Shannon's model framed entropy and information as co-constitutive - where the 'more unexpected (or random) a message is, the more information it conveys' - Wiener understood entropy and information to be opposites (Hayles, 1999, p. 102). In the *Human Use of Human Beings*, Wiener wrote,

As entropy increases, the universe, and all closed systems in the universe, tend naturally to deteriorate and lose their distinctiveness, to move from the least to the most probable state, from a state of organisation and differentiation in which distinctions and forms exist, to a state of chaos and sameness (Wiener, 1950, p. 12)

For Wiener, then, entropy could be *managed* via the communication of information; the greater the amount of information, the less amount of *disorder*. Hayles presses that this was felt so strongly by Wiener that he came close on 'several occasions to saying that entropic decay is evil' (1999, p. 103).

Information thus became a way of measuring 'negative enthropy, or negentropy'; that is, a way of determining order in a system that tends toward chaos (Johnston, 2010, p. 202).

It is also pivotal to note that Wiener's work on cybernetics was fundamentally shaped by his liberal humanist politics (ibid, p. 85). These politics - privileging 'a coherent, rational self, the right of that self to autonomy and freedom, and a sense of agency linked with a belief in enlightened self-interest' - were central to Wiener's worldview. 'He was less interested in seeing humans as machines,' Hayles writes, 'than he was in fashioning human and machine alike in the image of an autonomous, self-directed individual' (ibid, p. 7). Communication for Wiener could be understood as a 'game that two humans (or machines) play against noise' (ibid). Hayles continues,

To be rigid is inevitably to lose the game, for rigidity consigns the players to the mechanical repetition of messages that can only erode over time as noise intervenes. Only if creative play is allowed, if the mechanism can adapt freely to changing messages, can homeostasis be maintained, even temporarily, in the face of constant entropic pressure toward degradation (ibid, own emphasis)

'Creative play', as it is articulated here, shares pressing similarities with the notions of 'play' articulated within neoliberal discourses, already referenced above: as a way of *maintaining equilibrium* - or 'stability' - within a broader context of uncertainty. Just as 'play' allows a mechanism to 'adapt freely to changing messages' within the cybernetic imaginary, 'play' within the context of neoliberalism encourages subjects to be always sustaining mental *flexibility* and *productivity* within broader frameworks of economic precarity.

The co-aligning of human and machine in the cybernetic imaginary strengthened the idea that aspects of the human were automatable. Wiener argued that in the same way computation can be understood as sets of feedback loops, governments, corporations and universities should also participate in this 'two-way stream of communication, and not merely in one descending from the top' (1950, p. 49). While, as Bassett and Roberts highlight, automation wasn't a term that occurred in Wiener's work, it did inspire notions of a 'second industrial revolution', where, they write, the first industrial revolution 'devalued the human arm, the second would do the same for the brain' (2019, p. 12). Tomas further writes,

Wiener's cybernetic automaton was conceived as an active, hierarchically governed, self-regulated and goal-oriented machine, which was bound through a particular time/space logic - the adjustment of future conduct through a comparative assessment of past actions - to its environment (Tomas, 1995, p. 25)

This thus produces 'an orientation towards the future' that is rooted in what is deemed to be certain about the past and present (Bassett, 2019). While, it is important to note, cybernetics can be understood as one starting point among many that adhered to such forms of rationality, cybernetics was unique in that it situated such logics, as manifest through information, to be ubiquitous amongst all systems. This thus had pivotal implications for subsequent political imaginaries that pre-figure humanity as legible, controllable and predictable via the transmission of digital information. On this tack, I will conclude this section by bringing forward a question that was posed to Wiener at the Macy conferences, which will provide a further guiding question for this thesis: 'where should the cybernetic dissolution of boundaries stop? At what point does the anxiety provoked by dissolution overcome the ecstasy?' (Hayles, 1999, p. 85, my emphasis).

1.14 The History of Technolibertarianism

The final sphere I will turn to, in terms of the political ideas, imaginaries and discourses that led me to the writing of this thesis, pertains to the politics of technolibertarianism. Technolibertarianism emerged as a conglomerate of some of the principles of cybernetics, the nineteen-sixties counter culture movement, and economic liberalism. It refers to the belief that technological development will bring about human 'freedom', in a way that government, in any form or capacity, is understood to be detrimental to such 'freedom' (Golumbia, 2016). Technolibertarianism posits that digital technology will pave the way for a globalised virtual class of empowered users, able to *choose* if and how they are to participate in the regulatory structures imposed by states. It is oriented toward disintegrating the 'top-down' structures of states and governments, and to form instead a 'global' network of autonomous users who will henceforth be enabled and empowered by digital technologies (ibid). This also relies on the presumption that government will always stand to curtail 'freedom' in a way that corporations never could (ibid).

The nineteen-sixties counter culture movement - on a very broad scale - was driven by an antiestablishment politic, and opposed many of the state doctrines of the time, including America's drive for imperial expansion, and its policies and cultures of sexual discrimination, homophobia, racism and consumerism (Barbrook & Cameron, 1995). Economic liberalism pertains to the view that economic 'freedom' should rest with individuals rather than with institutions (Adams, 2001). The conception of 'freedom' endorsed by the counter culture movement embraced notions of collectivity, unity, and self-expression, while economic liberalism heralds individual freedoms within the marketplace, freedom from state control, and the freedom to *choose* (Barbrook and Cameron, 1995). Both ideologies found a meeting point in new developments in digital technologies during the nineteen-sixties and seventies, and the belief that new digital systems would help bring about their own visions of utopia. While some within the nineteen-sixties counter-culture movement rejected the military origins of cybernetics, others believed that understanding humans, machines and other biological systems to be governed by the same set of regulatory laws could inspire ideas about a more democratic and 'collective' future (Barbrook and Cameron, 1995, p. 2).

Within this cultural landscape, in 1968, Stewart Brand founded the Whole Earth Catalogue, which fused the social values of the some elements of the counter-culture movement with the 'wholesystems thinking' drawn from cybernetics, appreciating it as an 'intellectual framework and as a social practice' (Brand, cited in MNM, 2009; Turner, 2006, p. 43). The Whole Earth Catalogue embraced a 'tool-centric' worldview that rejected institutions and celebrated individualism, where 'agricultural equipment, weaving kits, mechanical devices', alongside recent developments in digital technologies and readings of cybernetics, were celebrated as pivotal to these politics. Turner describes the technical progress of the time as carrying a 'mystical charge' for many and a faith in a sense of 'togetherness' (Turner, 2006). Such mysticism was emblematic of Whole Earth Catalogue, which regularly invoked dogmatic discourses. Indeed, the title of the publication itself came from a campaign that Stewart Brand instigated in 1966, which aimed to provoke NASA into releasing its rumoured photographic imagery of the 'whole earth'. Seeing the earth from above, Brand believed, would serve as powerful and evocative imagery, and fulfil the Catalogues purpose of helping the readers see themselves 'as gods' (Brand, 1968; Cadwalladr, 2013). Up until the moment of the Catalogue's release, Brand posited that power had existed only in the hands of states, big businesses, formal education institutions, and the church (ibid). The forming of the Whole Earth Catalogue, for Brand, celebrated the coming of a milieu in which 'intimate, personal power [was] developing - power of the individual to conduct his own education, find his own inspiration, shape his own environment and share his adventure with whoever is interested' (ibid). The Whole Earth Catalogue went on to have a considerable impact upon the cyber-culture of the 1990s. In his Stanford Commencement Address in 2005, Steve Jobs recounts the inspiration he personally took from the *Catalogue*, as one of the 'bibles of [his generation]:

When I was young, there was an amazing publication called *The Whole Earth Catalogue, which was one of the bibles of my generation*. It was created by a fellow named Stewart Brand, not far from here, in Menlo Park, and he bought it to life with his poetic touch. This was in the late sixties, before personal computers and desktop publishing; it was all made with typewriters, scissors, and polaroid cameras. It was

sort of like *Google* in paperback form, thirty-five years before *Google* came along. (Jobs, 2005, emphasis added)

John Perry Barlow is also often foregrounded as one of technolibertarianism's 'core' proponents (Winner, 1997; Borsook, 2000; Turner, 2006; Morrison, 2009). John Perry Barlow became a prominent public figure writing lyrics for the Grateful Dead, and later became a digital rights activist and 'champion of free speech on the internet', forming the *Electronic Frontier Foundation* alongside Mitch Kapor (Schofield, 2018). Barlow's world-view was very much in keeping with that of the *Whole Earth Catalogue*, in that he believed the technical developments of the time could offer 'what LSD, Christian mysticism, cybernetics and countercultural 'energy' theory had all promised: transpersonal communion' (Turner, 2006). The advent of the Web in 1989, from Barlow's perspective, bought about a new space in which it seemed these ideas could flourish. In 1996, his notorious *Declaration of the Independence of Cyberspace* was distributed on the Web, advocating the technolibertarian stance that governmental regulation had no rightful position within 'cyberspace' (Barlow, 1996). The *Declaration* exhibited an explicitly technolibertarian politic, outlining a 'new' world without 'elected government', a 'global social space [that] we are building to be naturally independent' (1996). Barlow continues,

We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth.

We are creating a world where anyone, anywhere may express his or her beliefs, no matter how singular, without fear of being coerced into silence or conformity.

Your legal concepts of property, expression, identity, movement, and context do not apply to us. They are all based on matter, and there is no matter here. (ibid)

This text has been widely referenced and is largely a rhetorical document (Morrison, 2009, p. 54). It exhibits a politic where 'cyberspace' is framed as free from political bias, which Barlow locates as belonging to the realm of 'matter'. The 'we' in this document are those in high-tech, where dogmatic notions of 'creating a world' echoes Brand's earlier rhetoric of the *Catalogues* readers seeing themselves as 'gods'. Barlow establishes himself as coming from 'Cyberspace, the new home of Mind', which 'consists of transactions, relationships, and thought itself', and construes a seemingly radical world, where state-governance - that which imposes 'increasingly hostile and colonial measures' - places 'us in the same position as those previous lovers of freedom and self-determination who had to reject the authorities of distant, uninformed powers' (ibid). Such 'crypto-religious' ideology, in relation to new developments in digital technology, was prominent

within high-tech spheres in the 1990s, and is a thread that I will continue to pull upon throughout the course of this thesis (Winner, 1997; Borsook, 2000; 20001).

Each of the factors discussed in this thesis introduction have led me towards my areas of key field research. Each responds to a particular issue but also explores the connections between apparently discrete formations. Firstly, I turn to a case study of 'digital detoxing', which speaks to the discussed ideologies of 'wellness' and how they intertwine with discourse around digital engagement, work and 'play'. Secondly, to prospective 'blockchain for good' initiatives, which are offered as forms of techno-solutionism to issues surrounding financial inclusion and digital identity. Thirdly, I investigate an anti-work think-tank, which critiques the role of work within the UK, and poses suggestions for prospective 'post-work' futures. Explorations into Fisher's notion of 'capitalist realism' underscore each of these empirical studies, and how it is entwined with the epistemological and material structures of digital environments.

Thesis Structure

I will now turn to a brief summary of the structure of this thesis. In **chapter two**, I critically frame the methodologies that were used for the empirical work of the thesis, for which I combined ethnography, autoethnography, and digital humanities methods, broadly speaking. I also outline the analytical tools that were used for study of my research materials, which included Critical Discourse Analysis, close reading techniques and use of qualitative data analysis software NVivo. I draw upon a series of feminist-materialist and de/post-colonial accounts to help outline the rationale for the adoption of these methodologies, and reflect upon how some of the politics embroiled with these methodologies are tied with broader concerns of the thesis. I then proceed to outline how each of these methodologies were specifically enacted for each of the thesis's case studies, and reflect upon some of the ethical considerations that were encompassed with each.

Chapter three then explores and critiques a series of theoretical accounts that engage with forms of sociomateriality. Sociomateriality, as I use it in this thesis, refers to the social norms and processes that are entangled with matter, and how these entanglements recursively shape and influence the conditions and practices of everyday life (Orlikowski, 2007; Shotter, 2013). I situate my own work as aligned with a series of feminist-materialist and de/post-colonial approaches, which will provide some of the conceptual framework for the empirical case studies undertaken later in the thesis. I provide a route through the arguments offered by these writers, and draw upon

a series of central threads within these: firstly, some of the ways that technological determinism has been conceptualised, and within this, how technologically deterministic ideology can be understood to be constitutive of an epistemic framework that helps propagate corporate and state power (Wyatt, 2008); secondly, how this epistemic framework is intertwined with histories of colonialism, and concomitant systems of heteronormative patriarchy; and thirdly, how these logics are manifest in the material conditions of digital environments, and are embroiled with forms of cognition, relationality, imaginaries and subjectivities.

The chapters up to this point provide the necessary groundwork for the thesis's empirical case studies. My case studies each, in some way, respond to the public and academic debates around digital technology already outlined. They provide a space for exploring the forms of individuation that digital environments might propagate, and some of the responses this has opened up, particularly through the issue of discontent; not, however, in terms of global revolt, but in terms of a relation to a relation to the digital. I explore the futures that are imagined, or absent, within the discourses offered in each of these case studies, and how these futures speak to forms of discontent within the contemporary moment. In each case, I focus on how digital technologies - as extensions of capital - materialise 'capitalist realism' as a ubiquitous force in everyday life.

For **chapter four,** then, I attended a four-day 'digital detox' retreat as a participant observer, and carried out fourteen research interviews with fellow attendees following my visit to the retreat. I explore the pertinence of why, within this sphere, the 'digital detox' meant we would not only relinquish use of our mobile devices and laptops, but also, we would not engage in 'work talk', we would not go by our given names, and we would engage in activities that were discursively framed by the retreat as 'play'. My motivation was to understand how the 'digital' was understood by the participants of the digital detox, and how they saw it to impact their behaviours and social interactions within the space. I consider the pertinence of why a detox from the 'digital' and from 'work' were enveloped with one another, and how the centrality that was accorded to 'work' was interlinked with a cultural framework that prioritises 'digital ubiquity'. To develop my arguments in this chapter I draw upon themes of neoliberal 'wellness' already briefly mentioned, and consider why themes of mental wellbeing were central to the camp's ethos of digital rejectionism.

In **chapter five,** I explore discourse that is encompassed in notions of 'blockchain for good'. This is a term that has appeared in both academic and polemic discourse, and pertains largely to prospective blockchains for use within 'social impact' settings (Adams, Kewell and Parry, 2017;

Casey and Vigna, 2018b). In the first section of this chapter, I undertake a critical discourse analysis of grey-literature and pop-literature accounts surrounding 'blockchain for good', in which issues surrounding financial inclusion and digital identity emerged as prominent themes. Here, I focus primarily upon how relationships between bodies and digitality are articulated, and how these relationships speak to specific structures of power: not simply in terms of an intensification of the accumulation of big data by Western apparatuses, but also in terms of the epistemological and ideological 'erasures' that emerge when populations are rendered digitality legible in this way (Vazquez, 2011). I also explore how economic reason is recurrently employed as the justifying narrative for claims to 'social good', and where and how such claims are made both explicit and implicit. This draws on earlier arguments pertaining to interrelationships between digital solutionism and capitalist and colonialist expansion, already lightly introduced.

In the final section of this chapter, I provide an account of a data-scrape process, which crawled Twitter for all Tweets containing the term 'blockchain' across a six-week period during July and August 2018. My intentions here were to explore how I might go about abstracting Tweets pertaining to 'blockchain for good' from other Tweets about blockchain, how this might be undertaken using digital methods, and how the systems of visibility and intelligibility offered by the software influenced how I conduced myself in relation to the data. I reflect upon how my own personal politics and processes of decision-making became embedded in the algorithm, how my working process became influenced by the forms of rationality that computation embodies, and how the combination of these factors influenced what was ultimately analysed and explored.

Chapter six is the thesis's final empirical case study, and explores the 'anti-work' and 'post-work' politics of a UK based left-wing think-tank group entitled Autonomy. Autonomy examine the role of work within the UK, and aim to de-stabilise some widely held perceptions around work, and propose 'solutions' to some of the issues that they understand to be associated with waged labour. These 'solutions' pertain both to positing suggestions for contemporary issues surrounding waged work, as well as prospective ideas around harnessing automation for a 'post-work' society, based on principles of 'freedom, equality, and democracy' (Autonomy, 2018). This research data is composed from a series of semi-structured interviews, as well as a discourse analysis of website material and reports by Autonomy's affiliates. Following the thoughts developed in the case study of the 'digital detox', I continue my considerations around interrelationships between work and identity formation, and how this was understood by a group who directly advocate anti-work politics. I further explore if and where neoliberal discourse is employed within Autonomy's work,

and reflect upon how this relates to articulations of 'radical' politics within a cultural context of 'capitalist realism' (Fisher, 2009; Autonomy, 2019b).

2.0 Methodologies

In this chapter I will critically frame the methodologies that were used for the field research of the thesis. I explore the rationale for the adoption of each of my research methodologies, and how these methodologies were specifically enacted for each of these case studies. I detail some of the ethical considerations that were encompassed with the data gathering process for each case study, and the ethical review procedures that I underwent via the University of Sussex. I detail how research participants were informed about my research, how consent was attained, and how I enacted what I considered to be ethical practice. What I constitute here as 'ethical practice' was informed principally by the frameworks provided by the University of Sussex, and further by my own readings of critical writing on ethical ethnographic research as outlined in a series of feminist-materialist and de-colonial approaches (Haraway, 1988; Rosaldo, 1993; Toyosaki, 2018).

For the empirical components of this thesis, then, I used a combination of ethnography and digital humanities methods. These came to include participant observation, semi-structured interviews, autoethnography, and a data-scrape of Twitter using some proprietary Natural Language Processing (NLP) software. I used qualitative text analysis software NVivo for coding and analysing the data gathered from my semi-structured interviews, and a Critical Discourse Analytic (CDA) approach for the analysis of all of the research data. Ethnographic and autoethnographic methods were used for the case-study of the 'digital detoxers'. This involved embodying the role of participant-observer whilst at the 'digital detox' site and conducting semi-structured research interviews via Skype following my visit. Data-scraping and autoethnography were used for the 'blockchain for good' case study, which was combined with analyses of literature that explicitly covered the topic of 'blockchain for good'. This broader 'blockchain for good' literature was found via search engine queries and 'snowballing' through internet links (LibGuides, 2019). I used semistructured interviews for the final case study of think-tank Autonomy, which I juxtaposed with analyses of literature provided on the Autonomy website. This literature came to include website information and research undertaken by affiliates of the think-tank that featured on the website at the time of writing³.

³ February 2019.

The structure of this chapter will proceed as follows. In the first section I outline what I mean in this thesis by ethnography. I explore some of the ways it has evolved, and highlight how some of these moments in ethnography's history have encompassed different ways of narrativising the lives of those it studies. Here, I chiefly focus upon how ethnographic practice has shifted from accounts that make claims to objective truths, to more contemporary practices that emphasise the embodied role of the ethnographer. This then leads into a brief exploration of what constitutes autoethnography for this project, and how its explicit foregrounding of the subjectivity of the ethnographer counters notions of an 'objective' ethnographic gaze, and provides scope for exploring the self as a site for cultural and political insights. In the following section, I then outline some of the ways the 'digital humanities' has been conceptualised, and highlight some key arguments that bare relevance to my use of digital methods within the thesis. I then detail the methodologies that I used for the analysis of my data, which comprised predominantly of close reading techniques and use of qualitative data analysis software NVivo. The following sections then outline how these methodologies were employed in each of my case studies specifically, and some of the main ethical considerations that were encompassed with the gathering of my research data.

2.1 Ethnography: Participant Observation and Semi-Structured Interviews

Ethnography, in various different forms, was the methodology that I used most extensively for my field work. Put simply, ethnography is the study of 'social interactions and behaviours' amongst social groups and communities (Reeves and Hodges, 2008). The term ethnography is, however, vastly polysemic, and encompasses a series of approaches and theoretical assumptions that have shifted across the course of its history (Jones and Rodgers, 2019). On this tack, James Clifford usefully describes ethnography to be located amidst an array of 'processes'; as an 'interdisciplinary phenomenon' situated 'between powerful systems of meaning ... [it] decodes and recodes, telling the grounds of collective order and diversity, inclusion and exclusion' (Clifford, 1986, pp. 2-3). He goes on to outline six spheres that can be used to distinguish ethnographic practice, and how these intersect with the insights that ethnographies can provide:

(1) contextually (it draws from and creates meaningful social milieux); (2) rhetorically (it uses and is used by expressive conventions); (3) institutionally (one writes within, and against, specific traditions, disciplines, audiences); (4) generically (an ethnography is usually distinguishable from a novel or a travel account); (5) politically (the authority to represent cultural realities is unequally shared and at times contested); (6) historically (all the above conventions and constraints are

Norman Denzin identifies five historical moments that have marked changes in what is understood by 'ethnography', which include the following: 'the traditional (1900 to World War II), modernist (World War II to the mid-1970s), blurred genres (1970-1986), crisis of representation (1986 to present), and the fifth moment (now4)' (1997, p. xi). These different ethnographic moments lead Denzin to conclude that what is meant by ethnography can 'no longer be taken for granted', with each moment encompassing different theoretical assumptions about how an encounter should be approached (ibid, p. xiii). 'Traditional' and 'modernist' forms of ethnography are based upon a splitting between subject and object, where the ethnographer's role entails an articulation of so-called 'objective' or 'scientific' accounts of the world. Such accounts are predicated upon the 'conflicting parameters' of the 'we' and the 'they', where the researcher is 'typically considered an 'outsider' belonging to 'we' and the people are 'insiders' belonging to 'they" (Uddin, 2011, p. 459). These forms of ethnographic relationality are closely tied with histories of coloniality, where the broader anthropological umbrella has been described as 'the child of western imperialism' (Gough, 1968) or the 'handmaiden of colonialism' (Moore, 1999, p. 2). This, Uddin notes, is due to Victorian anthropologies and ethnographies constructing 'the people it studied as primitive, ancient, illiterate and nude exotic others', and the equating of the white-male gaze with notions of objectivity and truth (2011, p. 459).

Renato Rosaldo cites Levi Strauss's *Tristes Tropiques* as an example of such forms of ethnography; of the 'Lone Ethnographer's [...] ideological role in perpetuating the colonial control of "distant" peoples and places' (1993, p. 31; Levis Strauss, 1975). The subjectivity and political positionality of the ethnographer is abstracted from any claims to truth made in such accounts, where the ethnographer is instead positioned as an omniscient observer who documents unbiased accounts of the real. Such ethnographic forms have been heavily problematised for their colonialist underpinnings, where the world is framed as a directly representable 'external social reality' (ibid, p. 31). This form of encounter presumes that the 'real' can be grasped through meticulous recordings and transcriptions of ethnographic data (research interviews, field notes, and etcetera) and the interpretation of these materials via the 'objective' body of the ethnographer. The language or discourse provided by 'subjects' (participants) in such ethnographic accounts is assumed to be verbatim; as an unmediated representation of the subject's experience of the world. On this tack,

⁴ This text was written in 1997.

Denzin emphasises how language never acts as a direct mirror of one's experience, and always interacts with the participant's relationship and understanding of themselves, the ethnographer, and other surrounding contextual factors (1997, p. 5). Further to this, language is also always encompassed with specific epistemic orders, which thus entails absences, gaps and specific linguistic associations that the ethnographer must reflexively interpret.

Following such 'traditional' and 'modernistic' ethnographic forms, poststructuralist and postmodern accounts have foregrounded how language and discourse can only ever offer partial perspectives, and can never provide 'direct' representations of the world (Denzin, 1997). This does not mean that valuable insights and 'truths' cannot be derived from language, but rather that careful consideration must be paid to how accounts provided by both research participants and ethnographers are influenced by broader cultural frameworks and structures of power. They further foreground how ethnographic work must reflexively engage with how language functions as a construction and performance of self (ibid, p. 5). This is constitutive of what Schatz labels as ethnography as 'sensibility', which, he notes, goes 'beyond face-to-face contact', to the gleaning of 'the meanings that the people under study attribute to their social and political reality' (2009, p. 5). This is formed through a close interrogation of research data or broader artefactual material, and requires the ethnographer to have a close familiarity with broad social narratives. This then facilitates recognition of what constitutes individual experience or more extensive hegemonic discourse (Allina-Pisano, 2009, p. 66). This can bring to light what participants see to be the 'banal' and 'unassuming' aspects of social reality, and illuminate how the normalisation of these ideas becomes intertwined with relationships between power and meaning (Boellstorff, 2008, p. 83). Hegemony within this context can be distinguished through repetition across isolated individual accounts (Allina-Pisano, 2009, p. 70), helping to bring to light forms of reification and socialisation.

While Donna Haraway is not an ethnographer per se, her widely-cited *Situated Knowledges* problematizes notions of 'objectivity' and how they sometimes figure within claims to truth within discourse (1988). She emphasises how all claims to truth are situated within specific times and spaces, where an acknowledgement of the researcher's positionality can help provide more 'responsible' accounts of the world. 'Feminists don't need a doctrine of objectivity that promises transcendence', she writes, 'a story that loses track of its mediations just where someone might be held responsible for something, and unlimited instrumental power' (1988, p. 579). Haraway's position resists accounts that assume a universalistic 'objective' voice, and emphasises the importance of 'feminist objectivity' (ibid, p. 583). This is a position, she writes, about 'limited

location and situated knowledge, not about transcendence and the splitting of subject and object' (Haraway, 1988, p. 583). For Haraway, this is the only way truly 'scientific' accounts can be achieved, where an acknowledgement of the subjective cultural lens shaping claims to truth helps the researcher becomes 'accountable' and hereby responsible for what and how they see (Boellstorff, 2008; Haraway, 1988). This more 'responsible' approach acknowledges the privilege (or un-privilege) shaping truth claims; the cultural factors that may be causing the researcher to be more acutely aware of certain social dynamics than others.

Following the post-structural turn, 'digital ethnographies' explore how 'we live and research in a digital, material and sensory environment' (Pink et al, 2016). Since the term 'digital ethnography' is also vastly polysemic, I will use it in this thesis to refer to the many ways in which digital technologies influence the process of ethnographic research. As Pink et al. similarly highlight, digital ethnography entails not just the explicit study of how digital technologies are entwined with elements of social life, and rather extends to considerations of how the ethnographic encounter is influenced by the presence of digital technologies, and how digital technologies might be more indirectly involved with the research process. This might include, for example, what technologies are required to conduct research interviews via the internet, what role the mediation of the screen plays in the research interview, or who has access to specific digital mediums. It further encompasses the politics that are entwined with the digital technologies required for conducting and analysing the research, which in the case of this thesis, primarily included Nvivo and Method52⁵. Both pieces of software are proprietary, meaning that my capacity to explore underlying mechanisms within the software was limited. Further, access to the software is only available to those who belong to a specific institutional setting, or have sufficient financial means. As I discuss throughout the thesis, these pieces of software encompass specific epistemic tendencies, and thus had pivotal implications for the research.

In these ways, each of my case studies comprised elements of digital ethnography. While my research interviews with members of Autonomy and attendees of the 'digital detox' were not, for instance, specifically examining how the process of interviewing via Skype influenced what research data was gathered, this was nonetheless an intrinsic part of my research process that rendered my ethnographic research in some sense 'digital'. In a similar vein, my participant observation at the 'digital detox' can also be constituted as a form of digital ethnography. Although the title 'digital detox' infers an *absence* of digital technologies, this absence was part of the appeal

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⁵ Specific discussions of these politics are discussed in sections **2.8** and **2.9**

for the community that gathered at the retreat, which thus gestured towards potential sets of mutually held meanings that pivoted around a nexus of the 'digital'. Using NVivo for the analysis of my ethnographic research data also had a significant influence upon the write-up of my research materials: it allowed me to identify key themes and patterns in discourse via tools that indicated how many times a word or phrase occurred within the text; and it allowed me to compile sections of the text that belonged to similar themes, which was then useful for viewing thematically similar sections of text in conjunction with one another.

Power relations between the researcher and researched will always exist within the ethnographic encounter. Ways of critically and reflexively working with, and resisting, such power relations have been variously conceived. Some have argued that participant observation can work to counter some of these problematic dynamics (Boellstroff, 2008; Schatz, 2009). 'There is no illusion of detached objectivity to shatter in participant observation', Boellstroff writes, 'because it is not a methodology that views the researcher as contaminant' (2008, p. 71). Schatz defines participant observation as 'immersion in a community, a cohort, a locale, or a cluster of related subject positions', where participation within a given social setting can offer insights that may not be available within other forms of ethnography (2009). In what might be described as a hybrid space, the ethnographer operates neither wholly from-above nor wholly from-within a given social setting: the researcher does not act wholly as 'participant', since the motivations for their participation will be partially bound with the aims of the research, and their presence may influence the behaviours of others within the space; nor wholly as 'observer', since they partake in the activities of the research setting, and may also self-reflexively consider how the dynamics of the space influenced their own behaviours and attitudes. These were factors that I deeply considered during my participant observation at the 'digital detox', where my role as researcher provoked particularly interesting dynamics whilst at the retreat. As I will explore in more detail in section 2.3, a key element of the 'digital detox' was that participants were instructed not to speak of their 'work' whilst at the retreat. My positionality as researcher - what might be constituted as my 'work' - meant I did not experience this element of the 'detox' in the same way as other participants, and also may have shifted the experience of others in attendance through my embodying of this role.

Immersion within specific social settings can offer insights into relationships among participants, cultural norms, as well as information about cultural ideas and behaviours. Unassuming or 'common sense' elements of social life might be uncovered during participant observation, revealing ties between shared cultural assumptions of the participants (Boellstorff, 2008, p. 75).

Mack et al. (2005) posit that notable qualities that should be observed during participant observation research should be: appearance, including age, gender, and physical appearance of the participants, that may or may not give indications about membership in a group or community; specificities around verbal behaviour and interactions, including information about who speaks to whom, who initiates interaction, and vocal tone; details of physical behaviour and gestures, pertaining to who and who is not interacting, and what emotion is communicated through body language; and details around personal space, in terms of how the spatial relations between participants communicate information about relationships and hierarchy (p. 15). These are all elements that I documented during my case study of the 'digital detox', which I will explore in more detail in section 3.3.

2.2 Autoethnography

Autoethnography can be broadly defined as a self-reflexive research methodology, where the 'multiple nature of selfhood' is foregrounded to offer narratives on particular social and cultural formations (Read-Danahay, 1997, p. 3). Strathern characterises autoethnography as 'anthropology carried out in the social context which produced it', while Pratt defines autoethnography as a form of writing that offers a personal and political account of one's own culture (Strathern, 1987, p. 17; Pratt, 1994; Read-Danahay, 1997). It often stresses 'multiple, shifting identities', where the researcher examines the cultural conditions and forms of relationality that have come to influence their embodied engagement with the world (Toyosaki, 2018). Many accounts also highlight how autoethnography can be conceived of as *processual*, where, as Trinh notes, 'a certain identity is never possible: the ethnographer must always ask, 'Not *Who* am I? but 'When, where, how am I (so and so)?' (1992, p. 157). It emphasizes a move away from the gaze of the 'objective' observer to foreground the importance of the meanings of the 'personal', where – moreover – the meanings embroiled with the 'personal' are understood *not* as stasis, but as constantly changing 'through experience, and with knowledge [...] as something that is deeply historical and collective' (Mohanty, 2003, p. 191).

It is for these reasons that Toyosaki considers autoethnography to hold significant de-colonial and postcolonial potentialities (2018). Autoethnography, he notes, purposefully makes no claims to objectivity or 'political neutrality', and represents a 'commitment for our continuous self-reflexive labour to interrogate, become more aware of, and possibly challenge the relationality through which we became and continue to become autoethnographers in our academic culture and

everyday living' (2018, p. 33). This was significant to all elements of my research project, as I deliberately sought to challenge claims to knowledge that abstract the subjectivity of the researcher from the research materials. The role of academia is also a core focus within this piece of Toyosaki's work in particular. Here, he explores how colonial histories are manifest within educational institutions, and what autoethnography might offer by means of countering these colonial legacies. Here, he argues that it presents the opportunity for researchers to challenge the cultural politics that shape how claims to truth are formulated and treated as *legitimate*, and question how 'academia's cultural and institutional past of colonisation (i.e. racism, heteronormativity, patriarchy, xenophobia, cultural Othering, sexism, classism, Standard English, etc.)' can be dialectically challenged through the foregrounding of personal experience (ibid, p. 34). Interrogating the aspects of these cultural legacies that are constitutive of our own ways-of-seeing are thus central to decolonial and postcolonial ethnographies, where the researcher self-reflexively considers their own role in reproducing these structures.

Toyosaki foregrounds the significance of the imagined 'YOU' within academic writing, and how this interacts with constructions of the self. This, for him, is a central concern of autoethnography, where the 'relational nature of our self construction' is fundamentally a political and economic concern (2018, p. 35). The 'YOU' marks a mode of *governmentality*; an 'imagined hand' that 'write[s] with and/or over me', in order for academic work to adhere to sets of institutional conventions that remain shaped by colonial histories (ibid, p. 35; Conle, 2004, p. 141). He argues that while autoethnography - in its countering of notions of the 'objective' observer and the framing of the research as 'process' not 'product' - offers a form of resistance to some of these conventions, this does not negate that 'we have been always already colonised by the normalising, neoliberal and capitalistic academic discourse to be "successful" or to be able to "survive" U.S-American higher educational culture where autoethnography ties to flourish' (ibid, p. 36). He continues,

I still consider how the assigned blind reviewers would respond to my autoethnographic essays while imagining who they may be; I still imagine them to be White, Standard-English-speaking, and middle/upper-class scholars and others who became trained to value such standardised educational culture. Since the early stages of my academic career, I have learned to be scared of blind reviewers whom I can only imagine as powerful academic ghosts who are real but not really. They render real materialistic and psychological effects on me (ibid, p. 36)

These are considerations that I engage with most extensively in **chapter six**, where I utilise an autoethnographic approach to narrate and reflect upon a data scrape process. I explore the forms

of intelligibility that my engagement with this digital method encouraged, and how these are tied to broader colonial legacies and rationalities. I have, however, tried to maintain this self-reflexive perspective in response to all of my research materials, and to foreground my own political positionality throughout the thesis.

2.3 Digital Humanities and Digital Methods

This section of the chapter will explore some of the debates and critiques surrounding 'digital humanities' methods, which will chiefly provide some theoretical background to the methodological frameworks that I utilise in **chapter six.** It will also highlight how the vast majority of the content in this thesis can also be understood as in some sense 'digital humanities', due to the array of digital tools that were utilised to compile the research. In a similar vein to notions of 'digital ethnography' highlighted in the previous section, the vast majority of research conducted within the 'arts and humanities' will in some respect be 'digital humanities', whether this be due to accessing online journal data bases, conducting internet searches, using emails or social media to correspond with interview participants, or simply using word processing software to present research findings. In this way it is arguably not possible to disentwine the influence of the 'digital' from contemporary 'arts and humanities' research. For these reasons alone, this thesis can be loosely defined as belonging to the 'digital humanities'. There are however, other specificities that render this thesis a 'digital humanities' project, which I will now outline in this section.

The scope of the 'digital humanities' is far reaching, and has evolved from a series of fields and theoretical practices. Some of these include, but are not exclusive to, new media studies, science and technology studies, humanities computing, communications, and cultural studies, amongst others (Lopez, Rowland and Fitzpatrick, 2015; Risam, 2018). One way of describing the 'digital humanities' which bares relevance to this thesis is as 'self-conscious' humanistic enquiries into digital worlds and cultures (Berry & Fagerjord, 2017, p. 13). There has, however, been a great deal of debate around what precisely constitutes the 'digital humanities', and whether this should be constituted as a clearly defined field at all (Allington, Brouillette & Golumbia, 2016; Kim & Stommel, 2018). Franco Moretti has gone as far to state that the term 'digital humanities' means 'nothing', while others have 'decidedly' not defined the 'digital humanities', arguing that it is not for 'any single voice or collection or discipline to define' (2016; Kim & Stommel, 2018, p. 32). For Davidson, the reasons for eschewing clear-cut definitions of the 'digital humanities' lie in resisting further dividing lines between disciplines, noting that the 'binaries that have shaped academe [...]

need to be blurred, if not entirely erased, across all disciplines, departments and fields [...] if we are to arrive at a DH defined by difference, not simply by automation and *replication of the past'* (ibid, emphasis added).

A common thread among critiques of the 'digital humanities' is that the term has close ties with the neoliberalisation of humanities education (Allington, Golumbia, Brouillette, 2016; Moretti, 2016). On this tack, critiques of the 'digital humanities' have often revolved around its role in heightening the commercial and economic applications of humanities subjects, and it's possible role in preventing humanities departments from too much damage from the barrage of budget cuts that have been increasingly impacting universities over recent years (Allington, Brouillette and Golumbia, 2016; Risam, 2018). These arguments emphasise the restructuring of the humanities in accordance with the epistemological tendencies of STEM subjects, viewing the digital humanities as steering it towards being more 'instrumental, employable, and fundable' (Risam, 2018). As Allington, Brouillette and Golumbia point out, neoliberal policies favour academic work that 'produces findings immediately usable by industry and that produces graduates trained for the current requirements in the commercial workplace', which might be more easily or *efficiently* generated via methodologies that are explicitly 'digital' (2016). They continue,

Advocates position Digital Humanities as a corrective to the "traditional" and outmoded approaches to literary study that supposedly plague English departments. Like much of the rhetoric surrounding Silicon Valley today, this discourse sees technological innovation as an end in itself and equates the development of disruptive business models with political progress (ibid)

While I empathise with aspects of these critiques, it is equally important to scrutinize what forms of knowledge can and are produced via explicit and self-reflexive engagements with digital technologies, and what epistemological and methodological inequalities and biases these might encompass. I thus believe it is important not to dismiss the 'digital humanities' as merely a product of neoliberalisation, and rather consider how critical engagements with digital tools can be used to expose workings of power, in terms of the voices they are more likely to bolster, or the epistemic biases that might be bolstered via digital tools. As Kim notes in *Disrupting the Digital Humanities*,

We must discuss how to deliberately create structures and frames for an antifascist DH - to deliberately dismantle the methodologies, epistemologies, structures, data, databases, tools, archives, code that have created a world in which technology is now used to consistently bludgeon its most vulnerable denizens (2018, p. 482)

These are concerns I engage most extensively with in **chapter six**, where I self-reflexively engage with data-scraping software Method52. This software, as I highlight in section **2.8** of this chapter, is most extensively mobilised within commercial spheres for analysing consumer behaviour, and for policing. The fact that such data-scraping tools are utilised within these spheres indicates that the epistemological formulations that are specific to this software are likely advantageous to these politics and forms of power. This is not to state that such epistemological formulations are *exclusively* bound to these applications, but rather that there is a relationship between these data-scraping mechanisms and neoliberal power that requires closer inspection.

My own personal interests then, when it comes to 'digital humanities' methods, pertain to how the generalised 'computational turn' within approaches to learning, knowing and educating encompasses forms of epistemic violence, and how these epistemic violences can be explored, exposed and subverted via a closer and more nuanced engagement with the digital itself (Boyd and Crawford, 2011). Computation necessitates the translation of everything it processes into binary code, which in turn shapes and reshapes the worlds it comes to touch. This thus always entails a level of reductivism, which, as Berry writes, produces 'new knowledges and methods for the control of reality' (2012, p. 2). Within my own case studies - which explore conceptions of digitality within predominantly Western contexts, and not, for instance, the role of digital technologies in areas such as China⁶ - some of these knowledges and cultural biases might include: contributing to the rising hegemony of the English language, and the suppression and underrepresentation therefore of other languages; the resultant privileging of the epistemological tendencies that are embroiled with the English language; the privileging of histories from certain sectors of the world and the suppression of others, namely the historical narratives as told by, and pertaining to, Western-Europe and the United States; and the ways in which these histories are remembered or forgotten, thus retaining (often Eurocentric) cultural forms and silencing (often indigenous) cultural forms.

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⁶ It should be noted that - while critical - in studying Western contexts I am also in some senses reproducing such forms of Western-centrism. This is due partially to spatial limitations within the thesis, and partially to my own linguistic limitations that make studies into non-English applications of digital technologies inaccessible. My hopes, within this thesis, are to use my own forms of cultural understanding to uncover and expose how specific digital technologies developed within Western contexts are oriented towards establishing new forms of neo-coloniality and governmentality, and thus the forms of power that underlie these digital applications.

Relatedly to these considerations, Risam foregrounds the importance of applying postcolonial and decolonial approaches to the study of computing and technoculture, which would thus encourage the 'creation of new tools and methods with epistemological and ontological roots beyond the Global north; [attend] to the role of labour in digital humanities projects; and [address] the hegemonic role of the English language in digital humanities scholarship and practice' (2018). Decolonial and postcolonial approaches foreground the ways in which modernity and scientific rationality have been shaped by colonialism, imperialism and capital, and how these are inseparably intertwined with the development of digital computing. These cultural legacies have shaped and continue to shape the functionality of digital tools, their surrounding discourses, the institutions and corporations that produce them, and who has ownership or access to the data they produce. These are all pivotal considerations when engaging with digital tools for research, and are considerations that I will return to throughout the thesis.

2.4 Data Analysis Techniques: NVivo and Close Reading

My data analysis for all of the case studies involved close reading techniques, where I made notes about any overarching themes that I noticed, and my preliminary observations. I tried to distinguish key tensions that occurred within each of the texts, and how these tied into broader social, political and economic narratives (Nicholson, 2017, p. 184). I usually did these on printouts of the manuscripts as I found I was more able to immerse myself within the texts this way (without, for instance, distractions such as emails, or the inclination to conduct internet searches around aspects of the interviews). This allowed me to get a sense of overarching themes for coding within NVivo.

For the case studies of the 'digital detox' campers and Autonomy, I made extensive use of qualitative data analysis software NVivo. This software helped me corroborate, or shed new light upon, any preliminary hypothesises that had been drawn from my close readings. NVivo served as a useful tool for illuminating any significant biases in the analyses drawn from my close readings (for instance, I noticed that I was more inclined to draw upon themes that had already been explored within the thesis than I was with new patterns in discourse). This was due to NVivo's function of quantitatively highlighting how many times a word or phrase occurred in a text. It also allowed me to visualise which words occurred in conjunction with other words, which was also helpful for identifying linguistic patterns and associations within the discourses of my interviewees. It is also important to note here that NVivo did not, by any means, completely eliminate my own

personal biases that influenced my interpretation of the data, but rather provided tools to bring my awareness to patterns that I may have been less inclined to notice without qualitative data analysis software.

2.5 Critical Discourse Analysis

Critical discourse analysis (CDA) is the data analysis approach I used for the analysis of the majority of my research materials. CDA chiefly explores the ways in which power and inequality are produced and reproduced through language and discourse (Van Dijk, 2015, p. 466; Lupton, 1992). Within the context of CDA, Deborah Lupton defines discourse as 'a group of ideas or thinking which can both be identified in textual and verbal communications and located in wider social structures' (1992, p. 145). A 'critical' approach to textual analyses avoids dichotomous or reductive explanations, and rather explores the nuances and contradictions that might underlie discursive formations (Wodak & Ludwig, 1999, p. 12). Wodak and Ludwig also foreground how a 'critical' approach should encompass some level of self-reflexivity on part of the researcher, where they might consider how their own cultural conditioning or political environment might shape their personal approaches to the discourse in question, and make this stance explicit. Social and political context are thus fundamental components in CDA, where the researcher looks 'behind language use' to uncover and expose underlying or unassuming elements of the text which might propagate specific workings of power (Hart, 2010).

Many accounts of CDA highlight that it is not a homogenous approach with a precise methodological framework (Wodak & Lidwig, 1999, p. 11; Van Dijk, 2001, p. 353). Rather, it is a conglomerate of approaches that might be better understood as a 'perspective', which, as Teun van Dijk notes

may be found in all areas of discourse studies, such as discourse grammar, Conversation Analysis, discourse pragmatics, rhetoric, stylistics, narrative analysis, argumentation analysis, multimodal discourse analysis and social semiotics, sociolinguistics, and ethnography of communication or the psychology of discourse-processing, among others (van Dijk, 2015, p. 466)

The way that this intersected with my use of qualitative language analysis software NVivo was therefore pertinent. For instance, the ways that NVivo draws connections between frequently occurring terms is chiefly quantitative, which potentially lends itself towards reductive interpretations of research materials: it does not allow, for instance, for words with multiple

meanings to be identified within their broader discursive contexts. Using NVivo for my research analyses thus necessitated self-reflexivity and an understanding of how the analytic mechanisms within the software functioned, as well as an awareness of the broader discursive structures within which specific terms existed.

Weiss and Wodak also describe CDA in terms of a synthesis of approaches, some of the most prominent being Foucauldian approaches to discourse and the utilization of Bourdieu's habitus (2003, p. 6). Habitus refers to patterns in behaviour that might be associated with an actor's cultural and social background, including race, gender, class, ethnicity and sexuality, where these cultural and personal elements are not understood as determined (Power, 1999, p. 48). It is, as Elaine Power writes, 'a way of describing the embodiment of social structures and history in individuals [...] a set of dispositions, internal and external, that both reflects external social structures and shapes how the individual perceives the world and acts in it' (ibid). Foucauldian discourse analysis similarly aims to make explicit the ways power performs within social relations, where discourse is understood to play a pivotal role in the maintenance of structures of power, and how these impact social groups (Powers, 2015, p. 18).

CDA might also foreground why the researcher selects the area of study, how it will be studied, and the approach taken to the materials. Each of these elements of the research process are inseparably entangled with the researchers own beliefs, cultural background, language, personal histories, and interests, which will always steer the research in a direction that is specific to the researcher. CDA foregrounds these subjective particularities, and aims to situate them within wider structures of power. The right interpretation does not exist; a hermeneutic approach is necessary. Interpretations can be more or less plausible or adequate, but they cannot be 'true" (Wodak & Ludwig, 1999, p. 13). As an approach that encourages self-reflexivity and focuses largely on analyses of the materials captured or given (in this thesis's case interviews, Tweets, and web content from specific sources), CDA complimented the scales of my other research methods, which were chiefly ethnographic and autoethnographic. These methodologies, as I use them in this thesis, each foreground how the subjectivity of the researcher is intimately tied with any claims to truth made, and how examinations into microcosmic formulations can reveal patterns which bare relevance to broader political and cultural frameworks.

Having now critically framed each of the methodological frameworks that I used to compile the research data of this thesis, I will now outline how these were applied for each critical case study.

This will detail how the research was gathered and subsequently analysed, and the ethical considerations that were specific to each case study.

2.6 Participant Observation at Camp Wild*

In this section I provide details around the ethical and methodological practices that I enacted at the Camp Wild as a participant observer. I will highlight what terms were agreed with the organisers of the retreat prior to my attendance, and how my data were subsequently recorded in accordance with these terms. I will also focus on how causing harm was avoided, how privacy was preserved, how informed consent was attained, and how the process was deemed to be ethical by the University of Sussex (appendix 2.5).

I attended the retreat as a 'camper', meaning that I was not involved in the set-up, planning or running of the retreat, and experienced the four-day event as a participant observer, in a way that was broadly similar to the other paying guests (non-paying attendees were those who were conducting workshops or helping organise the camp). I lived alongside the other participants for the entire duration of the retreat, and slept in the children's summer-camp-style cabins that were located on the site. I attended workshops and events alongside other campers, as well as taking coffee and lunch breaks together. Spending this time fully-immersed in the camp's activities allowed me to develop trust between myself and the other campers, and – with the caveats set out above with regards to 'work' - to share their experience. It also facilitated informal discussion about my research during the semi-structured interviews that I followed up with. Participants, including myself, were not permitted to have cameras (digital or otherwise) for the duration of the retreat, nor were we allowed mobile devices, laptops, or any other items that could be labelled as 'digital' (there were however discontinuities in what was considered to be 'digital', which I will discuss in detail in **chapter five**). Prior to the retreat, I was asked by the organisers not to utilise any digital devices for the recording of my research data whilst on site, as this may have altered the experiences of other campers. This meant that all of my field notes were made using pen and paper, and consisted of my own observations about the camp, and brief notes about conversations that I'd had with other campers (appendix 4.4).

Besides the prohibition of our digital devices and other photographic apparatuses, there were several other prominent rules that we, as paying attendees, were to abide by during our stay: we were asked not to engage in 'work talk' (discussion of our professions), and we were to use

nicknames of our own choosing for the duration of the retreat. All campers were informed about these rules via email prior to attending. The 'no work talk' rule also prompted ethical questions about how I would present myself as researcher. Participants were informed that a UK-based researcher would be present at the camp prior to arrival in a group email that was sent to all attendees (appendix 4.3). This email stated that I would only be taking hand-written notes, and that no recording devices would be used. It also noted that my research adhered to a policy of 'complete anonymity', meaning that any details of location and identity would be abstracted from my research. Participants of the 'digital detox' were reminded of my presence again during an opening presentation given by one of the camp's organisers. If there was any discomfort or opposition to my presence at the camp, participants were told that they should report this to one of the camp's 'counsellors' (these were appointed helpers who had often been involved in the retreat in previous years, and were now involved in the organisation of the retreat). If there were any concerns expressed, I was not informed of these.

As noted earlier in this chapter, my role as researcher meant my experience was different to the other campers in that they were at the retreat specifically to remove themselves from discussions of their 'work'. Although we were asked not to speak of our professions whilst at the camp, I decided that it was unethical to anonymise myself, and thus informed those around me that I was the person conducting the research. Responses to this were mixed, but I was never policed or instructed not to speak of my role. There were sometimes instances in which the topic of my research prompted discussion around my subject area, and others where attendees commented that they were 'being watched'. I was never asked not to make notes when comments such as 'we're being watched' were made, and if I sensed that participants felt uncomfortable about my presence during discussions, I asked for additional consent about whether I could make notes about what had been said. Participants always consented on the condition that conversations were anonymised. This combination of factors meant my role as researcher did alter the experiences of the participants to some degree. It is also relevant to note here that repeated narratives put forward by the camp of it being a 'safe space' where people were 'free to be whoever they wanted to be', alongside factors such as the prohibition of cameras and discussion of professions, were done to help participants of the 'digital detox' feel less self-conscious (more details of this will be explored in **chapter five**). I thus felt that overt note taking would have significantly altered the experiences of those at camp. In order to mitigate this dynamic slightly, I recorded notes a few minutes after conversations had taken place, and made these whilst sitting alone. This was not however

completely private as all of the spaces for paying attendees were shared, which meant that others were able to see me working.

There was also a culture amongst some of the campers - certainly not all - of sharing alcohol and hallucinogenic substances. This was a very minor element of the camp, however it did provoke important ethical considerations. I was not aware of this prior to attending, although retrospectively it had been vaguely alluded to in the 'BYOF' section of the email (an acronym for 'bring your own fun', which included 'alcohol, herbs or elsewise', see appendix 4.1). Although campers had been made aware that I would be making notes throughout the duration of the camp, and were thus aware that research would be ongoing, I never made notes on conversations held with campers if I was aware that they were under the influence of any illicit substance, or if I felt their judgement had been impaired by the consumption of alcohol. If participants were not sober then their memory or judgement may have been potentially impaired, which I felt provoked problematic issues with regards to participants being able to grant fully informed consent. Therefore, all notes I made pertaining to the use of substances were highly generalised. By this, I mean I did not make notes on specific individuals, and referred to the use of alcohol and substances in the broad sense of these being part of the culture at the camp. This was to protect participants from any potential legal consequences that could result from the publication of my study, and to minimise any risk of psychological harm that could have been caused from overt note taking while attendees were under the influence. Details of the name of the camp, the names of the participants, and any other identifying information have been abstracted from my study. It is also pertinent to note that I never felt threatened, or in danger, as a consequence of the presence of alcohol and hallucinogenic substances being used at the camp.

This case study was retrospectively assessed by the ethical review board at the University of Sussex. Prior to my attendance at the camp, I completed the ethical assessment required by the University of Sussex, which was subsequently approved by my supervisors. However, due to some misunderstandings in how this procedure was to be fully completed, it was not formally cleared by the CREC review board prior to my attendance at the retreat. Following my visit however, I provided full details of how the details of my participation were agreed with the camps organisers, how the organisers of the camp informed attendees of the camp about my presence and the research I would be conducting, how I informed my interviewees about what would be required of them within research interviews, how I informed my interviews about how the information they provided in research interviews would be used, and how I attained consent from my interviewees.

After providing these details, the chair of SS-ARTS CREC wrote a full letter noting that the research I conducted was ethical, despite the fact that institutional ethical approval was not gained before-hand. This letter is attached in full in the appendices of the thesis (appendix 2.5).

2.7 Semi-Structured Interviews: Digital Detoxers and Autonomy

I will now detail how the data for my research interviews was gathered. The interviews for both the case study of Camp Wild and Autonomy were conducted via Skype, or other video-calling software such as Facetime. These different video-calling applications were used in accordance with the preferences of my participants, rather than due to my own choices around the politics or the various affordances of these pieces of software. The only functions we used within the software were audio and video for video-calling, which meant the different applications made little difference to the data produced. All data was transcribed in the same way, and the audio was of a similar quality.

That the interviews were conducted via video-calling software was due to distance, since all of my interviewees lived in far-away locations that were too costly for me to travel to. All of my interviewees did however have means to conduct video calls via the internet. This was not necessarily my preferred method since this was prone to disruptions. The most prominent issue that I experienced conducting interviews in this way was fluctuating internet connection. This meant that aspects of some conversations were inaudible, or discussions were interrupted as we attempted to regain sufficient connection, which lead to some interviews feeling stunted. It was also more difficult to observe the non-verbal cues of participants using video-calling software, which was particularly prevalent during the Camp Wild interviews as participants sometimes used bodily gestures to help describe the sensations that they experienced during the 'digital detox'. As Mary Bayles notes in relation to Skype, 'we lose the full range of postural, gestural, and expressive movement that the body conveys, as well as the intentionality that is carried and expressed in that movement' (2012, p. 578). Interviewing via Skype did however have some advantages, in that my participants could undertake the interview in a space which felt comfortable to them, and they didn't have to spend extra time or money travelling to a given location. It is also relevant to note that none of my interviewees expressed concerns around the video-calling software and end-toend encryption. Since my interview questions did not directly enquire into what might be deemed as sensitive personal information (for instance, experiences of trauma, engagement in illegal activity, and so on), I did not find it necessary to conduct the interviews with software that had

stronger end-to-end encryption than Skype or Facetime. In order to reduce any extra unpaid labour from my participants, I usually asked which video-call software would be most accessible to them and used their chosen software for the interview.

My research interviews for Camp Wild were carried out with fourteen of the camp's attendees across a two-month period following our time at the camp. Those who I interviewed responded to a request I'd posted on a 'closed-group' for the camp's attendees on Facebook. This request invited the group to get in touch if they were willing to participate in a research interview with me about their experiences of the camp, and noted that the interviews would likely take around twenty to thirty minutes. As the relationships I had established with my participants whilst at the camp were generally cordial and friendly, the interview format was fairly conversational, and other questions formulated on the spot were often asked in response to the answers that participants had given (sample interview provided in appendix 4.5). I asked each of the volunteers the same set of pre-established interview questions, regarding: what their motivations were in attending a 'digital detox'; how they found the experience; how they thought other people's experiences were similar or different to their own; how they interacted with others whilst at the camp; and if they considered these interactions to be different to those that they usually have outside of the camp. The interviews generally took between fifteen and thirty minutes, and several neared an hour in length. Of the fifteen volunteers, eight were female, and seven were male. Thirteen of these volunteers were Canadian, were nearly all between the ages of twenty-eight and thirty-five, and were vast-majority white. Consent was initially attained verbally for these interviews during the video-calls themselves, and then subsequently my interviewees each signed a consent form using e-sign software (appendix 5.5). Verbal consent and signatures were attained from all of my interview participants.

The research interviews with Autonomy were undertaken in a broadly similar fashion, in that they were semi-structured and conducted via video-calling software. I became aware of Autonomy through an acquaintance who is involved in running the think-tank, who assisted me in providing contact information for the others involved. I contacted every person who featured on the Autonomy website during my research interview period⁷, and interviewed all who responded and consented to giving an interview. I sent all prospective participants the same initial email regarding the basic purpose of the interview (appendix 2.1), which entailed information about the overarching themes of my thesis, and what I would require from them in terms of time and

⁷ Research interview period fell between May 2018 and September 2018

information. There were some instances in which participants consented to giving an interview from the information I'd provided in this initial email, and others in which participants requested a little more information or detail about what questions I would be asking them, in order to prepare. I provided the questions prior to the interview in these cases, which meant there was some variation with regards to the spontaneity of the answers provided by my interviewees. Prior to the interviews, all interviewees were sent an information sheet (appendix 2.2), which provided more details about the conditions of their participation, and how the information would be used. All participants were also sent consent forms which were signed using e-sign software (appendix 2.3). Signatures were attained for all of the interviews I conducted.

For the most part, I asked each participant the same set of pre-defined interview questions⁸. Largely, I asked the participants about what it was that interested them about anti-work, and what they saw to be the core issues (sample interview **appendix 6.2**). I enquired about how they were personally responding to issues around anti-work, how the issues were being addressed by Autonomy, and where it was that they envisaged Autonomy having an impact. Notions of 'postwork' were also discussed, where I asked them what they understood a 'post-work' society to be, whether they saw a 'post-work' society to be a feasible prospect, and the role they envisaged technology playing within prospective 'post-work' futures. This tied into my broader thesis themes around capitalist realist imaginaries, and how and where this is tied with the epistemological and material conditions of digital environments.

2.8 Digital Humanities Methods and 'Blockchain for Good'

I will now detail the methodologies that I employed for the 'blockchain for good' case study, which is comprised of two parts: the first is a CDA of two 'blockchain for good' texts, which were attained via 'snowballing' through internet links; and the second is a data-scrape of Twitter that was undertaken with some natural language processing software. In this section I will also reflect upon some of the ethical considerations that were encompassed with these digital methods: while the data gathering for the 'blockchain for good' chapter did not necessitate formalised ethical clearance from the University of Sussex, there were nonetheless ethical considerations to be made regarding my use of internet data.

⁸ Occasionally questions were missed or asked in a different order to the basic structure I'd initially planned, if I felt the question was not appropriate for the discussion at the time. There were also times when I veered from the set of pre-defined interview questions, if the interviewee had provided an answer which had prompted further discussion.

By 'snowballing', I mean that I browsed through a series of internet articles via links or references provided within a given text. This was thus - as with all of my research data - also heavily influenced by my own biases and choices pertaining to what I deemed to be most relevant to my broader research. In order to eliminate some of this bias, I only selected texts which specifically invoked the slogan 'blockchain for good' (and not, for instance, initiatives that featured in some 'blockchain for good' discourses, such as specific digital identity initiatives, or initiatives for financial inclusion). While 'blockchain for good' is a discourse that provided ample scope for a case study, I was not able to find a wealth of texts with - what I considered to be - sufficient data for a CDA. I thus selected the two texts that were labelled with the slogan 'blockchain for good', and contained the most amount of text that would then be lucrative for exploring and corroborating key 'blockchain for good' themes. Another factor in the selection of these texts was that I initially conducted my searches via Google. I used Google as I wanted to explore the most hegemonic applications of the slogan 'blockchain for good', which I felt would be most likely generated via Google due to it being the most popular search engine globally (StatCounter, 2020). However, when conducting the same searches via search engines such as DuckDuckGo - which does not store any personal user data and is less influenced by corporate agendas (for instance, it does not sell personal data to advertisers) - I discovered that I encountered very similar search results to those that were generated by Google. It is thus difficult to accurately state how heavily influenced my research data were through using Google specifically, and its various procedures for compiling and ordering search results.

I conducted the data scrape of Twitter using Method52, which is a piece of proprietary Natural Language Processing (NLP) software. Access to this software was again granted by the University of Sussex. I used Method52 to crawl Twitter for all Tweets⁹ containing the term '#blockchain' across a six-week period between July and August in 2018. It was also subsequently used to automate the analysis of the scraped data. Via engaging with this experiment in digital methods, I sought to explore the ideological and epistemological limitations of this particular digital methodology, and how power was materialised in the various stages of this data scraping process: each within myself and my own decision-making processes; within my institutional setting; within the material affordances of the software; and in relation to the agencies of the code-writers and

⁹ There were various moments in which the network connectivity fluctuated, which caused a few disruptions to the scrape. These disruptions were minor however, and since the scrape accumulated such a vast span of data, we decided that the effects upon the final results would be very minimal, or at least, would not have a significant effect upon what I was intending to explore.

developers. I also intended to critically explore what this particular digital method allowed me to see, the forms of intelligibility that were offered by the software, and how this was significant to some of the narratives embedded in 'blockchain for good' discourses.

The scrape was largely assisted by Jack Pay, a member of the Text Analysis Group (TAG) at the University of Sussex. TAG conduct research into AI and Natural Language Processing (NLP), and have developed approaches to 'classification, information extraction, influencer analysis, automatic tagging and automated dialogue' (Tag Laboratory, 2019). The current TAG team includes fourteen men and two women. Their NLP technologies are utilised for the analysis of text documents and social media data. Their main foci, as stated on their home page, pertains to the study of 'the impact of social media on politics, policy-making and law enforcement', as well as 'associated emerging social phenomena including radicalisation, community intolerance, information spread and coordination (e.g. in disaster response), and approaches to health and wellbeing' (ibid).

The 'Major Projects' page of the TAG website lists a series of projects that the Method52 software has been used for. Some of these were for commercial projects, such as 'Mobile Commerce as a Service' in 2014, which was intended to help businesses understand the 'intent' of their customer base via social media data and text messages. Another project entitled 'Policing Hate Crime: Modernising the Craft, an Evidence Based Approach', undertaken between 2015 and 2017, explored how 'the policing of hate crime might be improved through the application of NLP technology', where 'community temperament' - as indicated via social media platforms - was examined in correlation with incidents of hate crime (TAG Laboratory, 2019). These projects were funded by groups such as Innovate UK, The Metropolitan Police Service, the Police Knowledge Fund, and Demos. As highlighted in **section 2.3**, that Method52 is mobilised within these spheres indicates that there is a significant relationship between securitisation, consumer analysis and the epistemological formulations that are specific to such forms of software. TAG also work alongside governments and businesses, and co-founded the Centre for Analysis of Social Media, which works closely, as the TAG homepage foregrounds, with the think-tank Demos (ibid). Demos define themselves as 'a champion of people, ideas, and democracy' and are oriented towards 'policy solutions' (Demos, 2018). They utilise machine learning and big data to 'understand social trends as well as people's lives and experiences', and are 'authentically cross party', working with governments and 'social and community leaders, businesses and campaigners to renew Britain' (Demos, 2018). Their website information also lends specific attention to ideas for the future,

where, they write, 'we innovate and look forward [...] we don't see problems, we see the opportunity to come up with new solutions' (ibid).

The Method52 software combines two approaches to analysing semantics: a compositional approach, and a distributional approach. The compositional approach explores how an infinite number of sentences and meanings can be generated via a limited vocabulary (TAG Laboratory, 2019). A distributional approach delves into the meanings of the words themselves, and how the meaning of a word is contingent upon its surrounding context (ibid). This is premised upon the idea that certain words are more likely to occur within certain contexts, and will have a closer relation – if drawn mathematically – than others (ibid). Mathematically these contexts are typically represented in vector space', TAG writes, 'so that word meanings occupy positions in a geometrical space' (2019). They provide the example of the words 'cat' and 'dog' being more likely to be closely related in 'vector space' than the words 'dog' and 'television'.

This was the first time that I'd interacted with any NLP software. I learned how to operate the software through a series of meetings with Jack, where he explained much of the software's functionality, and as I then interacted with the data during my own time. Jack constructed the initial settings for the scrape, oversaw the process as it was underway, and advised me on how to proceed with each stage. I chose an autoethnographic approach to narrate this process, where I purposefully make no make no claims to objectivity or 'political neutrality' (Grande, 2008); rather, part of my objective in using these methodologies conjunctively was to foreground the *non-neutrality* of each of these methods. It was each an ethical, ontological and epistemological exercise, where I could explore and challenge the forms of knowledge and relationality that my engagement with this data-scraping method encouraged (Kim, 2018, p. 484).

I chose Twitter as the resource for the scrape for several reasons. Twitter is a social networking platform that allows users to post, interact with and follow brief snippets of information that have been posted by other users. While user-produced content is a primary component of the Twitter platform, much of its functionality is proprietary and black-boxed (Kim, 2018). While I was in a position of privilege, in that I was working with an academic institution that had the financial means to crawl Twitter data (Boyd and Crawford, 2011; Crawford and Finn, 2014), there were still limitations upon what we were able to gather, and how we were able to engage with what was gathered. Since the data-set was so large, creating filters or viewing samples of the data were necessary for analysing the data within the timeframe of my thesis writing. We were also not able

to crawl Twitter for history that went beyond the previous week. This was due to limitations with Twitter's Standard Search API and Method52, which are in place largely due to the technical difficulties of making Twitter data beyond this scope indexable and searchable. There are also legal limitations which meant that crawling data on Twitter beyond this timeframe is limited (Twitter Developer, 2019).

I was curious to explore Twitter as a result of a series of claims I'd read pertaining to Twitter having a more diverse user-base than other social-networking platforms (Smith, 2011; cited in Brock, 2012, p. 529). In this regard, some have highlighted how Twitter is not limited to certain forms of Internet access; users can contribute to the platform via SMS from a non-smartphone platform, which has been part of Twitter's functionality since it began in 2005. Citing Smith, Brock has noted that of Black internet users, 25% use Twitter, in comparison to 9% of online Whites, and suggests that the reasons for this may be down to the variety of ways that users can post to the platform (ibid, p. 529). These claims to Twitter's diversity were interesting as I felt there were links between this and the claims to inclusivity put toward in some of the 'blockchain for good' discourses; while Twitter may be considered a more inclusive platform than others, my research into the biases within corporate technologies in particular had led me to believe that the various material affordances of the platform would nonetheless favour certain politics, cultural frameworks and social groups above others.

Boyd and Crawford also highlight some more generalised methodological considerations when it comes to crawling data from Twitter that were relevant to this case study. Their article, 'Six Provocations for Big Data', posits that questions of 'who gets access? For what purposes? In what contexts? And with what constraints?' must always be foregrounded when researching with or about big data (2011, p. 12). Regarding Twitter specifically, they note that specific ethical considerations might pertain to how consent might be given for the use of Tweets. 'It may be unreasonable to ask researchers to obtain consent from every person who posts a Tweet', they write, 'but it is unethical for researchers to justify their actions as ethical simply because the data is accessible' (ibid, p. 11). While Tweets - unless protected - are written for public viewing, they argue that this might not necessarily mean that the authors of Tweets (or other online content) had anticipated that their content would be scrutinized for the purposes of research (ibid). Other considerations that Boyd and Crawford highlight include: acknowledging that data from Twitter does not represent 'all people', since access to the Internet is not universal, and not all Internet

users have a Twitter account; that some Tweets may be generated from bots; some users may have multiple Twitter accounts; and some accounts may be utilised by more than one user (ibid, p. 6).

Thus, while my institutional setting did not require formalised ethical approval for this case study, there were nonetheless several ethical considerations to be made regarding the use of public internet data. While all Tweets used in this study were made public, this did not - as highlighted above - necessarily mean that the authors of the Tweets consented to the use of this data for my research. It was however impossible to gain consent from the authors of all of the Tweets used in my study. One measure that I took to mitigate this issue slightly was anonymising the Tweets that I use in my case study, meaning that there was less chance of the authors of the Tweets facing any negative consequences as a result of the Tweets being used in my research. The Method52 software could also not corroborate Tweets from Twitter accounts that are made 'private' by the user.

2.9 Conclusions

This chapter has outlined the methodologies that were used for gathering and analysing the empirical components of this thesis. I have outlined how these methodologies were specifically enacted for each case study, and what ethical considerations these each came to encompass. My hopes in using mixed methodologies were that engaging with a synthesis of approaches would provide greater scope for exploring any epistemological limitations that might be bound with using one singular methodology. This is something I confront most extensively in my case study of 'blockchain for good', where I use an autoethnographic approach to narrate a data-scrape process to specifically explore the epistemological limitations of this digital method, and vice versa. However, I also extensively engage with a variety of tools and approaches for my case studies of Camp Wild and Autonomy, where I used qualitative data analysis software NVivo to compliment and shed new light upon any hypotheses drawn from my close readings, and engage with materials that were generated from participant observation, semi-structured interviews and discourse that was written specifically for public reading. This variation in scales thus offers an array of perspectives, discourses and ways-of-understanding the key concerns of the thesis.

3.0 Perspectives on Sociomateriality

This chapter will explore and critique a series of theoretical accounts that engage with forms of sociomateriality. This will lay the conceptual foundations for the empirical case studies undertaken later in the thesis, which were both informed by, and developed in response to, some of the perspectives outlined in this chapter. Sociomateriality, as I use it here, refers to the social norms and processes that are entangled with matter, and how these entanglements recursively shape and influence the conditions and practices of everyday life (Orlikowski, 2007; Shotter, 2013). The perspectives I outline in this chapter chiefly emerge from feminist, de-colonial and post-colonial science and technology studies (STS), among which I situate my own work. I provide a route through the arguments offered by these writers, and draw upon a series of central threads within these: firstly, some of the ways that technological determinism has been conceptualised, and within this, how technologically deterministic ideology can be understood to be constitutive of an epistemic framework that helps propagate corporate and state power (Wyatt, 2008); secondly, how this epistemic framework is intertwined with histories of colonialism, and concomitant systems of heteronormative patriarchy; and thirdly, how these logics are manifest in the material conditions of digital environments, and are embroiled with forms of cognition, relationality, imaginaries and subjectivities.

This chapter will thus proceed as follows. In the first section, I explore a series of ways of understanding technological determinism. This has been variously conceptualised amongst a wide range of accounts¹⁰, but technological determinism can be defined, broadly, as an approach that positions technologies to be the core drivers of social change (Wyatt, 2008; Cherlet, 2011). This rests upon a conceptual binary split between humans and nonhumans, which allows for technologies to be distinguished as their own ontological entities, distinct from the influence of politics and culture (Latour, 1993). While it has been described as 'old fashioned' within a series of STS accounts (Cherlet, 2014), technologically deterministic discourse frequently occurs within contemporary debates surrounding the 'effects' of digital technology upon cognition and behaviour (Carr, 2007; 2011; Sullivan, 2016; Lewis, 2017), as well as in discourses used in spheres

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¹⁰ It is beyond the scope of this chapter to give a comprehensive overview of each of these accounts and theoretical positions. I therefore chiefly explore the accounts on technological determinism that bare relevance to the thesis's empirical case studies.

such as advertising and developmental aid (Cherlet, 2011). For these reasons, I argue that it remains important to consider where and how technologically deterministic ideology occurs, and what forms of power this might propagate. These considerations provide some of the key theoretical framework for the arguments I develop in later chapters. In **chapter four**, discursive binary splits between humans and digital technologies were integral to Camp Wild's ethos of digital rejectionism, and were thus, I argue, an essential part of the discourse that prompted the community to gather at this 'digital detox' site. In **chapter five**, I explore forms of technosolutionism in 'blockchain for good' discourses, within which technological determinist discourse helps ambiguate what I argue to be contemporary forms of neo-colonial power. In **chapter six**, I explore how technological determinism occurs in the discourses of left-wing think-tank Autonomy, where notions of harnessing 'automation' for their leftist 'post-work' agendas are a core part of their public facing discourse.

In the following section of the chapter, I then turn to an exploration of feminist, de-colonial and post-colonial accounts that have worked, in part, to destabilise such discursive binarisms. These accounts foreground how these binary formations are constitutive of a broader epistemic order that helps sustain specific hierarchies and cultural assumptions, pertaining specifically to notions of race, gender, ethnicity, sexuality and class (Haraway, 1991; Vazquez, 2011; Mbembe, 2017). I draw upon the work of Browne (2015) and Mbembe (2017), who highlight how the epistemic tendencies of contemporary techno-science have been a fundamental component in the subordination of marginalised groups by Western apparatuses. By 'contemporary techno-science', I mean, drawing on the works of Haraway (1991), Vazquez (2011) and Mbmebe (2017), the epistemic configurations that have derived from modernity, and have come to consolidate economy, science and technology in the West.

The final section of the chapter then turns to an exploration of literature that highlights how identity and subjectivity are constituted across a network of life and matter (Haraway, 1991; Bennett, 2005a; Stiegler, 2012b; 2015a; 2015b). I pay particular attention to the notion of 'individuation' as it occurs within the work of Bernard Stiegler, who develops the term from Simondon (2015a; 2015b). Individuation, broadly, refers to a continual course of transformation that occurs across a network of people and things, one in which the individual alters, or is altered, by their material and social environment; always as relation, never as 'stasis and identity' (Stiegler, 2015b, p. 52). I then link these theories to the works of Haraway and Jane Bennett, who advocate for a 'radical kinship of people and things' (Bennett, 2005a), where identity is always bound in a

'relational [...] web or dance of life and being' (O'Riordan, 2019). These accounts argue that relationships between life and matter are, at their heart, political, and foreground how digital technologies – often forming extensions of capital – are embroiled with forms of relationality, imaginaries, and ways-of seeing.

3.1 Technological Determinism

Technological determinism, put simply, is an ideology that positions shifts in technology to be the driving force behind social change (Wyatt, 2008; Cherlet, 2011). While the extent to which technology is understood as the *fundamental* driver of social change varies from account to account, technologically determinist thought generally posits that technologies bear a greater influence over societal conditions than any other factor (Smith, 1994, p. 2). Although it has been dismissed as 'old fashioned' (Cherlet, 2014, p. 775), 'wrong-headed' (Smith, 1994, p. 172) and 'intellectually poor' (Bijker, 1995) within a series of STS accounts, technologically deterministic rhetoric is embroiled with a great deal of contemporary discourse surrounding digital technologies and their perceived 'effects' (Carr, 2014; Sullivan, 2016; Lewis, 2017; Cherlet, 2011). For this reason, I would contend that rather than dismiss technological determinism as 'old fashioned', it is important to consider the various ways in which technological determinism occurs within contemporary discourse, how and where such discourse has emerged, and *whose worlds* technologically deterministic discourse might propagate. As Wyatt notes,

Technological determinism persists in the actions taken and justifications given by many actors; it persists in analysts' use of it to make sense of the introduction of technology in a variety of social settings; it persists in manifold theoretical abstract accounts of the relationship between the technical and the social; it persists in the responses of policy makers and politicians to challenges about the need or appropriateness for new technologies; and it persists in the reactions we experience when confronted with new machines and new ways of doing things (2008, p. 167)

A common thread throughout technological determinist discourse is the labelling of 'whole historical epochs and societies by their dominant technological artefacts' (Wyatt, 2008, p. 168). This can be seen in notions such as the 'age of the smart machine' (Zuboff, 1989), the 'network society' (van Dijk, 2006; Castells, 1996), the 'information society' (Crawford, 1983; van Dijk, 2006; Webster, 2006), the 'datafied society' (van Es & Schäfer, 2016), the 'information age' (Castells, 1996; Fuchs, 2008), and etcetera, which each broadly¹¹ refer to the involvement of digital

¹¹ It is beyond the scope of this chapter to detail the various nuances of these categories.

technologies with shifts in the organisation of econom(ies) and societ(ies). Often, these accounts articulate notions of epochal 'breaks' with the past, invoking discourse of newness, such as the 'new frontier of power' (Zuboff, 2019), the 'new digital age' (Schmidt and Cohen, 2013), or a 'new brave world' (van Es & Schäfer, 2016, p. 13). Such linguistic tendencies, as highlighted by cultural studies theorist Raymond Williams, recur throughout history: Williams notes how 'people often speak of a new world, a new society, a new phase of history, being created 'brought about' - by this or that new technology: the steam engine, the automobile, the atomic bomb' (1974, p. 1). Williams positions his own work in opposition to McLuhanesque medium theory, and rejects 'any form of technological determinism' (Silverstone, 2003, p. viii). Instead, he maintains that technological development occurs principally in accordance with shifting economic and social pressures. 'Industrialisation and modernisation had created new demands and new challenges', Silverstone writes in regard to Williams, 'for order, for control and for communication' (ibid, p. viii, emphasis added). This tension - between technological determinism and what is sometimes termed 'cultural determinism' - is one that recurs throughout a wealth of STS debates (Mumford, 1934; Winner, 1978; Bimber, 1994; Wyatt, 2008).

Lewis Mumford was one of the early leading practitioners of the tendency of defining societies in relation to their dominant technological artefacts. In his 1934 account Technics and Civilisation, Mumford documents the 'profound modifi[cations]' to Western civilisation that he associates with the advent of the 'machine' (1934, p.3). Throughout the text Mumford voices concerns around agency, and the influence of the 'machine [of] automatic action' upon the cognition of its user(s) (ibid, p. 10). Mumford labels his own technological environment to be 'inhuman', and envisages an 'earth-centred, organic and human model' to which society must 'return', in order to resist machinic domination (ibid; Winner, 1978, p. 5). Mechanisation, for Mumford, is framed as a force that hinders skill and cognitive function: machines, operating according to rationalistic logics, are bound with discourses of 'inhumanity', while the 'earth' and the 'organic' are positioned as the machine's opposites. Mumford's discourse is frequently predicated upon this discursive binary distinction between 'human' and 'machine', where the 'human' is framed as having sets of inherent qualities that render it ontologically distinct from the machine. He believed, Rosalind Williams notes, that 'the first step in reorienting our civilization was understanding the machine, as a means of understanding society and ourselves' (Williams, 2002, p. 141). The influence of the machine upon the cognition of its users is a key concern in Mumford's work, and how this is tied up with wider political and economic dynamics.

Mumford's critique of the 'machine' is intimately tied with concerns around mechanisation, and the impact that this had upon the capacities of the working class to understand the labour process in its 'totality'. Mechanisation, for Mumford, refers to the process of replacing physical labour with machines (1934). He describes how the measurement technics that were pivotal to the expansion of Taylorism during this period allowed elements of the labour process to be broken down into discrete elements, geared toward the optimisation of speed, productivity and profit. "Technics' became capable of undertaking certain tasks at much lower costs than human labourers, which bought about significant shifts in the ways in which workers engaged with the labour process. While workers once conducted the majority of the labour, their roles shifted to operating the machines that conducted the labour they had previously undertaken. Mumford posits that the capacities of the proletariat to understand the 'totality' of the labour process became reduced to mere 'fragments', who thus lost the 'capacity for intelligent response' as they came to embody 'machine-like precision and regularity' (1934, p. 96). He speaks of a materially induced 'paralysis', yet remains hopeful that a shift toward an 'organic ideology' could emerge, where the machine would be contracted 'to those areas in which it directly serves as an instrument of human purpose' (ibid, p. 427, emphasis added). For Mumford, the 'machine' divides, and makes the worlds it touches more efficient, in accordance with the motives of capital; the 'human', on the other hand, is 'whole', and seeks 'human satisfaction and cultural achievement' (ibid, p. 433). This is a linguistic and epistemological tendency that persists within much of the discourse featuring in my empirical case study materials, which I will continue to explore, and unpack the significance of, in coming chapters.

Within a series of early technologically deterministic STS accounts, digital technologies are often framed as having their own inherent qualities, and are thought 'almost exclusively in artefactual terms' (Heilbroner, 1967). Bruce Bimber's work on technological determinism cites Robert Heilbroner's article, Do Machines Make History, as a prime example of one of these accounts (1994). In this article, Heilbroner understands history to be bound by a specific scientific order that would sequentially be uncovered by living-beings, and explores whether technological development follows a 'fixed sequence', along which 'technologically developing societies must travel' (Heilbroner, 1967, p. 336; Bimber, 1994). 'I believe there is such a sequence', he continues, 'that the steam-mill follows the hand-mill not by chance but because it is the next "stage" in a technical conquest of nature that follows one and *only one* grand avenue of advance' (ibid, emphasis added). Such rhetoric is deeply entangled with the culture of modernity, where technological developments are often equated with unilinear notions of progress (Brey, 2003; Wyatt, 2008).

Bassett aptly frames this narrative as an 'optimism as a belief in Progress that produces an orientation towards the future made myopic by the given-ness of the present (the givens of the market producing the endless repetition of the commodity form)' (2019, p. 5). Such narratives, it might be said, are predicated upon a form of adumbrating of the 'technological' that is as much *imaginary* as much as it is *material*.

Braybrooke and Jordan's enquiry into a series of 'technomyths' pulls on similar threads, highlighting how narratives of progress in relation to digital technologies allow it to become 'a self-fulfilling prophecy' (2017, p. 27). Citing Dourish and Bell, they show how 'myths' surrounding the development of 'ubiquitous computing' in the early 1990s became 'foundational to scholars in computer science and related fields', a force that then came to shift social relations, which in turn 'shape[d] future innovations in their own image' (ibid; Dourish and Bell, 2011, p. 3). These considerations are important as they illustrate how such discursive formations are constitutive of broader structures of power, where these technocratic imaginaries became expedited through a recursive *shaping* and *being-shaped*. While, of course, the realisation of such imaginaries is not a foregone conclusion, there is a powerful relationship between *who* constructs these imaginaries, *how* and *through what* they become woven into public discourse, and how these dynamics are then encompassed with the establishing of hegemony. Progress as 'self-fulfilling prophecy' is thus not inevitable, but a *belief* that is recurrently manifest within technologically deterministic discourse and its broader epistemological configurations.

Langdon Winner is a prominent figure within accounts that explore the various facets of technological determinism, who provides - what I would argue to be - a more nuanced approach to some of the interrelationships between technology, politics and identity than some of technological determinism's cruder forms. By 'cruder forms' - drawing on the aforementioned works by Wyatt and Bimber - I mean accounts that essentialise digital technology and position it as the *sole* determinant of social change. Winner departs from technologically deterministic accounts that situate technology as exclusively following its own 'sequence', and posits that the advent and introduction of a technology to a given society encompasses a series of unforeseeable consequences that cannot be sufficiently anticipated by social actors (Winner, 1980; Wyatt, 2008, p. 174). In his widely cited 'Do Artefacts Have Politics?', Winner explores how the low-hanging overpasses, built in New York between the 1920s and 1970s, were used to discourage buses from using particular parkways (1980, p. 123). Poor citizens and people of colour were most likely to be using the buses, while those owning cars - most likely to be 'upper' or 'comfortable middle class'

white citizens - were freely able to use the parkways for their commutes and recreational purposes (ibid, p. 124). Technological change, Winner notes, is bound with a series of political imperatives, where the 'deck has been stacked long in advance to favour certain social interests', and thus, 'some people [are] bound to receive a better hand than others' (ibid, p. 126). This counters the lines of thought outlined above which envisage technological developments as instigating a predetermined set of effects, and foregrounds instead that: firstly, the 'effects' that a given technology may or may not have is dependent on a complex network of cultural, social, political and economic factors, and is thus not bound to one singular and predictable lineage; and secondly, that those in positions of power are more likely to influence the course of technological development, and how such technologies then become entwined with the establishing of hegemony.

Another of the central issues within critiques of technological determinism is that framing technologies as their own autonomous force often leaves little scope for political accountability, as it allows the role of the actors involved in developing such technologies to be abstracted from discourse (Winner, 1977; Wyatt, 2008). This is an issue that I will return to throughout the empirical case studies of this thesis. An example of this can be seen in Sen's work¹², who provides one – among the many that exist (see Eubanks, 2018) – example of some of the intensely discriminatory politics that are encompassed with Google's Autocomplete algorithm. Upon typing the words 'schizophrenics should' into the search bar, Sen had found that the search suggestions provided by Google included 'schizophrenics should be locked up', 'should schizophrenics be forced to take medication' and 'should schizophrenics be euthanized' (see appendix 3.1). These automated search suggestions are established, broadly, according to two primary factors: one is the number of times in which other Google users have made similar search queries; and the other is predictions deemed to be most relevant to a given user based on their personal data. Google does however censor some autocomplete suggestions according to a few 'automated rules', including whether or not a 'potentially disparaging or sensitive term was associated' (Google, 2017). Precisely who or what decides what these 'automated rules' are is not made transparent, however, Google claims that 'human involvement' is not part of the process (ibid). The binary formation of human/nonhuman, in this instance, helps obscure the influence of corporate power that shapes the autocomplete process. This leaves little scope for the political accountability of the actors involved: while an automated algorithm will undoubtedly assist this process, 'human involvement' is of course required for writing the algorithms, reporting inappropriate search terms, and deciding upon which search terms are then prohibited.

¹² Conference paper delivered at Brighton's Messy Edge conference, 2017

Jan Cherlet's work draws upon similar discursive tensions, and identifies examples of where technological determinism functions within developmental aid discourses. Here, she illustrates how notions of digital technologies 'enabling' development within areas of the Global South are pervasive within language used by organisations such as the World Bank and UNDP, which often frame technologies as apolitical and autonomous (2014, p. 18). For Cherlet, such discursive framings are bound with issues of 'technology transfer', which is a term she uses to refer to the notion that a given technology can be removed from one social context and implemented in a different one, bringing with it the same social, political and economic dynamics as it did within its original context (2011, p. 4). Here, the technology *in itself* is considered to bring about specific social effects that are non-contingent on cultural or political context. Challenging this model, Cherlet notes that 'barriers' always exist within technology transfer, which occur 'between two persons, between different departments within the same organisation, between different organisations, between nations or between cultures', meaning the 'effects' of introducing a technology to a new social context cannot be sufficiently anticipated by developmental aid organisations (2011, p. 5).

Her work draws links between technological determinisms and epistemic determinisms, emphasising the ties between specific epistemic tendencies and digital technologies. While technological determinism, she notes, does not adequately consider the interrelatedness of technology and the social context(s) in which it came into being, epistemic determinism does not consider how 'all knowledge is situated', and encompasses the assumption that knowledge is 'an immaterial good [that] can be transferred, without much effort, to another social reality where it will have similar meanings and effects as in the original social reality' (Cherlet, 2011, p. 6-7). For Cherlet, the interrelatedness of these two ideologies helps maintain and uphold specific political powers within developmental aid contexts. While, she notes, 'plain' technology transfer is contingent upon both sides sharing 'enough common knowledge, both sides know[ing] the differences in their knowledge, and hav[ing] sufficient access to the domain-specific knowledge of the other side', she contends that technology transfer from areas of the Global North to more impoverished countries is unquestionably bound with power asymmetries that render 'plain' technology transfer impossible (p. 5). The obscuring of Western-centric agendas via their own epistemological biases has, for a long time, propagated and maintained imperial and colonial agendas, and continues to disempower those living in areas of the Global North. As Mignolo questions:

Geo-politics of knowledge goes hand in hand with geo-politics of knowing. Who and whey, why and where is knowledge generated? [...] Why did eurocentered epistemology conceal its own geo-historical and bio-graphical locations and succeed in created the idea of universal knowledge as if the knowing subjects were also universal? (Mignolo, 2009, p. 160)

These are points I return to in **chapter six**, in which I argue that specific 'blockchain for good' initiatives that have been developed in Western contexts have been wielded to have particular economic effects within areas of the Global South, and have been heavily predicated upon Western-centric epistemologies.

3.2: Epistemology and Materiality

This section of the chapter will now turn to an exploration of some of the intersections between epistemology and materiality. I focus specifically upon the epistemic tendencies of contemporary techno-science, and some of the implications this has for those marginalised by Westernised notions of race, class, and gender. As noted in the introduction to this chapter, by 'contemporary techno-science', I mean the epistemic configurations that have derived from modernity, and have come to consolidate economy, science and technology in the West. I will pave a route through perspectives offered in a series of feminist, de-colonial and post-colonial accounts, where questions of racism and sexism are at stake within the functionalities of digital technologies, and their surrounding discourses. These accounts highlight the manifold ways in which bias is entangled with matter, and how these biases are partially enabled through materialisations of specific epistemic configurations. These perspectives also illuminate the inadequacies of progressis-all narratives explored in the previous section. I will explore how these epistemic tendencies propagate the motives of heteronormative, colonialist and patriarchal power, and where and how this relates to the notions of 'translation' and 'erasure' (Vazquez, 2011; Mbembe, 2017).

The destabilising of binary forms has been a central thread amongst many accounts that explore and problematize the epistemic tendencies of modernity and contemporary techno-science, highlighting how such binaries have, for a long time, been constitutive of Eurocentric and modernistic understandings of the world. Haraway argues the dualisms of 'self/other, mind/body, culture/nature, male/female, civilized/primitive, reality/appearance, whole/part, agent/resource, maker/made, active/passive, right/wrong, truth/illusion, total/partial, God/man' to be some of the most pressing in this regard, highlighting how they have helped sustain notions of hierarchy,

difference and otherness (1989; Hall, 1997). Whether, she writes, these dualisms are understood 'functionally, dialectically, structurally, or psychoanalytically' (Haraway, 1988, p. 290), they have been widely flagged to be constitutive of modernity's epistemic order, which has long served imperialism, coloniality, and concomitant systems of capitalist-heteronormative-patriarchy (Latour, 1993; Hall, 1997; Suchman, 2008; Vazquez, 2009). These binary forms are thus tightly encompassed with a geopolitics and biopolitics of knowledge, as Walter Mignolo elaborates:

The imperial classification and ranking of regions (for example, developed/underdeveloped or First/Second/Third Worlds, where the imperial and the colonial differences can be seen working in tandem) goes hand in hand with classification and ranking of people (for example, civilized/barbarians, humanitas/Anthropos; black, yellow, brown, white; heterosexual/gay and man/woman in the First, Second, or Third Worlds, etc.) (2011, p. xxi)

A core issue at stake within a series of de-colonial accounts of modernity is that of translation, which is an issue that I believe to be particularly pivotal when seeking to generate a better understanding of the non-neutrality of digital (and non-digital) technologies: not just in terms of the discourses, behaviours and forms of governmentality that they might be designed to encourage and propagate, but also in terms of the epistemological configurations that become erased when control is exerted via technologies that have been developed within (predominantly) Western contexts (Vazquez, 2009). Translation, as I explore it here, also shares close similarities to the issues surrounding 'technology transfer' explored in the previous section (Cherlet, 2011). Rolando Vazquez's article, Translation as Erasure: Thoughts on Modernity's Epistemic Violence, highlights how translation has been pivotal to the maintenance of Western colonial powers (2011). Citing Mignolo, Vazquez frames modernity as an epistemic structure that transforms 'people, cultures, and meanings into what is legible and controllable for those in power', where knowledge forms that are not encompassed in modernity's epistemic framework are unnamed or invisibilised (Mignolo, 2005, p. 144; cited in Vazquez, 2011, p. 30). He uses translation to refer to the 'borders' that surround specific systems of meaning, extending it beyond its use within literature to apply it more expansively to the ways in which forms of understanding that are not part of modernity's epistemology become appropriated and incorporated into its monolithic framework. He continues,

The epistemic territory of modernity establishes its field of certainty, its reality, by a movement of incorporation that subdues the multiple, the discontinuous, difference into the realm of presence. Incorporation is the reduction of difference into sameness, of contingency into continuity (Vazquez, 2011, p. 28)

I draw upon the issues foregrounded by Vazquez and Mignolo above as digital technologies necessitate materialisations of specific epistemic configurations, which are often - but not always (see Braybrooke and Jordan, 2017) - bound with Western-centric ideologies and forms of translation. This can be further seen in Os Keyes work, which demonstrates some pressing examples of where erasure occurs within Automatic Gender Recognition (AGR) algorithms (2018). They highlight how research into formulations of gender within Human-Computer Interaction (HCI) has often critiqued how such systems disempower women, while relatively little research has been conducted into how they reinforce dichotomous notions of gender, and invisibilize genders that do not fall within the woman/man binary, such as (non-exhaustively) nonbinary, trans, and gender-fluid gender identities. Keyes shows how HCI and AGR systems are predicated upon understandings of gender that overwhelmingly frame it as each: binary, distinguished only in terms of women and men; immutable, meaning that once a person has been assigned a gender category, this cannot then be changed; and physiological, where a person's gender is distinguished according to elements of their physical appearance - chiefly genitals, but also attributes such as facial hair and differences in bone structure (ibid, p. 2). Keyes argues that the operationalising of binaristic understandings of gender within HCI and AGR systems subjects trans and non-binary persons to erasure, reinforcing the normative view that 'trans people do not exist as a population with needs' (ibid, p. 12). It also erases those who do not fall at the top-end of the division and hierarchizes according to the man/woman binary. This non-recognition of genderqueer identities, they argue, will also prevent trans and non-binary communities from being researched within prospective studies deriving from AGR data (ibid, p. 12). Erasure thus functions here through the operationalisation of normative gender biases, and the replication and materialisation of existing inequalities.

Readings of the body manifest in contemporary AI systems, developed within commercial and military contexts, are located within culturally specific and essentialist ecologies of signs, where specific attributes of the body are equated with assumptions about how a body can be categorised, and what it should or might do. This is an issue Simone Browne also draws upon in *Dark Matters:* On the Surveillance of Blackness, where she highlights that the ways in which facial recognition algorithms measure and categorise faces are often derived from anthropometry. She notes that during the nineteenth century, anthropometry was deployed alongside pseudoscience's such as craniometry – the practice of measuring parts of the skull to assess intelligence - and phrenology, which similarly drew links between the physicality of the skull and mental abilities (2015, p. 112).

These practices helped 'legitimise' racial and gendered prejudices during the nineteenth century, and were practiced on the bodies of prisoners, where racially specific aspects of the body became equated with notions of criminality. While developed in 1882 as a way of measuring and categorising the body for forensics, anthropometry continues to be defined as the 'scientific study of the measurements and proportions of the human body' (Oxford Dictionary, 2019, emphasis added; Browne, 2015, p. 112). This is just one example of how the mechanisms of control manifest in digital environments were also manifest in histories of colonialism, and further illuminates the reductivism in notions of societal 'newness' explored in the previous section (Browne, 2015; Mbembe, 2017).

Browne highlights how, citing one biometric study, 'statistical knowledge of anthropometry' continues to be invoked within research and development for facial recognition algorithms (ibid, p. 11). She further draws upon a study by Gao and Ai (2009), which assesses a facial recognition algorithm that was designed to function within a 'multi-ethnic' environment, in order to distinguish a subject's race and gender (2015, p. 111). This study found that when a gender recognition AI was programmed to distinguish the genders of 'all ethnicities', the algorithm was predisposed to constituting the faces of 'African' women as male, and 'Mongoloid' men as female (ibid, p. 111). These authors developed an algorithm that was trained on images of faces categorised as 'Mongoloid', 'Caucasoid' and 'African', which was fed on vastly unequal quantities of data: 2400 images of 'Mongoloid' males, and 'Caucasoid' males and females; 2500 of 'Mongoloid' females; 1800 'African' males; and 1600 'African' females (Gao & Ai, 2009, p. 174). Unsurprisingly, even when using the 'Ethnicity Specific Gender Classifier', African women were the least successfully identified (Gao & Ai, 2009; Browne, 2015, p. 111).

It is important to highlight however that digital technologies are not *inherently* bound to discriminatory politics, or politics that favour white heteronormativity. Rather, what I have argued in this section is that digital technologies - developed predominantly within marketised and militarised frameworks - are oriented towards the privileging of specific social groups and subjectivities. This is achieved through processes of *translation* and *erasure*, where digital technologies both *translate* according to the logics that they have been designed to operationalise, and *erase* all that which is not encompassed within these logics.

3.3: Individuation and Identity

I will now turn to a series of accounts that work to destabilise the human/nonhuman binary iterated within technologically deterministic discourse, and contend that identity and subjectivity are constituted and manifest across a network of life and matter (Haraway, 1991; Bennett, 2005a; 2005b; Stiegler, 2012b; 2015a, 2015b). This further develops concerns from the previous two sections, where foregrounding the co-evolution of bodies and things can help counter the binaristic tendencies of technologically deterministic discourse, and provides the conceptual space for understanding how materialisations of discriminatory politics are bound with, and influence, forms of subjectivity and relationality. I will turn briefly to aspects of Haraway's Simians, Cyborgs and Women: The Reinvention of Nature, as an influential text within feminist STS, but will focus chiefly upon a handful of works by Stiegler (2010; 2012b; 2015a; 2015b) and Bennett (2005a). A central thread among these accounts pertains to the agencies exhibited by bodies and things, where humans and nonhumans are understood not as two distinct ontological spheres, but rather as continuously bound in a process of co-influence. This process of co-influence, in each of these accounts, is understood to be deeply historical, where thought, movement, and forms of relationality are bound to those of the past and present: it concerns the 'union of the political and physiological', and how this union is entwined with structures of power (Haraway, 1991).

Haraway's *Cyborg Manifesto* presents a conception of identity as dispersed and distinguished across all forms of life and matter (1991). This, for Haraway, is pivotally embroiled with the notion of the cyborg, which she constitutes as a 'disassembled and reassembled, postmodern collective and personal self' (ibid, p. 163). Latour describes Haraway's figure of the 'cyborg' as a 'hybrid term, half cybernetic, half organistic, that was made to designate the prosthetic character of our posthuman, postmodern, end-of-century existence: half a psychological body, half a high-tech robotic one' (1999, p. 1). Identity for Haraway is thus both 'singular "I" and a collective "we", 'always relational in a web or dance of life and being' (O'Riordan, 2019). The *Cyborg Manifesto* is chiefly an ethical account, foregrounding the significances of conceiving of machines as 'us': *not* in the McLuhanesque sense of media as 'extensions of man', but rather as always shaping and being-shaped, an 'aspect of our embodiment' (1991, p. 180). In locating the machines as 'us', the systemic violence embroiled within colonial and patriarchal histories can be understood as constitutive of our lived embodiment. This is particularly pertinent to my own project, as it seeks to explore how the material conditions of 'digital ubiquity' influence imaginaries and forms of relationality. This thus also understands digital technologies and their underlying politics as indistinguishable from

lived experience. The *Cyborg Manifesto* has been an influential text within feminist STS, and, while heavily foregrounding the interrelationships between the instruments of capital and experiences of oppression, Haraway's account is principally non-essentialist in that it delves into the potential spaces for feminist intervention, and does not resign itself to readings of digital technologies that frame them as *inherently* oppressive. 'Liberation rests on the construction of consciousness', she writes, 'the imaginative apprehension, of oppression, and so of possibility' (1988, p. 2). She seeks an 'elsewhere' to the 'hostile order of relationships among people, animals, technologies and land', where the figure of the 'cyborg' functions between gender categories, between 'nature' and 'machine', between individual and collective (Sollfrank, 2017).

I will now turn to the work of Stiegler, who similarly conceives of relationships between life and matter as bound in a process of co-evolution, and binds these concerns to forms of attention, education and industrial technologies (2012b). Stiegler's work builds upon Simondon's work on individuation, which, Stiegler notes, encompasses two significant theses: firstly, that a 'psychic individual' should not be understood as a fixed or stable identity, but rather as always undergoing a process of transformation; and secondly, that the process of psychic individuation is never complete, and is embroiled with a wider process of social and collective individuation (Stiegler, 2012b, p. 13). Individuation, then, is not a process that one undergoes in isolation; it is a continual course of transformation that occurs within a wider network of people and things. Living-beings shape and are shaped, while cognitive capacities exist with and through technical apparatuses, prosthesis and 'organised inorganic matter' (Roberts, 2012, p. 8; Crogan, 2010). This, for Stiegler, is intrinsically political, where the 'technical traces' that are now 'placed under the control of global industry' are argued to have profound implications upon the 'psychic apparatuses, [...] the social apparatus, and knowledge itself' (2015b, p. 8).

Memory is a key focus within much of Stiegler's work, and how it becomes 'exteriorised' within technical apparatuses via forms of grammatisation. This, for Stiegler, forms the history of 'human memory' (2010). Grammatisation refers to the process through which memory becomes recorded in discrete marks; this is traced back to the 'unintentional' memory support of the lithic tool, later developing into forms of grammatisation that were more purposefully intended for aiding memory, such as ideogrammatic writing and the alphabet (Hansen, 2010, p. 64). While these forms of recording memory constitute what Stiegler labels as mnemotechniques - methods used for developing and improving one's memory - digital environments are now saturated by mnemotechnologies, which he understands to be detrimental to the process of remembering,

engendering a widespread 'loss of knowledge' (Stiegler, 2010, p. 82). I draw and extend upon memory as it is used by Stiegler for two main reasons. Firstly, it helps elucidate the notion of 'cobecoming', not only in terms of how cognition is bound and influenced by marketised digital technologies and platforms (which might be thought, for instance, in terms of the politics that are embroiled with reminding oneself of a term through conducting a search on Google, instead of recalling information without a memory 'aid', or instead perhaps of using a non-digital glossary that does not also contain a multiplicity of marketised links intended to influence ones attention); but also, as an extension of this, it allows us to think through how the politics of *what* and *whose* memories are privileged via digital platforms, and how this then also become part of lived embodiment.

There are, however, some inconsistences within Stiegler's writing, which are pertinent to some of the tensions that I explore throughout the thesis. Within his discussion of memory, Stiegler draws upon Plato, who he describes as the 'first thinker of the proletarianisation' (2012a). Plato's work understood the practice of writing to constitute a form of 'false' knowing as he saw it to represent an 'exteriorisation' of thought; a form of 'loss of know how' (2012a). Stiegler borrows two concepts from Plato: anamnesis, a theory of memory that refers to the process of remembering without 'memory aids', embroiled with notions of a human 'essence' that exists separately from its material environment; and hypomnesis, which refers to the process through which memory becomes 'exteriorised' via mnemotechniques. Stiegler rejects the idea that memory can exist in isolation from its material environment; 'human memory is originally exteriorized', he writes, 'and that means that it has been technical from the start' (2012a). This said, however, he often invokes notions of cognitive technologies, or mnemotechnologies, 'causing us to lose an ever-greater part of our knowledge', and is recurrently concerned with the 'obsolescence of the human' by mnemotechnologies (2010, p. 68). This is a thread that also occurs in the accounts – albeit far less critically - provided by Carr and Sullivan earlier in the thesis, who also argue that digital technologies are supplanting and succeeding 'human' capacity. Stiegler provides a similar example to Carr, with regards to the skill involved with driving a car: 'the more improved the automobile becomes', he writes, 'the less we know how to drive – the GPS system assisting the driver in his driving will replace him altogether [...] we lose our sensori-motor schema formalized by the system as it becomes automatic' (2010, p. 68, my emphasis). I would posit that although Stiegler vigorously highlights the co-becoming of people and things, notions of 'human obsolescence' are nonetheless embroiled with the human/nonhuman binary that he critiques. This thus not only overlooks the fact that 'humans' have had a very significant part in creating the car that renders 'him' a less

competent driver, but is further encompassed in epistemic tendencies that conceive of technologies in terms of rationalistic 'progress' that will, at some point, supplant 'humanity'.

It is for these reasons that I believe Bennett's Vibrant Matter: A Political Ecology of Things to offer a more sensitive and nuanced account around some of the interrelationships between living-being, agency and matter (2005a) than that provided by Stiegler: in relation, at least, to the problematics surrounding 'obsolescence' foregrounded above. Her approach makes arguments for a 'radical kindship of people and things', and again opposes epistemic tendencies of dividing humans and non-humans into distinct ontological spheres. She problematizes notions of 'agency', arguing that the 'history of agency as a philosophical concept is, in general, a history of attempts to mark the uniqueness of humans' (2005b, p. 461). Bennett explicitly resists anthropocentric tendencies of conceiving of agency as an intrinsically human attribute, embedding her approach within a sphere of 'vital materialism' (Bennett, 2005a, p. xvi). This approach advocates the agentic capacities of 'things', which are understood to be capable of following their own trajectories that lie outside of human intention (ibid, p. viii). While she recognizes that political theory has engaged with the importance of materiality for some time, she argues that the focus has often remained upon the 'human' attributes that are embedded within material structures (ibid). Her argument does not negate the fact that the choices, movements and habits of living-beings become inscribed in landscapes and technologies, but rather aims to de-centralise focuses on the 'human' within discourse of materiality (ibid, p. xvi). Her motivation here is largely ecological: 'these material powers, which can aid or destroy, enrich or disable, ennoble or degrade us, in any case call for our attentiveness, or even "respect" (2005, p. ix).

It is pertinent to highlight how this approach is distinct from other technological determinisms; a distinction that might be usefully articulated via the ways in which Bennett frame's causality. She cites Connoly's term 'efficient causality', referring to an 'active force [that] is isolated as the author of a clearly identifiable effect' (2005b, p. 458). Technological determinisms often fall within this framework, where a given technology, isolated from its surrounding multiplicity of social, cultural and economic factors, is bound with notions of cause, effect and progress. 'Efficient causality' is thus linear and reductive, singular and essentialist. 'Emergent causality', conversely, refers to a nonlinear causality, where 'one finds circuits where effect and cause alternate position and rebound back upon each other' (ibid, p. 459). Bennett argues that this, then, unsettles 'a host of inherited concepts, including cause, time, culture, nature, event, life, kinship - and also responsibility' (ibid, p. 452). She invokes Gilles Deleuze's term 'assemblage' to highlight the ways in which 'people,

animals, artefacts, technologies, and elemental forces' work alongside one another (ibid, p. 461), forming groupings which then also exhibit agential capacities. This does not differ significantly from the perspectives highlighted earlier by Winner and Stiegler, but might be more adequately described as a shift in emphasis. While Winner and Stiegler strenuously highlight the politics that are inseparable from material artefacts, Bennett's approach foregrounds both that: firstly, the agential capacities that non-human formulations possess are indeed political; but further, that non-human formulations possess their own trajectories that lie outside of human intentionality altogether. This then allows for a conception of technology that recognises that it determines social dynamics to a degree; that the 'effects' a technology may or may not have are not limited to what is anticipated within the human imaginary; and for a non-anthroprocentric conception of the world that does not value technology or matter in terms of its capacities to imitate or embody qualities that have elsewhere been considered to be exclusively 'human'.

Conclusions

In this chapter I have outlined a series of theoretical accounts, stemming predominantly from feminist, de-colonial and post-colonial STS, that offer ways of understanding sociomateriality. I have paved a route through a series of accounts which discuss various iterations of technological determinism (Mumford, 1934; Heilbroner, 1967; Bimber, 1994). Drawing on Winner, Wyatt, and Cherlet, I argued that technological determinism can help propagate market agendas through the obscuring of the political influences that shape the functionality of a given technology or technological apparatus. I highlighted how technologically deterministic discourse is often bound with an ideology of *progress* that is based upon a form of adumbrating of the 'technological' that is as much imaginary as it is material. By this, I mean that deterministic discourses surrounding technological becoming often anticipate that it will always continue in 'one grand avenue of advance' (Heilbroner, 1967). Such assumptions, as myself and others have argued, are predicated upon hegemonic narratives surrounding the development of technology throughout history (Bassett, 2018; Braybrooke and Jordan, 2017).

I then highlighted how such narratives in relation to technology are bound with specific epistemic configurations that have historically disempowered social groups that are marginalised by Westernised notions of race, gender, and class. I principally drew on the works of Vazquez (2011) and Haraway (1988) to show how the 'epistemological privilege granted to modern science from the seventeenth century onwards, which make possible the technological revolutions that

consolidated Western supremacy' (de Santos, Nunes & Meneses, 2007, p. xv) has been a pivotal component in this process of marginalisation, particularly with regards to the notions of translation and erasure. *Translation* here referred to the process of adapting multiple systems of meaning into one epistemic framework, while *erasure* highlights the meanings and forms of cultural understandings that are lost via the process of translation (Vazquez, 2011). I then drew on more recent accounts by Browne (2015) and Keyes (2018), who highlight how such dynamics occur within contemporary digital apparatuses and propagate Westernised structures of power.

In the final section, I went on to explore and critique a series of theoretical accounts that emphasise how identity and subjectivity are constituted across a network of life and matter. Conceiving of identity in this way has pivotal implications for understanding forms of governmentality, and how the hegemonic forces shaping digital environments become embodied. It also provides the conceptual space for conceiving of how the 'horizon of our imagination' is shaped by our material conditions (Poulsgaard, 2019). As Poulsgaard highlights, the 'nature of our technical prostheses profoundly impact the nature and scope of our creative imagination' and the ways that we understand temporality (2019). I aligned my own work most chiefly with that of Bennett, whose perspective allows for an unsettling of notions of progress, and highlights that 'artefacts, technologies, and elemental forces' are very much capable of following their own trajectories that lie beyond the limits of the human imaginary. How we imagine, and how this is shaped and limited via engagements with the digital, is a core focus of this thesis, and is a tension I will continue to unpack throughout the upcoming critical case studies. These each, in some way, offer different ways of understanding the 'horizons' of the thinkable, and how these horizons are bound with the material and epistemological conditions of 'digital ubiquity'.

4.0 In the Digital World, We Work; At Camp, We Play: Discourses from 'Digital Detox' Campers

This chapter reports on an ethnography I undertook at a 'digital detox' retreat located in North America in June 2017. At this particular 'digital detox', participants were invited to relinquish use of their digital devices, discussion of their professions, and use of their 'real names' for a four-day period. It accommodated two-hundred-and-fifty attendees, who were, for the most part, part of a community of friends, and friends-of-friends, which had grown over the three-year period since the camp was founded¹³. When I attended the retreat in 2017, this particular 'digital detox' was non-for-profit¹⁴. With a few exceptions¹⁵, participants of the 'digital detox' paid a ticket fee of five-hundred-and-eighty dollars, in exchange for meals, drinks, snacks, a full schedule of activities, transport to and from the retreat, and accommodation. I attended the camp as a participant observer, which meant that I experienced the camp in a broadly similar capacity to other paying guests, in that I paid the same ticket fee, camped in the same spaces, and partook in the same activities. I did, however, have a different agenda, in that I was at the camp for my own ethnographic research purposes, meaning that I was in some senses, at 'work'. I combine the findings from my time spent as a participant observer with insights gathered from fourteen research interviews that I undertook with fellow attendees subsequent to the retreat.

In this chapter I use this empirical material to address a series of questions that I have bought to the fore in the thesis thus far. I consider the pertinence of why a 'detox' from the 'digital' and from 'work' were enveloped with one another, and how the centrality that was accorded to 'work' at this retreat was interlinked with a cultural framework that prioritises 'digital ubiquity'. I draw upon themes of neoliberal wellness already briefly mentioned to consider why themes of mental wellbeing emerged as central to the camp's ethos of digital rejectionism. I explore what might be revealed about the forms of psychic and collective individuation made manifest in 'digitally ubiquitous' environments through a critical engagement with the discourses used to describe and

¹³ This was information I'd gleaned during conversations had with campers whilst I was at the 'digital detox' site: it was not publicised in emails sent from the camp, or on the website information provided at the time

¹⁴ The following year the retreat became 'for-profit'

¹⁵ Some attendees of the digital detox could apply for subsidised tickets if they were on a low-income. How many of these tickets were available was not publicised, nor was the reduced price

market a space in which 'digital technologies' had purposefully been removed, and how the discourses invoked by the 'digital detox' retreat and its attendees alluded to a wider cultural framework of capitalist realism.

The structure of this chapter will thus proceed as follows. In the first section, I describe the process that led me to choose Camp Wild¹⁷ as the site for my field research. This will outline some of the characteristics of the other 'digital detox' retreats that I contacted before deciding upon Camp Wild as my site of study. In the following section, I will detail some of the characteristics of the camp, including what activities were on offer, how the camp was structured, and how it was described in the information provided by the camp. I will also briefly recap some of the methodological considerations outlined in **chapter two**, and detail the demographics of the participants that I interviewed. In the third section, I gather together and analyse my research data using a CDA approach, and identify key themes that emerged throughout the research data. These chiefly came to include: meanings that participants associated with the 'digital'; how their relationships with digital technologies were tied with sentiments of anxiety and social isolation; and repeated narratives around 'work' and 'play'.

4.1 Rationale

My interest in 'digital detoxing' emerged following my research into how some of the relationships between digital technologies and cognition had been conceptualised within a series of public debates. The discourses invoked by writers such as Carr (2011) and Sullivan (2016), discussed in the introduction to this thesis, had been emblematic for me in this regard: both narrativised the 'digital' as something that was impeding upon their sense of what it meant to be 'human'. While, on the one hand, these pop-technology accounts were framing the 'digital' as a damaging force within their day-to-day lives, on the other a wealth of self-tracking and wellness apps - some prominent examples being Headspace (meditation), Strava (running, swimming and cycling), and Sleep Cycle (sleep) - were also growing in popularity, each claiming to help users improve their health in some way. There was thus a tension here that I wished to explore in more detail, in which the so-called 'digital' was acting as both poison and cure; what might be described as a *pharmakon* (Stiegler, 2012b). I was intrigued, given the growing prominence of apps such as these, as to how the 'digital' had become intertwined with the term 'detox' – a term which is affiliated with the

¹⁶ I use quotation marks here as there were some inconsistencies in which digital technologies were permitted at the retreat, which I will explore later in the chapter

¹⁷ This is a pseudonym, as it was agreed with the organisers that I keep any identifying details anonymous

removal of harmful substances – literally 'toxins' – and physical and mental dependencies upon addictive entities (Cambridge Dictionary, 2019). I wanted to explore what precisely it was about digital technologies that 'digital detoxers' sought to 'detox' from, how this distinction was made, if and how these distinctions were tied in with the public debates that I'd previously explored, and what the significance of a digital 'detox' was within a broader climate of neoliberalised 'wellness' (Cederström and Spicer, 2015).

I began my research by exploring a series of 'digital detox' retreats online, to get some sense of the 'digital detox' landscape: where these retreats were located; what discourses were used to describe the retreats; and what - and if - were the generalised themes that ran throughout each of these retreats. I wanted to explore the most commercially prominent 'digital detox' sites as I thought these might be the most pertinent in terms of exploring hegemonic understandings of the 'digital'. I thus used Google for these investigations due to its own commercial prominence and hegemony within the spectrum of search engine platforms. Camp Grounded, under the domain digitaldetox.org, was the most 'relevant' link to be returned by Google, which was sloganized with the phrase 'disconnect to reconnect®'. This particular retreat was held at various different locations in the United States, and invited participants to relinquish use of phones, clocks, and other digital devices for a period of three-days. The website invited its readers to attend the camp and embrace 'childlike wonder', and remember 'what being human really feels like'. It offered activities such as yoga, analogue photography, 'primitive skills', meditation, hikes, and an array of crafts (Camp Grounded, 2017). Drugs and alcohol were forbidden from this camp, and were framed as 'belong[ing] to the world of adult distraction'. Instead, the camp embraced a 'holistic' view to mindful eating. Alongside the 'detox' from digital devices, participants of this camp were also not to speak of their professions whilst at the camp. Despite this rule about work however, the camp did offer specific packages for companies, which purported to 'help leadership create and maintain an integrated culture of balance, play and Digital Detox so the program doesn't end when we say goodbye'. At the time, this was accompanied by testimonials from employees of Google, which noted how the experience at Camp Grounded was beneficial for working relationships amongst their Google cohort.

The camp which I attended, Camp Wild, was the next 'digital detox' site that I explored online¹⁸. While their website information was a lot more limited than that of Camp Grounded, it appeared to share many similar characteristics: no digital devices for a four-day period, no discussions of professions whilst at camp, and notions of discovering 'what it means to be a kid again'. There were however some differences: while Camp Grounded permitted analogue photography, Camp Wild prohibited cameras of all types, encouraging visitors instead to take 'mental pictures'. Other smaller scale 'digital detox' retreats that I discovered during this preliminary research stage also came to include It's Time to Log Off, a UK based company that held retreats in the UK, Italy and Hawaii. This seemed to be more explicitly targeted towards upper-middle-class audiences, and advertised a package that appeared to be more luxurious and less oriented toward a child-like camp atmosphere. Here, activities predominantly included yoga, surfing and guided walks, and accommodation took the form of apartments and villas with a minimalistic aesthetic. At these sites, talking about one's profession was 'discouraged', not prohibited, and the schedules appeared to be less oriented toward group activities.

Having conducted some preliminary research around each of these retreats, I decided that the USbased retreats which heavily revolved around the 'summer camp' trope would be of most relevance to my thesis: I was intrigued as to why there were such marked emphases on notions of 'play' at these sites, how this was intertwined with the prohibition of discussion around 'work', and what the significance was of the repeated emphases on returning to 'childhood' and 'nature'. I thus set about getting in touch with the two summer-camp style retreats. Camp Grounded was my first choice, since, from the information available online, it appeared to have the most well-established identity, and made its aims, rules, and ethos clear. However, within communications made with the camp, I initially received only automated responses signed with the moniker 'Popcorn', before getting another generalised response informing me to buy a ticket. When I'd asked for further specifics about the possibility of conducting research after buying a ticket, I was informed 'You can do whatever research you want at camp but you cannot talk about what you do for a living at camp. One of the main rules is that there is no "W" talk (work talk). You must be discrete about your research. :)'. It was thus seemingly difficult to get an adequate enough response for me to be sure I could safely conduct my research; if I was to carry out my research 'discretely' as they'd suggested, this would bring about significant issues with regards to informed consent. Camp Wild,

¹⁸ This wasn't the second most 'relevant' link that *Google* returned, however it was the second 'digital detox' site that was returned in my search query. Links in-between contained news or blog articles on the topic of 'digital detoxing'

however, were far more responsive, and were intent upon both parties (myself and the organisers of the camp) being clear about what precisely I would be doing at the camp, how my research would be conducted, and how the safety of those attending the camp would be ensured. After a series of email exchanges, Skype meetings, and the signing of a contract by the organisers, my PhD supervisors and myself, I was to attend Camp Wild.

4.2 Overview of the Camp

This section will provide a more detailed description of some of the most significant characteristics of Camp Wild, to provide context for my analysis of the key themes that emerged throughout the research data. This description is drawn from the notes that I compiled as participant observer (appendix 4.4), as well as information distributed by the camp in both email exchanges and leaflets. To briefly reiterate how these research materials were gathered¹⁹, all notes during my time spent as a participant observer were made using pen and paper, and were usually taken a few minutes after conversations had taken place. Other research materials consisted of email exchanges and leaflets provided by the camp, which are shown in the appendices of the thesis.

The camp sent a group email two weeks prior to the camp taking place, which primarily provided information about what attendees should and shouldn't bring to the retreat (appendix 4.1). In this email, the camp generally presented itself as 'eco-friendly', and the language used was jovial and informal. Attendees were asked not to bring any snacks or perfumes to the venue, as there may be some in attendance who had sensitivities to scents and certain foods. On the subject of snacks, the email went on to note that 'our Wellness team has been hustling like you wouldn't believe to ensure we have brought on some amazing partners who will be providing us with loads of snacks'. The camp's 'eco-friendly' ethos which was iterated in statements such as '[bring] your receipt for proof of payment (shown on your phone is fine - let's save those trees!)', and a request that attendees bought eco-friendly toiletry products with them. Other items in the pack-list included three fancy dress costumes for attendees to wear themselves ('a super-fun way to get all dressed up however YOU want!') and 'any additional costumes you'd like to donate to the Camp Wild Tickle Trunk'. The list also included items such as yoga mats, 'camp fun' ('we do not serve alcohol at camp. But you are welcome to BYOF (Bring Your Own Fun), whether that's alcohol, herbs or elsewise. Just remember, camp is no fun hungover!'), sitting pillows, and other general clothing items. The end of the email was signed off 'in love and play', with a 'PS' inviting attendees to add

¹⁹ More extensive detail of methodologies provided in chapter two.

their favourite music to a collaborative Spotify playlist. There was thus some indication from this email that the camp wasn't rejecting or prohibiting digital technologies entirely: phones were evidently permitted at some stages of the retreat for displaying tickets - framed here as a preferable, eco-friendly option - and using digital app *Spotify* to share music was encouraged. This non-rejection of *all* digital technologies was also iterated when I attended the retreat: those running the retreat often had laptops, sound systems and other pieces of equipment that were used for conducting the workshops. For the most part, however, participants did not actively engage with these. By this I mean we were not controlling, for instance, how the laptops or sound systems were used, but we engaged with these technologies in the sense that we could hear sound produced from speakers, and so forth.

The retreat began off-site for most of the participants, at a meeting point that was local to most of those in attendance. While here, most of us were still in possession of our digital devices (some noted that they had left their devices at home altogether), and everyone I met at this meeting point was already using their camp nicknames. These nicknames generally followed similar themes, often referring to animals, colours, retro children's entertainment, or food. Many arrived at this meeting point wearing fancy dress costumes (these often also assumed animal themes, or nineteen-sixties and nineteen-seventies hippie tropes), and many were singing children's summer-camp style chants. A cluster of yellow school buses took us to the camp from this meeting point, which resembled the yellow school buses that most campers would have ridden to school or summer camps during childhood. This I saw to contribute to the overriding tropes of nostalgia and childhood that the camp regularly emphasised.

Upon arrival at camp, we were greeted by a setting of wooden cabins, fields, and a lake, decorated with large illustrations of Apple's emoji symbols (these included a large pizza slice, a face that was crying with laughter, and an aubergine), which I learned – to my confusion at the time – had been put there specifically for the 'digital detox' camp. There was also a large dining hall, where we would meet for meal times, coffee breaks, and sign up for workshops, as well as large entertainment hall, which was kitted out with a stage, an auditorium, and large illustrations of characters from children's films and television shows (these illustrations were part of the normal décor of the campsite, and were not there specifically for the 'digital detox'). We would meet here for activities that involved everyone at camp, including the 'un-talent show', the 'day breaker' event (an early morning 'sober rave', undertaken in fancy dress costumes), and the end-of-camp closing party, where attendees would do conga lines and wear fancy dress costumes.

Along one of the walls in the dining hall area were imitations of social media and search engine sites drawn on large sheets of paper. The 'Ask Me' board – which used a similar font design and colour scheme to that of Google – provided a public medium for campers to share their skills and interests with other campers. These included suggestions such as 'ask me for a tennis lesson', 'ask me for a flamenco dance lesson', 'ask me for a tarot reading' and 'ask me about Bitcoin, Blockchain, and Ethereum'. Another board, entitled 'Chirpr', imitated some of the design characteristics of Twitter, where campers could write short snippets of text or draw pictures onto post-it notes, and stick them to the 'Chirpr' board. The content of these was on-the-whole light-hearted, on which attendees would draw pictures of cats or other animals, or replicate hashtag trends that were circulating on social media at that moment in time ('#blessed' featured frequently). The third board was labelled 'Kudos', which followed a system broadly similar to 'liking' on social media, where people could accredit other campers with behaviours that they'd seen to be noteworthy. These were indicated using the '@' symbol (e.g. '@bobcat'), mimicking its usage on social media apps. The presence of these on the walls of the camp thus also indicated that these forms of social media weren't rejected entirely, and rather indicated how central these forms of social media were to the imaginary of the 'digital detox'.

There was also a marked absence of clocks at the camp. Clocks were not prohibited, but since phones were prohibited and there were no clocks on the walls, the only source of time was from those campers who had bought a watch. It is also relevant to note here that watches did not feature on the pack-list sent to attendees prior to our arrival (appendix 4.1). In spite of the marked absence of clocks however, the camp's schedule was timetabled. On the timetable were mealtimes, 'workshops' and 'events'; 'events' and mealtimes were for everybody in attendance, whereas the 'workshops' were optional, from which attendees could choose from a wide series of options and split off into smaller groups. These workshops were coded according to a classification system of either 'play', 'connect' or 'transform':

Play: In these workshops, you'll have fun without any cares in the world. These workshops are designed for pure play.

Connect: In these workshops, you'll create a deeper relationship with your beautiful self and/or other beautiful things.

Transform: In these workshops, you'll self-reflect, become aware of your present self, and choose to make positive changes. Consider if you're ready. These workshops occasionally bring out intense feelings (appendix 4.2)

Examples of 'play' workshops included activities such as playing drums ('percussion jam'), silent hikes, body painting, basketball, 'super soccer session (in costumes)', and 'intuitive development for busy people'. 'Connect' workshops often assumed 'mindfulness' themes, and were given titles such as 'mind medicine', 'feeling into intimacy', 'pulse meditation', 'self-empowerment' and 'heart work'. Finally, the 'transform' workshops also followed 'mindfulness' themes, often with a focus on self-empowerment and productivity, with titles such as 'taxonomy of personal growth approaches', 'speaking power with truth', 'follow your bliss', 'gtfo your comfort zone!', 'building authentic strength', 'empowered self-love: daps to your inner child', and 'jump out of bed with purpose!'.

Since we were, for the most part, without clocks, measures were put in place by the camps organisers to ensure that people were able to get up on time for the morning's activities. A 'morning band' visited the cabins in the mornings to ensure that campers were up for early morning activities, who sang a song with the lyrics 'have an awesome day'. The morning band was made up of a few of the camps 'counsellors' and a series of volunteers, who would wander around the camp with a ukulele singing 'have an awesome day' to those who were still asleep. Other activities where the entirety of the camp would meet included the 'un-talent show', at which people would perform particular skills that they were 'exceptionally bad at'; the 'superhero summit', for which campers would dress up in costumes, assume the identity of a superhero and join in the main hall to 'network'; and a silent disco, at which people were each given a set of Bluetooth headphones, connected to a music set played by one of three live DJs. This was an instance in the retreat in which attendees were invited to actively engage with a 'digital' technology, where they could choose between one of three tracks on the Bluetooth headphones.

The handing in of our digital devices (this largely meant mobile phones, but for me, also meant my laptop, as I had bought this abroad with me for my research and was unable to leave it outside of the camp) felt like a very significant moment of the retreat. Once we had arrived at the camp and unpacked our belongings at our cabins, we were divided into our groups, who were our designated camp 'families' for the duration of retreat. These loosely contained the same number of men and women and a mix of ages, and consisted of small groups of around twelve. In my own group (entitled 'Wild'), we each introduced ourselves, and discussed why it was that we wanted to relinquish our mobile devices for the weekend. It was clear at this point that mobile devices were the main focus point of the 'digital detox'. One person (male, of middle-aged appearance) likened

his relationship with his mobile device to that of his relationship with alcohol, and noted that he engaged with it when he felt he needed to isolate himself and distract himself from the issues in his life. Another person (female, of a similar age) likewise bought in the topic of addiction, and claimed that in the 'outside world' she was a 'workaholic', and at the camp, she intended to become a 'playaholic'. She noted that handing in her mobile device would help enable this. I introduced myself here as the UK based researcher that was mentioned in group-emails, and noted that I was also interested to explore how I felt without my phone for a few days since I was aware that I compulsively check it during anxious moments, or when I was trying to avoid concentrating on challenging thoughts when writing my academic work. I didn't discuss what I saw to be the politics of this as this wasn't part of the discussion with the other participants, and was curious to see if it would emerge without my own prompts.

It transpired that other conversations held at this stage did not explicitly pertain to the politics that participants associated with habitual engagements with their mobile devices. One person (early thirties, female) commented that her constant engagement with her mobile device determined her sense of how tired she is. She commented that it helped her quantify the number of times she experienced disturbances in the night, and her awareness of how many hours she had slept then had an impact upon how she behaved throughout the day. Other discussions in this circle revolved around how becoming 'disconnected' from our mobile devices would help bring about a deeper 'connection' with others whilst at the camp. There seemed to be a mutual understanding that we'd all come to the camp to have 'deep' and 'meaningful' conversations, which was also iterated in the information leaflet provided by the camp (e.g. in a page detailing the camp's 'vision', their aims included 'ask hard questions' and 'stay open and true'). This reflected discussions I had later on in the retreat, where attendees noted that the 'digital detox' was attending to feelings of 'loneliness' or an emotional lack. Once we'd discussed our reasons for 'digital detoxing', we each put our mobile devices in a sealed wallet that was to go in a locked box, and in return, we were handed a necklace with the word 'wild' on it. We were told that we would get our digital devices back at the end of the retreat.

Often between meal times, the camp provided snacks for the attendees. These were usually distributed from a shop-style counter at the centre of the camp, and often came from eco-friendly brands. Despite the aesthetic of a shop-counter, the 'counsellors' were not exchanging snacks for money: they were handed out freely. The only items that were available for purchase at the camp were branded camp t-shirts with the words 'play hard' on them, which attendees could pay for

with cash. As mentioned in the group email, alcohol was not distributed or sold on the site, but campers were allowed to bring their own alcohol to the retreat if they wished to do so. In this regard, it was generally understood that the culture around alcohol was one of sharing. The sharing culture amongst attendees also came to encompass other substances, most prominently hallucinogenic drugs such as magic mushrooms and LSD. This was vaguely alluded to in the 'BYOF (Bring Your Own Fun)' section (see **appendix 4.1**), where it noted that 'alcohol, herbs or otherwise' were permitted at the camp, but since the email had noted that 'camp is no fun hungover' and also featured prominent themes around childhood, I had not anticipated that this was the meaning of 'BYOF' prior to my arrival.

I attended a few workshops during my time at the digital detox, including a meditation workshop, a drumming workshop, and a workshop where we tapped on 'pressure points' on different areas of our bodies to 'reset our mental hard-drives'. At this workshop, we were told to make sure we were sitting next to someone we hadn't formerly met during the retreat. At the end of this workshop, everyone in the room was invited to hug the person next them (I personally felt uncomfortable with this but participated nonetheless). In the meditation workshop, the organiser (female, white) gave us 'mantras' for 'self-empowerment' to say quietly to ourselves during the session. These mantras included phrases such as 'I deserve to be happy', 'I deserve to be loved', and 'I am a good person and I do my best'. At this workshop we were also to write love-notes (what the workshop's organiser had titled 'warm snugglies') to the others – who for me, were mostly strangers – at the session. We were each to write something complementary on a folded piece of paper, and put it in a named 'letter box' which would go to each person in the room once the meditation workshop had come to an end. When I received my box of 'warm snugglies', the notes contained phrases such as 'your energy lights up the whole room' and 'you have a wonderful smile'.

On the final day of the retreat, after a weekend of workshops, events and 'self-discovery', all of the campers gathered for a final meeting in the main hall. Here, we split into our camp 'families' for the final time, and reflected upon our time at the retreat. Many commented that after the first twenty-four hours of the retreat, they had barely noticed the absence of their digital device. I noted that my experience of 'detoxing' was similar; at first I continually noticed the physical absence of a device in my pocket, which evoked a momentary panic around it being lost. This sensation however deteriorated throughout the course of the retreat. During this last meeting, we were also handed a blank postcard. Since we had no access to cameras or social media, we were told that

this was a way of recording something that we had learned or found memorable over the course of the retreat. We were to address this to ourselves, and the camp's organisers would send these on to us a few weeks after the camp had ended. After writing our postcards, we all gathered as a group to partake in the only photograph of the retreat, showing all of the campers in a large group shot. This was taken on a mobile phone by one the camp's 'counsellors'.

We were then finally handed back our digital devices, and, before leaving, many participants exchanged business cards. This was one of the only instances in the retreat in which I got a sense of what the professions of those at the 'digital detox' were. At this stage, I met several men who worked in blockchain and high-tech, several 'holistic' therapists, and several self-classified entrepreneurs. When I conducted my research interviews subsequent to the retreat, I asked my participants specifically about their professions as I wanted to gain some sense of the socio-economic backgrounds of my participants and how these may have been tied to their motivations in attending a 'digital detox'. Professions were often highly paid, with the lower paid professions being those working in education, or students. Professions that I classified as 'highly paid' included roles such as lawyers, government policy advisers, self-classified entrepreneurs and business developers, and those working in human resources, advertising and film.

4.3 Analysis of Key Themes

This section of the chapter will now thematically analyse the research data gathered for this case study. This is comprised of the notes I made whilst at Camp Wild and the research interviews that I undertook in the two-month period following the retreat (July and August 2017). To do this, I set out to identify the most frequently occurring themes that occurred within all of my research materials, which, as explored in **chapter two**, were identified via close reading techniques and through the use of qualitative data analysis software *NVivo*.

4.3.1 Discursive Binarisms

I will begin this section of analysis by drawing a table of some of the discursive binarisms that emerged throughout the research data. As previously mentioned, there was a repeated emphasis within much of the camp's discourse around notions of 'play', which were often juxtaposed with the world outside of camp, at which participants would engage with 'work'. This table shows the two different 'worlds' described by those at the camp - the 'non-digital' world of the retreat, and the 'digital' world outside of the camp - and some of the prominent associations that emerged with each:

The 'Digital' World	The 'Non-Digital' World	
Work, economy	Play	
Logical, rational	Emotional, vulnerable	
Artificial, fake	Real, authentic	
Detached, distracted	Engaged, present	
Responsibility	Freedom	
Adulthood	Childhood	
Isolation	Touch	
Anxiety	Mindfulness	
Self-improvement	Self-improvement	
Productivity	Productivity	
Social validation	Social validation	

Table 1

The world at camp, the 'non-digital' world, was very often described as a world where attendees could engage in activities that were constituted as 'play'. 'Play' - within the information leaflets, camp emails and in the discourses used by the participants - was often associated with states of 'authenticity' and 'vulnerability'. These were often seen to be more 'natural' states, or states that participants would have embodied during childhood. These states were associated with a sense of freedom, or of 'being whoever you wanted to be'. These more 'vulnerable', 'authentic' and childlike selves were seen as more prone to engage in conversation and activities that could be constituted as 'emotional' - which included a marked emphasis on 'plutonic touch' - and were often described to be bought about by the 'judgement free' atmosphere of the camp. Inversely, the world outside of camp, the 'digital' world, was very frequently described as one in which participants would have less 'authentic' or less 'real' interpersonal interactions than those that they experienced at the 'digital detox' camp. There was a sentiment of anxiety associated with the 'digital' world, and people described themselves to be 'distracted' there. This was often construed as being distinct from the state of 'presence' and 'mindfulness' that the camp bought about. Notably, the 'digital' world was very often associated with forms of responsibility and work.

The lower section of this table shows the similarities that emerged between the two 'worlds' throughout my research data. Both were oriented toward self-improvement, however, the ways in which this was framed varied: in the 'digital' world, self-improvement was explicitly oriented towards ones professional development, while in the 'non-digital' world, self-improvement was oriented towards more effectively managing ones emotions, most prominently sentiments of anxiety. While discursive affiliations with these terms differed according to which 'world' they

referred to, they gesture toward broader ties between notions of wellness, self-improvement and neoliberal governmentality, where the imperative to improve one's mental health is co-aligned with one's capacity for economic productivity (Cederström and Spicer, 2015). It was also pertinent that forms of social validation emerged within both worlds. This wasn't an association that participants explicitly gestured toward, however it was a theme that I personally noticed in terms of how the camp was structured, and how participants spoke about their experience at the camp. Within the 'digital' world - that participants and the 'digital detox' camp itself generally affiliated with social media and emails - social validation takes the form of 'liking' or 'views' on social media platforms; in the 'non-digital' world, it took forms such as 'warm snugglies' (the notes that we wrote to one another during the meditation workshop), the 'kudos' post-it notes, and the repeated emphases on hugs and 'plutonic touch'. This, I would again argue, is chiefly tied with a neoliberal climate oriented towards self-improvement; a psychic landscape in which consumers are continually prompted to *be better* (Pearl, 2014; Cederström and Spicer, 2015; Davis, 2015).

4.3.2 The 'Digital' Meaning 'Phones', 'Social Media' and 'Email'

A major theme amongst the research data was that the terms 'social media', 'phones' and 'email' were often used interchangeably with the term 'digital'. 'Digital' seldom referred to its dictionary definitions of 'recording or storing information as a series of numbers 1 and 0' or 'using or relating to digital signals and computer technology' (Cambridge Dictionary, 2020). This association was one that was also partially encouraged by the camp, since the 'digital detox' was primarily focused upon the relinquishing of mobile phones for the four-day period. Aspects of the camp's aesthetic, such as the large cardboard cut-out of emojis, and imitations of social media on the walls of the main hall of the camp, also reinforced this association.

In a discussion about their use of a digital (non-smart) watch, one participant specifically discussed what the word 'digital' meant to them. We spoke about how, although their watch could be constituted a 'digital' object, it did not correspond with the understanding of the 'digital' that was encompassed within the culture of the 'digital detox'. For them, this form of digital watch was not considered to be a breach of Camp Wild's ethos:

I11: So, for me, at least digital, while maybe that distinction in grade 4 would have been 'oh the thing with the arms is analogue, and the thing with the numbers with the kind of black on grey kind of look is digital'... Digital to me now is this [gestures toward computer], digital is effectively

more high-tech, and the watch that I had was effectively analogue, in a way

 $[\ldots]$

II1: But to me that's not cheating, that's not the spirit of the thing. Because it just felt like a... I'm not addicted to my watch, how about that. I'm not obsessively looking at my watch and playing with it

In this instance, the forms of digital technology which were considered to be a breach of the 'spirit' of the 'digital detox' were those that are designed to encourage addictive behaviours in users. It is also notable that this participant did not comment upon the political significance of these addictive behaviours, or the role that high-tech companies play in designing digital objects that might encourage addictive behaviours (Hayles, 2007; Hussain & Pontes, 2019).

There were many other forms of digital technology present at the site, including microphones, speakers, flashing strobe lights, and sound-desks. During conversations held with other attendees, it was rarely flagged that these pieces of equipment were digital items. However, one participant did query the presence of Bluetooth headphones in a conversation that we shared during the silent disco. The silent disco had three separate DJs, who were each playing their own sets simultaneously. Those participating in the silent disco could choose which DJ channel they wanted to listen to through pressing a button on their headphones. This meant that while everyone was dancing together in the same space, those in the space weren't necessarily listening to the same music. This particular participant and I were discussing my research at this point, and they gestured to the headphones and said, 'this is digital, is it not?'. I agreed, and asked whether they thought it detracted from the experience of the 'digital detox'. They said yes, but not because the headphones were 'digital': they considered the headphones to detract from the 'digital detox' because it meant that 'people [were] isolated from one another when they [were] dancing' (appendix 4.4). This participant, then, attributed this sense of isolation to both: the headphones themselves, which meant that people could not speak with one another; and to the fact that those in the silent disco space were listening to one of three tracks, which meant that it was difficult for those participating to share the experience of a song with the others around them. They said that if the music was playing from speakers - thus allowing everyone to dance together to the same song - it would not have detracted from the experience of the 'digital detox'. In this instance, it was the individualising elements of the silent disco that were considered to be a breach of Camp Wild's ethos.

4.3.3 Addiction

Discourse of addiction was very frequent throughout all of my research data for this case study. The understanding that digital devices – phones, laptops, and social media – are addictive was usually taken as a given; as an implicit element of the social reality that those at the camp shared. As previously noted, part of this understanding might be attributed to the notion of a digital 'detox' itself, where 'detox' bares connotations of addiction and dependency. It is also notable that, within a great deal of public debate surrounding digital technologies, different forms of technology are often described as having the effect of 'addicting users': many have flagged how phones, in particular, are engineered to be habit-forming and encourage users to stay engaged with their screens for prolonged periods of time (see e.g. Sullivan, 2016; Lewis, 2017; Klass, 2019). In these instances, as explored in **chapter three**, terms such as 'technology' or 'phones' can often be reductive and de-politicised, in that such 'addictive' effects are attributed to the technologies in themselves, rather than the broader corporate apparatuses that engender these dynamics.

One interviewee revealed the strategies that they personally put in place to manage the length of time they spent engaging with their phone, in order to establish a more 'mindful' relationship with their mobile device subsequent to the 'digital detox' retreat. This involved purchasing a box with a lock and a timer on it, which was used for storing their mobile device. They would then set the timer to the amount of time that they wished to spend away from their mobile device, and once set, the box would prevent them accessing their device until the timer had expired. They understood their digital device to be detrimental to their personal well-being; as something that hindered their sense of personal agency and ability to engage in 'me-time'. They described the 'enforced digital detox' of the box as a way of retaining some agency around how much time they would spend engaging with their screen. For this interviewee, simply choosing not to engage with the device was not a sufficient enough measure for preventing their engagement with it. This, I felt, represented a self-managed and individualised response to the perceived effects of the 'digital', where these 'effects' were again not attributed to any broader corporate dynamics. This participant's attempt to establish some form of control in relation to their mobile device reflects a broader neoliberal dynamic in which consumers are offered micro-opportunities to manage whilst being managed (Braybrooke and Jordan, 2017; Bassett, 2018). This might pertain to, for example, engineering one's own content within the parameters of a social media platform (Braybrooke and Jordan, 2017), or, more latterly, using digital 'wellness' apps such as Apple's Screen Time, which inform users about how much time they are spending engaging with their device to help them 'make more informed decisions about how [they] use [their] devices' (Apple, 2020). In these cases,

and in this participant's response, ways of intervening with the 'effects' of the digital are only framed or *imagined* in terms of individualised behavioural shifts.

4.3.4 Connection

The most frequently occurring term throughout my interview data was 'connection' (or words using the same stem, i.e. 'connect' or 'connecting'). When referring to the 'non-digital' world at the camp, attendees tended to be referring to emotional bonds established between others who were present at the camp, which can be seen in comments such as 'this year one of my motivations was to engage in the freedom of not having the devices and the opportunity to open up with and connect with other people more' (I7). Another interviewee invoked similar discourses:

I8: And it was just so nice that we were hanging out and not doing much of anything but we just didn't have ours phones with us for a while, so it was really... And I think it will just help me be more aware of how disconnected you are when you are connected

In discussions of the 'world' outside of the camp – i.e. the world in which attendees were in possession of their mobile devices - 'connection' was used to refer to engagement with digital devices and the Internet which, in nearly all instances, came to mean communications made via email or social media. Additionally, when referring to the 'world' outside of the camp, 'connections' also referred to professional ties and business networks. Although digital devices were seen to facilitate instantaneous and multitudinous 'connections' with others, these 'connections' were seen to be less 'authentic', or less personally fulfilling, than the 'connections' that participants established during face-to-face interactions. This was often attributed to physical distance, or the mediation of the screen. Factors such as corporate or state surveillance, or corporate ownership of data, didn't feature in these discussions. The toxicity here thus pertained to how participants described mediation or 'work' to influence their social bonds or relationships to the self, as opposed to, again, the forms of power that might influence social interactions online. While some commented that what they 'craved' when it came to the 'digital detox' was 'connection' and 'deep conversations', others noted that the 'digital detox' had helped them become more 'mindful' about how and when their digital devices were impeding upon face-to-face interactions within the 'outside world'. The notion that digital devices have an effect of 'impeding' was usually assumed; participants often shared the understanding that digital devices (namely, mobile phones) pulled them away from the social interactions they would preferably have, but that their capacities to create a more 'mindful' dynamic around this outside the sphere of the camp, were limited.

What is also pertinent here is that writers such as Fred Turner have described the politics of hightech businesses such as Facebook and Google to be that of 'connectionism' (2017). Indeed, the term is frequently invoked within Facebook's rhetoric: when a user sends a 'message request' to another user who is not on their current list of 'friends', the recipient is informed that this user wishes to 'connect' with them; similarly, Facebook's official @facebook page informs users of Facebook's 'mission' of coming together to celebrate 'how friends inspire us, support us, and help us discover the world when we connect' (Facebook, 2018). While many participants described social media and 'technology' as entities that hindered their 'connections' with others, the use of the term 'connection' also often echoed its usage within the discourses of high-tech. For instance, I4 noted that they thought 'most people were very similar, like they really appreciate and they thrive in the environment in which they're forced to connect with people'. There was thus a blurring of meanings here: at times, 'connection' meant emotional bonds, in a way that was often reminiscent of - but not necessarily replicative of - its use within high-tech spheres; in others, it was used to refer to communications made via social media; and in others, it was used to refer to business networks. While it would perhaps be too presumptuous to state that the prevalence of this language was directly tied with its use within high-tech spheres and neoliberal discourse more broadly, I would suggest - drawing on the aforementioned readings of the term by Turner - that the frequency with which the term 'connection' was used serves as some indication as to the extent to which the language of high-tech was intertwined the imaginaries and vocabularies iterated within the 'digital detox' space.

4.3.5 No 'Work Talk'

As aforementioned, discussion of our professions was not permitted whilst we were at the retreat. Attendees were informed of these rules prior to the retreat, which were subsequently policed, for the most part, amongst ourselves. Although I was never 'policed' and told not to speak of my role as researcher, I did experience the policing of this rule with others. In one instance, subsequent to discussing the details of my research with another participant, the topic of conversation veered towards how it was relevant to much of what he did in his daily life and within his job. I then proceeded to ask him what this was, and he told me that 'we're not supposed to be talking about this', and that we should discuss it at the end, once the retreat had finished. From what I could gather, it seemed to be the general consensus of the camp that the rules of the 'digital detox' were purposeful, and that it was the sake of our collective wellbeing to abide by these rules.

In several research interviews, participants attributed the rule of no 'work talk' to a way of removing social inequality from the space. At times this was attributed to the forms of cultural capital that are interlinked with certain lines of work, and how this is tied with class. By cultural capital, I mean the forms of social identity that are often conflated with forms of power (Bourdieu, 1984). One participant remarked upon how the embodiment of certain professional identities, was, for them, constitutive of social inequality, and how the removal of these professional identities bought about a sense of 'unity' within the space:

I1: When you don't talk about work everyone's equal and you're able to like bond and hang out without judgement. And that is also connected to the whole commodification thing as well, and de-commodification. The concept of unity that comes together when work is not involved, and there aren't these various levels of like, 'oh you're a CEO, you're a taxi cab driver', like, that doesn't exist cause it's not discussed and it's not part of the energy there

Another participant made a similar comment when I prompted them to speak more about the 'no work talk' rule, who likewise used the example of a CEO as one of the professional identities that would contribute to a sense of social inequality:

I2: a lot of people define themselves by their workplace and what they do, and how they do it, and if I read into it a little bit it kind of like shows some societal hierarchies, in a way, kind of by the title of their job, and where they are, and you know, are you a plumber or are you a CEO? Like, really? Does it really matter? But in society there is that inbuilt hierarchy, so I felt like not being able to talk about work forced people to see who they are

This interviewee then went on to discuss how this absence of social 'hierarchy' forced participants to think about factors outside of their professions that contributed towards their sense of self. This was articulated in terms of an inside/outside dichotomy: work was articulated as an external force, as a thing we 'have', while identity was articulated as something intrinsic, as something inherent about incarnation:

I2: I loved the fact that there was no societal hierarchies, everyone was on the same page and we had to like look into ourselves to see what defined ourselves, versus, looking at what we have to define ourselves

This sense of collectivity - of everyone being on the 'same page' - thus came to encompass the fact that all of those in attendance had relinquished the use of their digital devices, all belonged to an economic background that enabled access to the space, and all had entered into the same form of social contract with regards to relinquishing use of their real names and discussion of their

professions. This social contract also bought with it the overarching expectation that in adhering to these rules, attendees would get a heightened benefit from their interpersonal interactions, in the sense that they were seen to be more honest and more in keeping with who they 'truly' were.

Participants also commented that there was a sense of collectivity that emerged from the mutually held knowledge that nobody at the camp would be able to take a picture, which was seen to eliminate the forms of self-consciousness that participants associated with the 'digital' world. Cameras, both digital and otherwise, were prohibited from the camp: this was the only non-digital item that was not permitted on the site. Some participants commented that this helped severe ties with the world outside of camp. One female interviewee noted that the absence of cameras might allow one to be 'in a swimsuit that they might not wear somewhere else', and also noted that her profession as a teacher meant that her 'public image matters'. She described the experience bought about by the absence of cameras to be 'very authentic'. This dynamic thus wasn't necessarily bound with the fact that cameras are sometimes digital objects, and was rather tied with the forms of surveillance and self-consciousness that this participant associated with the presence of cameras.

Throughout the retreat, I only experienced two instances in which the veneer of 'no work talk' was lifted. The first was early evening, on the final day of the retreat. A group of people, comprising of three women and one man, were chatting together, and when I sat down to join them, they told me that 'we're talking about privilege'. This transpired to be the only selfconsciously political conversation that I would have during the retreat. At this point, contrary to the rules of camp, a couple of the participants in this group revealed what they did as their professions, which included charity and NGO based work. They commented that they felt exasperated with the space at the camp, as they saw it to be detached from politics and 'reality' (which, within the context of the conversation, I took to mean systemic social inequality). This detachment from 'reality' was not attributed to the absence of technology at the retreat, but instead to the demographics of those who attended the camp, and the attitudes that were broadly held. This group noted that the camp was a white-dominated space, which was the only acknowledgement of this that I'd personally encountered. One participant in this discussion commented that when they had remarked to another camper that their choice of attire was culturally appropriative, they had been told that the camp was a 'safe space' in which people could be 'free' from political issues. The participant informing the group of this felt frustrated with this attitude, and noted that it was damaging and prevented the 'detox' site from being a 'safe space' for marginalised social groups. This incident was significant as it broke the social contract that the

organisers had put in place: once the camp was no longer seen to accommodate for the collective good of all in attendance, the social contract was broken.

As noted earlier in the chapter, another instance in which the 'work talk' rule was lifted was at the end of the retreat, once we had collected our belongings and were waiting for the 'magic school buses' to take us back to the meeting spot in the city. We had reflected upon our time at the camp during the camp's closing ceremony, and were handed back our digital devices. At this point, people were also revealing their given names to each other, and in presenting their non-camp identities, had also begun to exchange business cards. This was an interesting shift: while at the camp, measures were put in place to remove forms of economisation from the space (for example, 'no work talk', limited exchange of money for goods), attempts were — immediately - made to capitalise upon the relationships established within the 'detox' space once it had come to an end. On a similar tac, one interviewee noted that the prohibition of 'work talk' did not prevent people thinking about 'networking and business' while at the 'digital detox' site, and noted that the absence of such discussions allowed him to 'raise [his] value':

I1: People are still thinking about work and networking and business so it does come up. And I find that like, the ability to not talk about it and say like 'oh we're not talking about it'... for one, it's clearing for me, I love that shit, sometimes. And two, the way in which I talk about it - or like, the way in which I don't talk about it - I could actually raise my value

For some, then, part of the appeal of 'no work talk' was to establish relationships that could then be capitalised upon subsequent to the retreat. While 'work' was purposefully not part of the discourse of the 'digital detox', it was nonetheless present in the social interactions and forms of relationality that were made manifest within the space.

4.3.6 Play

The theme of play frequently occurred throughout research interviews. The associations participants made of play with the 'non-digital' world, and work with the 'digital' world, were very marked. This was also a discourse that was frequently iterated by the camp's organisers in leaflets, group emails and merchandise (for example, t-shirts featuring the slogan 'play hard', and emails signed 'in love and play', see **appendix 4.1**). Throughout the interview data, play was often associated with 'doing things' with our 'hands and bodies' (examples of this included 'painting a rock', 'running around' and 'hula hooping'), and was seen as distinct from the forms of

embodiment that became manifest in the 'digital' world. 'Play' was also associated with 'letting go', 'being ourselves' and 'authenticity', and was very often described to be one of the most beneficial aspects of the experience of the camp. On the whole, 'work' and 'play' were often articulated in mutually exclusive terms (for example, in the 'outside world' I'm a 'workaholic', at camp I'm a 'playaholic'), or 'play', at least, was not seen as something that was undertaken in the world beyond the sphere of camp (for example, 'my motivations were to separate from my daily life and play').

I will depart briefly from the ethnographic analysis here to highlight how 'play' has been conceptualised amongst philosophical and sociological literature, as these conceptualisations bear relevance to some of the understandings of 'play' that were articulated throughout the research data. While there is a great deal of debate around what may precisely constitute 'play', it is generally understood to be an activity that is an end in itself (Henig, 2008; Feezell, 2013; Ryall, 2013). Some attribute the concept of play to an 'apparent purposeless', while others argue that it is 'unproductive, insofar as it is not obviously pursued for the sake of satisfying material needs' (Feezell, 2013, p. 16). Roger Caillois' work on play, which critiques and builds upon early definitions outlined by Huizinga, is frequently invoked in relation to play as an exceptional state. Huizinga describes play as an activity 'quite consciously outside "ordinary" life', 'not serious', 'connected with no material interest, and no profit can be gained by it' (cited in Caillois, 1961, p. 4). Caillois foregrounds however that such a conception of play bypasses considerations of games that are played for money, and 'affirms or implies the absence of economic interest' (ibid, p. 5). He contends instead that play does *not* preclude economic interest. Its chief characteristic is rather that it is *unproductive*: that is, while property may be exchanged, 'no goods are produced'. It is this which renders it distinct from work or art (ibid). He continues,

Nothing has been harvested or manufactured, no masterpiece has been created, no capital has accrued. Play is an occasion of pure waste: waste of time, energy, ingenuity, skill, and often of money for the purchase of gambling equipment or eventually pay for the establishment (Callois, 1961)

Stuart Brown's definition of play shares some similarities with Callois, in that it is 'done for its own sake', but departs from Callois in that it emphasises notions such as a 'diminished consciousness of self' and play's 'improvisational potential':

Apparently purposeless (done for its own sake); voluntary (not obligatory or required by duty); inherent attraction ('it's fun. It makes you feel good... it's a cure for boredom'); freedom from time ('when we are fully engaged in play, we lose a sense of the passage of time'); diminished

consciousness of self; improvisational potential ('we aren't locked into a rigid way of doing things. We are open to serendipity, to change'); continuation desire ('we find ways to keep it going [...] and when it's over, we want to do it again) (2009: 9–10; cited in Ryall, 2013).

Throughout the research interviews, discourse around 'play' encompassed similar philosophical assumptions to the conceptions of 'play' outlined above: the focus wasn't necessarily on the *non-pecuniary* status of play, but instead upon freedom from time constraints and the feeling of less self-consciousness that many participants noted they felt at the retreat. As previously discussed, within the 'digital detox' space, there was a marked de-emphasis on 'time constraints'; although the structure was timetabled, clocks were notably absent from the premises, and many attendees noted the lack of pressure to adhere to the given schedule. Similarly, the efforts that were put in place to reduce levels of self-consciousness on part of the participants - prohibition of cameras, repeated discourse of the site being a 'safe space' - also meant the camp shared similarities with the conceptions of play outlined above.

As noted in the introduction to the thesis, notions of 'play' have also been invoked within a series of neoliberal workplace environments as a way of heightening the productivity of workers (Flemming and Sturdy, 2010; Stewart, 2013; Cederström and Spicer, 2015). Flemming and Sturdy's ethnography of a call-centre work environment argues that discourses of 'play', 'being oneself' and 'authenticity' were often invoked by management as a way of distracting employees from the 'stultifying effects of [...] otherwise low discretion environments', while James Stewart highlights how the Google offices, a 'place to work and play', are specifically engineered to establish the 'happiest, most productive workplace in the world' (Stewart, 2013). I would posit that many similarities can be drawn between the discourses utilised in these spaces and those invoked within the sphere of the 'digital detox'. Elements of the 'digital detox' space - such as the imitations of social media on the walls of the main hall of the camp, and the large cardboard cut-outs of Apple's emojis - indicated that while there was an emphasis on 'detoxing' from digital devices, this 'detox' was not a rejection of the high-tech spheres that produce such technologies. Further, while there was an emphasis on no 'work talk', workshop titles such as 'intuitive development for busy people' and 'jump out of bed with purpose' indicated that there wasn't necessarily a critical stance towards 'work' held within this space, or a permanent rejection of 'work' wasn't part of the imaginary of the space. Rather, the prohibition of 'work talk' was a way of returning to work in a more productive manner, and 'play' a way of mitigating some of the detrimental psychological effects of 'work'.

4.3.7 Authenticity and Vulnerability

Throughout the interviews, the 'digital' was seen as detrimental to establishing 'real' or 'authentic' connections. This differed to the 'connections' that participants noted that they experienced whilst at the 'detox' retreat. A common thread throughout the interviews was that in stripping away each our given names, 'technology' and 'what we do' in our professional lives, we are able to establish an understanding of our more 'authentic' selves. The camp's themes of childhood were also significant in this regard; notions of origins, or of returning to a time in which digital technologies were less omnipresent, were also embroiled with these notions of 'authenticity':

I4: I guess we are still a generation that fortunately lived without big-tech devices consuming our lives for a while. So I think for me in particular it was getting back to that

The vast majority of those I interviewed were between the ages of twenty-eight and thirty-five. It is therefore likely that those belonging to this age group remember a period in their lives in which digital devices were far less pervasive. This was reflected in much of the discussion held with attendees: returning to childhood, nature and notions of 'authenticity' were often encompassed in the same discourses. I would also posit here that there was a strong link between the themes of childhood nostalgia and the lack of 'responsibility' that participants associated with the camp; childhood as not only a time where digital devices were less present, but also as a time when participants felt less 'responsibility' (whether this be in terms of professions, or the social pressures that participants associated with digital environments, such as the presence of cameras and body image).

'Vulnerability' was also a term that featured frequently throughout the research data, and was often used in relation to notions of 'authenticity'. 'Vulnerability' was usually associated with the 'emotional selves' that participants felt they embodied whilst they were at the camp. These emotional selves were seen to have more 'authentic' and 'genuine' conversations, be more open to 'plutonic touch', and be more inclined to engage in activities that could be constituted as 'play'. Also, notably, the 'emotional' selves of the camp environment were usually seen as distinct from the selves that participants described themselves as embodying in the 'digital' world.

4.3.8 'Being Whoever You Want to Be'

Throughout all of my research data, participants often expressed that they could 'be whoever they wanted to be' within the sphere of the camp. This echoed discourse that was used by the camp to some degree: for example, the pamphlet that we had each received told us that we had 'permission' to 'feel all the feelings, play all the things, and be silly, fun, and above all else, you'. Often, the lack of digital technology was seen as enabling of this dynamic. The reasons behind this were mixed. Some attributed the sense of 'being yourself' or of 'being whoever we want to be' to the fact that a digital device wasn't mediating social interactions, or acting as a distraction:

I5: showing up without being hidden by our day-to-day kind of stuff, and I do think that specifically around technology, that that absence of it meant that there wasn't anything else to do except be yourself

The absence of cameras was also very frequently associated with 'being whoever you wanted to be'. Many commented on how the 'safe space' of camp was facilitated by the absence of cameras and smartphones, as there was no fear that evidence of their behaviour could be captured or distributed beyond the sphere of camp. As previously noted, these fears were often expressed in relation to responsibilities that participants experienced at their workplaces, or pressures around body image. Aside from the scenario discussed in the previous section, in which the topic of privilege was discussed amidst a few attendees at the camp, I did not encounter instances in which 'being whoever you wanted to be' was problematized. In this regard, notions of 'being whoever you want to be' have close ties with neoliberal imaginaries that propagate individualism and ideologies of choice (McGuigan, 2014, p. 225). Choice architectures are pivotal to a broader constellation of neoliberal ideologies that emphasise that anyone can achieve anything should they choose to work hard enough, regardless of broader economic structures that systemically disadvantage marginalised social groups. I did not experience such problematisations within the sphere of Camp Wild. For the most part, 'being whoever you wanted to be' was celebrated and foregrounded as one of the most beneficial elements of the camp.

4.3.9 Anxiety

Discourse around anxiety was a frequently occurring theme throughout my research data. Many noted that they felt anxieties in the first twenty-four hours of the retreat, subsequent to handing in digital devices. This was often linked with the sensation of having something missing, particularly the physical sensation of pockets being empty. While I would not consider myself a heavy user of my mobile device, this was also something that I personally experienced while 'digital detoxing'; I often felt panicked when I realised my mobile device was not on my person. Some

participants described the anxieties as 'momentary' or as an 'awkward twitch', while others used bodily gestures to describe the sensation that occurred:

I10: The first day of camp I definitely noticed in myself like moments where I'd be like... [gasps] gotta check my phone! Like that [jolts forward, in a whip-lash motion]... whatever that is that happens inside of me like 'gotta check it!'. I have that awkward twitch a few times, the first day or so

* * *

I10: I remember last year having some itchy moments of when you're walking somewhere during downtime or something and feeling the pocket and feeling nothing there and the sense of yeah... a momentary anxiety?

Another participant described the sensation of the absence of their mobile device in a similar way, as an experience of momentary panic:

I11: And it's just weird not having... when I put my hands on my hip, right? Or on my... you know what I mean? When I put my hands in my pocket? And this moment of panic, 'oh my god, where's my phone?', right? I lost my phone somewhere... and then the realisation, oh no... So it felt weird because this thing that has literally almost become a part of me

Many noted that they felt these anxieties in moments when they were not having their attention directed towards something; during times when they were walking alone from one area to another, or when they were using the bathroom. One participant (I11) noted that these were usually the times where they would check their mobile device. It was also often noted that had the retreat not provided extensive activities for the duration of the stay, and had rather left participants to create their own entertainment, attendees would have found it more difficult to be without their 'digital devices' for the duration of the retreat.

4.3.10 'It Wasn't the End of the World'

Many participants of the 'digital detox' noted that giving up their digital devices for the duration of the retreat 'wasn't the end of the world'. Several interviewees alluded to a sense of inescapability when it came to the presence of digital devices within their day-to-day lives, and how this presence had become reified to form a given component of their existence:

I1: I wasn't sure what was going to happen. I didn't know if people were going to be like 'no, no, I don't know if I can handle this!' or whatever

* * *

I2: I think that going to Camp Wild* [audio cuts] taught me what is possible when you focus on the things besides technology

Within my research interviews, and my time spent at the camp, giving up digital devices subsequent to the retreat was never articulated as a sustainable life choice. Instead, it was something that could only be achieved in temporary environments such as the 'digital detox'. This was further iterated in the repeated notions of 'origins' and returning to 'nature' that were iterated by the 'digital detox' retreat and its attendees; life beyond daily presence of high-tech devices was only envisioned in terms of drastic returns to primitivism. This, for me, gestured towards the politics of capitalist realism (Fisher, 2009), where alternatives not *only* to capitalism, but capitalism as it is manifest through high-tech, were not part of the 'digital detox' imaginary.

4.4 Conclusions

This chapter has explored the data gathered from an ethnography I undertook at Camp Wild. I have analysed the field-notes from my time spent as a participant-observer, and fourteen semi-structured interviews that I conducted with some of its attendees subsequent to the retreat. Camp Wild was a space that invited its participants to relinquish use of their digital devices, discussion of their professions and use of their real names for a four-day period. In undertaking this case study, I aimed to explore what precisely it was about the 'digital' that attendees sought to 'detox' from; what the significance was of the 'digital detox' encompassing both a prohibition of 'digital technologies' and discussion of one's profession; and how attendees of the retreat understood the removal of the 'digital' and 'work' from the space to influence their behaviours and interpersonal relationships. I found it important to explore what attendees of Camp Wild were seeking to detox from as it would gesture toward sets of mutually held meanings that pivoted around a nexus of the digital: how the digital was imagined; and how the materiality of high-tech, and its surrounding discourses, influenced imaginaries, forms of relationality, and subjectivities.

Camp Wild spoke to a series of cultural dynamics that attendees attributed to anxiety, stress, and loneliness. Attendees were invited to attend the retreat and remember what being 'human really feels like' without the presence of their digital devices. In attending the 'non-digital' world of Camp Wild, many described their experience as being more emotional, more *authentic*, more mindful, and more free. Inversely, in the 'digital' world of work, participants understood themselves to be more distracted, isolated, *responsible* and anxious. This dichotomy between the two 'worlds' was pertinent,

and is, I argue, bound with a broader epistemic order in which 'humans' and 'digital technologies' are often distinguished as their own ontological entities (Latour, 1993; Haraway, 1991). This epistemic order further paves the way for the de-politicisation of 'digital' technologies, which was manifest both in the discourses propagated by the camp, and in those of my research participants. The detrimental effects that participants associated with the 'digital' and 'high tech' were bound principally with emails, phones and laptops *in themselves*, rather than the broader corporate spheres that play a key role in instigating 'addictive' and anxiety provoking sentiments and behaviours.

As a commercialised *response*, then, to sets of mutually held meanings pivoting around the 'digital', Camp Wild was tailored towards the forms of governmentality that are made manifest in digital environments. It offered *short term coping mechanisms* as a way of mitigating the dynamics of neoliberal capital; it did not offer challenges to the political spheres that are bound with the detrimental dynamics that participants associated with 'work' and 'digital technologies'. Similarly to Flemming and Sturdy's study, which explored how discourses of 'play', 'authenticity' and 'being oneself' were employed within a call centre environment to distract employees from the 'stultifying effects of [...] otherwise low discretion environments', I argue that such discourses made manifest within the sphere of Camp Wild were oriented towards similar ends; as a way of personally *managing* the dynamics of neoliberal capital as it is manifest through high-tech (2010). This was iterated, for example, in the 'mantras' provided in meditation workshops, where myself and other participants were told 'I deserve to be happy', 'I deserve to be loved', and 'I am a good person and I do my best'. Amidst a culture of neoliberal discourse that perpetually instructs consumers to be *better*, these momentary reassurances offer short-term antidotes that allow subjects to continue participating in the mechanisms of capital.

While hyperbolic, many participants noted that relinquishing their digital devices for the four-day period of the retreat wasn't the 'end of the world'. Themes of returning to 'nature' and 'childhood' - established by the retreat and iterated within the discourses of the 'digital detoxers' - were also pertinent. This alluded to a sense of inescapability around digital devices and daily life; life beyond these dynamics was bound to drastic returns to primitivism, and was only potentiated within the sphere of the retreat. This, as argued in the final section of the analysis, is further bound with a wider cultural framework of 'capitalist realism', where capital - and by extension, digital devices - 'seamlessly occupy the horizons of the thinkable' (Fisher, 2009). For the 'digital detoxers', digital devices, their ties with work and *responsibility* had become a reified component of everyday life from which the 'digital detox' offered them the opportunity to *temporarily* withdraw.

5.0 'Blockchain for Good': On Epistemic Governance and Futures We Can 'Trust'

5.1 Introduction

This chapter examines the emergence of the discourse of blockchain, with a specific focus upon the question of whether notions of 'blockchain for good' can be understood as distinct from this more general formulation. When I began work on this thesis, my motivations for exploring blockchain as part of my key empirical work were quite different to how they stand currently. I was then primarily interested in forms of collective action, and what role the digital would or could play within contemporary social movements. With respect to these motives, blockchain encompassed many interesting possibilities. An array of political positions, ranging from socioanarchism to far-right technolibertarianism, had speculated about how blockchain technologies could be harnessed for their respective agendas. For the conservative techno-libertarian, blockchain was finally a way to bring about collective participation amongst individuals who were all ultimately seeking out their own self-interest (see Tapscott and Tapscott, 2016). For the socioanarchist, blockchain represented a way of eschewing government or corporate intervention, and could potentially pave the way for self-organisation and mass collaboration at scale (Scott, 2016). With the latter speaking to my own personal politics, and a piqued curiosity about how it could be that this digital technology was attracting interest from such a diverse array of political perspectives, I commenced my research into blockchain.

Since these beginnings for my research in 2015, blockchain has shifted a great deal. What had first seemed to be a potentially subversive medium has gained immense commercial momentum, and has – in a similar vein to the Web – become readily developed and adopted by banking, corporate and governmental sectors. While initially conceptualised to function as the underlying ledger for Bitcoin, uses for blockchains have extended far beyond cryptocurrency, to include applications such as smart contracts, decentralised labour models, and initiatives for digital identity and financial inclusion (Adams, Kewell and Parry, 2017). Notions of 'blockchain for good' have emerged following the advent of these blockchain applications, and have featured in Twitter hashtags such as #BlockchainForGood and #BC4G (Adams, Kewell and Parry, 2017; Blockchain for Good, 2018; Wells & Llopis, 2017). For some, 'blockchain for good' pertains to notions of sustainable

development, which encompasses initiatives for financial inclusion, revised supply chain models, prospective sharing economies, and so-called 'innovations in governance' (Adams, Kewell and Parry, 2017). For others, 'blockchain for good' pivots around humanitarian and digital identity schemes (Blockchain for Good, 2018; Wells & Llopis, 2017; Casey and Vigna, 2018b). While there is some continuity in terms of what constitutes 'blockchain for good' across each of its contexts, universalistic notions of 'good' are of course ambiguous, and are encompassed with specific cultural imaginaries and epistemologies (Alasuutari & Qadir, 2013).

Blockchain is, on the one hand, a networked operation of code layers and protocols that can be used for a variety of purposes. On the other hand, it is a discursive formation arising in popular technology writing, trade press, policy documentation and academic fields. As a force for 'good', blockchains are often mobilised for philanthro-capitalist and libertarian paternalist political agendas. Philanthro-capitalism can be described as a branch of capitalism that positions 'philanthropic' activity as a central part of its business model, where companies 'accumulate capital by leveraging moral economies' (Burns, 2019, p. 130; Morvaridi, 2012; Fridell and Konings, 2013). Tech big-names such as Google, Microsoft and Ebay have each been involved in philanthrocapitalism, while private organisations such as the Bill & Melinda Gates Foundation have been formed with the proclaimed intentions of reducing extreme poverty and improving healthcare across the globe. Libertarian paternalism, as outlined in the introduction to the thesis, is associated with policies that are 'selected with the goal of influencing the choices of affected parties in a way that will make those parties better off', where what is 'better' is usually equated with what is 'rational' or most economically beneficial for particular sets of social actors (Thaler & Sunstein, 2003, p. 175). This outlook maintains that citizens can be 'nudged' into undertaking specific decisions and behaviours, while still respecting maxims pertaining to 'freedom of choice' (Thaler and Sunstein, 2008). These ideologies have a specific relationship to notions of 'social good' that are prevalent within 'blockchain for good' discourses, which, I argue, both obscure and propagate neoliberal and neo-colonial agendas.

In this chapter, I relay these considerations to Fisher's notion of 'capitalist realism', and argue that discourses of 'blockchain for good' advocate ideas for the future in which 'capitalist realism' is materialised as a ubiquitous force in everyday life (2009). I also consider these themes in conjunction with the ideas around sociomateriality, highlighted in **chapter three**, where I highlighted how Western-centric epistemologies and materialisations thereof, have, and continue to, disempower marginalised social groups and propagate Western structures of power. In the first

section, I will provide a brief history of blockchain and some of its key characteristics. This background is intended to contextualise the empirical work undertaken later in the chapter. In the chapter's second section, I detail what methodologies were utilised for compiling and analysing the data for this chapter. In the third section, I then undertake a close reading of pop-technology literature that orbits notions of 'blockchain for good'. I analyse some pieces of writing that are explicitly labelled with a title of 'blockchain for good', which include the *Blockchain for Good Manifesto* by the think-tank 'Blockchain for Good', and a chapter in Casey and Vigna's book *The Truth Machine: Blockchain for Good and the Future of Everything* entitled 'Blockchain for Good'. My analysis of these pieces focuses primarily upon relationships between bodies and digitality, and how these relationships speak to specific structures of power: not simply in terms of an intensification of the accumulation of big data by Western apparatuses²⁰, but also in terms of the epistemological and ideological 'erasures' that emerge when populations are rendered digitally legible in this way (Vazquez, 2011).

In the fourth section I provide an auto-ethnographic account of a data-scrape process, which involved the use of some proprietary natural language processing (NLP) software to crawl Twitter for all Tweets containing the term 'blockchain' across a six-week period during July and August 2018. Here, there were several intentions: to explore how I might go about abstracting Tweets pertaining to 'blockchain for good' from other Tweets about blockchain; how this could be undertaken using digital methods; and how the systems of visibility and intelligibility offered by the software influenced how I conducted myself in relation to the data. I reflect upon how these forms of visibility and intelligibility are bound with specific cultural politics, and what can be revealed about the hegemonic assumptions underlying 'blockchain for good' via an engagement with large-scale Twitter data. I tie these considerations into the epistemological concerns explored throughout the course of the chapter, and what limitations were involved with engaging with a data-scrape methodology that centrally entailed automation.

5.2 About Blockchain and 'Blockchain for Good'

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²⁰ I use the term 'apparatus' here as it is framed in Agemben's work, *What is an Appartus?*. This work expands upon the *dispositif* (apparatus) as it is used by Foucault, to refer to 'literally anything that has in some way the capacity to capture, orient, determine, intercept, model, control, or secure the gestures, behaviours, opinions, or discourses of living beings' (2009, p. 14)

This section of the chapter will now provide a brief history of blockchain. Blockchains are cryptographic distributed ledgers, which allow anyone on a given network to exchange forms of economic value from peer-to-peer, without the intermediation of an external third-party. While governments, corporations or banks usually act as the bodies that legitimise transactions within centralised exchange frameworks, blockchains substitute the role of these third-parties with distributed consensus mechanisms, which allow other users on the network to discern fraudulent activity (Scott, 2014; Adams, Kewell and Parry, 2017). A growing list of records is stored on every computing device on the blockchain network, which is then updated, verified and stored every ten minutes. This means that modifying the list of records would require such an immense amount of computing power that overriding or tampering with blockchain data is considered to be theoretically impossible (Scott, 2014; Brekke, 2018). Blockchains are frequently described as 'disruptive' platforms due to their purported immutability and capacities for disintermediation, as these attributes are often considered to act as building blocks toward establishing alternatives to centralised business models and forms of governance (ibid).

Blockchain was initially conceptualised to function as the underlying transaction ledger for Bitcoin, as a way of mitigating the 'double spend' problem. This refers to the possibility of spending the same money a series of times that can occur with other forms of digital currency (Davis, 2011). The Bitcoin protocol attempted to address this issue through making all transactions public, where all machines on the Bitcoin network are able to discern that a transaction has been made between party A and party B, and through the implementation of a series of cryptographic protocols that prevent the same transaction being undertaken a series of times (ibid; Scott, 2014). Users of the Bitcoin network can earn Bitcoin via the Proof-of-Work protocol, for which they are required to solve a cryptographic 'puzzle' which is then used to complete and verify transactions (Bulkin, 2016). Since Bitcoin, many other applications have been written to run on blockchains. A particularly prominent example is Ethereum, which allows for the creation of smart contracts between two or more parties. Other uses for blockchains include: the recording of birth and death certificates, marriage licenses, educational qualifications, health data, and insurance claims; movement of goods within supply chains; tracking uses of funds within charities; and distributed alternatives to centralised labour models such as Uber or Airbnb.

A great deal of rhetoric surrounding blockchains describes these networks to be 'trustless' (Adams, Kewell and Parry, 2017; Casey and Vigna, 2018b). 'Trustless' within these contexts usually refers to the sets of algorithms and infrastructures that allows for data or value to be safely transferred

from party A to party B: party A doesn't have to rely on other measures of trust in party B for the transaction to safely occur, nor do they have to go via an intermediary to ensure that the transaction is valid. It is thus usually considered that this 'trustlessness' is achieved through both: the transparency of blockchain data, in that all users of a given network are able to discern fraudulent activity; and 'incentivisation' mechanisms, which allow users to reap economic rewards when they act in accordance with the consensus of the blockchain network (Adams, Kewell and Parry, 2017; Casey and Vigna, 2018a; Casey and Vigna, 2018b; Magas, 2018).

Blockchain value is constituted within the parameters of a given network, and remains independent, to some degree, of the currency systems of countries and states. Besides uses for cryptocurrency, this can also be exemplified in initiatives such as La'Zooz, which provides ideas for where prospective 'sharing economies' could exist (Adams, Kewell and Parry, 2017). Differing to the 'Proof of Work' protocol that Bitcoin runs for the creation of value, the La'Zooz token system functions according to a protocol of 'Proof of Movement'. Users of La'Zooz are 'rewarded' either by providing their own movement data, or by helping the community grow so that more people are able to share their movement data (La'Zooz, 2018). These behaviours are then tokenised and made spendable within the parameters of the La'Zooz platform, allowing users to essentially exchange one service (such as providing movement data) for another service (such as a lift in a car). The purposes of this, according to La'Zooz, pertain to disintermediation and sustainability: La'Zooz replaces the role of third-party corporations such as Uber with distributed consensus mechanisms, and encourages more sustainable car use by providing a platform that helps drivers and passengers share unused vehicle space. There are several notable themes here which I will carry forward in the rest of the chapter, pertaining to: who sets the terms and conditions for 'rewardable' behaviour; how that behaviour is 'incentivised' and quantified; to whose and what ends the 'Proof-of-Movement' data serves; who has access to the 'Proof-of-Movement' data; and finally, how such 'proof-of' mechanisms continue to utilise quantitative data to speak some form of 'truth' on part of the subject.

Blockchain for Good' is a specific formation within the broader blockchain discourse, which – as I will explore and argue throughout this chapter – cannot be rigidly defined. It has, however, been briefly explored in the academic work of Adams, Kewell and Parry in *Blockchain for Good? Digital Ledger Technologies and Sustainable Development Goals* (2017). Adams, Kewell and Parry thematically explore a series of existing and prospective blockchains that are intended for use within 'social impact' settings, and divides applications of 'blockchain for good' into four overarching categories.

These include: supply chains; innovations in governance; prospective sharing economies; and financial inclusion (2017). The 'supply chain' category gets very brief attention in their work, and refers to blockchain initiatives that facilitate the tracking of goods, in order to reduce the likelihood of fraud or corruption between origin and destination. Examples of such blockchains can be seen in initiatives such as Everledger, which tracks the movement of assets, and applications for green energy markets, which allow for party-to-party trading of excess solar-generated energy (ibid, p. 134).

The 'innovations in governance' category draws upon notions of substituting 'code [...] for trust' (ibid, p. 134). When 'appropriately designed', they note, self-executing smart-contracts can be run on blockchains, thus paving the way for new forms of 'economic and social governance' (ibid, p. 134). No detail is provided however in terms of what might constitute 'appropriate design', but the writers do acknowledge that there are dangers when it comes to who is writing the code for smart-contracts, and how the 'individual's free will' might be affected when engaging with them (ibid, p. 134). It is worth noting here that the term 'innovation' is often a term that is invoked within business rhetoric, to refer to 'creating value from ideas' in relation to other 'competitors' in the market (Rahim, 2017). The 'sharing economy' category is also very brief, and explores how blockchains might address issues with 'decentralising and disintermediating' (ibid, p. 135). Here, they draw upon the example of La'Zooz previously explored, noting that it is predicated upon 'truer sharing economy principles, rather than monetary incentives' (ibid, p. 135). The writers do not elaborate upon what precisely constitutes 'truer sharing economy principles', however in relation to La'Zooz, they note that 'value is created amongst those who created it, offering greater reward and opportunity for inclusion' (ibid, p. 135).

The final category offered by Adams, Kewell and Parry then explores blockchains that might be used for 'financial inclusion'. Here, they discuss initiatives that have (purportedly) been orchestrated to help those living in poverty access financial aid and services with greater ease and less corruption. The writers argue that identity is crucial for 'enabling' greater financial inclusion, under the rationale that 'the "identityless" exist on the margins of society, unable to formally participate in democratic, educative, healthcare and economic activity' (ibid, p. 136). Examples of blockchain initiatives that are seeking to address these aims here include ID2020, BitNation, BlockchainBorderBank, BanQu, and NevTrace (ibid, p. 137), which largely revolve around notions of bringing the world's 'unbanked' into the global economy (ID2020, 2018; BanQu, 2018; Korkmaz, 2018)

There are thus several themes running through the categories offered by Adams, Kewell and Parry, and their conceptions of what constitutes blockchain 'for good'. One pivots around ideas for party-to-party 'sharing', which occurred within both the green energy initiatives and lift-sharing platforms. A theme of risk mitigation and securitisation is also prevalent; smart contracts and the tracking of goods are both explicitly geared towards such ends, as well as notions of code replacing 'trust'. There is also a focus upon spheres that are intertwined with the activities of the public sector, and notions of 'identity' acting as a gateway out of poverty. The themes provided by Adams, Kewell and Parry are by no means comprehensive, but provide a preliminary framework surrounding notions of 'blockchain for good' that I will take forward and expand upon within my close readings.

5.3 Close Reading of 'Blockchain for Good' Texts

5.3.1 Close Reading of Pop-Technology Literature on 'Blockchain for Good'

This section of the chapter will now undertake a CDA of discourses featuring in the *Blockchain for Good Manifesto: Humanising the Blockchain*, provided by think-tank 'Blockchain for Good' (2018), and a chapter in Casey and Vigna's book *The Truth Machine: Blockchain and the Future of Everything* entitled *Blockchain for Good* (2018b). I chose these texts as they were two of the most prominent throughout my process of 'snowballing' through internet links. By most prominent, I mean they occurred most frequently throughout search engine searches, and were cited most frequently in blog posts and posts on other forms of social media, such as Twitter. They also spoke to themes that I had previously encountered in the *Blockchain for Good* piece by Adams, Kewell and Parry, cited above, which allowed me to establish some preliminary understanding of the discourses and politics that 'blockchain for good' might come to encompass. I was hoping to explore how the themes in my selected 'blockchain for good' texts were iterative of broader blockchain discourses, and how the notions of 'good' articulated in these texts were iterative of capitalist realism. I have divided prominent discourses within these texts into thematic subsections for this analysis. As highlighted in **chapter two**, these themes were established via close reading techniques, which were corroborated with findings established using qualitative data analysis software NVivo.

To provide some brief background around these texts, the Blockchain for Good think-tank uses 'blockchainforgood.com' as its web domain, under which one can find a manifesto, a white paper, links to associated Twitter and Medium accounts, and an 'about' section. They describe themselves

as an 'industry' think-tank, who bring together the 'greatest minds around the world to explore and debate the development of blockchain, for the greater good of humanity, society, economy and our environment' (2018). The think-tank is based in California, however the website states that panel discussions have also been held in London in the United Kingdom. There is no overt mention of the think-tank's politics within information provided on the website, however brief detail is provided around the professional backgrounds of some of those who have participated in think-tank discussions. Blockchain for Good was founded in 2015 by a woman named Cécile Baird, who came from a background of working for financial publications such as Coin Telegraph and Coindesk. Other participants include investors, CEO's, film makers and producers, UK government officials from the Department of Work and Pensions and the Government Office for Science, employees of the Open Data Institute, charity representatives, employees of digital identity 'non-for-profit public-private partnership' ID2020, and employees from a handful of other tech companies, such as Decentrl and Plug'n'Play (ibid). The Blockchain for Good manifesto is a fourteen-page document that features on their website, and broadly centers around how blockchains might be used within humanitarian settings, as well as for extending the scope of uses for digital identity²¹.

The chapter in Casey and Vigna's pop-technology book *The Truth Machine: Blockchain and the Future of Everything* also goes by the title of 'Blockchain for Good' (2018b). Other chapters in this book tend to follow broadly neoliberal and technolibertarian themes, going by titles such as 'The God Protocol', 'Enabling the Fourth Industrial Revolution', 'A Self-Sovereign Identity' and 'A New Constitution for the Digital Age' (ibid). For Casey and Vigna - similarly to Adams, Kewell and Parry - the areas encompassed in their chapter *Blockchain for Good* include: initiatives for financial inclusion; ideas around how digital identity might benefit refugees and immigrants; how blockchain might be used within green energy sectors; and prospective blockchain registries for 'moveable assets', such as cars and other vehicles (ibid). For the vast majority of the chapter however, the writers primarily focus upon how blockchains can provide 'solutions' to issues around digital identity and financial inclusion (ibid, p. 198).

5.3.2 Trust and Digital Truth

The most prominent theme within both of these 'blockchain for good' texts was around how blockchains were considered to bring about 'new' forms of 'trust' and 'digital truth'. Trust was

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²¹ 'Digital identity' here refers to identity documentation and biometric data.

very often situated here in terms of statistical recording, and the capacity of such records to mitigate 'risk' within specific social systems. Here, the *Blockchain for Good Manifesto* begins with the following:

As a technology often described as *trustless* in its concept, it is delivering a new type of *trust*.

This is compared with the current model of many organizations and businesses, where one party, whether it's a bank or a government agency, is entrusted to maintain a "digital *truth*" (emphasis added)

Such notions of 'digital truth' are embedded within modernistic understandings of the 'real' that are located within the realm of statistical recording and quantification, while the 'digital' is articulated as its own ontological entity (Skouteris, 2004, p. 15). Discursively framing the 'digital' and blockchain in this way allows it to be understood as distinct from the biases of living-beings, and paves the way for claims to its objectivity, then allowing it to speak the 'truth' for subjects who might otherwise be framed as unreliable, untrustworthy, irrational or 'risky'.

On a similar tack, the *Blockchain for Good Manifesto* also makes frequent references to 'evidence'. The following exert is taken from a discussion around digital identity initiatives and their perceived prospective benefits:

In a blockchain-enabled world, one can imagine a world where a shared, immutable ledger which brings *evidence* together can be used as a single shared truth. This can provide *evidence of someone's humanity* and bring together the *evidence* to convict criminals.

Trust is fundamentally at the heart of blockchain. (emphasis added)

Language of scientific method is invoked here to substantiate claims around the posited benefits of digital identity. 'Evidence of someone's humanity' and 'evidence to convict criminals' are further entwined with discourses of risk, invoking mistrust and anxiety. 'Humanity' is equated with persons whose information is recorded on digital identity systems, thus othering and *dehumanising* those who are not yet part of these systems.

Similar framings of 'trust' and 'truth' are articulated within Casey and Vigna's work. In the book's introduction, the writers note:

[Blockchains provide] a societal system of trust, identity, and record-keeping that ties *our past to our present*, anchors us as human beings, and lets us participate in society (Casey and Vigna, 2018b, p. 2, my emphasis)

Trust is again situated here in terms of statistical recording, and the capacity of such records to mitigate risk within specific social systems. This is also a theme that runs throughout their *Blockchain for Good* chapter, which begins by describing living conditions for Bolivian immigrants living in Beunos Aires. While, they note, a great deal of these living conditions are highly impoverished, they go on to discuss one area in which the housing is of a significantly 'stronger foundation', where residents are also able to access a local school, a health clinic, and a 'host of other institutions' (2018b, p. 175). Their reasoning for why this area of Beunos Aires is 'comparatively blessed' in relation to its surrounding neighbourhoods pertains to 'two words: property title' (ibid, p. 175):

The Charrúa families didn't earn higher incomes than those in other parts of the neighbourhood, and they weren't more educated or better connected. The difference was that they had the capacity to *prove* home ownership with *the indisputable seal of government* (Casey and Vigna, 2018b, p. 175, emphasis added)

Such discourses frame such interventions as inherently desirable for those living there, and are distinctly reductive; rather than critique the capitalistic and bureaucratic frameworks that engender inequality, the roots of poverty are framed in terms of lacks of governmental documentation. Furthermore, as Korkmaz's work concerning 'Blockchain for Refugees' highlights, legally recognised documentation does not disrupt unstable economic conditions within potential host countries, and, in the most optimistic of scenarios, refugees would be subject to the same financial opportunities as local residents (2018). This however does not account for issues such as local prejudices, language barriers, struggles with mental health, or issues with asylum applications. In this way, such notions of 'identity' are constitutive of a reductive technoscientific epistemology, wherein all that does not belong within its parameters of legibility becomes invisibilised.

Following this, the writers go on to discuss such notions of 'proof' and how they perceive it to relate to poverty. These discussions pertain largely to the prospect that without 'official' documentation - that which is 'accepted by the government or bank' - immigrants and refugees

will continue to be subject to highly impoverished conditions (ibid, p. 176). Their reasons for this chiefly concern the mitigation of risk from the perspectives of banks and businesses, wherein, without proofs of 'who I am, what I do, and what I own', a business faces 'uncertainty', which then prevents potentially 'risky' subjects from accessing financial services, due to the costs that banks or businesses might incur (ibid, p. 177). The 'immutable' records that blockchain-backed identity schemes offer are thus framed as the solution to such 'uncertainties', providing banks, businesses and governments with information about a subject's 'on-time payments, property ownership, and other forms of *trustworthy* behaviour' (ibid p. 178, emphasis added). 'Trust' is again articulated in overtly economic terms, while businesses and banks are those who are principally affected by 'risk'. 'Risk' does not pertain, for instance, to the impoverished living conditions subjects might face if they do not meet the conditions set out by banks, businesses and governments.

Interestingly, within such discourses of blockchain data constituting 'trust', Casey and Vigna do give some consideration to the potentiality of 'bad information being entered into blockchain ledgers' (2018b, p. 177). On the topic of land rights, they note that in 'poor countries where registries need to be built from scratch, there's a risk that corrupt government officials charged with attesting to people's ownership would embed harmful falsehoods into the blockchain-based registry from the outset' (ibid, p. 177). Corruption is only potentiated here in relation to 'government officials' in 'poor countries' however; no consideration is given to how corruption might occur within more economically affluent spheres of the world. It does however provide a rare instance in which a discord is highlighted, between the data stored on blockchains and that which the data represents. They continue,

When a ledger is assumed to be an unquestioned truth, the issue of what information gets into it is a serious one.

Nonetheless, if we take a macro view and assume that in the vast majority of cases blockchains will be used honestly, the wider benefits of cryptographically secure asset registry are pretty enticing. Peruvian economist and anti-poverty campaigner Hernando de Soto estimates that the amount of "dead capital", the pool of untitled property around the world, is worth about \$20 trillion (2018b, p. 177)

Here, while brief consideration is given to the prospect that blockchain data could disempower those living in poor countries, this is immediately dismissed in favour of the 'macro view' that assumes 'honest' use of blockchains, and swiftly proceeds to a discussion of prospective economic benefits.

I am not the first to notice that there are distinct echoes of Hobbesian philosophy within a great deal of blockchain discourse (see Scott, 2014). Scott notes that the prospect that 'self-regarding people realise that it is in their interests to exchange part of their freedom for security of self and property' is often embedded within the assumptions underlying blockchain rhetoric (2014). I would posit that similar assumptions underlie the notions of 'trust' cited above, where living-beings are understood as self-serving individuals, who are each willing to defraud one another in pursuit of their own ends. In pursuit of the mitigation of 'risk', statistical recording on the blockchain speaks the 'truth' for potentially unreliable subjects. While this might be advantageous for those already privileged under Western systems of governance, immutable data on subjects who are likely to be deemed as 'risky' within such frameworks is very likely to further entrench exploitative and authoritarian power relations.

5.3.3 The 'Human' Blockchain and the 'Financial' Blockchain

The *Blockchain for Good Manifesto* articulates a frequent discursive dichotomy between a 'human' or 'humanised' blockchain and a 'financial' blockchain. Examples of this are iterated in the following:

So far, the majority of investment has been concentrated within the *financial industry, attracting the majority of headlines*. Yet one area that has not yet received the same level of attention or investment is *the human aspect of the blockchain* – how it could underpin the technologies that impact our everyday lives (emphasis added)

Here, the financial industry is argued to be the most affluent and well-known sphere of blockchain, while the 'human aspect' is articulated as distinct from this. Within a context of 'blockchain for good', which rests upon a 'good' and 'bad' binary, this then alludes to a series of implicit assumptions surrounding finance, and how the 'human' aspect of the blockchain is understood by contrast. More light is shed upon this in paragraphs that follow, which go on to discuss the ambiguity encompassed in notions of for the 'good'. Here, it is acknowledged that the meaning of 'for good' is dependent upon its context, and the motives of a given party:

We are living in a world where 'for good' has become zeitgeist and is often interpreted as "social good". However to set the scene of the discussion it is really important to note that "for good" is not limited to non-profit activities or the third-sector. Businesses that will continue to thrive tomorrow, will be those with a clear purpose which is underpinned by a commitment which balances the triple bottom line of people, profit and planet.

It is perhaps not surprising that in our discussion, there were incredibly varied views of what "for good" meant - for creative industries, it is transparency and fair distribution of royalties; for refugees, it is establishing or protecting identity; for charities, it is about accountability and for government, it is about delivering better services to the public (emphasis added)

This encompasses a series of assumptions. Firstly, it is acknowledged that (within a collectivised and generalised 'world') 'for good' is often associated with 'social good', which is here associated with the activities of non-profit organisations and voluntary workers. This might otherwise be understood as organisations and groups whose aims are not (supposed to be) immediately bound with private profit. Notions of how these cultural understandings of 'social good' might be appropriated by businesses then follow, where, in accordance with philanthro-capitalist ideology, they note that adopting a commitment to the 'good' is imperative for the furthering of future profit. The ambiguity in meaning highlighted here provides another subtle example of how binary forms can propagate structures of power: capitalistic motives are obfuscated by normative assumptions surrounding 'social good', a notion that is reductive and culturally specific.

The following paragraph then addresses these ambiguities, and describes what the term 'for good' might mean for a series of different groups, including creative industries, refugees, charities and governments. Here, discursive absences are pertinent. Toward the beginning of the *Blockchain for Good Manifesto*, a brief list of the think-tank's participants is detailed, which in this instance includes the 'greatest minds from the worlds of entrepreneurship, investing, academia, sustainability, charities and policy making'. There is thus a disjuncture here: although the think-tank's participants are said to include those from the spheres of entrepreneurship and investing, these groups have no mention in the discussion of what constitutes 'social good'; and although it is posited that 'digital identity' is what constitutes 'social good' for refugees, refugee voices have no mention in the list of the think-tank's participants.

In the above passages then, there is a discord when it comes to framings of social 'good' and how financial spheres are discursively situated in relation to these; here, they are very often positioned as distinct. Further, it is pressing to note that while there is an explicit and generalised assertion of what constitutes 'social good' for refugees, they have no mention within the list of the think-tank's

participants²². Notions of 'for good' pertaining to the 'establishing and protecting [of] digital identity' for all refugees are again dubious and highly reductive: as highlighted in the previous section, much of the discourse surrounding 'digital identity' within these 'blockchain for good' texts is oriented toward the privileging of businesses and banks over the impoverished.

5.3.4 The Future of 'Everything': Claims to Universality

Within both of these 'blockchain for good' texts, claims to universality are frequent, and are markedly Western-centric. As previously highlighted, the *Blockchain for Good* think-tank have noted that they bring together 'the greatest minds around the *world* to explore and debate the development of blockchain, for the greater good of *humanity*, *society*, economy and our environment' (2018, emphasis added). The list of the think-tank's participants however comprises predominantly of CEO's, government officials, tech-industry workers, and representatives from schemes such as *ID2020*. Notions of 'humanity', 'society' and the 'world' here assume a Western readership, and universalise this position, discursively erasing all that - and *who* - do not belong within the epistemic frameworks of Western techno-science.

The *Blockehain for Good Manifesto* goes on to unpack further details around ongoing and prospective digital identity schemes, under a title 'A Blockchain Utopia and Today's Grassroots Innovators'. Following this title, it provokes the reader to 'imagine a *utopia* where blockchain technology is used to underpin applications that addresses *real-world problems* - with a vision of *shepherding a better future*' (emphasis added). This quote features twice on the page, and in the second instance is set apart from the rest of the text in bold italics. There are several important points to make here. Firstly, notions of 'real-world problems' within this context again universalise all worldly experience through a Western lens. 'Shepherding' here is also very ideological, and invokes theological connotations of guarding, watching over, herding, steering, and protecting. Notions of 'a better future' and 'utopia' are also ideological here, alluding to notions of progress in relation to technological shifts. This section has distinct echoes of libertarian paternalism, where the ideas expressed are imbibed with an heir of authority, and the notion that this is the best or correct way of doing things (Jones, 2018). The correct way of doing things here is again bound with the politics of risk, holding out a 'promise of managing uncertainty and making an unknowable and indeterminate future knowable and calculable' (Amoore, 2013, p. 7).

²² There is a more detailed list of participants featured on the *Blockchain for Good* website, and is also indicative of this: there are several representatives from humanitarian organisations, amidst CEO's and UK government representatives, but no explicit mention of refugee voices

The *Blockchain for Good Manifesto* then goes on to discuss an 'e-residency' scheme currently being tested by the Estonian government, alongside its 'partner' Bitnation, which is an organisation that is orchestrating prospective 'governance services' via blockchain technologies (Bitnation, 2018). In this regard, *Blockchain for Good Manifesto* notes:

Estonia's e-residency scheme offers anyone, anywhere, a digital identity issued by the Estonian government, allowing non-residents to access the country's services *including having a local bank account.* E-Residents can digitally sign and verify contracts online anywhere in the world, therefore *reducing its borders*, *especially to businesses*.

In particular, the government has *partnered* with Bitnation, to offer a public notary *service* to e-Residents, underpinned by blockchain technology. This will allow individuals *to electronically record their marriages*, *birth certificates* and *business contracts*, regardless of their residency. (emphasis added)

In the above section, the privileging of market-based principles is fairly explicit. Although refugees are argued to be the persons benefitting from 'identity' in previous passages, businesses in the above passage are situated as the primary beneficiary of such digital identity schemes and Estonia's proclaimed 'reduced borders'. Terms such as 'partnered' and 'service' also invoke neoliberal discourses, while the rationale behind why 'e-Residents' might benefit from such schemes pertains to 'digitally sign[ing] and verify[ing] contracts anywhere in the world', as well as recording marriages, birth certificates and business contracts. A brief look at the e-Residency scheme's 'partner' BitNation's whitepaper also demonstrates an overt privileging of neoliberal as well as libertarian paternalist politics, and depicts a vision for a series of so-called 'governance services'. The rhetoric here largely revolves around a desired shift away from nation state governance, under the rationale that it reduces 'personal sovereignty' and individual choice (2018). The whitepaper also features detail of the 'incentivisation' strategies that are embedded into BitNation protocols, as well as the processes (ideologies) that shape how its 'jurisdiction' becomes quantified:

In digital space, everything must be quantified in order to be computable. The Pangea jurisdiction relies on *reputation* (automated and human scores, ratings, collaborative filtering, and digital representations of sentiment, opinion and thought) to incentivize opt-in contractual rule compliance and decide which peers, Nations, service providers and arbitrators receive a favourable rating (Bitnation, 2018)

Similar themes emerged within Casey and Vigna's writing, whose book is titled 'The Truth Machine: The Blockchain and the Future of *Everything*' (2018b, emphasis added). Notions of

'everything' here are again markedly Western centric. Vazquez highlights how such discourse can be understood in terms of epistemic 'erasure', wherein the 'all that doesn't belong to [modernity's] parameters of legibility and certainty' is un-named and invisibilised (2011, p. 31). Within the context of this book, in which blockchains are offered as forms of solutionism to a series of 'risks' posed to businesses and states, notions of 'everything' are also indicative of capitalist realistic politics. The proposed 'utopias' offer an intensified vision of technoscientific and capitalistic rationalities: to borrow Fisher's phrasing, capitalism here 'seamlessly occupies the horizons of the thinkable', and a 'pre-emptive formatting and shaping of desires, aspirations and hopes by capitalist culture' is offered in the notions of 'everything' proposed (2009, p. 8-9).

5.3.5 The World's 'Unbanked'

Within Casey and Vigna's chapter, discourse of the world's 'unbanked' is frequent. The term 'unbanked' is used almost interchangeably with 'impoverished', which is iterated in the following:

For the more than 2 billion adults worldwide that the World Bank describes as "unbanked," the good news is that a combination of humanitarian and financial motivations has produced a good global movement to move the unbanked into the world of modern finance (2018b, p. 179)

Most of these systems are still based on an underlying banking infrastructure, and the banks that run them don't have a good handle on the needs of "unbanked" *customers*, many of whom are confused by the demands placed upon them (ibid, p. 191, emphasis added)

The understanding of 'good' articulated here is one in which the world's 'unbanked' are 'move[d]' into the 'world of modern finance'. The term 'modern' can be likened here to modernistic notions of 'developed' and developing', where Western-European and American systems are assumed to be the goal for the parts of the world that are not yet fully encompassed in its economic infrastructure. 'Mov[ing] the unbanked' is again bound with libertarian paternalist rhetoric, where the writers of the text and those at the World Bank are presumed to know what is most beneficial for those living in poverty. 'Humanitarian' and 'financial' motivations also function collaboratively here, demonstrating a further discursive blurring between 'financial' spheres and the activities of such 'philanthropic' organisations.

Similar rhetoric pertaining to 'unbanked' persons can be seen in ongoing digital identity schemes such as ID2020 and BanQu, which both feature as examples of 'blockchains for good' in the

academic literature by Adams, Kewell and Parry (2017, p. 137). Echoing the discourse of Casey and Vigna, these digital identity initiatives frame 'refugees, the displaced and the world's poorest' as 'unbanked', and use this terminology to help substantiate claims pertaining to the roots of poverty (see ID2020, 2018; BanQu, 2018). As opposed to a critique of the capitalistic frameworks that engender inequality - within which exploitation is pivotal to their very function - notions of poverty mitigation here are recast solely in terms of enveloping increasing spheres of the globe into the governance systems of the West. While I do not dispute that legally recognised identity documents constitute access to housing, work, education, medical care, and travel, this does not negate the resolute privileging of the interests of banks and governments within the discourse that surrounds blockchain digital identity initiatives. I would strongly suggest that the propositions made within these 'blockchains for good' discourses would not mitigate the epistemic injustices that propagate such forms of governmental and financial power. Rather, I contend that they are oriented towards further entrenching such power relations. I would argue that what these blockchain discourses propose is the further development of a sociotechnical apparatus for extending economic and technoscientific epistemologies, and the neoliberal and neo-colonial powers that are concomitant to these epistemologies.

5.4 Analysis of a Data Scrape

This section of the chapter will now turn to an analysis of the data scrape I undertook with the TAG laboratory using the NLP software Method52. This crawled Twitter for all Tweets containing the term 'blockchain' across a six-week period between July and August 2018. This was the second stage of my research into 'blockchain for good', and was largely informed by the discourses and themes explored in the previous section. To refer briefly to the methodological considerations discussed in **chapter two**, the purpose of this exercise was to explore what epistemic biases and cultural assumptions might or can be encouraged via digital tools through gathering data via a process that centrally entailed automation, and to consider the pertinence of these biases in relation to the discourses explored in the previous sections of this chapter. My main focus lay in how I might go about abstracting Tweets pertaining to 'blockchain for good' from other Tweets about blockchain. I wanted to explore how this distinction could be explored computationally, and how this exploration might be limited by the various material and epistemic affordances of the Twitter and Method52 platforms (Burns, 2015). This data-scrape process was undertaken alongside Jack Pay, a member of the TAG Laboratory at the University of Sussex.

The first stage of the process involved myself manually sifting through a data sample²³ of tenthousand Tweets and labelling them as either 'relevant' or 'irrelevant' to my study (appendix 5.2). The purpose of this stage was to filter the contents of the data, so we could automate a process that would determine which Tweets were 'relevant' and 'irrelevant'. Tweets that were labelled 'relevant' here were ones that I felt related to notions of 'blockchain for good'. Not all of these Tweets out of the ten-thousand were to be labelled; I was advised that I would likely have to label between three-hundred to five-hundred Tweets before the algorithm could adequately automate the process itself (by which I mean able to discern which Tweets pertained to 'blockchain for good' topics). Upon exploring the data set, there were very few – if any – Tweets that could definitively be labelled as 'relevant'; many of them contained language or were phrased in a way that rendered them ambiguous. A more adequate way of describing this might be that the 'relevant' Tweets occurred across a spectrum, with some being closer to the 'relevant' end of the spectrum than others. Examples of these looked like the following:

Read this review to know more about Energycoin blockchain technology. Read on to know how it works and how to buy ENRG. Read more reviews at: https://t.co/ctS6s9hdWh...https://t.co/Z5IAY5ygI7

FreightWaves - Blockchain: Helping out a trucker: 5 charities worth considering https://t.co/ty8PDuUGHEhttps://t.co/u7s1sS3hTa

The project – made up of the National Archives, the University of Surrey, and the UK Open Data Institute and funded by the EPSRC – is creating a blockchain prototype that will show the audit trail of how a document has been edited. https://t.co/4I3bEqQLpz

The content of these Tweets, then, pertained explicitly to sustainability, charity organisations, and ways of preventing data corruption, which were all topics that were touched upon in my earlier readings around 'blockchain for good'. That I felt I could label these as 'relevant' was due only to these readings, meaning that any results acquired from this process of labelling were limited by the definitions, categories and conceptions of 'social good' that had been outlined by the writers of the 'blockchain for good' texts. I experimented with how much I was able to remove my own politics from the process, limiting myself only to the understandings of 'for good' that were outlined in my earlier readings. However, even within the Tweets that leaned toward the more 'relevant' end of the spectrum, there was still some level of ambiguity, and thus a need for my own personal interpretation; I had not, for instance, explicitly read that charities oriented towards

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²³ A sample was needed as the data set was too large to explore in its entirety.

helping the lives of truckers are an example of 'blockchain for good'. I had however read that 'for good' often involved 'non-profit activities or the third-sector' within the *Blockchain for Good Manifesto*, and thus referred to my own forms of cultural understanding to bridge these gaps in meaning.

Tweets that were more ambiguous but I nonetheless categorised as 'relevant' might have touched upon some of the aforementioned topics, but were blurred by other content contained in the Tweet. These might have looked like the following:

1. Why AI needs blockchain? Today AI needs data but this data is locked in insurance companies, FB, Google etc. But if consumers would own their data on blockchain with privacy protected computation, that would enable marketplace where consumers can sell bits of their data. https://t.co/dRDuOugima

Similar language to this featured in the discourse of Bitnation, which heavily orbited neoliberal ideology of 'personal sovereignty' and individual choice, and featured recurrently as an example of 'blockchain for good' within various pieces of writing (Bitnation, 2018). For these reasons, I marked this Tweet as 'relevant'. While - perhaps needless to say - this conflicted with my own personal politics due to its orientation towards the intensification of neoliberal infrastructures, I had to *attempt* to remove my own personal politics from the process if I was to attain a coherent data set; there was no scope within this process of marking 'relevant' or 'irrelevant' for nuances or multiple conceptions of what might constitute 'blockchain for good'. There was also further ambiguity here as, within the *Blockchain for Good Manifesto*, distinctions were made between the 'human' blockchain - which, in this instance, came to mean 'blockchain for good' - and the 'financial' blockchain. *Explicitly* economic uses of blockchains were often not encompassed within the sphere of 'blockchain for good', which meant that this Tweet regarding both data security and a 'marketplace where consumers can sell bits of their data' fell within a grey area. Another example of a Tweet that felt particularly ambiguous can be seen in the following:

Season 2, Episode 3: Samson Williams (@hustlefundbaby), Co-Founder of @AxesandEggs ••• Samson talks about growing up in Texas, overcoming the industry's racial and gender gaps, and the future of blockchain technology. ••• Hear how he's helping to #CloseTheGap on #iTunes!

https://t.co/3xQUztQNYE

This was ambiguous as while notions of reducing gender inequality did not feature within any of the 'blockchain for good' texts that I explored, and notions of reducing racial inequality were vague (at best), discourses of equality did feature in examples of 'blockchain for good' initiatives (for example, ID2020's homepage states 'closing the identity gap is an enormous challenge' and 'imagine a world where safe and secure digital identities are possible, providing everyone with an essential building block to every right and opportunity they deserve') (ID2020, 2018). I thus had to speculate about whether or not this should be labelled as 'relevant', both from my readings of the 'blockchain for good' texts and my understandings of their broader social and political contexts and how they invoked notions of 'social good'. Further, it was difficult to decipher from the short amount of text featuring here whether or not discussions between 'racial and gender gaps' and 'the future of blockchain technology' were interlinked. However, Jack had advised that if I felt unsure about how to label a Tweet, then to mark as 'relevant', as this would mean that I wouldn't lose data that could be potentially useful. This did however mean that, despite my efforts, the Tweets marked 'relevant' did begin to encompass a conglomerate of political discourses and ideologies.

Tweets that were labelled as 'irrelevant' either revolved around banking, finance, or investing, contained a great deal of '@' tags to other users on Twitter, or comprised mostly of hashtags (this however wasn't an overarching rule, as occasionally Tweets featured long strings of hashtags contained words or phrases that were relevant to notions of 'blockchain for good'). That these topics were labelled as 'irrelevant' was again due to my readings of the 'blockchain for good' texts where a distinction was made between the 'human' aspect of the blockchain - which came to mean the aspects of the blockchain that were considered to go towards philanthropic purposes - and the 'financial' aspect. Tweets that I marked as 'irrelevant' then might have looked like the following:

Five Questions to Ask Before Investing in a Blockchain Company https://t.co/o4DrX2Erkx

Artificial Intelligence Influencers @mikequindazzi @ipfcoline1 @alvinfoo @juliosilvajr @ronald_vanloon @enkronos @machinelearn_d @fisher85m @ibm @ianljones98 Top hashtags #ai #iot #machinelearning #bigdata #blockchain#deeplearning via NodeXL https://t.co/4bqAaob00c https://t.co/aGIx259ro8

Just published our take on #IBM 's 2nd quarter as its growth turnaround continues to take shape. Big results in #mainframe & #security with progress in #cloud, industry #blockchain & enterprise #AI. All good ground for more confident story telling from Big Blue in 2018 https://t.co/ACr0rj8Zti

From this process, the algorithm generated a series of keywords that it had assigned to the 'relevant' and 'irrelevant' categories. Fairly generalised terms surrounding blockchain such as '#cryptocurrency' (#blockchain_#cryptocurrency', '#bitcoin' and '#eth' appeared in the

'irrelevant' column, while the 'relevant' column generated more specific terms, such as 'govt' (government), 'land_related' and 'health_care'. While I had tried to assign Tweets about finance to the 'irrelevant' category, the 'relevant' category nonetheless had come to incorporate terms and phrases such as '#malware_#fintech', 'companies_begin', 'care_companies' and 'revenue_dept'. The 'relevant' column transpired to be a lot longer than the 'irrelevant' column, and further terms that I wouldn't have personally deemed to be relevant were also allocated to the 'relevant' column by the algorithm (for instance '#malware', 'liverpool' and - to my amusement - 'yogi'). These lists were generated by Method52's combination of methods derived from compositional and distributional semantics ('relations of words within a sentence', and how the 'meanings of words can be determined by considering the contexts in which the words appear in text') (TAG Laboratory, 2019). This thus meant that these word lists were derived from how frequently they occurred with words and phrases that had been marked 'relevant' during the earlier stages of this process.

I was not able to remove terms and phrases that I felt didn't belong in either column, which meant after my labelling of Tweets as 'relevant' or 'irrelevant', it was predominantly down to hidden mechanisms within the software to determine which words out of those Tweets were significant.

Relevant	Irrelevant
govt	#cryptocurrency
fraud_HTTPLINK	#ico
led_govt	#blockchain
yogi	#crypto
introduce_blockchain	#airdrop
store_protect	#bitcoin
land_related	airdrop
protect_land	1
related_data	000
technology_revenue	#cryptocurrency_#blockchain
blockchain	tokens
yogi_led	token
dept_store	#btc
technology_eliminate	#eth
revenue_dept	#crypto_#blockchain
manipulation_blockchain	#blockchain_#cryptocurrency

Figure 1 Relevant/irrelevant columns, generated by Method52

climate #healthcare climate_positive health_care positive_city exploring store #malware_#fintech #hacking_#databreach #ai #malware #datascience_#privacy #hack_#hacking liverpool begin_exploring #malware companies_begin data crisis #hack #databreach #crypto care_companies world climate #hacking #databreach

Figure 2 Relevant column, continued

Jack had advised however that I could copy and paste keywords and phrases from Tweets into these columns if I felt they were significant, and that this might improve the accuracy of the 'relevant' Tweets generated by the algorithm. The 'irrelevant' column again transpired to be a great deal shorter, wherein I copied phrases such as 'Startups', 'Football', 'business', 'gaming', 'brokers'

Enterprise_', 'profitable' and 'industry'. This was again down to my own interpretation; I had not explicitly read that 'football' or 'gaming' are not examples of 'blockchain for good'. However these spheres had no mention within the texts that I'd read, nor are they (typically) intertwined with the normative notions of philanthropy that these texts invoked. In the 'relevant' column, I thus copy and pasted words and phrases that appeared in Tweets that I felt touched upon topics pertaining to 'blockchain for good', and the usernames of users that were writing on these topics. This came to contain phrases such as '_#sustainability', 'access', 'humanity', 'social_impact', 'sharing', 'Estonian_ID' and '#RenewableEnergy'. My own judgement was thus a pivotal component in all stages of the process thus far; in the initial labelling as 'relevant' and 'irrelevant', and with the selection of key words and phrases subsequent to this.

_#sustainability sensitive_information ethics human_judgment @NITIAayog fair patient votina access immunisations special_needs children humanity social_impact #RenewableEnergy Sharing consent Equality Estonian Estonian ID agriculture developing_countries Save Them digitally_sign

Figure 3 Relevant column: words and phrases manually copy and pasted

Startups
Football
brokers_
business
gaming
brokers
Enterprise_
profitable
industry

Figure 4 Irrelevant column: words and phrases manually copy and pasted

While, in principle, I knew at this stage how to operate the software, the process of marking as 'relevant' or 'irrelevant' became more consistent as I grew more aware of general themes running throughout the data, and as I became more acquainted with the software. This meant that there was a difference between how I was filtering Tweets toward the beginning of the process, and how I was filtering them toward the end; I had become more specific in my discerning of what constituted 'good' or 'relevant', and conversely what constituted 'bad' or 'irrelevant'. This was, in part, due to the fact that the 'accuracy' score wasn't increasing as I was moving through the Tweets: my approach to labelling the Tweets shifted in response to this.

As I approached the end of marking my recommended sample size of five-hundred Tweets, the samples of 'relevant' Tweets that were being generated by the algorithm were not improving to the extent that we had hoped. The algorithm was able to mark 'irrelevant' Tweets with some accuracy (this was indicated by a score out of ten), however the score for the 'relevant' column was still relatively low, and was not improving as I sifted through the Tweets. I had noted that perhaps the fact that the algorithm wasn't returning particularly 'accurate' results here was meaningful, and indicative of the ambiguity of universalising notions of social 'good'. There was little scope within this particular method for nuanced interpretations of the Tweets (by which I mean, for instance, certain words or phrases would be part of a Tweet that was labelled as 'relevant', while the same words of phrases, within different contexts, would be part of Tweet that was labelled as 'irrelevant'), or training the algorithm to discern multiple political conceptions of 'social good'. The sample set of 'irrelevant' Tweets was fairly effective at recognising Tweets with long strings of financial hashtags, such as the following:

#TokenizeTheWorld, #SharingEconomy, #SecurityToken, #STO, #ICO, #Blockchain, https://t.co/n5R55dgFXQ

#Blockchain #DLT #altcoin #Fintech #tether #bitfinex #binance #investme nts #Innovation #eCommerce #Finance #trading#Cryptocurrency #futurism #futuretrends #technologytrends #technologists #technology #digitization #digitaleconomy#bitcoin #ethereum #BTC...https://t.co/hn00mJkRVa

However, even though the accuracy score for the 'irrelevant' column was higher than the 'relevant' column, I nonetheless came across Tweets that were assigned to the 'irrelevant' column that I would have labelled differently if I had conducted the process myself. Examples of these can be seen in the following, which pertained to topics of tracking the movement of goods, and philanthro-capitalist notions around millionaires helping citizens of Puerto Rico:

History made this week at @IBMBlockchain's #IBMFood'Trust event. World's first #blockchain dinner made using participating partners' ingredients that could be tracked back to source. Impressive. Still think it's hype? https://t.co/XJaOiEAGUG

Can crypto millionaires help the struggling island of Puerto Rico recover with blockchain technology? I met newcomers and locals with high hopes for this crypto tech as well as those sceptical of the new arrivals & their intentions - things get lively! https://t.co/OMywoaX2t4

The latter Tweet may have been deemed to be 'irrelevant' due to its featuring of terms such as 'crypto tech' and 'millionaires'. However, I had anticipated that terms such as 'help' and 'Puerto Rico' might have been deemed 'relevant' as there had been multiple reports in the media about blockchain entrepreneurs and their intentions to build a 'crypto-utopia' in Puerto Rico in order to rebuild its infrastructure following Hurricane Maria (Bowles, 2018; Baydakova, 2019). That this Tweet was deemed 'irrelevant' was due, then, to the number of times in which all terms in the Tweet had occurred in other contexts.

Meanwhile, the 'relevant' sample returned a lot of Tweets around the topics of healthcare and climate change, but was missing many other of the topics discussed within the 'blockchain for good' texts. Further, interestingly, the topic of healthcare hadn't occurred in my readings into 'blockchain for good', but had been deemed 'relevant' by the algorithm. Jack noted that the large number of Tweets pertaining to climate change and healthcare was perhaps down to the specificity of the terminology belonging to these topics (e.g. terms such as 'healthcare', 'health', 'health_care', '#pharma', 'climate_positive' and 'sustainability' all featured in the 'relevant' column), while the topic of prospective sharing economies, for instance, might tend to use more context-dependent terminology (e.g. 'fair', 'workers', 'supply chain'). Similar themes ran through many of the Tweets about healthcare to the discourses explored in the previous section, invoking notions of, for example, the wants of a universalised 'humanity'. It is also pivotal to note that these Tweets were often geared towards the marketization and privatisation of healthcare, rather than blockchain uses for the public sector. This, similarly to other 'blockchain for good' discourses, thus gestured towards broader connotations surrounding philanthropy - here, pivoting around healthcare - while being underpinned by imperatives toward further marketization:

Hu-manity wants to create a health data marketplace with help from blockchain https://t.co/23qTgEytrE https://t.co/vXRQx9aTTD

Meet Dmirty Khan, our resident Blockchain expert and strategic advisor for startups and corporations who has worked in fields as diverse as healthcare and space industry 2 Read more on Medium: #blockchain #cryptocurrency #innovation https://t.co/P5I5rq089

The next stage of the process involved conceiving of some overarching categories that could be used for keyword lists (appendix 5.3). We devised these keyword lists as there was very little coherence running through the dataset that was assembled through the process of marking Tweets as 'relevant' or 'irrelevant'. Following this process, Tweets would still be marked either 'relevant'

or 'irrelevant' by the algorithm, but we hoped that it would do this would greater 'accuracy'. These keyword lists would have to contain very specific terminology that would help the algorithm abstract Tweets that touched on a particular topic. From here, Jack noted that this 'high precision' method could be used to build 'classifiers' that would catch Tweets which used more general language. A 'classifier' is a component of the Method52 software that builds 'semantically coherent sub-collections, *classes*, of the text' (Robertson, 2018).

Informed by my readings of the 'blockchain for good' texts and my interactions with the data up to this point, I decided upon categories of 'climate change', 'education', 'financial inclusion-humanitarianism', 'governance', 'health care', 'education', 'security', 'misc-equality' and 'work labour'. Some of these categories were informed by my engagement with the Tweets thus far, and what the algorithm had deemed to be relevant, aside from just the 'Blockchain for Good' texts; the Tweet featured below, for instance, featured the hashtag '#DecadeOfWomen', within the context of discussing blockchain uses for helping those suffering with AIDS. While discussions of women and blockchains had not featured at all in the texts I'd explored, this hashtag was embedded within a bed of philanthropic discourse that did relate to the narratives offered within the 'blockchain for good' texts:

Can frontier #blockchain technologies help reach those most vulnerable & impact programming? RSVP for our #AIDS2018satellite session with #DecadeOfWomen honoree @janeathomason July 23. https://t.co/Iy1RQX0rIL #blockchaingetheworld@AIDS_conference https://t.co/rSeAE8EDwO

For these lists, I pulled terms from Tweets that I'd seen within the data set thus far, terms that had occurred within the 'blockchain for good' texts, and words and phrases that I'd pulled from relevant articles that were found through search engine queries. Jack had advised that I make the keyword lists very specific; he noted that terms such as 'world' or 'global' that I'd initially put in the 'financial inclusion-humanitarian' list were too broad and would return lots of 'irrelevant' data. This, again, was due to the fact that these words were likely to appear in a wide range of contexts. More specific terms I thus decided on for this category included 'birth certificate', 'global citizenship', and 'identityless'. What was notable about this process of categorisation is that it was limited according to what I had already seen; the data wasn't able to tell its own story. Tweets in the 'financial inclusion-humanitarian' column returned Tweets with similar narratives to the texts I'd read, with notions of credit access being a 'solution' to poverty:

One of the biggest causes of #poverty is the lack of access to credit and escrow. Smart contracts are the solution to poverty! Worth a read: https://t.co/abQgw11nMd #blockchain #Rubius #ICO

Further Tweets included techno-solutionist narratives, and notions of wealthy public figures instigating 'philanthropic' initiatives. What was notable here was that while terms such as 'pop star' and 'startup' had not been deemed irrelevant by the algorithm, for all intents and purposes, the logics were the same as those underscoring the Tweet earlier highlighted pertaining to 'millionaires' striving to rebuild infrastructure in Puerto Rico:

The top two skillsets for blockchain entrepreneurs, in order: Technology development. Community development. That's it.

British pop star Peter Gabriel has invested in blockchain startup Provenance, whose goal is to create better transparency in food transportation by applying blockchain technology. https://t.co/mnpe1R82V

There were thus a series of conclusions that can be drawn from this data-scrape process. Firstly, there was little coherence amongst the corpus of Tweets that Method52 produced after creating an automated process that would deem data as either 'relevant' or 'irrelevant'. In other words, within the context of this study, this meant it was largely inept at distinguishing Tweets pertaining to 'blockchain for good' from Tweets that explicitly pertained to blockchain uses for banking and finance. As explored in the previous sections of this chapter, while 'blockchain for good' discourses invoke notions of 'blockchains for good' being distinct from financial blockchain applications, blockchain is, most prominently, a sociotechnical apparatus for extending economic and technoscientific rationalities. By and large, as I have argued throughout this chapter, the motives underscoring prospective 'blockchain for good' initiatives are not distinct from this. That the Method52 software could not make this distinction was therefore pertinent.

What was also revealed during this data-scrape process was broader discursive affiliations between particular terms (as iterated in the English language and on the Twitter platform). From my initial process of marking Tweets as 'relevant' or 'irrelevant', the algorithm had discerned that blockchain applications for 'healthcare' might also pertain to 'blockchain for good'; this wasn't one of the topics that featured within the 'blockchain for good' texts I'd encountered. This meant that terms such as 'health' and 'healthcare' occurred in similar clusters of words to other 'blockchain for good' applications. What was interesting, however, is that while 'health' might here have been equated with 'good' by the algorithm, it wasn't able to discern the marketised imperatives that

underlay the Tweets about healthcare. This or, perhaps, since capitalistic agendas arguably underscored the majority of the data, it *was* able to discern the marketised imperatives, but terminology around health was deemed to be more meaningful. This then gestures toward the broader epistemic frameworks within which such discursive affiliations exist, and toward the agendas that they help sustain.

Conclusions

In this chapter, I have argued that blockchain is a sociotechnical apparatus for extending economic and technoscientific rationalities, and that 'blockchain for good' initiatives are constitutive of this more generalised blockchain formulation. 'Blockchain for good' discourses, I have maintained, are tightly bound with ideologies of philanthro-capitalism and libertarian paternalism. While philanthro-capitalism invokes moralistic discourse to further capitalist agendas, libertarian paternalism asserts that citizens can be encouraged to undertake specific, more 'rational' behaviours, without violating neoliberal maxims pertaining to 'freedom of choice'. These ideologies are invariably geared toward the privatisation of the public sector and the extension of capitalist market economies, and have a specific relationship to notions of 'social good' that coincide within 'blockchain for good' discourses.

Within the *Blockchain for Good Manifesto*, distinctions were explicitly drawn between notions of 'social good' often pertaining to 'non-profit activities or the third sector' and the role of businesses; between a so-called 'human aspect' of blockchains and their 'financial' counterparts. This speaks to normative assumptions around 'social good', which were here positioned *as distinct from the workings of capital*. These distinctions were then utilised in discussions around how notions of 'social good' could bolster capitalist agendas, and were conjoined with conflicting beliefs around what is 'good' or desirable; within these texts, this often pertained to making imagined futures determinable to specific social groups. In accordance with libertarian paternalism, rational choice was constructed as the correct way of doing things, and was often encompassed with a politic of 'risk': where, to borrow Ewald's words, decisions are made 'not in a context of certainty, nor even of available knowledge, but of doubt, premonition, foreboding, challenge, mistrust, fear, and anxiety' (Ewald, 2002, p. 294). That a theme of 'trust' recurred within much of the 'blockchain for good' discourse was indicative of this; living-beings were framed as self-serving and fraudulent, and blockchains as distinct from these 'human' flaws and biases.

Embedded within much of the 'blockchain for good' discourses were Eurocentric narratives around technological intervention into areas of the Global South being inherently desirable for those living there. This is both highly reductive and iterative of a wider neoliberal ideology in which causality is discursively abstracted from the experience of poverty. Technologically deterministic discourse that frames the introduction of such blockchain technologies as a gateway out of poverty bypasses considerations to the capitalistic frameworks that engender inequality. These dynamics are constitutive of a broader technoscientific epistemology that lends itself toward reductivism and universalism, where, to borrow Haraway's words, 'one language (guess whose) must be enforced as the standard for all the translations and conversions' (1988). This thus means that those who are not accounted for within such frameworks become *erased*, which is a concern that becomes particularly critical when governance systems built upon these ideologies are presented as politically neutral and advantageous to all areas of the globe.

The data-scrape that I undertook attempted to shed further light on the discourses I explored in section 5.3. Here, I explored whether it was possible to automate a process that distinguished Tweets pertaining to 'blockchain for good' from blockchain applications that are more explicitly entwined with the financial sector, and where the scope was for exploring notions of 'blockchain for good' that extended beyond the categories and sectors that were outlined in these texts. My engagement with the Method52 software was also an exercise in exploring the impossibility of removing personal biases and cultural assumptions from a process that centrally entailed automation. Via a process of marking Tweets as 'relevant' or 'irrelevant', the algorithm largely wasn't able to discern Tweets that pertained to 'blockchain for good' from blockchain applications that were more explicitly oriented towards marketization. This, I have argued, was pertinent, as it alluded to the inseparability of 'blockchains for good' from these more generalised financial blockchain applications. Secondly, the algorithm did pick up on some broader discursive affiliations; it deemed Tweets about marketised healthcare initiatives, for instance, as 'relevant' to my study of 'blockchain for good'. This, I felt, was also pertinent, and gestured toward broader epistemic frameworks in which 'health' or 'privatised health' is equated with 'good'. Thirdly, following a process of drawing up 'keyword' lists, the algorithm was able to more 'accurately' discern Tweets that pertained to 'blockchain for good' topics, that is, Tweets that invoked normative notions of 'social good' to propagate capitalistic agendas. It was only able to do this after we specifically searched terms that occurred in 'blockchain for good' texts, meaning that the data was limited according to what we had already seen; there wasn't a great deal of scope for the data to tell its own story. Following this process, despite attempts to mark Tweets that explicitly pertained to financialisation as 'irrelevant', the

algorithm was able to more 'accurately' return Tweets about 'blockchain for good' which contained both philanthropic language and imperatives toward marketization. This then throws up two interesting tensions that bear relevance to the wider concerns of the thesis. Firstly, the algorithm was only able to return accurate data after we'd specifically coded it in accordance with what we wanted to see; and secondly, it gestures toward potential broader epistemic affiliations that allow for capitalistic agendas to be obscured.

6.0 Harnessing Automation for 'Pragmatic' Post-Work Futures: On Capitalist Realism and the Discourses of *Autonomy*

This chapter will analyse the discourses invoked by UK-based left-wing think-tank Autonomy. Autonomy define themselves as an 'independent, progressive think-tank' who destabilise and rethink how work is understood, practiced and managed within the UK (2018). They are a left-leaning non-for-profit organisation, and are comprised of a group of academics, policy 'experts', and research affiliates of other think-tanks, the most prominent being the Institute for Public Policy Research (IPPR). Much of their public facing discourse centres around proposals for Universal Basic Income (UBI), links between automation and unemployment, the gendered dynamics of waged and non-waged work, and ideas for a 'post-work' society. They have had press coverage in a range of left-wing and right-wing publications, including The Guardian, The Economist, The Daily Mail, The Sun and Novara Media, with pieces going by titles such as 'Post-work: the radical idea of a world without jobs' (Beckett, 2018, in The Guardian) and 'Britain should switch to a NINE-HOUR working week to cut emissions and save the planet, think tank claims' (Nikolic, 2019, on the *MailOnline*).

The data for this chapter is comprised of eight research interviews that I conducted with eight members of Autonomy, and some of the public facing discourse that featured on Autonomy's website during the time of writing (February 2019). Using a CDA approach, I thematically explore the prevailing discourses within both sets of data, and consider the pertinence of some of the differences that emerged within each. I argue that the discourses offered in the research interviews express more radical positions than much of Autonomy's public facing content, which often invokes neoliberal rhetoric, and situates businesses, rather than workers, as the addressees of issues surrounding waged work. I consider the pertinence of this discord, and how it speaks to a broader cultural context of capitalist realism and iterations of 'radical' politics within it (Autonomy, 2018). I argue that while Autonomy are informed by radical left-leaning positions, their convergence with neoliberal narratives offers a 'compromise' that will ultimately sustain capital (Boltanski & Chiapello, 2005, p. 22).

The structure of this chapter will proceed as follows. In the first section, I outline some of the rationale behind exploring Autonomy as the final case study of this thesis, and how their work

relates to other ideas surrounding notions of 'postcapitalist' futures and utopian ideals in relation to technology. This chiefly draws upon the work of Srnicek and Williams, who form part of Autonomy's 'Advisory Board' and have previously outlined ideas about how digital technologies can be mobilised to disrupt the prevailing 'work ethic' (2016). In the second section, I draw out prevailing themes from Autonomy's public facing discourse, focusing chiefly on how they articulate notions of productivity and freedom, and how these relationships relate to their connotations within neoliberal discourses. In the third section, I explore some of the prevailing themes that emerged within my research interviews, focusing specifically on how 'post-work' imaginaries are articulated, and how automation and technology feature within these.

6.1 Rationale and Context

I became aware of Autonomy via an acquaintance who is involved with its running, and as a result of my curiosity around the ideas for a 'postcapitalist' future put forward by Nick Srnicek - who, as briefly aforementioned, is one member of Autonomy's 'Advisory Board' - and Alex Williams in Inventing the Future: Postcapitalism and a World Without Work (2016). In this book, Srnicek and Williams outline a series of 'demands' that they believe will bring about a 'post-work' society, which are heavily tied with notions of appropriating digital technologies for the political project of the 'left' (2016, p. 107). 'The utopian potentials inherent in twenty-first-century technology', they write, 'cannot remain bound to a parochial capitalist imagination; they must be liberated by an ambitious left alternative' (ibid, p. 3). As I hope has become clear throughout the course of this thesis, my feelings around the 'utopian potentials inherent in twenty-first-century technology' (ibid, my emphasis) were sceptical - at best - and I was interested into how much of the technologically deterministic rhetoric within technolibertarian discourse had become similarly invoked within contemporary leftist accounts such as these. On 'postwork' imaginaries, Kathi Weeks also uses the term 'demand', noting that it 'encourages critical reflection on the order of things: what are the problems the demand seeks to address, and what is the rationale for the solution it puts forward?' (Weeks, 2011, p. 145). The 'demand' then, in this way, speaks decisively to both the present and the future, where its crux lies in lacks, failings, and hopes.

Some of the 'demands' put forward by Srnicek and Williams include 'full automation', a reduction in the length of the working week without a reduction in one's wage ('it's not Mondays you hate, it's your job'), a universal basic income (UBI), and an overcoming of the 'pervasive pressure to submit to the work ethic' (ibid, pp. 107 - 126). The combination of these factors, they argue, will

contribute toward a new 'realm of freedom': a post-capitalist future without work, where 'we' have greater personal autonomy over how time is spent outside of the capitalist wage relation (ibid, p. 126). They extensively outline conceptions of how digital technologies could alleviate 'humanity' from the toils of waged labour, where, 'without full automation [...] postcapitalist futures must necessarily choose between abundance at the expense of freedom (echoing the work-centricity of Soviet Russia) or freedom at the expense of abundance, represented by primitivist dystopias' (ibid, p. 109). Putting aside for a moment the reductivism in this dichotomy, I was intrigued as to how 'technology' again functions here as its own ontological force, and how this is entwined with their own notions of 'freedom'. Universalistic notions of appropriating automation for the objectives of the 'left' do not adequately engage with whose and what politics are privileged within a wealth of digital systems, and risk reinforcing pre-existing discriminatory dynamics that digital systems are often – either explicitly or implicitly – designed to uphold.

In discussions about the length of the working week, Srnicek and Williams further discuss how the presence of networked digital technologies in day-to-day life has helped further dissolve the 'work-life' distinction, flagging how 'many of us are now tied to work all the time, with emails, phone calls, texts and job anxieties impending on us constantly' (2016, p. 115). Similarly to the narratives offered by the 'digital detox' campers, for Srnicek and Williams there is a close association between the presence of certain digital technologies within day-to-day life and waged work. They then go on to posit that a shorter working week could help alleviate the 'mental health problems fostered by neoliberalism' (ibid, p. 116). In a similar vein to Fisher (2009) and Frayne (2015) - who both write about interrelations between work, neoliberalism, and mental health - this argument posits that mental health conditions such as depression and anxiety must be understood within a wider political context, where the 'work-centred society' is intimately tied with feelings of insecurity and alienation (Frayne, 2015, p. 230). Following this logic, these writers argue that a reduction in the hours of the working week would help mitigate these dynamics, and pave the way for populations to have greater autonomy over how their time is spent.

The goal for Srnicek and Williams is increasing 'worker power', where less time spent at work would mean workers have more scope for collectivising and demanding better working conditions. This, for them, would be potentiated by less working hours, which would then pave the way for more time to engage in non-work pursuits, as well as potential heightened mental well-being that might be bought about by less engagement in waged labour (2016, p. 116). This, it is pertinent to note, is not dissimilar to pushes for shorter working weeks within spheres such as Google and

Microsoft. As several have highlighted, such pushes from these corporations stem from the recognition that overwork may have negative impacts upon the mental health of its employees and curtail productivity (Pearl, 2014; Cederström & Spicer, 2015; Davies, 2011; Davies, 2015; Beckett, 2018). In a project titled 'Work-Life Choice Challenge Summer 2019' at Microsoft Japan, all workers were given five Friday's off work without a reduction in pay. Reports from this experiment claimed that the shortened working weeks led to 'more efficient meetings, happier workers and boosted productivity by a staggering 40%' (Paul, 2019). This is also a logic that underscores some of the public facing discourse put forward by Autonomy: that in shortening the working week, a 'Happy Productive workforce with a healthy work-life balance' can be achieved (Autonomy, 2019a).

Universal Basic Income (UBI) is also a frequent topic of discussion within a series of 'post-work' imaginaries, and features within the work of Weeks (2011), Srnicek and Williams (2016) and Autonomy. UBI is a model where all citizens unconditionally receive the same amount of money, regardless of employment or salary (Dent, 2019). Advocates from the left have argued that a UBI could help mitigate benefit stigma, as well as some of the paternalistic disciplinary mechanisms encompassed with the contemporary welfare system within the UK (ibid). Pivotally, Weeks also posits that UBI could allow for a departure away 'from those strictly productivist values that link the worth of individuals to their commitment to work and that tether access to income to its performance' (2011, p. 146). She highlights how UBI could mitigate some of the inequalities that are interlinked with which forms of labour are waged and which are not. Exploring the example of housework, she notes that UBI could untether some of the ideological weight that devalues such forms of labour, challenging 'productivist ethics and family values' and the forms of social reproduction that these encompass (ibid, p. 147). This, for Weeks, does not come without caveats: while a UBI would mean women could receive a wage for household labour or childcare, for instance, this would not automatically untether the patriarchal structures that pressure into women undertaking such forms of domestic labour. However, she posits that a UBI could nonetheless function as a pivotal starting point for challenging the inequalities that exist within waged labour and domestic labour, as well as sever some of the ties between waged labour and identity.

UBI has however also been enthusiastically advocated by high-tech big names such as Mark Zuckerberg, and right-wing think tanks such as the Adam Smith Institute. Right-leaning spheres such as these often note that UBIs advantages lie in the prospect that it could help mitigate some of the issues around unemployment following the automation of certain job roles (Adam Smith

Institute, 2019). That a UBI could be a tool for right-wing political agendas stems from the idea that a UBI would replace all other forms of welfare. Pivotally, right-wing variants of UBI would not provide a living wage: libertarian writer Charles Murray's *In Our Hands: A Plan to Replace the Welfare State*, for instance, has made proposals for a \$10,000 UBI, while scrapping all other welfare systems within the US (Ikebe, 2016; Murray, 2016). Since welfare systems depend upon a significant amount of state bureaucracy, a one-size-fits-all system would provide leverage to significantly reduce the scope of government, giving instead 'the money to the people' (Murray, 2016; Zwolinski, 2013). A \$10,000 a year wage falls far below a living wage, and would reinforce neoliberal agendas where citizens *choose* between services, allowing for the widespread expanse of the market and privatisation. A UBI thus does *not* entail a 'universal' solution to those living in impoverished conditions, and in certain formulations could exacerbate economic precarity and propagate neoliberal capital.

I take forward these considerations in the following sections and consider how claims to universalism and overarching 'solutions' occur throughout Autonomy's discourse. I consider how the agendas put forward by Autonomy may be subject to - and beneficial to - forms of capitalisation, and where similarities occur between the proposals put forward by Autonomy and more explicitly neoliberalised instantiations of similar agendas, as outlined above. I consider how these discourses are legitimated by textual and visual discourses surrounding expertise, and how these are bound with paternalistic notions of *what is good for us*. This contributes to the ongoing thread that runs throughout the thesis pertaining to how discourses and cultural assumptions surrounding universalistic notions of technology and 'social good' are epistemically reductive, and can produce further scope for capitalisation within neoliberal frameworks.

6.2 Analysis of Research Data

I will now turn to an analysis of the research data. As highlighted in **chapter two**, the data from this chapter is comprised from eight interviews I undertook with eight members of Autonomy, as well as public facing discourse that featured on Autonomy's official website at the time of writing (February 2019). I explore the pertinence of the discords between the two sets of data, and how these discords allude to a broader imaginary of capitalist realism. Capitalist realism, as I've explored throughout this thesis, refers to the imaginative constraints that Fisher understood to be imposed by capital; to the overarching sense that alternatives to capitalism lie outside of contemporary imaginaries (2009, p. 2).

6.3 Public Facing Discourse

In this section of the chapter I will outline the discourse that features on Autonomy's website, and how these discourses are presented. This will allow me to introduce some of the key themes within their public facing discourse for analysis later in the chapter. The information provided on Autonomy's homepage is fairly concise, and is presented on one scrolling page, featuring professional-style photography and fairly minimalistic page design. Short snippets of information above sliding photographs include phrases such as 'what kind of automation?', 'ideas for the postwork century', 'rethinking work', 'healthier working cultures' and 'the new economy'. These quotes fall on top of photographs depicting various scenarios, including people of various nationalities doing chef work, a logistics port, and a block of high-rise buildings. The format for this webpage is very similar to other think-tanks, such as the Adam Smith Institute, who likewise feature sliding professional-style photography with short snippets of information and similar options on the navigation menu. Photographs on the website of the Adam Smith Institute include high-rise buildings, a logistic train network depot, and cityscapes, with snippets of information including 'making long distance work', 'a defence of intellectual property: patently good', and 'the neoliberal manifesto'.

Underneath this segment at the top of Autonomy's homepage, there are two brief paragraphs about the main aims and focuses of the think-tank:

We provide necessary analyses, proposals and solutions with which to confront the changing reality of work in society today. Our aim is to promote real freedom, equality and human flourishing above all.

It is time to question how waged work is organised, question our fundamental beliefs about work and determine rational and enabling solutions to the problems we face.

The navigation menu in the top right corner includes options of 'research', 'latest', 'consultancy', 'projects', 'about' and 'support us'. The 'research' and 'latest' pages feature a series of articles and reports written by members and affiliates of Autonomy, as well as other material from leftist writers surrounding the politics of waged work. At this time of writing²⁴, some of the reports and pieces of research go by titles such as 'Employability in the New Economy: Financialisation and the Promise of Self-Branding', 'The Shorter Working Week: A Report from Autonomy', 'No

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²⁴ February 2019

Autonomy without Equality! An Interview with Denise Calenano', and 'Stop repeating the mantra that "work is good for you" (Autonomy, 2018).

The homepage also provides a bullet point list of some of the main focus points of the think-tank. These focus points include: a shorter working week ('how can we move to an economy of shorter working hours, healthier workforces and more free time for all?'); technological employment ('what is the reality of the widespread automation of tasks across employment sectors?'); gender inequality ('how is work gendered and how can we reduce the fundamental inequalities that deny freedom to many?'); place and work ('how can the designed spaces of work, and the coordinates of the city be transformed in order to facilitate a stronger, more egalitarian economy?'); and proposals for UBI ('what qualifications are needed to make this idea pragmatic and enabling?).

Under 'Projects', brief information about some of the research projects being undertaken by members and affiliates of Autonomy is featured. One of these projects involves 'designing strategies' to shift employment policies, and addressing 'challenges' around contemporary issues around automation, climate change, aging populations and wealth inequality in Valencia. Another investigates the role of 'employability' within the 'new economy', which reviews forms of self-help and management literature to consider how it encourages readers to utilise leisure time to boost their employability. The final piece of research detailed is a collaborative graphic design project, which invites students to explore 'utopian scenario-modelling' in response to contemporary issues surrounding political economy and the 'crisis of work'. Under the 'About Us' section, there is a menu showing options of 'Directors Introduction', 'Our Team' and 'Press'. The 'Directors Introduction' is written by the co-founder of Autonomy (white, male), Will Stronge, which shows a professional head shot and further details about the 'crisis' of work within the UK and worldwide. Some themes here pertain to job precarity, the impact of automation upon working conditions, and the prospect that it is working families within the UK who are often the most impoverished. He also draws attention to the punitive sanctions that have increased over the recent decade which stigmatise and disempower those without employment. Stronge then goes on to note that Autonomy believe that 'we cannot draw on traditional responses from Right or Left: the state of work today requires new thinking that seeks progressive, pragmatic and desirable solutions', and lists similar organisations who explore 'virtues' surrounding waged work, including the Basic Income Network, Plan C, Disabled People Against Cuts, Boycott Workfare, and NEF and IPPR. Autonomy, he notes, 'settles into this ecology of institutions', and invites people to support the work of the non-for-profit think-tank. The 'Our Team' page then provides more detail on the research backgrounds and institutional affiliations of the members and affiliates of Autonomy.

From this initial set of verbal and visual discourses, there are a few elements that I will bring forward in the analyses later in the chapter. Firstly, language of 'determin[ing] rational and enabling solutions' is iterative of technocratic and neoliberal discourse, where the 'crisis of work' is situated as *solvable according to rational logics*. This is further iterated in notions of 'progressive, pragmatic and desirable solutions' (Autonomy, 2018). While the term 'progressive' is oriented toward leftist political positionalities, the language of pragmatism indicates that the tactics of Autonomy are situated as an extension of what is *already real*; that is, what already exists within the parameters of capital. The 'directors' introduction is further embedded in the rhetoric of neoliberalism, within which the portrait shot of the male director entrenches pre-existing relationships between hegemonic notions of expertise and white-manhood. Terms such as 'director' are further embedded in these broader sets of discourses, and is indicative of a top-down approach to politics within the think-tank. The invocation of these verbal and visual discourses, I will argue, paves the way for notions of *what is good for us* to be articulated and validated in accordance with hegemonic neoliberal discourses.

6.3.1 Productivity

Narratives of 'productivity' were often iterated in one Autonomy and IPPR (Institute for Public Policy Research) report entitled 'Exploring our Latent Potential: Moving Towards an Economy of Freedom', throughout which the writers discuss ideas for a move towards a more 'progressive' working culture (Stronge and Archela, 2018). This report draws upon contemporary issues surrounding waged work within the UK, and makes suggestions for where changes might be made to establish a 'healthier' working culture (ibid). The arguments put forward in this piece are immediately situated within discourses of productivity: a term which is framed by the writers as the 'share of national income that goes to labour (in the form of wages, salaries etc)' (ibid, p. 222). Productivity is thus articulated here in its economic sense, referring explicitly to relationships between labour and capital. The rationale behind why shifts in working conditions are needed is also justified by discourse of productivity, and the posited financial costs of 'burn out' and 'stress' to the wider economy:

Acknowledging these realities of the employment-centred society, we might say that real freedom might mean better work (and we should always seek to improve our

practices), but it should also mean less of it. [...] Reducing burn out and stress in this way could increase productivity (by decreasing absenteeism) and benefit the NHS and the public purse

This acknowledging of the 'realities of the employment-centred society' is gesturing to arguments made earlier in the report, pertaining to income inequality, job polarisation (here meaning an increase in very highly paid jobs and very poorly paid jobs, and a decrease in the availability of jobs with salaries that fall between the two), the gendered division of labour, and inadequacies of welfare policies within the UK; it is not stating that the 'employment-centred society' is the only feasible reality. This said, the phrase of the 'realities of the employment-centred society' nonetheless positions the 'employment-centred society' as the main focus. 'Real freedom' is not positioned outside the framework of the 'employment-centred society', and pertains here either to an improvement in working conditions, or a reduction in the time that one spends working. The benefits of less work are again framed in terms of productivity and a decrease in 'absenteeism', where 'less work' is correlated with a more committed engagement to ones labour during working hours. It should also be noted that notions of 'always improving our practices' are iterative of neoliberal discourses of self-optimisation. Each of these arguments are substantiated primarily in terms of their potential benefits to overall public spending, as opposed to, for instance, alleviating mental health issues or reducing poverty. This is again intimately tied with capitalist realist politics, where issues surrounding mental welfare and equality are articulated chiefly in relation to how they can be mitigated or improved in order to propagate to capital (Fisher, 2009; Davies, 2011).

Later in this report, the writers also discuss ideas pertaining to 'democratic automation'. Here, they note that a 'concerted effort' is needed to ensure that the 'time-benefits' produced by automated technologies are distributed to workers. In this regard, they suggest that IPPR's proposal for a body entitled 'Productivity UK' would help set this in motion, as a project intended to help educate small and medium-sized firms about how automation might benefit their businesses. Economic incentives around automation come first in this discussion, followed by suggestions that these business consultations should involve unionised and non-unionised workers, and 'could - and should - also involve the possibility of working time reductions' (2018, p. 228). The language surrounding 'working time reductions' is less assertive than the language used in the rest of this section, where terms such as 'could' and 'possibility' frame suggestions for working time reductions. The benefits of this are then articulated in terms of 'worker wellbeing' and 'enterprise productivity':

The introduction of automation technologies could in this way address both issues of worker wellbeing and enterprise productivity – thereby enhancing the conditions for a happier, healthier workforce and a more productive, successful enterprise (2018, p. 228)

Businesses are hereby the primary addressees of this report, and the rationales underlying the majority of the suggestions made are framed in economic terms. While this can be seen in the discourse thus far highlighted - in terms of understandings of 'productivity', and the addressing of business motives in discussions around automation - notions of 'wellbeing' might also be understood here in economic terms. In this regard, as discussed previously in this thesis, there have been a host of writers that have problematized the politics encompassed in rhetoric of 'wellness', and how they function within neoliberal cultural contexts (see Davies, 2015; Cederström and Spicer, 2015). Cederström and Spicer explicitly gesture toward a 'wellness syndrome', referring to the ideologies that are encompassed with such rhetoric and their relatedness to neoliberal governmentality. This can be seen in the section highlighted above, wherein a 'happier, healthier workforce' is co-aligned with a 'more productive, successful enterprise' (Stronge and Archella, 2018). A 'healthier workforce' is thus oriented here towards establishing subjects that are more proficient at fulfilling the motives of neoliberal capital.

The 'Consulting' page on Autonomy's website invokes similar language, and outlines the consultation 'services' that Autonomy offer to help 'forward-thinking firms' understand how a four-day working week could be useful for them. Here, a brief bullet point list is shown, depicting why a four-day working week could benefit 'your organisation', which includes, in the following order: 'improv[ing] employees' health and wellbeing; bolster[ing] a friendly office environment'; 'rais[ing] productivity'; and 'attract[ing] and retain[ing] staff' (ibid). It then outlines brief details of what Autonomy 'offer', which includes working with organisations to design a four-day working week trial, and working alongside staff to 'best fit with your working practices'. Following this, it notes that Autonomy have 'extensive research in this area' which 'equips us with the knowledge to help you'. These discourses again directly address businesses, and echo management strategies used within workplace environments (Flemming and Sturdy, 2010). 'Extensive research' invokes notions of expertise, which in this instance reinforces paternalistic notions of what is good for us, and further, what is good for business. The overriding discourse in this section is not one of improving the 'wellbeing' of workers to alleviate experiences of mental turmoil, but rather to encourage workers to affiliate and become more committed to the motives of their workplace environment. In this report, then, economic productivity and worker wellbeing are articulated as co-constitutive, and

the imperative towards greater mental health of workers is validated according to narratives of economic progress.

6.3.2 Freedom

In the introduction to this thesis, I discussed notions of 'freedom' and how it has been variously articulated across the political spectrum in relation to developments in digital technology. Here, I highlighted that many have drawn attention to how notions of 'freedom' have been endorsed from an array of political standpoints, and assume vastly different meanings in different contexts (Winner, 1997; Borsook, 2000; 2001; Mirowski, 2013; Golumbia, 2013; 2016). David Golumbia has recently pointed toward the view that 'widespread computerisation naturally produces democracy and freedom' has emerged from technolibertarian politics, and could be used to partially explain 'such a stark decline in the Left's political fortunes' alongside the rise of digital communication technologies (Winner, 1997; Golumbia, 2013). Meanwhile, 'freedom', within antiwork literature by writers such as Gorz (1999) and Frayne (2015), as well as in Italian Workerist and autonomist-Marxist positions, pertains to labour as fundamentally distinct from the wage relation (see Beradi, 2009; Dyer-Witheford, 2012). For David Frayne in The Refusal of Work, vocabularies of 'freedom' are intertwined with the resources one has available to pursue 'their own autonomous self-development', which here pertains to the 'capacity to represent and create oneself and one's relationships, the freedom to design, within obvious bounds, our own lives' (Weeks, 2011, p. 168; cited in Frayne, 2015, p. 230).

'Freedom', within the context of some of Autonomy's public facing discourse, was articulated in terms of 'better work [...] but it should also mean less of it' (Stronge and Archela, 2018, p. 226). This form of 'freedom' then might be understood as freedoms *around* control, rather than freedoms *from* control (Berlin, 1958; Flemming and Sturdy, 2010). This again speaks to the politics of capitalist realism, where the imaginary here does not potentiate a future outside of the wage relation. Similar understandings of 'freedom' are articulated throughout the same report, which concludes with the following:

By updating our social security net, and directing automation technologies according to the values of freedom and democracy, we can ensure a productive economy, a healthy working culture and a more equal distribution of time for ourselves

While the report in question does not explicitly assume the view that computerisation is inherently geared towards 'freedom and democracy' - indeed, the writers note that drive is needed to ensure that the 'time-benefits that accrue from automation technologies are distributed to the workforce', and would require governmental and organisational input for this to be realised - the notion of 'directing automation technologies according to the values of freedom and democracy' are ambiguous and contingent upon specific political readings of the terms. Indeed, as Winner argued in 1997 in relation to discourses surrounding the Web, 'rather than proclaim community, democracy, and citizenship, it would be better to study these boundaries, to think about how communities are likely to be affected by the arrival of networked computing and what a reasonable response would be'. In a similar vein, notions of harnessing computation for the purposes of 'freedom and democracy' was a discourse that occurred throughout the 'blockchain for good' initiatives explored in the previous chapter, in which I argued that these terms often ambiguated neoliberal and neo-colonialist agendas through invoking hegemonic notions of 'social good'. It is therefore important that the specificities of how precisely computation will be harnessed; whose and what freedoms are 'automation technologies' designed to propagate; and within what broader frameworks are such 'automation technologies' functioning within. This report continues:

An expansion of free time outside of employment will allow us *relative* freedom from disciplinary management and from repetitive toil, the freedom to equally share necessary, unpaid work, the freedom from an invasive state, and – most importantly – will allow us the space and cognitive bandwidth to pursue our own interests (emphasis added)

The term 'relative' here is significant, indicating that complete 'freedom from disciplinary management' is not part of this imaginary. It is also pivotal to note that while 'freedom from an invasive state' is often a current within anti-work literature, notions of 'freedom from the state' within such contexts are constitutive of broader socio-anarchist imaginaries. Within the context of this report, which frequently invokes language that occurs within neoliberal discourse, more critical and nuanced language is needed to prevent the convergence of these proposals with neoliberal and libertarian agendas. Similar language of relativism is iterated within another Autonomy report entitled 'A Shorter Working Week: A Radical and *Pragmatic* Proposal' (Autonomy, 2019b, emphasis added). The term 'pragmatic' here again gestures toward a capitalist realist imaginary, where Autonomy's propositions are situated within the parameters of what is *already real*. A complete overhaul of the dynamics of neoliberal capital are not potentiated here; what is suggested instead are ways of mitigating some of the 'stultifying' effects of capital while still operating within its parameters (Flemming and Sturdy, 2010).

It is also worth drawing attention to the term 'cognitive bandwidth' here, and how this is iterative of rationalistic understandings of the mind that are prevalent within neoliberal and libertarian paternalist rhetoric. Jones specifically notes how the term 'cognitive bandwidth' occurs within the discourse of behavioural economics, and propagates neoliberal political agendas in which poverty is framed in terms of the 'decision-making' capacities of individuals (Mullainathan & Shafir, 2013). Within such spheres, she notes, it is assumed that 'those with power and wealth have cognitive competence and know which specific behaviours and decisions are "best" for poor citizens, who are assumed to lack cognitive skills or "bandwidth" (2017). This reasoning can be seen in statements such as 'money worries can absorb cognitive bandwidth, leaving less cognitive resources to make optimal decisions', which features in a 'behavioural science' report by Mullainathan and Shafir (2013; cited in Jones, 2017). I would further suggest that Autonomy's proposition of providing 'rational and enabling solutions', highlighted earlier in the chapter, is also encapsulated in the political discourses of behavioural economics and libertarian paternalism. Here, the convergence of these discourses with that of Autonomy is indicative of two potential factors: firstly, that this language has been adopted by Autonomy to speak to imaginaries in which such discourse has become hegemonic, thus broadening their potential audience base; and secondly, that there are elements of paternalism here, in that Autonomy are speaking as a group of 'experts' or 'directors' about what is good for us.

Having now analysed some of the prevalent themes within Autonomy's public facing discourse, I will turn to an analysis of some of the discourses that were used in the research interviews that I conducted with eight members of Autonomy, and consider the pertinence of some of the similarities and differences between these discourses and Autonomy's public facing discourse. I decided to compare these two sets of research data as, upon conducting my study, I noticed there were significant differences between them. These differences are pertinent as they show a contrast between the discourses mobilised to encourage a wide-spread audience to identify with Autonomy's political agendas, and the political beliefs of those who are affiliated with the think-tank. This, I argue, reveals pertinent insights as to how the public imaginary was understood by members of Autonomy. These interviews, as highlighted in **chapter two**, were conducted via Skype, and enquired into what interested the participants about the prospect of anti-work, what they saw to be the core issues, how the issues were being addressed by Autonomy, and where it was that they envisaged Autonomy having an impact. I further enquired about what they

understood a 'post-work' society to be, whether they saw a 'post-work' society to be a feasible prospect, and the role they envisaged technology playing within prospective 'post-work' futures.

6.3.3 Post-Work Imaginaries

The prospect of a 'post-work' society features in much of Autonomy's public facing discourse as one of the main focus points of the think-tank, and is a topic that features frequently within 'antiwork' literature (Srnicek and Williams, 2016; Weeks, 2011). Further to this, one of the chapters in Srnicek and Williams's 'Inventing the Future' book falls under the title of 'Post-Work Imaginaries', while Weeks also explicitly discusses post-work imaginaries within 'The Problem with Work: Feminism, Marxism, Anti-Work Politics and Post-Work Imaginaries' (2011). Srnicek and Williams do not provide a distinct definition for 'post-work', however their chapter on 'post-work imaginaries' is subtitled with a quote form Arthur Clarke, which states that 'the goal for the future is full unemployment' (2016, p. 7). This chapter then goes on to list their 'demands' for prospective post-work futures, which, as previously noted, include universal basic income, full automation, and a reduction in the working week. In this chapter, a future without work is articulated as an aspirational long term goal, while these 'demands' are positioned as stepping stones toward this imagined future. For others, such as Aranowitz et al., a 'post-work' political project would entail 'shorter working hours, higher wages, and best of all, our ability to control most of our own time' (1998, p. 33). 'At a fundamental level', they note, 'the first thing required is a change in ideas', thinking 'differently about work itself' (1998, p. 38). Post-work for these writers thus encompasses a critique of a widespread 'common sense', with the goal of having greater autonomy over how one's time is spent, outside the parameters of capital.

As aforementioned, my interview question pertaining to 'post-work' enquired as to what my participants understood a 'post-work' society to be, and whether they saw the prospect of a 'post-work' society to be feasible. This question prompted a lot of interesting discussion, and varied fairly substantially from interviewee to interviewee. One topic that occurred fairly frequently however was around the prospect of a four-day working week. Many anticipated that a four-day working week could play a pivotal role in de-prioritising work within everyday life, which could subsequently shift how work is engaged with and understood. This was referred to by some as a disruption of the 'work ethic', and was often seen as a necessary component in a shift towards prospective 'post-work' futures. This was articulated in the following interviews:

I1: And then shifting things like... shifting to a four-day working week under certain circumstances could really shift normative values around work and they could hugely transform the way in which we relate to work, in which case it would make room potentially for broader and more deep changes afterwards

I3: I think given time of a three-day weekend, people can discover different ways of being, thinking and living

The stance that a four-day week would be necessary for shifting relationships between waged labour and capital was widely held by the interviewees, however views on how a four-day week might become instantiated, and the effects it was anticipated to have, were varied. While it was broadly hoped that a four-day working week would help de-prioritise waged labour within daily life and pave the way for alternative ways of living, many also highlighted that this might not automatically de-couple relationships between life and capital.

From some leftist perspectives, as several interviewees highlighted, a four-day week could lessen the amount of time one spends engaged with the pursuits of waged work, and could thus help mitigate some of the forms of governmentality that are encompassed with waged labour (such as, for instance, attempts to optimise ones capacity for economic productivity). However, one participant noted that their hopes for a 'broad sway left' were not optimistic, and that shifts toward a four-day working week were more likely to be instantiated within spheres such as Google. They noted that there's recognition at Google that intensive working hours have a negative impact upon the mental health of workers, which forms part of the drive towards a four-day working week within these workplace environments. In a similar vein, many have flagged how Google's aims to 'create the happiest, most productive workplace in the world' are intended to encourage workers to identify with the company's values and increase profits (Stewart, 2013; Flemming and Sturdy, 2010). A four-day week within such contexts is thus oriented towards optimising the company's overall productivity and profit. This is not to state that the potentiality or benefits of better mental health stemming from reduced working hours are automatically negated or rendered futile by these neoliberal contexts, but rather to flag that the motivations underlying the drives for four-day working weeks within such spheres are definitively bound with neoliberal rationalities. I would thus posit that less time spent engaging in waged labour would not automatically equate to the negation of ill mental health; indeed, if the parameters within which these shifts operate are nonetheless geared towards the maintenance of neoliberal capital, imperatives toward selfimprovement, competition, and economic precarity - that many have strenuously linked with ill mental health - would not be offset (Fisher, 2009; Davies, 2011; Cederström and Spicer, 2015).

I probed the interviewee further on this topic, and enquired about what they thought about links between mental health and notions of productivity, and how this was being addressed within corporate spheres such as Google. Here, the participant went on to discuss relationships between leisure time and work, and how they understood leisure time to also be constituted by work and capital:

I1: ... part of this that I guess we don't foreground as much is that leisure is almost entirely capitalised on. Capitalised by work or captured by work, or produced by work. Desires... the way in which we engage with leisure, the way in which we engage with our kind of 'freedom'... kind of thing... This is all constitutively produced through work. The Google play-work combo is potentially like not the answer but the apotheosis of neoliberalism

This is a stance that I empathised with. I argued in **chapter four** that the discourses of 'play' articulated by the 'digital detox' campers were bound with similar rationalities; as both constituted by neoliberalism, and invoked as a way of adjusting ones relationship to work and enhancing productivity. The interviewee then went on to note that they disputed that a shift forwards a four-day week within Google would achieve 'anything useful', but that shifts in 'entrenched structures' such as the five-day working week might shift other structures in ways that 'you just can't foresee', but that could be potentially 'capitalised upon'. This position contrasted quite starkly with some of Autonomy's public facing discourse, where 'introducing shorter working hours in your organisation' was, in a similar vein to Google, proclaimed to 'improve employees' health and wellbeing', 'bolster a friendly office environment', 'raise productivity', and 'attract and retain staff' (Autonomy, 2019a).

In another interview, one participant extensively queried what should constitute 'post-work', and whether it would entail 'replac[ing] it with leisure time or [...] a recognition of other types of work', or simply 'reducing the focus on paid work employment [and] recognising the work involved in every other sphere of life'. This participant worked within public policy and wasn't directly associated with an academic institution. They noted that they found it hard to comprehend how society could shift towards something 'radically different', and noted that instead of 'post-work' entailing no paid labour whatsoever, a more 'realistic' understanding of 'post-work' might simply involve the recognition that forms of labour that aren't typically waged (for example childcare, or domestic labour) should also be constituted as 'work':

I4: well I think it's like I was saying earlier that right now, the leap from where we are now to something radically different, is just very hard to comprehend how you would go from where we are to something which you know, does post-work involve no paid work at all, or does it involve a more kind of humane balance between a bit of paid work and other things, and you know, as we were discussing, what are those other things? I think... I guess the question about what is post-work is such a big question, because, what do you want to replace it with? Do you want to replace it with leisure time or do you want it to be a recognition of other types of work?

They continued:

People won't stop wanting to volunteer or to do the gardening, or to grow vegetables. Those things are hopefully not going to disappear; they're all forms of work that are unpaid. So I guess that would be a more positive place to end up, that we value all forms of work more highly

Here, 'post-work' was understood in terms of a reduction of work 'in the economic sense', and a heightened recognition of forms of labour that aren't monetised (Gorz, 1989). This participant also noted that 'post-work' might then simply be the understanding that 'work is not the answer to all of our problems'. 'Post-work' was thus not understood here as a distinct break with capitalism as it currently stands, but rather as a framework in which shifts occur in terms of what activities are assigned economic value.

The topic of a four-day working week was also a topic of discussion with this participant, and how they saw this to relate to a decoupling of life and capital. They questioned the notion that a four-day week would automatically create the space for different ways of living, which was iterated in the following sections:

I4: I don't think that we can assume that just by the very fact of having more time to ourselves, we'll all be happier and healthier and feel better about our lives, you know?

[....]

Anyone that's been unemployed even for a few months knows it's incredibly depressing to be sat around twiddling your thumbs, and you know, if you weren't depressed to start with, you're probably depressed at the end

They went on discuss how their female friends who had taken time out of their professions to care for children had often felt that 'they'd lost something of themselves' when they'd stopped

going to work. They attributed this to the ties between waged labour and identity, noting that 'who we are is what we do for work'. This felt significant as it gestured towards a broader dogma around work which is entwined with feeling good 'about our lives', and again towards an understanding that less time spent undertaking waged labour would not necessarily negate neoliberalised imperatives toward economic productivity, and the rationalities and psychic landscapes that are tied with such imperatives.

For other interviewees, UBI was a 'key' part of their 'anti/post-work future' imaginary. This, for I2, was seen as a step towards a radically different future: a 'world where we don't even have money anymore, or sort of alternative forms of exchange'. This participant noted that UBI was a 'feasible' stepping stone towards this future, adding that 'we have the trial in Finland', and that 'the EU is talking about how we probably need to implement this across the EU'. It is pressing to note here that these trials for UBI in Finland were part of a centre-right political agenda, which occurred simultaneously with funding cuts in education, health and welfare (Laterza, 2015; Zamora, 2017). This was discussed by another interviewee following a question about how they could foresee 'anti-work' or 'post-work' politics being instantiated:

I7: the universal basic income argument, is like... in of itself it's not a good thing, it's how its implemented that means it can be progressive or regressive. Either it could help break the connection between income and working, or it could be used to destroy public services, and just transfer a small amount of money to people and they can choose which marketised healthcare they buy. So you know, on the other end these kind of things in practice can mean very different things

The specificities of how precisely a UBI would function are therefore crucial; it would not automatically benefit those in precarious positions, nor is it possible to benefit all political agendas. While, as noted earlier in this chapter, and in this section of I7's discourse, there are drives from a wealth of neoliberal and technolibertarian initiatives for UBI, it is again imperative that the *structures within which a UBI exists* are first of all subverted.

6.3.4 Understandings of 'Human'

The term 'human' also occurred frequently within research interviews. While these understandings again varied from interviewee to interviewee, there were several prominent themes. The term 'human' frequently occurred alongside 'flourishing' and 'labour' (i.e. 'human flourishing' and

'human labour'). 'Human flourishing' was often understood as distinct from waged work, or as something that occurred outside the sphere of waged work:

13: ...we can talk about big business, those things - big businesses and large capital, i.e. platforms, have no interest in basically reducing everyone's working week, allowing for human flourishing

This distinction - between 'human flourishing' and the objectives of capital - echoes some of the discourse previously explored around 'blockchain for good', where the so-called 'human aspect' of blockchains was positioned as distinct from blockchain uses within financial contexts (Blockchain for Good, 2018). Similar understandings of 'human activity' and 'capital production' were articulated by other participants:

I6: Changing the conversation groundwork means, in part, changing our understanding of human activity in relation to capital production, in relation to the social reproduction of our general lives, and how that's mediated through institutions

Distinctions were also made between notions of the 'human' and digital technology, which usually occurred during conversations surrounding automation. During a discussion about automation with one participant, they discussed the absence of the 'human' in the motives underlying big tech companies:

I7: You then get an incredible tendency for technocratic solutionism in Silicon Valley, and I think Uber is a fantastic example of this. Like, oh don't worry we'll solve transportation problems by making people self-employed and organise them through an algorithm, and we have this imaginary future where everything will be automated and we'll make super profits. The human in all of that becomes completely missing

'Human' was thus used here in contrast to 'automation' and 'profits'; as something that was missing within high-tech imaginaries. In a similar vein to the discourses I explored within the case studies of the 'digital detox' and 'blockchain for good' (for example, 'humanising the blockchain' was used in contrast to explicitly 'financial' uses for blockchains) the implication here is that to be 'human' is distinct from the motivations of capital and the functionalities of digital technologies.

6.3.5 Automation and Technology

Automation and digital technologies were frequent topics of discussion throughout the research interviews. One aspect surrounding the role of 'technology' in relation to work pertained to the

unpaid labour that occurred during time spent commuting, which was attached to answering phone calls and emails. This however was only remarked upon by one participant; for the most part discussions around 'technology' or 'automation' revolved around certain digital technologies performing job roles that would have previously been undertaken chiefly by human actors. Understandings of how automation might intersect with issues around work and labour varied from interviewee to interviewee - while most interviewees noted that digital technology embodies bias, there was quite a lot of variation in terms of how interviewees envisaged the role of technology in prospective 'post-work' futures. Despite the bias that many interviewees pointed toward, some remained hopeful that it could play a role in reducing working hours, and in replacing job roles that they considered to be particularly toilsome:

I5: I think overall, we can use technology as a good thing to help implement a postwork society, to help achieve that goal of working less. But having said that, at the same time we need to understand that technology and work, they are not competing for the same thing. I think that most technologies are created with the purpose of efficiency, or replacing manual labour

On the whole, while 'automation' is foregrounded as one of the main focus points of Autonomy within their public facing discourse, the conversations held around technology were on the whole vague²⁵. 'Automation' was often flagged as something that could potentiate a post-work future, as having 'positive potential of freeing up people from the most laborious, unfulfilling manual or repetitive kind of tasks' (I4). Most held the position that technology could be a 'good thing', or that 'technology is the kind of thing that might make [post-work futures] happen' (I5). These arguments were usually based upon the idea that technologies could undertake the labour of the 'really crappy jobs'. One participant questioned whether people would work in spaces such as 'carwashes' or the 'tills at Asda' if such jobs were able to be automated:

I5: I think the problem is that, why do we still have low-paid, low-skilled workers doing that. So... again, are people just working because we have the moral imperative of work? Some people that advocate UBI would go - well, would they still be working if they got six-hundred pounds a month? Would they still be doing this kind of low-skill, doesn't add much to society, work, if they had other sources of income? So I think technology can be beneficial if it helps us to rethink those other things that still exist, cause it seems to me that in the current system technology and low-skill, low-paid work are competing for the same thing and it's creating a tension

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²⁵ It should be noted here that interviewees had different forms of 'expertise', some of which didn't directly involve relationships between technology and work

It is worth flagging here the value assumptions associated with such low-paid forms of labour, and how these are tied with imaginaries surrounding automation. While I do not - in any way - dispute that there are some jobs that are particularly toilsome and detrimental to the mental and physical wellbeing of workers, constituting some forms of work as 'low-skill, doesn't add much to society' (alongside using 'Asda', a supermarket targeted at lower-income customers, as a prototypical example) encompasses value assumptions that require closer inspection and critique: what constitutes 'skill' and what does not? Which jobs are constituted as valuable to society and which are not? Who decides which jobs are worthwhile and 'skilled'? According to what is the value of certain professions evaluated? How does 'technology' play a part in replacing the professions that are considered to be invaluable? And how, then, does this affect those working in such professions, in terms of perhaps involvements in communities, routines, or other forms of satisfaction that may be derived from participation in a given workplace environment? 'Technology' in this passage is juxtaposed with 'low-skill, low-paid' work, which the interviewee claims produces a 'tension'; this tension was again not articulated in terms of the capitalistic frameworks producing technologies to undertake labour at cheaper costs than human workers.

6.4 Conclusion

In this chapter I have explored some of the discourses invoked by left-leaning think-tank Autonomy. I have analysed some of the prevalent themes within Autonomy's public-facing discourse, and those which occurred within interviews that I conducted with eight of Autonomy's affiliates. In the first section of the analysis, I chiefly argued that Autonomy's public facing discourse invokes neoliberal rhetoric to substantiate their proposed political agendas. While explicitly constituting themselves as 'radical' and 'progressive', terms such as 'director', 'cognitive bandwidth', 'raising productivity' and 'solutions' situate Autonomy's rhetoric within broader constellation of neoliberal and technolibertarian discourses. I have argued that phrases such as 'relative freedom from disciplinary management' and a 'radical and pragmatic proposal' are iterative of capitalist realist politics, where the proposed imaginaries and political agendas do not extend beyond contemporary capitalist frameworks. Language of 'pragmatism' suggests that Autonomy's proposals are located in what is deemed to be realistic; that is, what already exists within a capitalist order, or as Fisher's 'capitalist realism' points toward, the only possible order (2009).

The language of neoliberalism is part of the *common sense* of contemporary capital; it is, to draw upon Boltanski and Chiapello, encompassed with a series of 'shared representations', a dominant ideology that is invoked within Autonomy's public facing discourse to appeal to a majority (2005). In this way, Autonomy 'forge[s] compromise' with the dominant discourses of contemporary capital, and regularly makes appeals to the motives of business. The 'directors introduction' on Autonomy's homepage notes that 'we cannot draw on traditional responses from Right or Left'. They make appeals to the motives of business ('organisations around the globe are adopting shorter working weeks in order to create healthier, happier workplace environments'; 'reducing hours at work can [...] attract and retain staff'), and what might be typified as typically leftist political agendas ('our aim is to promote real freedom, equality and human flourishing'; 'how is work gendered and how can we reduce the fundamental inequalities that deny freedom to many?'). This echoes appeals to increases in the 'scales' in the political project of the 'left' put forward by Srnicek and Williams, who argue that forms of resistance situated in the 'local' are insufficient for tackling the scope of neoliberal capital (2015).

I have argued that the conflation of these discourses within Autonomy's public facing discourse is strategic, and aimed at appealing to a broad range of political positionalities; it was not representative of the positions held by the majority of my interview participants. On the whole, my interview participants expressed far-left views about relationships between work and identity, and were largely critical of how pushes for a four-day working week or a UBI could function within neoliberal frameworks. One participant argued that shifts toward a four-day working week were more likely to gain momentum in spheres such as Google, and that pushes within such spheres were 'not the answer but the apotheosis of neoliberalism'. Several also highlighted that leisure time is also constituted by work, and that a four-day working week would not necessarily untether ties between identity and capital. I concur with these positions and would further extend that, following arguments made throughout this thesis, 'solutions' such as a four-day working week within a broader cultural framework of neoliberal capital would not untether these relationships, and could generate new scope for capitalisation. Work is an ideology that is not solely perpetuated via engagements with the five-day working week, nor is it an ideology that is solely perpetuated via engagements with digital devices that bind 'free' time to professions via emails and social media: it is an ideology that is perpetuated via the epistemological frameworks that perpetuate 'digitally ubiquitous' environments, in its propensities toward efficiency, self-improvement and economic and scientific progress.

With these ideas in mind, following Gorz, I would suggest that the 'question we must ask [...] is what meaning we wish to give this new-found free time and what content we wish to give it. Economic reason is fundamentally incapable of providing an answer to this question' (1989, p. 4). Without a deeper critique of the neoliberalised frameworks within which these working structures exist, and indeed in *invoking* the language of neoliberal capital, I would conclude that Autonomy's project offers a comprise that will ultimately *sustain capital*. It offers, as Boltanski and Chiapello put it, 'hesitant populations the opportunity to participate in [capitalism] more enthusiastically' (2005, p. 22). Universalising 'solutions' that invoke neoliberal and technocratic language are limited in what they hope to shift, and risk further entrenching exploitative power relations.

7.0 Thesis Conclusions

This thesis, Activism, Refusal, Expertise: Responses to Digital Ubiquity, has been concerned with the everyday practices; the instances of refusal and compromise; the discourses that have theorised, narrativised, advocated and opposed digitality in its many facets. It has been guided by the question of whether digital technologies capture human potential in terms of economic value, and how this is entwined with neoliberal governmentality. It has examined how the forms of power exhibited by the state, corporate and bureaucratic institutions that govern and influence living-being within contemporary spheres are bolstered with and via digital technologies, allowing such powers to be outsourced, re-established, materialised, de-materialised and, most principally to this work, embodied. It has explored embodiment via theories of sociomateriality, where I have argued that the politics and architectures of non-human entities are pivotal to understanding the intricacies of the relationships between digital technologies and power.

Throughout the thesis I have returned to Mark Fisher's notion of capitalist realism, which I also argue to be critical to understanding the contemporary moment in the West (2009). To briefly reiterate, capitalist realism refers to the prevailing sentiment that not only is capitalism the 'only viable political and economic system', but also, that alternatives to capitalism lay beyond contemporary imaginaries altogether (2009, p. 2). This has formed the theoretical terrain from which I have interrogated how and where digital technologies – as extensions of capital – materialise capitalist realism as a ubiquitous force in everyday life. I have explored how this 'psychic landscape' (Noys, 2019) influences imaginaries for the future, and whose politics and futures are privileged via the boundaries and chasms produced within contemporary digital environments.

This work was prompted by an interest in culturally specific theories of the mind that situate it in terms of a series of partite attributes: attributes that can be categorised, bureaucratised, exploited, and managed. Following Fisher, I noted that framing the mind in this way paves the way for experiences of mental turmoil to be detached from the political and social contexts that often play a critical role in engendering it (2009; 2011). Poverty and social stigma attached to notions of race, disability, nationality, gender and sexuality are abstracted from such mental health frameworks: in

this way, mental illness is something that can be alleviated via purchases, pharmaceuticals²⁶, and *personal willpower*, it is not our pasts – both personal and cultural – or the subsumption of time and rationality by capital.

In the introduction to this thesis, I noted that the term 'digital ubiquity' - used most prominently within high-tech spheres - often refers to environments that are saturated by a prevalence of networked information technologies. I reflected on some of 'ubiquity's' earlier theological meanings to understand its power in understanding contemporary digital environments. 'Ubiquity' in its theological sense, I noted, has a hierarchical relationships to humans; it knows humans in a way that humans cannot know it; it is both material and immaterial; and it is totalising. It has been my contention in this thesis that this 'ubiquity' of digital technologies is crucially entwined with Fisher's articulation of capitalist realism, an argument that is realised via a critical scrutiny of the logics and politics that are materialised in digital objects. In an article entitled *The Privatisation of Stress*, Fisher wrote,

since 1989, capitalism's success in routing its opponents has led to it coming close to achieving the ultimate goal of ideology: invisibility. [...] In the global North at least, capitalism proposes itself as the only possible reality, and therefore it seldom 'appears' as such at all (2011, p. 124 - 125).

I have argued that capitalist realism is reinforced via the material and epistemological frameworks that compose contemporary digital environments. Digital ubiquity is both *ideology*, in that it is 'inscribed in institutions, [and] bound up with actions' (Boltanski and Chiapello, 2005, p. 3), and *sensibility*, in that it 'educates desires, and configure[es] habits, aspirations and beliefs' (Murray Li, 2007, p. 275), forms of relationality, perceptions, and emotional states of being. It arranges 'things so that people, following their own self-interest, *will do as they ought*', where all aspects of life and matter are configured and evaluated in terms of market value (Scott, 1995, p. 202, my emphasis). It is not intrinsically *coercive* - as libertarian paternalist discourses may suggest - but, via an epistemic order that helps frame digitality as neutral and anchored in what is *real*, thought and movement are guided towards ways-of-being in which capitalism is understood as *natural*, abstractly *beneficial*, and, as Fisher argues, the *only* possible reality.

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²⁶ I am not disregarding the many instances in which medication has had positive and life changing impacts on mental illness sufferers; I am rather gesturing toward pharmaceuticals as constitutive of a broader framework of corporatisation, where such mental health treatments are privileged above the mitigation and overcoming of austerity, or therapeutic mental health treatments that have become increasingly inaccessible under austerity. This is also a tension that Fisher points toward. See also Fisher, 2009; Noys, 2019

In the third chapter, I explored a series of theories surrounding sociomateriality, which here referred to the social norms and processes that are entangled with matter, and how these entanglements recursively shape and influence the conditions and practices of everyday life. This recursivity – between the digital and the non-digital, the political and the psychological, the governing and the governed – is constitutive of Stiegler's understanding of 'individuation', where identity is situated *not* as fixed or stable, but rather as always transforming within a wider network of people and things. This, I have argued, has pivotal implications when interrogating the politics and forms of control manifest in digital objects and the relationship of these dynamics to embodiment. I further explored how technological determinism – predicated upon a discursive binary between human and technology – features in contemporary discourse, and how it can be seen to propagate and obscure corporate agendas. I argued that discourses that abstract the politics underlying digital objects maintain a specific function under neoliberalism; they pave the way for hegemonic understandings of technology as politically neutral, and serve to reinforce ideologies of contemporary capital as common-sense through the invisibilisation of these ideologies within digital objects and their surrounding discourses. I further explored the notions of 'translation' and 'erasure', where I foregrounded that digital technologies both translate according to the logics that they have been designed to operationalise, and *erase* all that is not encompassed within these parameters.

The 'digital detox' retreat that I explored in **chapter four** invited its participants to attend the retreat and 'remember what being *human* really feels like' (my emphasis) through relinquishing use of their digital devices, discussion of their professions, and use of their 'real names' for a four day period. The participants of the 'digital detox' often attributed the presence of the 'digital' within their day-to-day lives to senses of isolation, anxiety, and self-consciousness. In a vein that echoed the discourses utilised by the retreat, many of my interviewees often remarked upon the interconnectedness of their professions, or 'work', with their digital devices. Discourses of 'origins', 'childhood' and returning to 'nature' were also prevalent throughout the interview data for this case study. Within this sphere, the 'digital' and 'work' were rarely associated with politics or understood as political forces, and were rather understood as necessary and core tenets of everyday life, from which the space of the 'digital detox' allowed participants to only *temporarily* withdraw. This, I argued, alluded to a broader framework of capitalist realism, where life beyond the remits of 'work' and the 'digital' was so unthinkable that notions of eschewing these dynamics were bound with drastic returns to primitivism.

My case study of 'blockchain for good', undertaken in chapter five, explored how notions of 'social good' were mobilised for philanthro-capitalist and libertarian paternalist political agendas. I explored how the 'blockchains for good' in question materialised incentivisation mechanisms, and were predicated upon what constitutes 'rewardable' or 'good' behaviour. Living-beings within the 'blockchain for good' discourses I explored were often framed as fraudulent and self-serving, which, as myself and Scott argue, is an understanding that often underscores the functionalities of blockchains (2014). Users of blockchains are encouraged to partake in consensus mechanisms not for the collective benefit those involved, but rather through a process that individually rewards for collective participation. A theme of 'trust' recurred throughout this research data, where statistical recording on blockchains was often framed as speaking the 'truth' for potentially unreliable subjects. I explored how universalising notions of 'social good' within 'blockchain for good' contexts often ambiguated market-based principles, where decisions are made 'not in a context of certainty, nor even of available knowledge, but of doubt, premonition, foreboding, challenge, mistrust, fear, and anxiety' (Ewald, 2002, p. 294, my emphasis). The forms of 'social good' thus put forward within these discourses were ones in which the future is framed as secure; 'risky' subjects are monitored and policed; and the motives of banks and businesses are preserved. 'Risk' here meant those persons that posed threat to the maintenance of capitalist powers; and anxiety about those risks were then managed through narrativising unknowable futures as predictable, legible, and economically rational.

In chapter six, I explored some of the discourses offered by left-leaning think-tank Autonomy. Here, I examined the pertinence of the disjunctures that occurred between the narratives offered in some of Autonomy's public-facing discourse and those in my research interviews. I argued that Autonomy's public facing discourse often invoked neoliberal rhetoric to substantiate their proposed political agendas. This contrasted quite heavily to the perspectives offered in my research interviews, which in most cases offered far-left ideas about relationships between waged work and identity. I argued that while proposing 'radically' leftist agendas, the invoking of neoliberal and technocratic language within Autonomy's public facing discourse would ultimately sustain a cultural framework of capitalist realism. I further contended that Autonomy's notions of harnessing 'automation' for leftist political agendas within their public facing discourse did not adequately engage with the motives of computational capital. Indeed, while I am careful not to disregard digital technologies as inherently capitalist, if the capitalist frameworks within which they exist are not first subverted, digital technologies will continue to propagate the motives of capitalist power. As Frayne similarly suggests, 'so long as economic rationality continues to dictate the goals and

methods of production, existing attempts to humanise working conditions are highly limited in what they can hope to achieve' (2015, p. 46). I thus contended that *Autonomy* 'forges compromise' with the dominant discourses of neoliberalism, and offers the opportunity for 'hesitant populations' to participate in capital more enthusiastically (Boltanski and Chiapello, 2005).

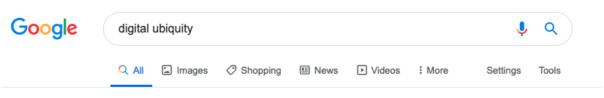
This body of work began, then, as an exploration into the psychic structures of capitalist realism as they are manifest through 'digital ubiquity', and culminated in the study of a series of initiatives and political agendas for whom the psychic wasn't necessarily the point. I have argued that capitalist realism pervaded the objectives, strategies and imaginaries offered in each of these 'responses' to digital ubiquity. Anxiety, as a sentiment that is intimately entwined with how we imagine, has been a core part of each of these stories, and was made manifest in the discourses and agendas that attempted to make presents and futures more legible, more manageable; less abstract, and less chaotic. On this tack, Noys argues that the 'psychic experience of high capitalism is chaotic' (2019). This, I would argue, gestures toward the prominence of anxiety within contemporary environments, as well as the chasms that neoliberal capital produces. While neoliberalism constructs an anthropocentric vision of the world in which the future is narrativised as knowable and fundamentally within our control, the question of what falls between these gaps has recurred throughout each of my case studies. This gap, I would contend, has often been articulated in notions of what it means to be 'human'. In each case study, being 'human' was articulated as distinct from the workings of capital and the world of high-tech. While this is bound with a broader epistemic structure that shapes how we understand the world in the West, I would posit that the prominence of this recurring discourse points toward something deeper; that in spite of its propensities towards establishing itself as ubiquitous, a pervasive underlying sense that capital, and the ways in which it is manifest through high-tech, has existential limits.

What I have not had the scope to do in this thesis is explore the implications of these chasms upon those that are marginalised by these structures; those that are implicated or *erased* from 'ubiquities' parameters. What I have offered has been an uncovering of some of the various spaces in which capitalist realism operates, and how even discourses that attempt to reduce the scope of capital are nonetheless entangled with its logics. My contention has been that capitalist realism is sustained, in large part, by the digital apparatuses and epistemic structures that are oriented towards the invisibilisation of these ideologies. While it may present itself as such, capitalism can never be totalising. Opportunities for future research, then, might examine the spaces and collectivities that offer different ways-of-seeing to those offered by capitalist realism; those that

critically engage with the limitations and potentialities of the digital; and those that strive to amplify, rather than supress, the voices of those marginalised and erased under Westernised systems of governance. From here, we might start to explore the 'elsewheres' - of which, I believe, there are many - to 'digital ubiquity'; that start from its chasms, and branch outwards.

8.0 Appendices

Appendix 1.1



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Appendix 2.1: Introductory email sent to members of Autonomy

Hi
Hope this email finds you doing well!
I'm doing my PhD at the University of Sussex, and am looking at understandings of 'anti-work' and 'post-work' as my final case study, as well as how these are being addressed within the public sphere. I am a friend of and have been doing research interviews with other associates of Autonomy as part of the case study. I was wondering if you would be interested in partaking in a short research interview with me, as part of the study?
The interview would take place via Skype, and would likely take between twenty and thirty minutes. All interview content can be anonymised if you wish
If you're interested, am happy to send on further information.
Thanks and all the best,
Emma
Emma Harrison Doctoral Researcher, Sussex Humanities Lab @_emmaeharrison I medium.com/@_emmaeharrison

Appendix 2.2: Information Sheet provided to members of Autonomy



Emma Harrison School of Media, Film and Music University of Sussex Tel: 07928670406 Email: e.harrison@sussex.ac.uk

STUDY TITLE

Collective Action in the Age of Ubiquitous Computing (title subject to change).

INVITATION PARAGRAPH

You are being invited to take part in a research study for the PhD thesis 'Collective Action in the Age of Ubiquitous Computing'. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

WHAT IS THE PURPOSE OF THE STUDY?

The thesis broadly explores how capitalism provokes specific forms of socialisation, and how digital ubiquity feeds into this dynamic. The purpose of this case study specifically is to explore this broader thesis aim through a nexus of 'work'.

WHY HAVE I BEEN INVITED TO PARTICIPATE?

You have been invited to participate as you are affiliated with the 'think tank' Autonomy, which specifically addresses many of the issues at stake within this thesis pertaining to ideas of anti-work and post-work, and how these may be potentiated.

DO I HAVE TO TAKE PART?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason.

WHAT WILL HAPPEN TO ME IF I TAKE PART?

You will be asked a series of pre-formulated semi-structured interview questions, and further potential questions that I formulate on the spot, in accordance with the answers you give. The interview will be recorded on an audio recorder, and it will be stored on my own personal hard-drive. I will transcribe these interviews and anonymise any personal information. This means that gender-appropriate pseudonyms will be used, and no personally identifiable data will be published.

WHAT ARE THE POSSIBLE DISADVANTAGES AND RISKS OF TAKING PART? (WHERE APPROPRIATE)

The interview will take between twenty and thirty minutes, so it may be time consumptive.

Collective Action in the Age of Ubiquitous Computing Version 1.0
17th April 2018

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

You will be contributing to a body of research that I have been developing over the past three years. I hope this body of work will contribute to future debate around potentialities for anti-work and post-work, alongside the discussions that 'Autonomy' are bringing forward.

WILL MY INFORMATION IN THIS STUDY BE KEPT CONFIDENTIAL?

All information collected will be kept strictly confidential (subject to legal limitations). Confidentiality, privacy and anonymity will be ensured in the collection, storage and publication of research material. This means pseudonyms will be used, and any personally identifiable data will be removed from the research data.

WHAT SHOULD I DO IF I WANT TO TAKE PART?

If you decide to take part, you will be asked to sign a consent form which states the terms of your participation.

WHAT WILL HAPPEN TO THE RESULTS OF THE RESEARCH STUDY?

The results of the research will be analysed within the proposed PhD thesis, and published as part of this. This will be published on the Sussex Research Online repository. I may also develop future research articles stemming from this study. If this occurs, the same identity protection protocols will be followed.

WHO IS ORGANISING AND FUNDING THE RESEARCH?

This research is funded by the Sussex Humanities Lab, and organised by myself, Emma Harrison.

WHO HAS APPROVED THIS STUDY?

The research has been approved by the Social Sciences & Arts Cross-Schools Research Ethics Committee (C-REC).

CONTACT FOR FURTHER INFORMATION

You can contact myself, Emma Harrison, for further information. If you have any concerns about the way in which the study has been conducted, you can contact my supervisor, Caroline Bassett (details provided below). The University of Sussex has insurance in place to cover its legal liabilities in respect of this study.

Caroline Bassett
Silverstone Building, University of Sussex
Falmer, BN1 9RG
Email: C.Bassett@sussex.ac.uk

THANK YOU

Thank you for taking time to read this information sheet.

DATE

17th April 2018

Collective Action in the Age of Ubiquitous Computing Version 1.0 17th April 2018



CONSENT FORM FOR PROJECT PARTICIPANTS

PROJECT TITLE:	Collective Action in the Age of Ubiquitous Computing	
Project Approval Reference:	ER/EH291/4	

I agree to take part in the above University of Sussex research project. I have had the project explained to me and I have read and understood the Information Sheet, which I may keep for records. I understand that agreeing to take part means that I am willing to:

- Be interviewed by the researcher
- Allow the interview to be audio taped
- Make myself available for a further interview should that be required (non compulsory)
- Use a computer to participate in a video/audio call for interview purposes

I understand that personal information will be removed from the study and pseudonyms will be used to prevent my identity from being made public.

I consent for the data provided in my research interview to be used in the proposed PhD thesis, and potential further research articles stemming from this study. If future research articles are undertaken, I understand that the same protocols pertaining to identity protection will be followed.

I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way.

I consent to the processing of my personal information for the purposes of this research study. I understand that such information will be treated as strictly confidential and handled in accordance with the Data Protection Act 1998.

Name:		

Collective Action in the Age of Ubiquitous Computing, Version 1.0

Signature The Signature

Date: Sep 21, 2018

Collective Action in the Age of Ubiquitous Computing, Version 1.0

Appendix 2.4: Digital Detox consent form

Terms of Agreement

The interview I conducted with you was part of the PhD research project 'Collective Action in the Age of Ubiquitous Computing' (title subject to change), which explores relationships between digital technologies and cognition. This information is being retained by the University of Sussex, and is only being used for the purpose of research. The information will be processed by the University of Sussex in accordance with the provisions of the Data Protection Act 1998. No identifiable personal data will be published.

Statements of understanding/consent:

- · I understand that this interview data will be used as part of the proposed PhD thesis, and further potential research articles stemming from this study.
- · I understand that my responses have been anonymised and any details identifying my identity have been removed from the study.
- . I understand that any information I provide will be stored in a way that keeps my identity (and others I have talked about) private.
- I understand that my personal data will be processed for the purposes detailed above, in accordance with the Data Protection Act 1998.
- I consent to the data I provided in my interview to be utilised as part of the study.
- I consent to the use of anonymised quotes in publications from the research.

Participant: (Mar 13, 2018)

Interviewer: Date: 27/02/2018

Appendix 2.5: Retrospective Ethical Assessment



20th March 2018

Dear Emma,

Re: Retrospective Ethics Assessment of your doctoral research: *Collective Action in the Age of Ubiquitous Computing.*

As Chair of SS-ARTS CREC, I have been asked to offer a retrospective ethical assessment of the above doctoral research project. At Sussex University, this is a process undertaken by me, supported by our university Research Governance Officer, that assesses the ethical dimensions of research that has already been undertaken. We are not able to give retrospective ethical approval but are willing, in specific circumstances to provide a retrospective ethical assessment to support our students' studies.

For various reasons outlined elsewhere, this research project was not formally assessed or approved before the research was conducted. An ethics application was completed by Emma in June 2017, approved by her supervisor, and submitted for CREC review. At this point, further documents were requested by our CREC administrator to make the review possible (Informed Consent Form and Participant Information Sheet). As I understand it, at this point, due to a series of misinterpretations of the review process (by both Emma and her supervisors), Emma went ahead with her research believing that it had been approved. From her perspective, she had completed the ethics application, it had been approved by her supervisors, and she thought the she had covered verbally with her participants the ethical issues that would have been covered in the written documents requested by CREC. I understand it that one of Emma's supervisors has since listened to the interview recordings and can confirm that verbal consent and information about the project was given/relayed to participants. It is ethically sound to gain verbal consent in this way.

Since realising that in fact ethical approval had not been given for the work, Emma has communicated with me extensively to explain how she conducted her research. I am in no doubt that she has conducted her research with high ethical standards in mind. In her description of the research processes she used, I highlight below what I think is important ethical information.

1. Participant Observation at the digital detox camp. observational data was collected using pen and paper and all participants at the site were made aware of the researcher's presence on several occasions. Prior to the visit, an email was sent out by the organisers to all attendees that there would be a UK-based researcher making notes at the site in relation to research that was exploring the relationships between digital technologies and the ways people think, and the effects of these dynamics on collective action. Participants were invited to contact the organisers if they had concerns with the observational process and none were reported. This was reiterated at an opening presentation of the digital detox camp. Emma also informed those around her at the camp, that it was she who was conducting the research. She kept the research process fairly discrete though never disguised the fact that she was researching processes at the camp. Nobody expressed concerns to her about the research. Notes taken

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from the observation primarily comprised of broad descriptions of the camp, for example: the workshops undertaken, the forms of technology that were permitted on site, and eating and sleeping arrangements. No personally identifying information about participants was recorded.

2. Video based interviews. 14 semi-structured interviews were undertaken with participants after the digital detox camp had ended. Participants were recruited from a community Facebook page by those at the camp, and Emma posted a written request asking for volunteers to participate (I have viewed these). The post detailed the purpose of the research interviews that was to explore how the lack of digital technology impacted their experience of the camp, that the study would be contributing toward her PhD research, and that the interviews would take between fifteen and twenty minutes. Many people responded to this Facebook thread and were happy to help. Following this, informal conversations were had with participants where they could ask for further details about the interviews using Facebook messenger.

The interviews took place via Skype or via Facebook video-call, and were recorded either using the audio recorder on her mobile device, or video-call recording software that was installed on my laptop. Prior to the interviews commencing, participants were read a paragraph that informed them of the broad purpose of the study (the effect of digital technologies on the ways we think, and why we might want to step back from digital environments). They were informed that their responses would be anonymised, that it was being recorded, the interview would commence after their consent had been attained, the transcripts would be stored on her personal hard-drive, and that the interview would take around twenty minutes. They were all informed that the interview would comprise of some pre-formulated key questions, as well as other questions that were formulated on the spot, in accordance with the answers they had given. They all gave explicit verbal consent following this information. All responses have since been anonymised (pseudonyms used and generic pronouns, e.g. 'they') and have been stored on my personal hard-drive. The only issue that was not covered verbally was the right to withdraw participation in the research and the right to withdraw data. Importantly, in terms of remedial action, Emma has now contacted all research participants to get their written consent for the use of the research data, and participants have returned these forms to her. This retrospective form covers all the relevant issues included in the standard consent form.

I am confident that the research conducted was ethical despite the fact that institutional ethical review approval was not gained.

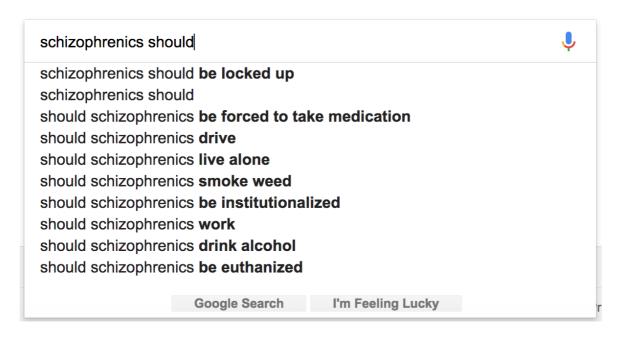
Thanks very much

Dr Liz McDonnell

Chair of SS-ARTS CREC

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Appendix 3.1



Appendix 4.1²⁷

- Email #1: Welcome Aboard, Start + End Times, Costumes
- Email #2: Bus Details, Programming, Playlis

Hey, hey, hey

With 17 days to go until Camp (pretty crazy, eh?), we figured now would be a great time to start letting you know what to pack to make sure everybody is well prepared for the epic journey ahead of us! ;)

As always, we have some important information for you below, so let's read on, shall we?

FIRST THINGS FIRST: PLEASE DO NOT BRING SNACKS.

A NOTE ON SCENTS.

We have a number of campers attending this year who have Multiple Chemical Sensitivities (MCS) and we want to ensure ________ is accessible for them at all times. As such, it is

²⁷ All identifying details have been removed from this email

very important to refrain from bringing or using any products that contain fragrances or essential oils during or before your stay.

This includes scented sunscreen, perfume, scented toiletries, vaporizers, smudging, etc. It is important to note that products labeled "unscented" can still contain masking fragrances and may cause a reaction. Similarly, any "organic" or "natural" products, or products that list "free from artificial fragrances" can contain essential oils that are fragrant. **Please ensure any products you bring are listed as "fragrance-free"**

PACK YOUR BAGS, CHECK 'EM TWICE

will feature a whole spectrum of exciting programming, and so we want you to be ready for whatever we throw at you this weekend. Below is a checklist of everything you will need to bring to camp.

• To Bring for Registration:

- Your receipt for proof of payment (shown on your phone is fine -- let's save those trees!)
- Some form of ID (Passport, Driver's Licence, Health Card, etc.)

To Pack:

- · Clothes and accessories:
 - Underwear (optional)
 - Socks (bring extra!)
 - · Long sleeve shirts, hoodies, and pants for late nights and the bugs
 - Running shoes and clothes you can play, get wet, get dirty and / or do yoga
 in
 - Rain jacket / poncho and anything else you would want that prepares you for rain (activities will run rain or shine!)
 - Sunglasses and hat
 - Swimsuit and towel(s) for showers and lake use.

• For your bed:

- Surprise! We are staying at a real summer camp... Meaning these beds were built for 12 year-olds in mind.
- Please don't expect a 5-star mattress; if you're tall, you find you are a little too long for the bed.
- You will need to bring your own fitted, flat, and pillow sheets for single beds.
- We highly suggest bringing an extra inflatable mattress, pillows, blankets, sleeping bags -- whatever will make you feel the most comfortable. The cabins are large, so if you want to even bring a blow up mattress, you have the space!

· Costumes:

- Costumes are a magical part of and a super-fun way to get all dressed up however YOU want! A reminder that our three costumed events are:
 - Back to the Future Daybreaker
 - The Superhero Summit
 - The BFP (The Be Free Party).
- Any additional costumes you'd like to donate to the

 Communal

 Tickle Trunk

TICKIC ITUIN

· Toiletries:

- Wet wipes, soap, gel, shampoo, conditioner. Preferably biodegradable and eco-friendly products. These should be listed as 'fragrance-free' (per above note on scent).
- · Sunscreen and chapstick with SPF.
- Bug spray: The environment-loving folks at Druide are supplying us with citronella-based natural bug spray. If you prefer your own or are allergic to citronella, we encourage you to bring your own.
 - NOTE: Toxic/DEET bug sprays (i.e., Muskol, OFF!) is discouraged.

Medication:

- Prescribed medications (especially your non-daily / infrequently used meds!).
- Bring your puffers, epipens, and allergy meds with you if you need them!
- Vitamins and electrolyte-powders.

· Odds and Ends:

- Flashlight and / or headlamps
- Yoga mat or towel for workshops
- Sitting pillow for workshops
- Camping cup: Snacks will be served in this to ensure we're being eco-friendly
- Ear plugs and / or sleeping masks

Camp Fun

 We do not serve alcohol at camp. But you are welcome to BYOF (Bring Your Own Fun), whether that's alcohol, herbs or elsewise. Just remember, camp is no fun hungover!

That was a long list. Make sure to check it twice.

LAST CHANCE FOR

T-SHIRTS + TANKS



Me're bringing back our favourite saving /"Dlay Hard") in a new design for 2017! Keen the

spirit of alive long after you leave and wear what is always a conversation starter.

T-shirts and tanks are on sale until Thursday at noon, so this is your last chance to snag one for \$20 + HST. <u>Buy them here!</u>

REMINDER: MAKER DAY!

This Sunday is our second annual Maker Day. Let us know if you're coming on our Facebook Event here. Here are the details:

Details

- Date: June 11, 2017
- Time: Drop in anytime between 11AM 5PM
- Address: 58 West Lynn Ave. (near Woodbine + Danforth)

Thank you to Perfect Timing and Squeak who are hosting us at their home. We ask that you are respectful of their space and treat it as your own.

As always, if you have questions, don't hesitate to reach out to us by replying to this email or sending a note to

See you soon, hopefully under the bright and shiny sun!

In love and play,

The team

PS: If you haven't yet contributed to our playlist, please add your favourite music <u>HERE</u> on YouTube. If you need instructions on how to add a song, you can find that <u>HERE</u>.



WORKSHOP LEADERS

LEGEND

- PLAS In these workshops, you'll have fun without any cares in the world. These workshops are designed for pure play.
- CONNECT In these workshops, you'll create a deeper relationship with your beautiful self and / or other beautiful beings.
- TRANSFORM In these workshops, you'll self reflect, become aware of your present self, and choose to make positive changes. Consider if you're ready: These workshops occasionally bring out intense feelings.

Appendix 4.3

We're excited to share that has partnered with a doctoral researcher at the University of Sussex in the UK, who is studying how surveillance through digital technologies is impacting collective action. The researcher will be attending part of their work, and will only be taking hand-written observational notes. No recording devices will be used. The research adheres to a policy of complete anonymity. Therefore, any details of location and identity will be completely abstracted from the research. Our campers safety and security is of our utmost importance. If you have any concerns, please do not hesitate to contact us.

See More

FRIDAM A lot of the namer reagle are uring draw on nature snoper (e.g. Air, Love, fourney). Disaurions around tech in ceremony hald with come familier nix of male of female). There disurien marsly revolved around notice phoner. One person (male, perhaps 30-40 years old?) Wend elidem in Atin girlmortisle, in to his relationship with alchal, and that he wied to when he reded to rolate humself and distract himself from the Burn in us life. Another person (pulage) early fortier, finale) whered with addiction. The said that in her to day ite stage

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25th June 17 anked a man about what the rearriery was behind uring nuclenanier at earry and the A Laid shet it was to gue people more room to play, but also shot you could be stotally enoughed to be, anonymour if you wanted to be, or be materiar you wanted X Le de gen 20 se to be. ما Tilent disco: There were three tracks & people could chave which back they wanted to 1. Hen to on the madelines: dre dancing and in was asynchronous which was fashenlarly noticable wolking shough the space with no head phoney on. I spoke not with

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Appendix 4.5: Sample Interview

Age: Thirty-three Nationality: Canadian

Profession: High School Teacher

E: So I just need to record your age, nationality, and profession, if that's okay

I: Sure. So I'm thirty-three, Canadian, and I'm a high school teacher

E: Okay. So I was going to begin by asking, what were your motivations for doing a digital detox at Camp Wild*? And do you think you were a heavy user of digital technology before attending?

I: I found this really interesting, this idea of not having devices, not having Google to turn to. Not having your phone to take photos of every single little thing - food, experiences, funny moments, whatever. Because I feel like we rely on our phones - I'm using phones but of course it means 'technology' - we rely on our phones so easily. And if we don't know the answer to the question, if we don't know what an actors name was right away, we jump to our phones. And I thought it would be really interesting if we just had to talk, and we just had to be, and wonder, frankly. And keep wondering, unless we answer it through different means. I think in my job I don't use my phone for work, so I don't have my school emails going to my phone. Once the day is done my phone use is personal, it's nothing to do with school or my job I guess. So for me, as someone who can't have her phone really, through the eight to five, it wasn't as difficult for me to detox, because I don't normally have it on my hip every day. But personally, I feel like I use social media a lot. I'm often sharing photos, or looking up YouTube tutorials on the most random things, and I'm definitely someone who can fall down a rabbit hole and start wondering the most random thoughts, and going to Wikipedia and that sort of thing. So I think personally I'm a user often of digital - you know, on my phone, or on Google, or I use Netflix - but in my job I don't have to use it, and I rarely can use it. So it was a bit of a [inaudible].

E: Okay, awesome. If and where was the pressure to come from to a digital detox?

I: Definitely no pressure. I think it seemed more fun than anything, interesting, very unique, because so often you can't even go to dinner with people without someone having their phone. So definitely pressure, even while we were there, as someone who was on the organising committee, I was busy the entire time I felt, or like there was always something going on, there was always someone to talk to, there was something to do. I didn't even think about my phone, to be honest. The first day was different for me, cause right away you wanna use your phone for the time, you wanna use your phone to check the weather. But after that I kind of honestly didn't even think about it

E: Okay, fair enough. Me too actually, I think after the first day it wasn't really a thing anymore. So how would you describe your experience of the digital detox? What specifically did you stop, how did you feel, or maybe, what technologies in particular did you feel had an effect?

I: So I think it was nice... there were definitely a few moments where I thought... 'I wish I could take a photo of that', just for the memory purpose. But it became more important to experience versus thinking about taking a photo of the experience, if that makes sense? So there was definitely a few moments where I would have loved to have captured what was happened, but I think it was good that it wasn't an option. It wasn't just - 'I'm making a personal choice to not have my phone' - we couldn't have our phones, and we didn't have our phones. So [inaudible] -

and something that's changed since camp, I stayed logged out of a couple of my social medias, and log in, you know, when I have a moment to check it. Or, you know, an evening, maybe before bed or something. It's also helped that I've been in New Brunswick for a couple of weeks, and will be here for another week. And there's no wifi at my mum's house, so that's why I wanted to do this at my sisters as she has wifi, because that causes me to check it less as well. Frankly, also, from an economic standpoint, from not wanting to use or pay for so much. So it's kind of helped me in that way. But I've actually stayed logged out, which I didn't think I would keep doing. Like, I didn't think it would continue, and it has, so that's been a bit of a change.

E: Do you think... how do you feel differently with regards to having not logged in all the time, do you notice a different feeling in yourself?

I: I think it's helped me to sort like I said, stay more present, and just be in the moment without needing my phone next to me all the time. And it's not even that camp helped me not wanna do that, it just made me more aware. And I've wanted to stop doing that, and it just sort of helped me see, like it's a funny thing to say, it sounds like a Hallmark card, that it's okay to not have a picture of every little moment, and it's okay to not share that picture even if you took it, and that sort of thing. So I'm just more in tune with what's going on, I guess.

E: Okay. So how do you think others at Camp Wild* responded to the environment? And would you say their experiences were similar or different to yours?

I: I definitely didn't hear too much about people missing their phones or wishing they had their phones or anything like that - in the conversations I had anyway. I thought before camp, I thought this is going to be really interesting, because sometimes you might meet someone who constantly you might meet someone who constantly has their image at the forefront of what they do. And needing to have the perfect instagram post, or have the perfect experience, or look how much fun I'm having, or look how cool my life is. And I thought it was going to be really interesting and it was. There were no ulterior motives, if there would have been normally. You knew there weren't, as there was no option to take a photo of your food, or of you sitting on the dock, or whatever the case. So at camp it would be very authentic to have conversations with people without the worry of someone recording them, frankly, or without the worry of a photo being taken, being in a swimsuit that they might not wear somewhere else, or things like that. And personally as a teacher my public image matters. And you know, there could be things I'm very conscious of, photos being able to be taken of me in public and things like that, cause that can affect my profession. And that's the reality and I knew that going in, but it was a bit freeing to know that I could have conversations that I knew - I mean not that I think I'm being recorded in regular life, or anything - but just to know you have that freedom. And I think that effected everyone the same way. It was a sense of, [sighs], I can be me, in the truest form, because I don't have to worry about clients being at the next table, I don't have to worry about potential employers being, you know, in the vicinity, or anything along the lines. So it was very freeing, you knew that the conversations were very authentic, because there could be no ulterior reasoning. And not being able to talk about our jobs was very cool, it was very interesting.

E: Yeah, I found that too. I noticed that with myself, as well - it is just a kind of engrained thought pattern I think to just be like 'hey, who are you, what do you do?' - I never really had that level of reflexivity about that until the camp, and then I realised 'oh yeah, that is the first question I ask people'

I: And it's such a part of our life, too. As a teacher, it is my life and it has always been, so it's natural that you would wanna talk about something that plays such a big role in your life. You

know? Or if you built a company from the ground up, that is your baby, that's your life, so it totally makes sense that that would be a common ground for you to find things to talk about and discuss. If you're both in the tech industry, if you're both you know, whatever, it's just nice to find other things to talk about. Yeah, it was kinda cool.

E: Yeah, I liked it too. Cool, so my next question is how did you interact with others at camp, and did this differ to interactions you have outside of camp, and why?

I: So I think, again, being part of the organising committee before having attended camp - so this year was my first Camp Wild - I was on the organising committee so I get to see it through a different lens. I got a taste for what camp people were like through the organising committee very open, very affectionate, very real, you know? When they asked you how you are, they meant it. You know? And that's what I felt with all my interactions with different types of people at camp. When they said 'thank you', they like grabbed you by the shoulders and really said 'thank you'. Or when they asked you how you were in the morning, it wasn't just a passing comment, or a nicety, they really meant it - like 'how are you doing, emotionally, spiritually, energy wise?' you know, whatever the case. So I just felt like they were so meaningful. And not that I don't have meaningful interactions in my daily life, in the default world, but in the camp world, when someone sought you out for a conversation, or stopped you when you were getting your coffee in the morning to have a chat, it was so purposeful, it was really touching to know just how caring and very mindful of everyone around them that everyone seemed to be. Everyone that I interacted with. And hugs were real hugs, and you know, that kind of thing. I'm a hugger anyway, I love to hug anyway, that's something that I'm a big fan of anyway, and just having so many people around that everything they were being, you knew they were being 100% real. And I felt it in my interactions. And it was just really nice to know, that if someone stopped to talk to you it was cause they really wanted to stop and talk to you. If someone asked you how they were, its cause they really wanted to know. It wasn't just a passing comment that you say because you meet up at the water cooler, kind of thing.

E: Okay, great. So what were your expectations of digital detoxing prior to the experience? And where did these expectations come from?

I: Hmm. I think, I thought it would be a lot harder, not only for me but for other people. I thought... I think I expected a lot of complaining or there to be a lot of people asking to see their phones, or just to check their phones quickly, and mind you I wasn't part of where they were being kept with the directors, I wouldn't have been someone they would have come too had they needed. It would have been Boo* or Green* or one of the head honchos. I just expected to hear more about it, or for people to say 'oh I wish I had my phone', and I really didn't. And maybe that's because I wasn't around the people who were saying it, I thought I'd find myself to be a bit more like 'maybe I'll just check it quickly!', you know? Or something like that. So my expectations were that it would be much harder, and it wasn't. Again, cause we were doing stuff all the time, and then I also thought when I got back to my phone, that there would be a million messages floating in, and there weren't, which was funny. So there were definitely a few, but also when I got my phone back it was dead, so I couldn't even use my phone for another five hours or something. So it was quite interesting that my phone was dead when I got it back, so I was like 'oh, I can't check it anyway'. It's sort of like - it was an interesting thing to see that the world didn't fall apart, everyone's still fine, like nobody needed to get in touch with me. I mean again, by that time I was finished, I was pretty much finished with school as well, like our school year. So, even if there were communications, it's nothing that couldn't have waited another couple of days, so I'm not someone who might have some very serious emails waiting with regards to my job. But yeah, everyone was fine, everyone moved on with what they were doing at the weekend

so, I don't know why I expected there to be so many - like everyone knew I was at camp, they knew I didn't have my phone, so they wouldn't have messaged me anyway. I think I thought - I wasn't as important as I think I thought I was.

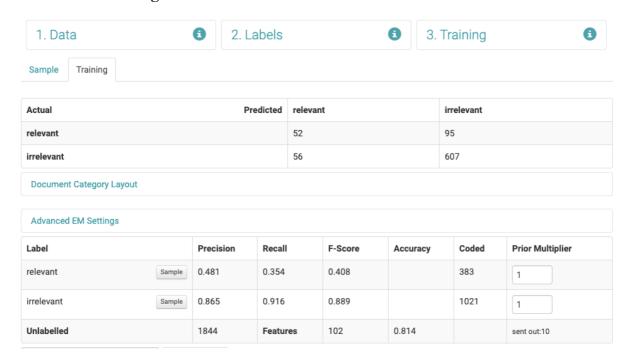
E: Yeah, I had exactly the same. I was expecting a stream, and then it was like 'ah! nope!'.

I: Two messages, great! [Laughing]

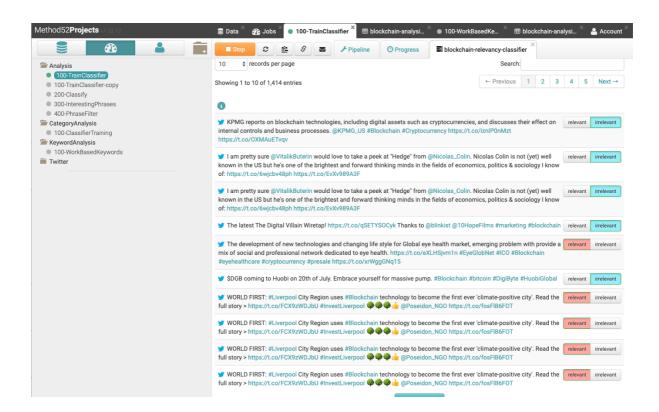
E: [Laughing] Yep, I had the same thing. So, this is my last question actually, and it is, did your experience at Camp Wild* change things for you subsequent to your experience? And do you think the effects of your experience will be sustained? I guess you've already answered this slightly

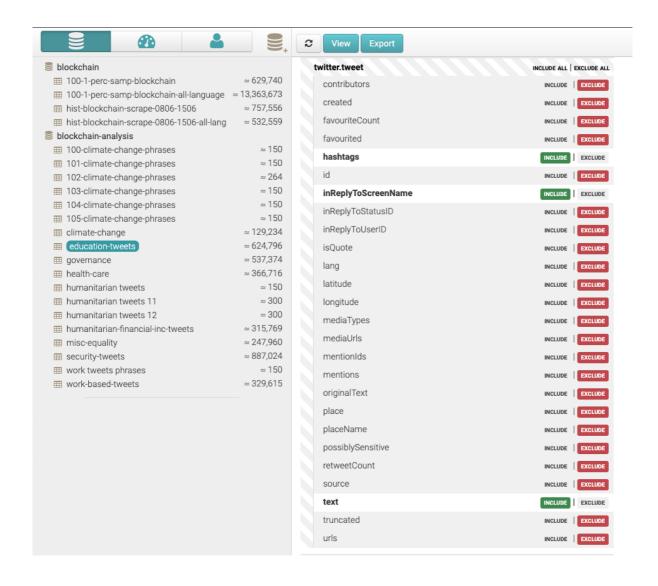
I: So I think, again I tried not to be the person that had their phone on 24/7, especially when like I mentioned this before, but like going to dinner with friends, I'd really try to not take my phone out, unless there were good reason to sort of, you know, we need to find the next restaurant cause we don't know where it is. Or something that was actually necessary. And I think Camp will just help me be more like that. Definitely guilty of it, definitely guilty of having my phone out, but I just have a few very close friends who have their own on all the time, like turned up on the table, all the time. And I see that and I don't wanna do that myself. So I think camp has taught me to be a little more like that, and plus any time I've met with camp people in the last - well, I was only in Toronto for a week after camp, but no one had their phones. And it was just so nice that we were hanging out and not doing much of anything but we just didn't have our phones with us for a while, so it was really. And I think it will just help me be more and more aware of how disconnected you are when you are connected. And I think it's something that I'll sort of lead by example, given the friends that didn't come to camp with me. There's even been instances and something has come up and I've been like 'oh I'll show you later', and they're like 'no you can show me now' and I'm like 'no, we're eating, like I'll show you later. We'll have time', you know? So, sort of influencing them, maybe, to be a little less plugged in. Which might not influence them at all, and not that I wanna take the moral high ground, I just don't wanna be the person that has my phone all the time. So I think it'll just help me be even more aware of doing that and come to curb it. So yeah, that's my bit. It's been a cool experience

5.1 Classifier training

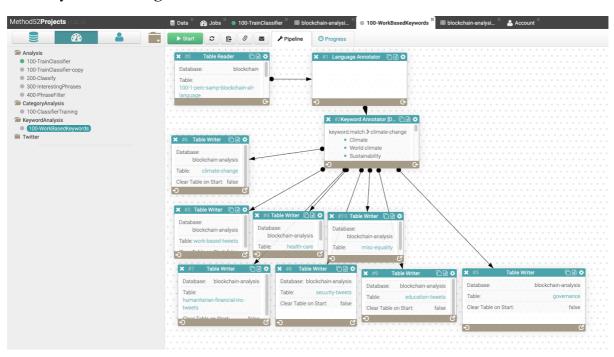


5.2: Relevant/irrelevant process





5.3: Key word training



6.1: Information sheet for *Autonomy*



Emma Harrison School of Media, Film and Music University of Sussex Tel: 07928670406 Email: e.harrison@sussex.ac.uk

STUDY TITLE

Collective Action in the Age of Ubiquitous Computing (title subject to change).

INVITATION PARAGRAPH

You are being invited to take part in a research study for the PhD thesis 'Collective Action in the Age of Ubiquitous Computing'. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

WHAT IS THE PURPOSE OF THE STUDY?

The thesis broadly explores how capitalism provokes specific forms of socialisation, and how digital ubiquity feeds into this dynamic. The purpose of this case study specifically is to explore this broader thesis aim through a nexus of 'work'.

WHY HAVE I BEEN INVITED TO PARTICIPATE?

You have been invited to participate as you are affiliated with the 'think tank' Autonomy, which specifically addresses many of the issues at stake within this thesis pertaining to ideas of anti-work and post-work, and how these may be potentiated.

DO I HAVE TO TAKE PART?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason.

WHAT WILL HAPPEN TO ME IF I TAKE PART?

You will be asked a series of pre-formulated semi-structured interview questions, and further potential questions that I formulate on the spot, in accordance with the answers you give. The interview will be recorded on an audio recorder, and it will be stored on my own personal hard-drive. I will transcribe these interviews and anonymise any personal information. This means that gender-appropriate pseudonyms will be used, and no personally identifiable data will be published.

WHAT ARE THE POSSIBLE DISADVANTAGES AND RISKS OF TAKING PART? (WHERE APPROPRIATE)

The interview will take between twenty and thirty minutes, so it may be time consumptive.

Collective Action in the Age of Ubiquitous Computing Version 1.0 17th April 2018

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

You will be contributing to a body of research that I have been developing over the past three years. I hope this body of work will contribute to future debate around potentialities for anti-work and post-work, alongside the discussions that 'Autonomy' are bringing forward.

WILL MY INFORMATION IN THIS STUDY BE KEPT CONFIDENTIAL?

All information collected will be kept strictly confidential (subject to legal limitations). Confidentiality, privacy and anonymity will be ensured in the collection, storage and publication of research material. This means pseudonyms will be used, and any personally identifiable data will be removed from the research data.

WHAT SHOULD I DO IF I WANT TO TAKE PART?

If you decide to take part, you will be asked to sign a consent form which states the terms of your participation.

WHAT WILL HAPPEN TO THE RESULTS OF THE RESEARCH STUDY?

The results of the research will be analysed within the proposed PhD thesis, and published as part of this. This will be published on the Sussex Research Online repository. I may also develop future research articles stemming from this study. If this occurs, the same identity protection protocols will be followed.

WHO IS ORGANISING AND FUNDING THE RESEARCH?

This research is funded by the Sussex Humanities Lab, and organised by myself, Emma Harrison.

WHO HAS APPROVED THIS STUDY?

The research has been approved by the Social Sciences & Arts Cross-Schools Research Ethics Committee (C-REC).

CONTACT FOR FURTHER INFORMATION

You can contact myself, Emma Harrison, for further information. If you have any concerns about the way in which the study has been conducted, you can contact my supervisor, Caroline Bassett (details provided below). The University of Sussex has insurance in place to cover its legal liabilities in respect of this study.

Caroline Bassett
Silverstone Building, University of Sussex
Falmer, BN1 9RG
Email: C.Bassett@sussex.ac.uk

THANK YOU

Thank you for taking time to read this information sheet.

DATE

17th April 2018

Collective Action in the Age of Ubiquitous Computing Version 1.0

17th April 2018

Appendix 6.2: Sample Interview

E: My first question is - what is it that interests you about anti-work and what are the core issues, for you?

I: So... I guess... I guess it's in a kind of a broad context of... I suppose it would be more useful to look at where I sit within the work and probability kind of sphere, which is... that I've worked for ten or fifteen years or so in different organizations and different roles, around employment and skills policy and strategy. So, some more policy based work and some more managing services, and setting up projects and things. And so, I guess... none of that has been sort of JCP, I hasten to add [laughs]. Mainly for like local authorities, or sub-regional local authority bases.

E: Okay.

I: So... I guess one of my... of the sort of interests that I've had particularly over the past few years has been around low pay, and in-work poverty, and how the idea that getting a job solves all of your financial issues, brings us all out of poverty, is obviously... maybe never was the case but certainly not now the case. And I set up a project in 2014, which was... there was very little else at that point which was looking at how to support people in low paid work, to press, to improve their skills, to get out of really badly paid and very often bad terms and conditions as well. And I guess just seeing and understanding the impact on people's lives and trying to manage that, being in those circumstances, and trying to manage the rest of their lives, around having poorly paid work, shift work, zero hours contracts, all those kinds of things, I guess that's sort of one of the main kind of angles that I would come from, the kind of failure of work to address poverty really. And so, I wouldn't say that then I directly make the leap to say, we should be... you know, no one should work, or... should immediately move into some kind of post-work utopia. So I think it's the understanding that work is not the answer to all of our problems I guess. And... is there another way. Or there's got to be a better way for paid employment to function for people, which isn't just, work your guts out and still not manage to scrape by. Um... yeah. So I think that's kind of, the place I would say my interests comes from, I guess. And then also... kind of, in parallel to that, an interest in universal basic income, you know, which may or may not be something that's in combination with working less, or not working. And I think one of my main interests in basic income is... is whether it could offer us a better way for social security and welfare to work. But I think... I wouldn't count myself as a kind of 100% passionate advocate of it, but I think it's opened up some really useful conversations around conditionality, around what we value as work, what we financially reimburse people for, paid work versus unpaid work, care, etcetera... should we be punishing people for being unemployed? I think the conversations that are opened up by talking about basic income or really important or relevant to that, you know that bigger picture, of what work is or could be. Or what we should or could get paid for. So, if that's makes sense?

E: Yeah, yeah - that makes total sense. I think that's a really interesting way of... or just a helpful way of looking at UBI. Because there are... I dunno there has been lots of stuff around how it could be used by right-wing interests, but then it's also got lots of potential for yeah, leftish uses, but yeah, I think what you said about opening up conversations is important. So my next question was going to be - if and how are you responding to these issues? But you have already touched upon that with regards to your work and what you do. But if there was anything else you wanted to add...

I: Yeah, I think that's one thing, definitely, is that issue of low pay. Although I think it's important to recognize that most of the... most of the practical work, of implementing projects,

at the moment, addressing low pay is very much focused on the individuals who are in low paid work, rather than trying to address the bigger late market issues. You know, obviously there's lots of commentary and lots of kind of policy proposals but from what I can see this work on the ground is very much based on trying to support individuals to move out of low pay. Which is important, but it's only one side to the issue. You know, how... what are we doing, or could we do, to address the growth in low paid work, feels like it's more of a theoretical conversation than people doing very much at the moment.

E: Yeah

I: I was thinking about this yesterday actually, and about my own sort of personal experience of not post-work, because I'm still working, but with working... I don't do a 9 - 5, I don't have an employer, I structure my time by building days when I don't do work that I get paid for. And I was just kind of reflecting on that as, you know, not... not in any way to be radical choice, but it's done in a way because it suits me, and that made me reflect I think on how I feel that I'm in a very lucky position to be able to do that, to be able to manage that financially. And I think the conversation about, should we be working a four day week, a three day week, should we all work less? Is very... very contingent on how much you earn.

E: Yeah, absolutely

I: You know, the idea that we could all work three days a week and take up painting and look after our kids more - whatever it is - is very contingent on what we can afford, so I think... it was just a reflection to myself that the way that, the way that I balance paid and unpaid work and other stuff, I feel like it's... I'm quite privileged to be able to do that, I think

E: Yeah

I: And so, I guess the debate about post-work or anti-work, I guess there's a danger that it becomes quite a middle class... you know, wouldn't it be lovely if we could have lots of days off to do nice things [laughs], which then I guess brings you back around to the basic income debate, about, okay, how would we be able to afford that, how would everyone be able to afford to do that, so it's not just another thing that the middle classes have access to and others don't. So it's... so I was just reflecting on that yesterday, as a concern I guess

E: Yeah

I: What would it really look like, you know, if we all worked less?

E: I think that's thing, isn't it, there's definitely a tension there between time and privilege, and we can paint this ideal world in which it is... like you were saying, post-work where everyone's got free time, but actually, in actuality, what is that going to mean for different groups, and is it possible to sort of undo that tension or not

I: Yeah. Yeah. The other thing I was thinking about yesterday was the idea that is having loads of free time necessarily a good thing?

E: Mmm. Mmm

I: I think generally, we, as human beings, want to be doing something productive, whether it's paid or not, but you know, you only have to look at people who have been unemployed for

decades without being enabled or without finding something productive to do to know that it's incredibly depressing. So I don't think there's an autonomatic, I don't think that we can assume that just by the very fact of having more time to ourselves, we'll all be happier and healthier and feel better about our lives, you know? And there's a link to privilege there, isn't there, to have the means to do something nice with your time

E: Yeah, cause that's costly as well

I: Yeah, yeah. Anyone that's been unemployed even for a few months knows it's incredibly depressing to be sat around twiddling your thumbs, and, you know, if you weren't depressed to start with, you're probably depressed at the end, after a few months of it. So yeah, its... I'm sure you know far better than me, it's like all of these things, it's very easy for it to be an incredibly simplistic debate, which actually misses a lot of the broader context and you know, well... how do you make something like that work for everyone, rather than just be a nice-to-have for a small chunk of society

E: Yeah. Yeah. I don't know [laughs]. But these are questions that I'm circling around as well. With regards to how you were responding to these issues, in terms of what you were saying around low pay, and addressing that in terms of individuals, I was just wondering if you had any thoughts on how it might be addressed on a wider scale?

I: I think there's all sorts of options and as I say, most of them are just things that we sort of talk about, theoretically really, at the moment. So the project that I set up was focused on skills development, which seems to be affective to some people, to gain new skills, or improve specific work-based skills. So I think there's a whole other debate around adult skills policy and funding and does that work, and how that should be tailored. I think, I think on the supply side, it's very focused on the supply side of you know, what are individuals doing, what have individuals got to offer, but in terms of what does the market want, and what are the jobs out there, I think there's positive potential in autonomation for example, for autonomation to take over some of the really really crappy jobs, but then you're still in the position of how do you support those people on something else, but I think there is the positive potential in harnessing automation/AI etcetera rather than it being a big scary thing that takes away all of our jobs. It could be a way of freeing some people up from the worst end of things. And I think there's some... I think there's some potential in... well there's a need for greater sort of parity of esteem and pay in things that can't really be autonomated. So things like social care work, for example. The terms and conditions and the pay are so bad, you know. Where that comes from, you know, whether those employers of that industry itself is in a position to do much about that, you know, their budgets are so squeezed, it very quickly turns into this massive insoluble... how do you change an entire industry? Until, unless you can make some, some kind of bigger shifts in things like paid conditions in that kind of sector, you're always going to get the bottom end of those types of jobs being really hard work, really badly paid, and without a lot of investment in people's progression. So, I think there's lots of things you could do, there are some things that are more straight forward than others, and I think a lot of the reasons a lot of attention is focused on individuals is cause it's kind of easier, it's less complex than trying to tackle a whole sector or a whole system, to try and support individuals but then you're not doing anything about the fact that those jobs exist, and for a lot of people the only for them to progress and earn more money and to get a better job is to leave that employer and leave that job. And that job will still exist and still be crap. But that's much harder to address. Yeah that's much harder to address. So, yeah I think it's a really big and complicated sequence of... [laughs]

E: Yeah. Absolutely. Okay, that's great. So I was wondering if you could say a little bit maybe about how anti-work or post-work issues are being addressed by Autonomy. Don't worry if you've not had that involvement.

I: [shakes head]

E: No?

I: Ask Rob*!

E: Ask Rob*, alright yeah, I will ask Rob* actually! I've had a bit of an interview with him but I've got questions [laughs]. Um okay, so what would you... what do you understand a post-work society to be, and do you see this prospect to be feasible?

I: Oh my gosh, that's a big... good question. Mmm... well I think it's like I was saying earlier that right now, the leap from where we are now to something radically different, is just very hard to comprehend how you would go from where we are to something which you know, does postwork involve no paid work at all, or does it involve a more kind of humane balance between a bit of paid work and other things, and you know, as we were discussing, what are those other things? I think... I guess the question about what is post-work is such a big question, because, what do you want to replace it with? Do you want to replace it with leisure time or do you want it to be a recognition of other types of work. So, post-work as reducing the focus on paid employment, but recognising the work involved in every other sphere of life. Which feels more realistic, I suppose, to me. Because people are never going to stop having to look after their children or parents. Or, people won't stop wanting to volunteer or to do the gardening, or to grow vegetables. Those things are hopefully not going to disappear, they're all forms of work that are unpaid. So I guess that would be for me a more positive place to end up, that we value all forms of work more highly. And we're not obsessed with paid employment as much as we currently are. But I think we were discussing that the what-else do we will our days with is... it's not just going to happen by magic that we're all suddenly active, happy and vibrant citizens overnight, just because we have a day off. So it feels like there would be quite a process, or quite a kind of evolution to happen, to get to somewhere really significantly different. And I think, that - the somewhere different, is so hard to kind of get your head around now, because it's so many steps away. Things like... just, more people being able to work flexibly, more people being able to work from home, you know. Working in the way I do, as I generally work from home, I set my own schedule, if I want a day off, I can have a day off. I guess these are all small steps toward something different, but there is... there... our attachment to paid work as status and identity is so huge that that's... I have plenty of female friends who you know, have had kids, and taken a couple of years off paid work, and really felt that they'd lost something of themselves, in not going into work, and who kind of struggling with their own status and identity from not going to work. And that's... and it's not like they weren't busy and doing something important, but I think that is so ingrained in us, that who we are is what we do for work, and how you kind of unpick that, and how we find... how we develop our identities as something bigger than that I think is really challenging. And something I've personally find difficult as well, sometimes like cause I don't work for an organisation, you know, I'm just me. So even within a work identity, like not having an attachment to a place or a kind of entity bigger than yourself gives you something to identify with. I think these are really challenging issues but really interesting issues, that kind of, on an individual level are quite challenging, with regards to how we define ourselves outside of work. So I don't think I've answered your question at all!

E: No that was a really interesting answer, and has got me thinking a lot. That's something that I think about - that is one of my main research questions actually, around the centrality of work within identity formation, and you're right, what would we do if we had that three day weekend, it's not like we can automatically undo years of socialisation under a system, you know, from when we're four years old, has us developing towards 'what we do'... it's as fundamental as the verb 'to do'...

I: I think there's huge potential in that, it's something that we as individuals would have to really get our heads around, but culturally, you know, culturally and economically would be such a huge shift as a, yeah... it's a kind of decades long process it feels like, to be able to make a shift, to weening ourselves off this obsession with - that paid work is the big-all-end-all. A lot of my work has been around how do you support people into work and to staying in work, and to get a decent job. I guess I'm not coming from the perspective of you know, no one should have a job, because I do still think most of the time it is a good use of our time. And there are lots of things that we gain from paid employment which are valuable. But it's... But I think it is an obsession that means that it tips over into unhealthy, you know, an unhealthy focus and any job is better than no job, which is obviously not the case. So I guess there's an argument for just rebalancing our idea of what is good work, as well. Cause you still, you know you still get DWP saying work is the best route of poverty, still, now. When it so clearly isn't for a lot of people. So, yeah - how you manage to unpick that narrative at that level is... that feels like a long a way in the future

E: Yeah. For sure. Okay, I've done most of my questions, but I just wanted to ask if you had any thoughts about where you would see or envisage technology playing a role within anti-work or post-work?

I: Um, so I guess, the positive potential of freeing up people from the most laborious, unfulfilling manual or repetitive kind of tasks - you know, that's where technology could play a positive role. I guess also, it could - you know, I'm not an expert in any of this at all any of this technological side of stuff, but it could be, the question of what you do with your time in this utopian future, I'm 99% sure the technology would play a big part in that. I don't know what it would be... but in terms of, I guess, enabling us to connect and to find things, you know, to find engaging things to do with our time, I'm sure technology would play a part in that. And I guess even in potentially, in enabling everyone to benefit from that time. I dunno, thinking very very broadly, very vaguely, people with disabilities for example, or people who are socially or geographically isolated, that... how... technology I guess could play a part in enabling everyone to be able to participate in things... [laughs] I don't know. Yeah, I guess, all we hear so much about the doom and gloom of technology, robbing us of a future, but I think there is a lot of potential for it to be... for it to be a positive tool, although obviously not a tool that has yet enabled us to work a fifteen hour week, as has been promised. But that's about what you do with it isn't, that's not about the technology itself

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