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Discourses of Digital Difference: A discursive study of the relationship between media representations of age and digital life and the identity work of 'older' digital professionals.

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To the Department of Organizational Psychology, School of Business, Economics and Informatics, Birkbeck, University of London

I declare that all work presented represents the author's own work

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Abstract

This research explores the relationship between wider media discourses linking age and digital life and the identity work of 'older' professionals working in the digital technology sector. It synthesises wider discursive explorations of age-technology identifications with accounts from a professional group charged with designing, developing, and delivering contemporary digital platforms and products.

The digital technology sector is the fastest growing sector in the UK economy (Department for Digital, Culture, Media and Sport, 2020). While age is firmly legislated for and located within a wider workplace diversity agenda, media reports of age discrimination and bias within this sector persist (Hymowitz & Burnson, 2016; Wickre, 2017) alongside speculation on whether, and to what extent such ideas are socially perpetuated (Iversen and Wilisńka, 2020).

Through the analysis of UK online news media and participant interviews conducted via a longitudinal study, this study explores the recursivity and interdiscursivity of unifying age-technology discourses between online news media texts and the identity accounts of older digital technology professionals. Using a longitudinal critical discourse analysis, I explore how technology is enrolled in the reproduction and reification of age difference more broadly through the generational construct and how such discursive linkages persist and evolve over time. I describe the ways such discourses are manipulated by this professional group as they negotiate their identity work as an older digital technology worker.

This study contributes to qualitative research through a methodologically original longitudinal study drawing on online data research methods. This research responds to calls for challenge to the generational construct particularly in work contexts (Parry and Urwin, 2021) and explores the identity work of a burgeoning, under-researched (and ageing) professional group (McMullin, Comeau & Jovic, 2007). Finally, it presents a fresh critical perspective on naturalised 'discourses of difference' in relation to age (Wodak, 1996, p.126) previously confined to studies of racism or sexism (van Dijk, 1996).

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Chapter 1: Introduction to the thesis

1.1   Research Context

It is now widely accepted that over the last 30 years we have lived through unprecedented global technological change, described as a 'digital revolution' (Clarke, 2012). This is no longer an issue of debate. Academics and social commentators now turn their attention to conceptualising the nature of the revolution, analysing its effects, and predicting the future global digital landscape. There are calls for ways to capitalise on our increasingly technologised lives (Gripenberg, 2011) to 'boost the digital revolution' (Department for Digital, Culture Media & Sport, 2020) to enhance our learning, economy, productivity, social and cultural experiences. However, there are also concerns about future risks associated with lives lived digitally such as online identity, trust, surveillance, cyber threats and information verification (Zuboff, 2019). Such risks raise further concerns about new inequalities situated within an increasingly digital world (Helsper, 2021).

Over the last ten years the conversation has evolved from how web 2.0[1] can enhance our work and leisure activities to discussions of the opportunities and risks of increasing technologisation. Robotics, artificial intelligence, and online automation are now associated with a 'third wave' of digital revolution (Office of National Statistics, 2017; Bank of England, 2021) or a fourth industrial revolution (Philbeck and Davis, 2018) with major implications for the world of work (UK Commission for Employment and Skills, 2016). The focus is now on how the power of digital technology can help us solve current and predicted global challenges as we endeavour to respond to demographical and biological changes impacting the human experience.

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[1] Web 2.0 is described as the second phase or stage of internet development, a move from static web pages to greater user interaction including content generated by users (user-generated content) and social media. It is understood as more interactive and collaborative than the first iteration of the World Wide Web (Murugesen, 2007)

Chapter 1: Introduction

Positive developments such as increased longevity and improving health in old age (Government Office for Science, 2016) have been a contributing factor in changes to how we work and how long for (Department for Business, Innovation and Skills, 2011). We are now increasingly digital citizens and workers, working later and for longer, in ever more technologised roles (Department for Digital, Culture, Media and Sport, 2019).   These broader social and demographic changes and increased digital exchanges within work, domestic and leisure contexts link together the topics of age and digital life in unprecedented ways. These have increasingly been matters of public and political focus, from a digital skills shortage (Select Committee on Digital Skills, 2015) to what constitutes, influences and how we manage our digital identities (Department for Digital, Culture, Media and Sport, 2021).

Ideas of a 'digital divide' underpinned by social and economic exclusion have been the topic of concern for policy makers and practitioners for some time (Friemel, 2016; Helsper, 2008; 2017; van Dijk, 2020; 2006) and continue to this day in a post-COVID world which has accelerated calls for ensuring online access for all (The Guardian, 2021). However, increasing concern about provision for perceived age-related divisions in terms of technological access, use and capability (Office for National Statistics, 2019; Age UK, 2015) at times described as a 'grey digital divide' (Friemel, 2016; Morris & Brading, 2007; Quan Haase et al., 2018) has driven calls to address a perceived age-related (and evolving) digital skills gap. The concept of grey digital divide is supported by popular rhetoric about naturalised advantage of 'growing up digital' (Tapscott, 1998) where exposure to computing technology since birth is constructed as being more socially and economically advantageous. From such understandings, a broader discourse underpinned by ideas of 'digital native' and 'digital immigrant' (Prensky, 2001) fuels the idea of a naturalised, and absolute, digital division on grounds of age.

While evidence to support such ideas is inconclusive and explored in more depth in Chapter 3, nonetheless there have been calls for industry, education, and government (Office of National Statistics, 2019) to attend to the 'divide' by improving access to and

training in digital technologies. Concerns about division also underpin ideas about naturalised age-related 'digital differences' (Friemel, 2016) where attention has turned from if individuals and groups are accessing and capable using technology to the choices, access and nature of their interactions within certain platforms and digital devices.

Running in parallel to such debates is the evolution and success of the digital technology sector. This sector creates the products and services that underpin the digital economy, from construction to consumption. It is the fastest growing in the UK (Office of National Statistics, 2015) having contributed £149 billion to the UK economy in 2018 (Department for Digital, Culture, Media and Sport, 2020). While age is firmly legislated for more broadly in society and within the workplace diversity agenda (The Equality Act, 2010), discrimination and marginalisation based on chronological age continues to receive much attention in this sector. Reports of sector-based age bias and discrimination persist in being of media scrutiny (Henley, 2014; Wickre, 2017). Despite such interest it has received minimal academic exploration or attention beyond a handful of texts exploring claims of age-related discrimination in Silicon Valley, the region of the San Francisco Bay area that is home to various technology companies such as Google, Facebook and Apple. The youth-orientated nature of such start-ups during their early years has received more recent academic exploration (Fisher, 2018; Rosales & Svensson, 2021; Wachter-Boettcher, 2017). However, UK-researched studies of age identity within this sector are rare and relevant scholarship which does exist is explored more fully in Chapter 3.

There is ongoing speculation of the potential challenges associated with age differences and divisions in UK life (Government Office for Science, 2016), and an acceleration of digital skills development for UK citizens including contemporary specialist skills such as coding (Department for Education, 2021). Such concerns run alongside an emphasis in criticality of the UK digital economy and sector for the UK and global economy (Department for Digital, Culture, Media and Sport, 2020). Yet there is minimal research exploring these topics in combination and, in particular, in exploring the significance of

the broader discourse constituting age, skills and digital work. This thesis seeks to address this shortcoming outlined in more detail below.

1.2.   Thesis Overview

While the UK government define the older worker as over 50 years of age (Department of Work and Pensions, 2021), definitions of what constitutes 'older' across different sectors and roles can vary (McCarthy et al., 2014) and is discussed in more depth in Chapter 3. My research seeks to address this issue by interrogating the ways digital life and chronological age are discursively linked in UK online media and the potency of such discourses within the identity work of older digital knowledge professionals. In this study, 'older' is defined as over the age of 35 and the rationale for this cut-off point is discussed in more detail in Chapter 2.

I begin my empirical work by exploring age-technology discourse within UK online news media as an example of a discourse situated within broader social life, what can be described as illustrative of both text and context from Fairclough's Model of Text, Interaction and Context (Fairclough, 2015). I then explore the extent to which, and in what ways, such discourses are recursive in the identity work[2] of 'older' digital sector professionals across two research phases at least one year apart. Through an examination of such discourses in two discursive realms – online news media and participant interviews – I aim to offer greater understanding of their interdiscursivity, how such discourses sustain and evolve and fundamentally how they influence identity negotiation within an older professional group. Furthermore, by exploring such discourses over the course of time, I offer a critical appraisal of the ideological positions about age and identity

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[2] Identity work constitutes situations and circumstances where individuals negotiate, modify and adjust their behaviour in order to be accepted, engaged with and listened to. Chandler (2017) describes identity work as involving the both the negotiation of self-identity and collective identity, building on work of Watson (2008) and Sveningsson and Alvesson (2003).

which such discourses deploy. Finally, this thesis discusses the implications of how such discourses sustain and evolve for this professional group.

Grounded in an interpretivist ontology and critical epistemology this research is concerned with the ways 'reality' and 'knowledge' are socially constructed in relation to age, the norms and naturalised beliefs of 'how things are' in the world and how identity is offered within such contexts. I argue that both exposure and participation in discourses that position age as a determining factor of technological engagement and skill risks problematising, positivising and therefore differentiating age groups in ways that exclude and privilege certain subjects.   I interrogate the discursive process which takes place and how it contributes to ideas of age-related digital differences which may evolve over time as both we and digital technology age and evolve. Such socially produced ideas in turn contribute to identity work by individuals and group who accept and engage in such 'discourses of difference' (McMullin, Comeau & Jovic, 2007; Wodak, 1996).

The key contribution of this research is to break new ground in three ways: by exploring the ways age, technology, and discourse intersect across two discursive sites, where sites is defined as the location and context of the discourse. I outline how such discourses evolve (or not) over time and implication such interdiscursivity may have for an ageing professional group intrinsically connected to evolving technology. I argue that the topics of age and technology are so closely entwined in popular and institutional discourse that it is difficult to separate them. This concomitance is discussed in more detail in Chapter 11. I emphasise that it is through exploring how such topics intersect that age/technological discursive norms and their potential power effects can be interrogated and challenged.   Such scrutiny is achieved by analysing discourses critically using Fairclough's model of Text, Interaction and Context (Fairclough, 2015) as a theoretical base discussed in more detail in Chapter 4 as this model enables an examination of how such discourses are reproduced at individual, organisational/institutional and societal levels.

Chapter 1: Introduction

This thesis supports the view that digital technology plays an important role in how identity, particularly age as identity dimension is offered. I outline the ways that digital technology is enrolled to justify age-related differences and divisions which are in turn achieved through identity work. These are enacted locally and institutionally through the recursivity, sustainability and evolution of discourse which I suggest moves between different discursive sites (Fairclough, 1995). For example, broader social discourses which link age and technology could also exist and manifest themselves within institutions (such as organisations or professions) which are then subsequently enacted in localised, individual 'conversations' or accounts. Preconstructed, pre-existing, socially accepted ideas about any given phenomena may contribute to broader ideologies (Fairclough, 2015; Foucault, 1980) about power struggles between actors within our digital lives. This can happen in often subtle, indirect, and implicit ways and the theoretical underpinnings of such phenomena is discussed in Chapter 4.

1.3. Background and Research Interests

My interest in researching the ways in which age and technology are discursively linked began in 2013 during the completion of my MSc in Occupational Psychology at Birkbeck. During this time, I read a paper called '*Digital Natives, Digital Immigrants'* (Prensky, 2001) which kickstarted an enduring 'native v immigrant' debate in popular culture, academic and practice. Prensky claimed that due to our increasingly digital lives, individuals born before 1980 - 'digital immigrants' - would be naturally disadvantaged in all aspects of life in future as a result of not 'growing up digital' (Tapscott, 1998). Working in communications of digital transformation I recognised such ideas as potentially having socio-cultural power effects. This has indeed been the case: the idea of 'nativism' continues to be an accepted and normalised differentiator of technological ability and engagement based on age. The construct endures in media accounts: offered as a legitimising construct from social commentators such as Tim Berners-Lee (The Guardian, 2021) but also used within Government policy (Department for Digital, Culture, Media and Sport, 2017). Since Prensky's original paper was written in 2001, his argument has

been fiercely challenged on empirical grounds discussed more in Chapter 3 (Helsper & Enyon, 2010; Bennett, Maton & Kervin, 2008). However, despite such criticism, ideas of a native/immigrant dualism, and of chronological age as indicator of technological exposure and affinity have persisted.

As debates surrounding the empirical robustness of age-related technological differences continue, I became instead interested in the social and institutional norms reinforced and reproduced by age-technology discourses. I was intrigued by what that would mean for future ideas, interpretations and meanings attached to age. I questioned in what ways would a fundamental belief that age-technology differences exist mean for future opportunities of the ageing population and in particular older workers. Specifically, I questioned what this meant for a sector yet to experience an older demographic due to its infancy and furthermore what it might mean to age and be older within a such a sector. I was fortunate in having experience of this sector, access to participants within it, a background and interest in media and communications and the benefit of completing a PhD part-time. I had the opportunity to engage in a longitudinal study involving an under-researched professional group which I had both experience of and exposure to. Furthermore, I queried whether my own identity is influenced by, and reproduces or reifies broader discourses linking age and technology, and what that might mean for me professionally. Such reflexivity is discussed in more detail in Chapter 11.

1.4.   Locating the literature

My exploration of the literature began with establishing the literary pillars of my research namely: age; technology and identity and how these have been approached discursively, individually and in combination. Rather than approach identity as a standalone topic, I have synthesised relevant identity research in relation to age, technology and discourse as a connecting empirical thread throughout the literature review and highlight these within the relevant literature chapters 2 and 3.

1.4.1. Locating Age Discursively

I begin in Chapter 2: Approaching Age by briefly summarising how age has been traditionally researched outlining the contribution of biomedical, lifespan/lifestage, and chronological studies to situate the historical contribution and limitations of this research (Palmore, 2005). Variable based, quantitative and positivist approaches provide a valuable contribution to our understanding of the philosophical and empirical roots of how age stereotypes come into view. However, I outline the conceptual and methodological limitations attached to quantitative age research, for example, studies which employ large scale survey methods to map differences in variables across (much disputed and poorly defined) age divides. Furthermore, studies based on ideas of biological and cognitive decline can become sociologically assimilated (Gullette, 2004; 1997; Pickard, 2016). Such models of ageing impact policy to the extent policy makers frequently employ a 'terminal drop' model homogenising all older people as struggling (Wilson, 1991). Post-structuralist and qualitative studies of age and ageing can enable greater understanding of the lived, and socially constructed orders of age, as organising principle for our lives (Bytheway, 2005; Gergen, 2009; Gergen & Gergen, 2000; Mortimer and Moen, 2016). Following an exploration of socially constructed understandings of age, I explore how age discourses are utilised to reify and reinforce difference and division within and between different contexts and in whose interests.

Research on the lived experience of ageism and age discrimination (Ayalon & Tesch-Römer, 2018) within work and organisational related contexts (Fineman, 2011; Thomas et al., 2014) has offered rich critical insights into individual and collective experiences of age and ageing at work. The role of discourse and the discursive construction of age in such contexts, particularly the subject position and construction of the older worker (Ainsworth, 2001; Ainsworth & Hardy, 2007; 2008; Riach, 2007) highlights the problematisation of age and ageing in work contexts and the related outcomes. The older worker subject position and broader discourses of age at work illuminate age as a contributing factor to difference, exclusion, and discrimination in certain work-related

outcomes (Fineman, 2011) discussed in more detail in Chapter 2. While research desists claiming that discourse is a causal factor in ageist attitudes and behaviours it is widely understood as a potent contributing factor (Phelan, 2018). I was keen to understand more about the potency broader age discourses may have for a specific professional group.

Generation is frequently used as a legitimised, naturalised organising framework for age (Kelan, 2014), a means by which to categorise age and ideas of differentiation between age groups based on assumed cultural and social affiliations. I provide an overview of the challenges to 'generation' and the generational-divide construct (Woodward, Vongswasdi, & More, 2015) and I specifically attend to how this construct legitimises age differences and divisions in relation to digital technology (Pemble, 2018).

Through an exploration of age discourses in popular media, I examine how historical understandings of age are discursively realised and ultimately normalised (Mason, Darnell & Prifti, 2010). Popular media provided an ideal discursive site from which to draw on to understand broader social discourses at play and explore their transference or interdiscursivity (Bhatia, 2010; Fairclough, 2015) to other contexts such as work and institutions. I draw on research which outlines the specific nature of ideological framing and discourse within media sources and their potency on contemporary lives (Machin & Leeuwen, 2007).

I was mindful within the literature review that age in digital life was also rooted in generational understandings due to other associated discursive constructs of nativism, growing up and being born digital. This evolved the debate from binary digital native/immigrant duality to one of group belonging and membership and has become connected to ideas of social capital resources such as 'digital capital' (Ragnedda and Ruiu, 2020) and 'digital wisdom' (Prensky, 2011), politically motivated within a 'digital democracy' (Brown & Czerniewicz, 2010). It was clear that historically understood social identity and acceptance threat (Branscombe et al., 1999) whether digitally connected or otherwise tended to linger both in organisations and wider society. This potentially

creates future limitations for how topics are to be understood and explored which fuelled my interest in adopting a critical lens. I wanted this research to respond to the call for more generational research specifically in relation to contemporary understandings of age in workplaces (Lyons & Kuron, 2014). Yet I was particularly motivated to interrogate the ways generation and technology have become persistently discursively linked (Sink and Bales, 2016; Woodward, Vongswasdi, & More, 2015; Thomas, 2011) and the implications this has for work contexts and workers.

I explore research interrogating the foundations and development of the 'digital native' construct and the limitations of such explorations due to being mostly confined to educational contexts (Bennett, Maton & Kervin, 2008; Bennett & Maton, 2010; Helsper & Enyon, 2010; Palfrey & Gasser, 2008; Selwyn, 2009; 2008). Additionally, broader studies on the role of discourse in contributing to digital divide rhetoric is explored (Bott, 2011; Corrin et al, 2011; Woodward, Vongswasdi, & More, 2015). While a more complex pictures of multiple digital literacies and preferences are offered by the literature (Gripenberg, 2011) 'older' people (despite varying definitions) continue to be problematised and homogenised as digitally lacking (McMurtrey, et al. 2012; Woodward, Vongswasdi & More, 2015). I was curious to understand what other 'older worker' identities may exist beyond the boundaries of current extant literature which to date has not drawn on how age and technology are socially constructed and discursively linked, and in whose interests such linkages may serve (Fairclough 1992; Phillips & Hardy 2002; van Dijk 1997a).

After attending to the way in which age has been empirically approached, linked to digital life and the contribution and shortcomings of such approaches, I discuss the contribution of relevant theoretical strands exploring our relationship with technology in and outside of organisations. Ideas of technological 'entanglement' (Orlikowski & Scott, 2008) suggest a inseparable relationship between us and technology often underpinned by a rhetoric of digital determinism (Bennett & Maton, 2010) that suggests how we live and work in future will be dictated and determined by technologically-driven social and institutional

structures. I outline the implications of such ideas when connected to age. I also discuss the contributions and limitations of the field of gerontechnology, which specifically explores the relationship between older age and technological product and service development, the limitations of the current field and the opportunity in broadening gerontechnological approaches to explore all ages. I offer these fields of research to set the groundwork for how age and technology have been empirically combined.

1.4.2. Locating age within the digital economy and digital sector

One of the early challenges of the literature evaluation in this research journey was resisting the temptation to dwell too closely on previous studies of IT workers. This is because the digital technology sector, discussed in more detail in Chapter 3, is distinctive from IT in relation to how it serves the broader digital economy. Explorations of the IT worker provided a valuable contribution to some of the experiential challenges facing older IT professionals in connection with professional identity work but did not provide insights on the specific challenges impacting older people in the sector serving the digital economy. This highlighted potential research opportunity for further exploration, particularly considering media interest in age discrimination within the sector as discussed.

At the start of this research journey in 2013, empirical and interdisciplinary research into the role of identity and digital platforms and devices was confined to understanding skills, capabilities, and behaviours within given contexts such as work or educational sectors. As I progressed throughout the thesis the part-time longitudinal design enabled me to follow the breadth and development of work published from 2013 onwards, discussed in a review of the literature in Chapters 2 and 3. Key texts emerged which provided vital insights into the cultural and social dynamics of the digital sector and the power dynamics connected to digital skill and professionalism (Ragnedda, 2020; Ragnedda & Ruiu, 2018; Rosales & Svensson, 2021) but many were limited to the US based study. UK based empirical explorations of age in relation to the digital economy and sector (from start-ups or small-medium enterprises to major technology firms such as Google, Twitter and

Facebook were minimal, in their infancy, located in mostly practitioner material or focused on employee experiences of very specific occupational groups such as gameworkers (Deuze, Martin & Allen, 2007) where age as identity dimension was not centre-stage. Reasons for lack of empirical exploration of this phenomenon are often cited as political and connected to institutional access constraints and lack of participant engagement (Chang, 2019).

In exploring identity scholarship encompassing age as identity dimension and specifically the role of identity within work contexts led me to extant research in professional identity. Research exploring age at work is still a "small but growing community" (Riach, 2016, p.261) and while there is an established body of work into of older workers, older IT workers, but as discussed little extant research on older digital technology sector workers. This sits in stark contrast to the range of media and popular culture sources that characterise the US and UK digital sector as economically vital, innovative, and burgeoning but enduring age discrimination leading to industrial action (Wickre, 2019). Debates have continued to challenge wider ethical codes of age in the digital technology sector and its image of a youth-obsessed culture, particularly within the confines of Silicon Valley in the US (BBC, 2017; Scheiber, 2014). The principal aims of this research were to build on the contributions of research that crosses age, identity, and technology by specifically exploring the ways they intersect, are discursively linked, and the wider role of identity in negotiating age-technology discourses.

1.5. Research Questions

The development of the research questions was an iterative process which ran in parallel with the scoping and reviewing of the literature. The questions are as follows:

• In what ways are chronological age and digital life discursively linked in UK online news media?

- To what extent and in what ways are such discourses offered in the identity accounts of 'older' digital professionals?

- What are the implications for how such discourses sustain and evolve for older digital sector professionals?

1.6.   Research Design

This research consists of a longitudinal, qualitative study spanning a seven-year period, divided into the following phases outlined in Table 1 below:

Table 1: Research Phases

Date	Research Phase	Time period
October 2014-December 2014	**Pilot Phase:** Collection and Selection of Google Alerts/online data Conducting 3 x pilot interviews Initial analysis Using pilot to finalise research questions, online corpus and participant profiles	3 months
January 2015-March 2016	**Phase 1** Collection and selection of 20 x UK online news stories Conducting 15 x participant Interviews Analysis of online news stories Analysis of interview transcripts Initial comparison of findings	15 months
April 2016-October 2017	**Phase 2** 15 x Interviews 20 x UK online news stories selected Data Analysis	19 months
Comparison of Phase 1 and 2	**Comparison Phase** November 2017-May 2018 Data Analysis /Final comparison of findings from each phase	7 months +

Data collection of phases one and two were conducted at least one year apart. They involved repeat interviews with the same participants. Interview participants consisted of

fifteen older digital professionals over the age of 35 at the point when the research began (2013). Full profiles of each participant are provided in Chapter 5: Methodology. Phase one and two involved the critical discourse analysis of 20 UK online media sources and 15 semi-structured interviews. Phase three consisted of the comparison of discourses between the first and second phase.

Due to my professional and academic background I was interested in exploring popular media and in particular news media as a potential source of data analysis. Much has been written from a critical discursive standpoint concerning media discourses in general and I have provided a critical overview of such material and their contribution to our understanding of popular age discourses in Chapter 2. I could find no empirical explorations of how age and technology are synthesised within media discourses despite the prevalence of age/generational-technology labels used in media sources such as 'digital natives', 'silver surfers', or in connection to devices and platforms specifically such as 'snapchat generation' common within online press media. By engaging in closer scrutiny of how age and technology are discursively linked in popular media (in this case news media) I could subsequently compare the extent to which such discourses are present within a broader social and discursive domain and whether such discourses transfer to individual accounts.

Research participants were drawn from a range of roles and professions within the digital technology sector and participants selected were over 35 years of age at the start of the research process. In terms of how this constitutes being an 'older' worker within the sector, my rationale for this based in the 'digital native' construct. I began my research in 2013 and anticipated commencing interviews in 2015, 35 years after Prensky's 'digital native' cut off point of 1980 (Prensky, 2001). Sources are varied in terms of the average age of the digital technology sector worker, and the age of 'older' technology workers (discussed in Chapter 3) is placed between 27-33 years of age depending on the organisation they work for, such as Google or Facebook, (Business Insider, 2021) recently documented by Rosales & Svensson (2021). 35 years of age seemed like a good cut-off

point and would consist of workers also within their 40s and 50s (and did), where over 50 is officially classified by the UK Government as older (Department for Work and Pensions, 2021). I was also aware of the broader social dynamics at play and in 2007, Mark Zuckerberg, Facebook CEO's gave a speech commenting that people under the age of 30 were smarter than older people (Danou, 2021).

All research participants in this study worked in the early iterations of 'digital tech' sector and have therefore witnessed and been part of the broader 'digital revolution' in roles and contexts supporting early internet-related work. Therefore, as individuals they have matured alongside the sector itself, moving between organisations and roles which became increasingly specialist. Such roles evolved with the introduction of social and mobile technologies and diversification of products and services provided by the sector. Through an exploration of identity accounts, I aimed to explore insights to the age-related challenges, opportunities and tensions within an under-explored professional group and the role of discourse in such processes. Located within a wider social convergence of working later, living longer and increasingly technologized lives it is of paramount importance to explore where social constructions linking these ideas can advantage or disadvantage individuals and groups in future. The identity work offered by this group provides important insights to wider understandings of professional credibility, desirability, competency and capability as they age and place the spotlight on challenges which may (or may not) be sector specific.

1.7. Structure of Thesis

The structure of the thesis is as follows:

Chapter 1: Introduction: this chapter provides an overview of research context and researcher interest which led to the broad research aims. From there I situate the aims

within the relevant literature and outline how that led to formulation of the final research questions, the thesis design and structure and concluding points.

Chapter 2: Approaching Age: Here I provide an overview of the age literature with specific attention to scholarship exploring the social construction of age and age identities particularly generational constructs which exacerbate difference, stereotypes and lead to labelling. I narrow the lens to explore age discourse scholarship at work, the significance of the generational construct in work contexts and the construction of the older worker in particular attending to how this is discursively achieved. I explore the role of identity and stereotypes within such discourses. I critically examine research into how age is represented in the media as a contemporary public discursive domain which constructs age in ways which can exacerbate current differences and divisions and create new tensions.

Chapter 3: Age and Ageing in Digital Worlds: this chapter provides a critical overview of scholarship exploring how social-technological divides and differences have been historically understood and researched and the role of age in such explorations. I specifically interrogate how age is discursively 'technologised' and the role of generational discourse in enabling this. From understanding where such divides and differences are located and how they have been empirically researched, I then explore scholarship of age and/or identity discourse within the digital economy, with particular attention to extant research of digital technology professionals. I specifically examine empirical work that synthesises these topics discursively to identify avenues for further research.

Chapter 4: Theoretical framework: This chapter provides an overview of the rational for conducting this study using an interpretivist ontology and critical epistemology using Fairclough's three tier model and critical Foucauldian theory.

Chapter 5: Research methodology: In Chapter 5 I outline how I conducted my research: from selecting and analysing online UK news data, recruiting, and interviewing

participants, and the processes of data management and analysis. I also discuss the process of conducting a longitudinal research methodology across two phases.

Chapter 6: Phase 1: Analysis of UK online data: This chapter outlines the analytical findings of my research drawn from the first phase of media analysis. It examines the extent to which the three main discourses present in the providing the three discourses which were present in the data.

Chapter 7: Phase 1: Analysis of interviews from older digital sector workers: This chapter outlines the analytical findings of my research drawn from the first phase of interview analysis. It examines the extent to which the three main discourses present in the media data are found within the interview data.

Chapter 8: Phase 2: Analysis of UK online data: This chapter outlines the analytical findings of my research drawn from the second phase of media analysis. It explores what discourses which link age and technology are present in the second phase of data collection.

Chapter 9: Phase 2: Analysis of Interviews from older digital sector workers: This chapter outlines the analytical findings of my research drawn from the second phase of interview analysis. It examines the extent to which the three main discourses present in the media data are found in the second round of interview data.

Chapter 10: Comparison of data analysis: This chapter presents a succinct comparison of the findings from both phases of research and in doing so provides a detailed response to the research questions set.

Chapter 11: Discussion and Conclusion: This chapter discusses the unique scholarly contribution of the thesis with respect to extant literature discussed in Chapter 2 and 3

and reflects on the limitations and advantages of the research process. This chapter offers ways this work may inform future research, policy and practice.

1.8.   Research Contribution

This research contributes to existing scholarship of age, identity, digital technology, the digital technology sector by exploring how such topics intersect and have been approached discursively, particularly via a critical lens. This study also provides a valuable contribution to longitudinal and repeat methodological approaches and studies which utilise online data. This is achieved through a scrutiny of how established and normalised discourses present within popular news media are discursively performed in the identity work of older digital sector professionals. Through critically evidencing the recursivity and reproduction of such discourse across popular media and professional life I argue such findings contribute to sustaining current and future digital divides drawn on age-related lines.

The research also intends to move the age-problematisation debate within the digital sector beyond speculation and sensationalist media accounts which are mostly US based (Wickre, 2017) or focused on UK start-ups or small to medium enterprises (Sevilla, 2019) to a broader discussion about contributing factors to social difference and division posed by age-technology discourses. This research also contributes to our knowledge about an under-scrutinised professional area providing insight to aid future research and practitioner work in the field of age, digital life and communication. Using an innovative methodological means via a longitudinal study also offers a contemporary lens to the existing body of longitudinal research.

1.9.   Concluding Points

The sustained success of the UK digital economy has subsequently generated interest in how discourses of digital life can help us understand and navigate the challenges (and potential future divisions) of life lived both on and offline. Such an exploration moves age-technology associations beyond being defined purely in terms of technological usage, skills, and access to more subtle, nuanced yet powerful influences. This invites future explorations using qualitative methodologies such as discourse analysis to understand the more subtle and contextual contributing factors to legitimised practices of division and inequality.

This research presents a launchpad for exploration of future implications and the conditions or 'episteme' (Foucault, 1972) for further age-technology divisions, which can potentially regulate attitudes and behaviours. By providing insights into local enactments of contemporary discourses and reflecting on their broader social and discursive influences I illuminate previously unseen (Fairclough, 1995) age-technology related discourses and the attached risks of normalising such discourses (Benson & Brown, 2011; Cody, Green & Lynch, 2012; Cogin, 2012).   Fundamentally, this study offers an interrogation of the ways discourse can normalise, legitimise and reproduce ideas about differences reproducing power struggles (Fairclough & Wodak, 1997) in ways deemed socially unacceptable if connected to race, disability or gender.

Chapter 2: Approaching Age

2.1. Introduction

This is the first of two chapters (Chapter 2 and 3) in which I review the relevant literature that underpins this thesis. This chapter aims to situate this thesis within a critical exploration of how age and ageing have been theorised and researched to date. I outline specific contributions of extant age scholarship to present-day understandings of age in contemporary work contexts.

In this chapter I explore age research in four ways: how it has been conceptualised in Section 2 and how this has created fertile ground for age stereotypes. Next in Section 2.3, I explore how age has been constructed through stereotypes and generations which unveils some of the ways in which age has been problematised. In Section 2.4, I offer the significance of contexts for age discourse, exploring the contexts of work and identities of age at work such as the 'older worker' and age depictions within media texts. Throughout each section I offer a discussion of relevant scholarship exploring identities of age and age as identity marker to outline the complexities of identity more broadly and illustrate the complex influencing factors that impact our understanding of age.

Central to my research is the scrutiny of how age is constituted within linguistic processes (van Dijk, 1997) moving beyond discourses of age and ageist discourses and binary dualisms of old vs. young to exploring naturalised understandings of age as social product (Mortimer & Moen, 2016). I do not offer definitive views of terms such as 'older' 'old' and 'young' but instead outline relevant research which challenges current presumptions about them and how they have become institutionalised (Thomas et al., 2014). Similarly, when using the terms 'age' and 'older worker' I refer to their discourses.

I conclude this chapter with an exploration of the contemporary influences on present day understandings of age, particularly the contribution of critical and intersectional

approaches to age and ageing (Calasanti & King, 2015). I develop this theme in Chapter 3 which offers how age-digital linkages problematise and positivise age through technological connections which form taken for granted discourses that pose current and future risks of exclusion and discrimination.

2.2. Conceptualising Age

Age studies constitute a broad and evolving topic (Pickard, 2016) encompassing the scientific to the sociological study of what is means to be a certain age, young, old, older and the process of ageing. Age studies draw insights from biological, medical, psychological and sociological disciplines (Phillipson, 2013) each with their own contributions and limitations linked to the origins of how age has been theorised, conceptualised and empirically researched. The implications for contemporary contexts particularly work and organisational settings are discussed below.

2.2.1.   Biomedical Perspectives

Bio-medical approaches to ageing focussed on 'senescence' or physical deterioration of bodily and cognitive functions associated with getting older (Khosla et al., 2020; Katz, 1996). Such studies have proven valuable in furthering our understanding of conditions such as dementia (Katz, 1996; Jorm, 1998) and building successful models and interventions to alleviate or treat age-related disease such as Alzheimer's or arthritis (Depp & Jeste, 2006). Such studies tended to be quantitative in methodological approach even if other aspects of biology and identity are explored, such as the relationship between age, sex, race and dementia (Zhu et al., 2021). Such quantitative and variable based studies tend to focus on the causal linkages and correlation between variables to arrive at potential treatments, risk mitigation and age-related condition alleviation. While providing valuable and often critical insights into potential treatments to enhance quality of life and managed decline, such studies do not attend to any broader spectrum of age conceptualisation in terms of social and lived experience/s. The focus on associations of

physical and cognitive decline with ageing can be empirically limiting and lead to a wider political and social response to how ageing and being older is constructed and perceived.

In response to conceptualisations of ageing as understood in terms of decline and degradation, a focus on 'ageing well' and 'active ageing' (Department of Health, 2014) has been offered by UK National Health Service and private healthcare providers. These initiatives aimed to increase a eudemonic lifestyle through increased physical activity, social interaction and even postponing retirement and prolonging employment (Foster, 2018). Rooted in 'successful ageing' ideologies (Baltes & Carstensen, 1996; Bowling & Dieppe, 2005), and subsequent discourses (Rozanova, 2010) 'ageing well' shifted responsibility for the prevention of disease and provision of health care needs to the individual (Cosco et al., 2014). Yet such ideas are underpinned by a predominantly western approach to retirement norms which can be hindered by other influencing factors such as social class (Radl, 2012). Such ideas link the adoption of lifestyle measures with lifespan extension, potentially connected to prolonging employment and therefore productivity, rooted in neo-liberal ideology which is discussed in more detail in Chapter 4. Whether concepts are labelled as 'successful ageing' (Depp & Jeste, 2006), 'ageing well' (Department of Health, 2014), 'positive ageing' (Featherstone & Hepworth, 1995), 'active ageing' (Foster, 2018) or the now discontinued 'age positive' Government agenda (Department for Work and Pensions, 2013) such concepts suggest the alleviation and impediment of a naturalised process implicating the ageing process as inherently negative and undesirable (Steele, 2020).

The association of ageing with inevitable decline (Butler, 1990) calls into question the personal versus societal responsibility for how one ages (Cosco et al., 2014) suggesting being older is a social burden and social risk (discussed in Section 2.2.4: the problematisation of age). The construct of successful ageing also fails to recognise the individual and personal ways which we age, the meanings and values we attach to different experiences of age as an identity dimension negotiated more broadly in line with other identity strands which can be contested and conflicted (Warren, 1998). All of which

suggests the nature of the aged identity category and being older is "the most devalued category of all" (Pickard, 2016, p.3). This in turn also limits the potential to view and construct the process of ageing as only one of positivised and managed decline (Gullette, 1997; Tretheway, 2001).

2.2.2. Socio-Psychological approaches to age

Psychological and sociologically informed approaches, such as theories of life-span, life-stage and chronological age have attempted to address the broader social and cultural meanings attached to age. I will now discuss these in turn.

Mid-19th century developments in birth registration introduced chronology as a means of classifying people by age (Bytheway, 2005) which became connected with different life stages (Mintz, 1993) and lifespan developmental theories. Such theories were connected to ideas of Erikson's stages of psychosocial growth (Gross, 2020) and adult development (Levinson, 1986) where chronological age was adopted as the normative and dominant social marker of ageing, as an indicator of life stages (childhood, adolescence, adulthood and old age). As such it was treated as an empirically robust category. For example, adolescence was described and socially accepted as a period of "storm and stress" (Hall, 1904, p. 75), a conceptualisation later critiqued as 'brilliance and nonsense' (Arnett, 2006, p. 186) due to the limitations of historical context, definition, and variance of what constituted adolescence itself (alongside other life stages). Despite such limitations, chronological age continues as the established, accepted, and normalised means of conceptualising and classifying age across both quantitative and qualitative research studies (Bytheway, 2011) although its suitability for contemporary life has been questioned in terms of social practice such as consumer behaviour (Kupplewieser & Klaus, 2021) or contemporary forms of ageing research (Victor, 2002). As a means of human categorisation chronological age faces criticism as being more socially constructed and symbolic than empirically reliable, citing it as more a measurement of time rather than offering any empirical truth about age in terms of ageing effects or development (Hedge

et al., 2006; Schwall, Hedge & Borman, 2012). However, the social acceptance of chronological age results in naturalised linkage of biological and psychological characteristics with temporal, historical and cultural events which are socially and culturally limiting (Gullette, 2004).

Chronological age has become attached to social and cultural points deemed as 'revolutionary' periods of history, such as war and uprisings (Mintz, 1993). Birthdates have become social and cultural signifiers, indicators of specific periods and points in time associated with entry and exit points of life such as the start of 'schooling' or 'old age' (Bytheway, 2005; 1995). Classifying people by chronological age also encourages comparison of the similarities and differences within and between age category members in terms of attitude, personality, or behaviour. This perpetuates social norms attached to various ages and stages rooted in ideas of assumed normative cognitive and physiological development (Baltes, 1987) which in turn is connected to normalised linkages between age, stage, goals and behaviours. Such ideas can result in the oversimplification of age, how it is cognitively managed, resulting in age stereotypes (Hummert, 2011) which have tangible outcomes for contexts such as work and organisations, discussed in more detail later in this chapter.

2.2.3. Stereotypes as psychological construct of age

Stereotypes, have been described as a fixed and oversimplified image of any given idea or item (Tajfel & Turner, 1979; Pettigrew, 1979) but with ideological ties:

"(Stereotypes are) a means of studying a cross-section of ideology...an important part of the socialisation of major structural groups...valid, structurally reinforced and refer to role performances" (Perkins, 2018, p 135).

Simplified and undemanding age stereotypes (Hummert, 2011) result in limitation of subjects through perception of age-related cognitive and physical shortcomings rather than reality (Lamont, Swift and Abrams, 2015). Early research on ageism (Kogan, 1979;

Butler 1969) warned against the potential toxicity of elderly stereotypes specifically, rooted in ideas of degradation and decline. In parallel, focusing the lens on assumed disadvantage of older citizens may inadvertently positivise, and therefore overlook challenges faced by the young (Pickard, 2016; Snape & Redman, 2003). Ageist attitudes against youth can lead to the denial of opportunity and resource access such as access to social support (Pritchard & Whiting, 2014). While age stereotypes vary in terms of characteristics and qualities they continue to focus and embellish an established young vs. old dualism, where youth is often but not always positivised, celebrated and aspired to while ageing and being older is derogated, derided and rejected as a positive identity (Vincent, 1996). However, the stereotypical picture is mixed where young people have been characterized in the media as rebellious and unfriendly (Buchanan & Holmbeck, 1998) guilty of anti-social behaviour (Evans, 2005), narcissistic and digitally addicted (Adorjan & Ricciardelli, 2021; Twenge, 2013; 2009;) and miserable (Twenge, 2006) which have all conversely contributed to homogenised derogation of youth. Young people it seems are not left unscathed.

Such stereotypes can become attached to ideologies of age located in capitalist systems (Calasanti, Calssanti & Slevin, 2001) where decline as an ideological strand is naturalised as fact. This can result in the denial of resources based on assumptions about need and social support required (Bratt, Abrams & Swift, 2020). Additionally, benevolent ageism (Vale et al., 2020) while well intentioned and indicated through offers of physical support to the elderly in public places, can be interpreted as pejorative, thus exacerbating and legitimising ideas of deficient and subjective ageing rather than focussing on actual need (Cary & Chasteen, 2015). Such 'benevolent ageism' can also be contextual in work and organisations (Romani, Holck & Risberg, 2019) and the experience and social impact of the older worker is discussed later in this chapter.

A selection of age stereotypes drawn from empirical research is provided in Table 2: Age Stereotypes below: however later in this chapter a fuller overview of age stereotypes *specifically in work contexts* is provided in Table 3.

Table 2: Age Stereotypes (*adapted from Chasteen, Schwarz & Park, 2002, p543)*)

Stereotypically Old		Stereotypically Young	
Positive	Negative	Positive	Negative
Experienced	Senile	Energetic	Inexperienced
Wise	Forgetful	Healthy	Reckless
Sage	Fragile	Adventurous	Lazy
Sentimental	Feeble	Excited	Wasteful
Generous	Tired	Carefree	Greedy
Patient	Neglected	Curious	Disrespectful
Cautious	Inflexible	Eager	Vain
Learned	Afraid	Vigorous	Loud
Knowledgeable	Bitter	Ambitious	Irresponsible
Practical	Lonely	Optimistic	Impatient
Mature	Helpless	Flexible	Rebellious
***Digital Wisdom	Digitally Incompetent*	Digitally competent*	Addicted to technology**

*Prensky (2001); Tapscott (2009); Mariano et.al., (2021)

**Twenge (2019)

*** Prensky (2009); Sadiku, et al., (2017)

Age stereotypes whether connected to life stages such as adolescence or middle age (Neugarten, 1968) are manifested through discourse, comprising of language (Gendron et al., 2016) and imagery (Ross, 2011). Middle age is widely used in Western society to refer to a time of crisis at any point between ages of 40 to 60 and has been depicted in comedy as "atypical, dramatic or extravagant behaviours" (Gatling et al., 2014, p.1). Derisory stereotypical imagery has varied from the pejorative 'hag' as a symbol of ageing through decline (Pickard, 2016, p.5) to identifications of positivised, dynamic older subjects such as the carefree newly retired eager to learn and flourish (Remedios,

Chasteen & Packer, 2010). However, similar to adolescence as social construct, middle age is debated as conceptually flawed due to definition and confusion of chronological start and cut-off points, which can vary from 45 onwards (Hepworth, 2004) to 60 and over (World Health Organisation, 2021). Research is equally empirically confused due to varied and dispersed studies across geographies and populations (Lachman, 2001). Yet it is through the discursive construction of middle age that we see strong stereotypical representations, particularly within consumer, marketing and media sources (Bailey, 2010) which can find their way into broader and localised social discourses. Images of greying, wrinkling, and listless subjects assimilate such changes with deterioration of appearance (Wilisńka & Cedersund, 2010; Carrigan & Szmigin, 2000) and in doing so reinforce and homogenise ageing as a process of decline. Subsequently and ideologically, ageing as decline reduces the older subject to a symbol of depleted social capital who is then devalued as unproductive and unenterprising (Mallett & Wapshott, 2015; Minkler & Estes, 2020) with major implications for future labour opportunity and working conditions (Phillipson, 1982; McCarthy et al., 2014).

Subsequently, ageing continues to be problematised. Products and services intending to reverse or eliminate ageing are marketed to those over 40 rooted in both the 'biologisation' of old and middle age (Vincent, 2007) and a social obsession with anti-ageing (Vincent, 2007), ageing prevention (Rattan, 2005) and even agelessness (Steele, 2020; Bytheway, 2000; Andrews, 1999). I will now turn to the ways in stereotypical ideas of age and ageing are problematised more broadly to facilitate a discussion of the impact of age on work-related contexts later in this chapter.

2.2.4.   The Problematisation of Age

Western society has historically problematised old age and ageing via a dominant ideology which marginalises and denigrates older people as vulnerable, frail, subject to social isolation, loneliness, financial insecurity, declining health and premature death (Bytheway, 1995; Coupland, 2007; Friedan, 1993; Gergen & Gergen, 2000). Over the last

20 years research has shown that older and ageing stereotypes, and age-based stereotype threat can lead to self-limiting beliefs and behaviour adaption, such as on cognitive ability tests and technological interaction (Lamont et al., 2015; Meisner, 2012). Ageism can be described as the prejudicial attitudes towards people of various ages (Butler, 1969), can impact both young and old (Hummert, 2011) resulting in positive or negative outcomes for individuals and groups (Palmore, 2005; 1999). Much of the ageism research has tended to focus primarily on prejudice against older people (Nelson, 2004) by various age groups including old people themselves (Hummert et al., 1994). Stereotypical ideas of older people can be conceptualised in various 'problematised' ways even if intentions are benevolent: from perceptions they are 'doddery but dear' (Cuddy & Fiske, 2002) to 'warmth' and 'competence' (Cuddy et al., 2008). Conceptualisations can suggest amiable but ultimately unproductive characteristics, which serve to devalue the social place of older individuals in society positioning them as dependent and burdensome (Gergen & Gergen, 2000).

Stereotypes of the older person synonymised with ill-health exacerbate such associations: the popular culture image of the infantilised older person in rocking chairs or nappies (Gendron, et al., 2016) serve to reinforce and exacerbate a 'culturally endemic paranoia' of ageing particularly by and within midlife (Schwaiger 2006, p. 14). Such stereotypes are far from neutral: Levy (2009) outlines the ways that age stereotypes such as these can transfer between wider social discourses and popular culture to individual interpretation which then results in social categorisation and prejudice (Tajfel, 1981). However, despite much of the focus being on the challenges faced by the ageing citizen as a result of socio-cultural connections to ageing as decline, younger people are not immune to such stereotypes, marginalisation and discrimination.

Despite important research exploring ageism towards the young people with implications particularly for work contexts (Snape & Redman, 2003) young people have been frequently overlooked in favour of the ageing subject, therefore seen as the 'neglected problem of ageism' (Bratt, Abrams & Swift, 2020, p.1029)**.** The significant distinction

between the problematisation of 'older' and the problematisation of 'age' more generally is reflected in legislation: UK and EU law recognise 'age' as a protected characteristic, but in contrast USA legislation only recognises 'older age' i.e. over 40 as worthy of such protections.   Yet younger people report being patronised in the workplace and susceptible to less favourable employment opportunities and conditions (Duncan & Loretto, 2004; Snape & Redman 2012) such as being overlooked for leadership positions (Spisak et al., 2014) or denied access to employment or housing opportunities (Pritchard & Whiting, 2014). To gloss over such experience risks ignoring or diminishing claims not simply that younger people are less susceptible to ageism (Bratt, Abrams & Swift, 2020) less impacted by it (Snape & Redman, 2003) but fundamentally that ageist labels and discourses may be less potent and consequential (Down & Revelry, 2004; Evans, 2005), a topic I return to at regular junctures within this thesis.

If ageing is connected to inevitable decline, associated concerns of social burden and responsibility for care requirements (Ainsworth & Hardy, 2007) from family or state due to incapacity and reliance on others begin to surface (Hummert et al., 1994; Swift et al., 2012). Such concerns are offered and amplified by political and legislative voices suggesting we may be underprepared for managing our ageing society both socially and economically (House of Lords, 2013) constructing our ageing population as a social and economic challenge at best and a burden at worst (Weicht, 2013). This strengthens and reifies social and political calls for changes to accommodate an ageing population, encourage health and productivity for as long as possible and introduce the necessary measures to accommodate an older workforce such as the Retain, Retrain and Recruit initiative (Department for Work and Pensions, 2015).

Western cultural representations of ageing tend to favour the discourse of decline (Gullette, 1997; 2004) where conceptualisations of ageing and being older are incumbent on the state care and at odds with social and political ideologies of individualism, capitalism and enterprise (Hofaecker, 2010) in Chapter 4. Negative attitudes towards older people can constitute a lack of respect, perceptions of social and economic

encumbrance, but such research is often confined to young v old attitudes located within the Western hemisphere (North & Fiske, 2012). The importance of 'elder respect' in the Eastern hemisphere (Ng 1998, 2002) illustrates the transitivity of social constructs depending on social context, location and history. For example, the construct of 'elder' and 'eldering' has been previously linked to Confucius 'filial piety' (Hwang, 1999) or respect and reverence for older people based on life experience and perceived wisdom. Yet established social expectations of children to respect and care for parents (Goldin, 2011) may have undergone ideological shifts. Older people are now reconstructed as burden rather than valued for their societal contribution (Zacher et al., 2019) an idea played out through 'elder blaming' discourse (Gao & Bischoping, 2018). A recent systematic review of ageism towards older people with an emphasis on health (Chang et al., 2020) and the World Health Organisation Global Report on Ageism (2021) suggest there may be a potential globalisation of the devaluation of being older. This may reflect decades of increasing industrialisation situated within capitalist ideologies of individualism and enterprise which I will now discuss.

2.2.5.   Anti-Ageing as a 'successful' enterprise

Earlier in this chapter I discussed how 'successful ageing' has also laid the foundations for reinforcing the limiting factors of 'positive' stereotypes. I argue that such terms pathologise 'normal' ageing by suggesting that, conversely, we risk ageing 'unsuccessfully' and have agency to alleviate and manage the ageing process through individual responsibility surrounding lifestyle choices and planning (Cardona, 2008). 'Successful ageing' is frequently connected to the concept of 'agelessness', (Andrews, 1999; Bytheway, 2000; Steele 2020) associated with undefined age and immortality. Such ideas are framed as socially appealing, desirable, and increasingly achievable (Steele, 2020). The possibility of halting or reversing ageing completely is now suggested as scientific reality and attention is shifting to debates on how to overturn the ethical and moral barriers to ageing reversal procedures (Caplan, 2005; Steele, 2020). However, the 'cure

for ageing' narrative to enable 'agelessness' continues to pathologise ageing as a state of disorder rather than natural process (Bytheway, 2000; Vincent, 2007). This can give rise to a 'gerontophobia' or fear of ageing (Bunzel, 1971; Lee & Song, 2021) which reifies and synonymises ageing as a state of dread. Definitions of 'successful ageing' in variable based studies range from life-expectancy to sense of purpose and control over life (Depp and Jeste, 2006). Qualitative approaches (Bowling & Dieppe, 2005) outlined how older people identify with living happy and fulfilling lives even in the presence of disease and disability, suggesting a multidimensionality of values and experiences of the ageing process. This challenges popular generalisations that ill-health inevitably leads to loss of self-worth, which in turn leads to affiliation or resistance with certain age identities and stereotypes whether negative or positive as a result of their social constructions. It therefore calls for more nuanced understandings of older people in different contexts which in part this thesis responds to.

Age problematisation across both old and young is manifested in two ways: being older framed and implied as social and economic burden, ideologically connected to ideas of diminished productivity and capability for enterprise (Phillipson, 1982). Such ideas by implication construct young people as economically and socially productive, enterprising and therefore desirable (Chasteen et al., 2002; Down & Reveley, 2004). However, such accounts are limited, limiting and one-dimensional, failing to account for complexities of identity which I will now discuss.

2.2.7. Age problematisation and identity: implications

Age stereotypes, as discussed in Section 2.2.2, offer a cognitive construction of age-related social norms. Deviation from such norms, for example when individuals fail to conform to established age regularities such as those set out through life stage theories (Baltes, 1989) can problematise age. Ageism shares the same challenges with more widely researched identity classifications of race or gender (van Dijk et al., 1997a) and endures many of the

same discriminatory practices as discussed earlier such as denial of resources (Fiske, 1998; Pritchard & Whiting, 2014). However, aspects of age problematisation may not be confined to age alone, but how other aspects of our identity intersect with age, particularly when social norms are broken.

Broader social stigmas can become attached to 'abnormal' life events such as depictions of older parenthood in the media (Wilisńka & Cedersund, 2010). In work contexts, discussed in more detail in Section 4.1, working beyond retirement age (Ainsworth & Hardy, 2004; 2007) can be problematised due to normalised ideas of when retirement should be. However, this continues to be reimagined and reconceptualised (Vickerstaff, 2006; Zacher et al., 2019;) and reinforced by political forces as ripe for reconsideration (Department for Business Innovation and Skills, 2011).   The experience of older workers attempting to enter what is considered 'entry level' positions (Lahey, 2008) or younger workers facing challenges entering leadership roles (Spisak et al., 2014) indicates how the individual is conceptualised as a 'chronological' object, yet the norms associated with such chronology are constantly culturally negotiated (Gullette, 1997) and 'bureaucratically managed' (Bytheway, 2005, p.362). However, we may alter our identities through identity work such as narratives or discourse in order to gain entry, acceptance and membership to certain identities (Hogg & Abrams, 1990; 1988) particularly professional identity construction and negotiation (Slay & Smith, 2011). This suggests a further intersection between age, society, identity, and context in more nuanced and multidimensional ways in order to achieve social (and professional) legitimacy (Calasanti & King, 2015). I will now summarise the significance of identity constructions and context for age identities in order to outline the need for my research.

Identity constitutes our response to interpersonal (one on one) and intergroup (one to many) associations. Social identity theory (SIT) relates to our beliefs, aspirations and constructions about ourselves in relation to others (Tajfel & Turner, 1979). Similarly, self-categorisation theory (Tajfel, 1981) relates to the processes that lead people to cognitively align themselves to positive in-group associations, establish group ties, foster

belonging and maximise difference between outgroups (Hogg & Vaughan, 2002). Age as identity dimension may lead us to accentuate and amplify aspects of ourselves in order to resist or associate ourselves with certain age concepts and categories depending on how certain age ideas are positivised or marginalised and oppressed. Subjects may reject or belittle chronological age, choosing to identify as younger or older and gravitate towards socially acceptable and popular conceptualisations of age through appearance, interests and life choices in a bid to appear, for example, more mature (Schwaiger, 2006) or youthful (Bytheway, 2000).

Research exploring social norms and expectations attached to ageing, from advertising and marketing suggest an ever-present pressure to retain a youthful appearance (Bytheway, 2000; Carrigan & Szmigin, 2000) where to "age is to lose symbolic capital and self-worth" (Coupland, 2007 p.39). Yet using chronological age as a mechanism to inform advertising and marketing of products and services may be flawed as it fails to account for the subjective experience of ageing and instead reflect culturally entrenched beliefs about age (Kuppelweiser & Klaus, 2021). While such social judgements indicate a revulsion and repression of ageing as identity dimension they tend to focus on popular culture and consumer domains where certain constructs reside, which I will now explore in more depth.

2.3.   Constructing Age

Age conceptualisations and constructions are rooted in epistemological and ontological positions: whether 'age' is viewed as discoverable truth as explored previously in Section 2, or as social construction. Our values, beliefs, and the systems and institutions of which we are members constitute and contextualise our approaches to age (Fineman, 2011). Social constructionist approaches (Andrews, 2012; Gergen, 2009) applied to age specifically (Mortimer & Moen, 2016) enable an unpacking and interrogation of the

interplay between our broader identity dimensions and the normative, taken for granted socially produced ideas that constitute age through constructs.

2.3.1. Social Construction of age

Adopting a social constructionist approach (Gergen & Gergen, 2000; Gergen, 2009) enables us to query the subjective meanings and social norms attached to constructs such as 'the lifecourse'. It also helps us understand the social dynamics of how age is constructed, and therefore enacted and performed as an identity category, recognising that identity itself is socially constructed (Shotter & Gergen, 1989). I argue that historical approaches to age through biomedical and lifestage/lifespan approaches may now be ambiguous, outdated and at odds with expectations of contemporary society and subsequent understanding of age. Demographic realities impacted by increased longevity and falling birth rates (Office of National Statistics, 2019) and extension of working lives (Department for Business, Innovation and Skills, 2011) are now integrating with other aspects of our everyday contemporary lives such as increasing digitisation.

Over time, chronological age has become increasingly understood and therefore researched as social construction, a marker of life transition, and a "a sign and a system of signification" of age associations (Riach, 2016, p.262) rather than constituting any knowable system of age truth (Gergen & Gergen, 2000). This renders age classifications, chronological or otherwise as ambiguous, fluid rather than fixed means of social categorisation, subject to context, situated and performed (Bauman, 2000). There have been calls for fresh theoretical and empirical approaches to age research such as the development of social constructionist approaches to enable deeper understanding of the meanings attached to age across certain contexts such as work (Rudolph et al., 2020). Indeed, there are calls for fresh theoretical approaches or understandings of the 'praxeology of ageing' in how we now live our digital lives that recognise new social inequalities exacerbated and rooted in technology (Wanka & Gallistll, 2018, p. 1). How we construct age and research age in response to our digital lives (Calvo-Porral & Pesqueira-

Sanchez, 2019), and recursively how we digitally engage in relation to how age is socially constructed (Anderberg, 2020) but also how we research such phenomena, can potentially broaden previously contained registers of identity research (Corlett et al., 2017).   A social constructionist lens enables us to explore how discourse contributes to these dynamics and I will now explore relevant scholarship which outlines the role of discourse in reifying and legitimising age constructs, central to this research thesis.

2.3.2.   Discourses of age

Discourse has been described as a highly practical means by which to explore social and cultural dynamics (van Dijk, 1997a), of 'language-in-action' within a given context (Blommaert, 2005). Discourse as the social construction of ideas based on culture, values and beliefs which become entrenched in social practices such as text and talk (Phelan, 2018) and has been offered as both theory and method (Phillips & Hardy, 2002) discussed in more depth in Chapter 4 and 5. Discourse is said to exist if certain ideas, subjectivities and categories about what constitutes 'knowledge' about a given topic are present in text and talk, requiring context, and can unveil our assumptions or 'statements' about the world (Foucault, 1972). Ideas like these also underpin how we perceive and approach age through discourse (Foucault, 1980; Phelan, 2018): how we talk and write about age and ageing can also reveal deeper connections to power, advantage and identity negotiation (Ainsworth & Hardy, 2004). Such discursive examinations of age can also expose the fundamental ideologies that contribute to ageist social attitudes and the outcomes of such approaches (Coupland, 2007) discussed earlier in this chapter.

Scholarly interest in age discourse has increased over the last 20 years (Phelan, 2018), where emphasis on the significance of language in ageist practice (Gendron et al., 2016) is now a matter of contemporary policy and practitioner concern. Discourse analysis of government, media, social media, advertising, and the charity sector found a proliferation of negative language to describe ageing and older people, using ageist stereotypes, where older people were constructed as dependent, vulnerable, sunk costs and framed within a

time of fatalistic 'crisis' (Centre for Ageing Better, 2020). Yet discourse analysts have attended to the ways categorisation, particularly negative stereotypes, have featured in everyday text and talk for several decades (Fairclough, 2015; Wodak & Fairclough, 2004). Such 'discourses of difference' both reflect and can reinforce prejudice such as racism (Wetherell & Potter, 1992; Wodak, 1996a; 1996b); sexism (Butler, 1990; 1969) and ageism (Phelan, 2018) with subsequent discriminatory acts. Typical stereotypical language may be subtle and insidious rather than exaggerated or extreme. Generic terms such as 'the elderly' can potentially mean three decades of a person's life and therefore suffer from fuzzy boundaries, leaving little room for identity variation or diversity (Coupland, Coupland & Giles, 1991).

However, it is through the unpacking of age discourse that we see the linguistic homogenisation of groups with marginal scope for other identity dimensions. For example, the 'greying' or 'silvering' of older people, present even in policy and practitioner material (Age UK, 2011) suggests 'grey' or 'silver' hair as the older subject's defining characteristic. It can be synonymised with decline in advertising (Carrigan & Szmigin, 2000) connected to diminishing skills when classified as the 'greying' of the workforce (Czaja & Moen, 2004; Kulik et al., 2016;) yet 'silver' can be positively gendered when used to describe older men (Gonzales, 2017) or older people engaged in digital technology (Birsen, 2018). Reflecting on contemporary social contexts, the so-called 'grey divide' or 'grey digital divide'[3] has been adopted as a means of describing assumed differences in digital access, capability, and engagement between older and younger people (Quan-Haase et al., 2018) and this is discussed in more detail in Chapter 3. Such lexicon is therefore used as a discursive device to establish age-related differences in ways which are clearly fluid and evolving.

Discourses of age can also vary, shift and evolve depending on context and demographics. As discussed, denigration of older age has become connected to ideas of social and

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[3] The 'digital divide' concept is discussed in more detail Chapter 3: Locating Age in a Digital World.

economic burden, rather than valued citizen (Wilińska & Cedersund, 2010) and incompatible with productivity. Yet such discourses are located within Western society holding individualistic and capitalist social values (Fairclough, 2004; Phillipson, 1982) and as discussed contributes to an 'elder blaming discourse' within both Western and Eastern cultural settings (Gao & Bishoping, 2018). However, older age may be more positively conceptualised when associated with social trust, respect for experience, and recognition of wisdom through constructs such as the 'modern elder' (Conley, 2018) where social value is placed on experience and problem solving connected to the construct of 'eldering' statesperson (Brewer, Dull & Lui, 1981). Such constructs suggest constraints attached to ways in which age is conceptualised, but importantly signify how these can shift between localities and historical periods. I will now turn to one of the most significant means of constructing, categorising and problematising age through discourse and central to the debate concerning contemporary means of constructing age: generations.

2.4. Generation as construct

Generation is a sociological construct, dating back to the work of Mannheim (1952) and can be defined as a group of people born during the same time period who have shared similar life experiences during their formative years (Rudolph et.al., 2020) and experience kinship, group affinities and membership, and social and cultural influences (Smola & Sutton, 2002). Generation as social and discursive construct has been used as a linguistic resource from which to study age (Coupland, Coupland & Giles, 1991) but also used as a means of legitimising differences and similarities between-and-within social groupings based on birth cohort. Generational identity is afforded to these collective groups through established means of identification: via schemas (cognitive frameworks which help us to organise information), prototypes (the best example or representation of something within a certain category) and stereotypes, a cognitive means of organising, outlined in this chapter (Bauman, 2000). However, it is through generational difference that age-based divisions and differences are illuminated particularly via their associated discourses.

2.4.1. Constructions of Generational Difference

Assumptions about intra-generational differences constitute a range of topics, from personality and characteristics, to work preferences to cultural affinities, many of which are outlined earlier in this thesis in Table 2. Young people for example are constructed as resistant to authority and uncompliant (Wils et al., 2011); overly emotional and irresponsible (Qu, et al., 2020); quck to challenge convention (Gursoy, Chi & Karadag, 2013) or narcissistic and obsessed with technology, (Twenge, 2019; 2013), a topic I will return to in Chapter 3. Advocates of the construct claim generation is a useful concept in understanding the values, motivations, and capabilities between and within age groupings (Twenge, 2013; 2006) described just as 'real and useful' as race or ethnicity (Campbell et al., 2015, p. 324). Twenge and colleagues (2006; 2009; Twenge & Campbell, 2012, Twenge et al., 2008) have written extensively that key differences do exist between generational groupings. These range from personality traits such as narcissism (Twenge, et al., 2009) and sense of entitlement (Twenge, 2006), to more specific accounts of attitudes to work behaviour in relation to reward, development, and work-life balance (Twenge, 2010; Ng, Lyons, & Schweitzer, 2012, 2010). Young people are described as prone to technological addiction (Twenge, 2019) which has particular impact for how we might view younger people in our increasingly digital worlds.

Similarly, much of the empirical work on generational difference can be variable-based research between ill-defined generational categories where attention to individual experience or differences between generational categories is under-explored. Such claims can also lead to broader societal stereotyping and generalisations of all age groups. This can lead to assumed differences regardless of context and potential exclusion, or misallocation of resources such as in education where high levels of digital media capability and engagement is assumed (Twenge, 2009). Similarly claims that digital technology usage among young people impairs their psychological well-being (Twenge, 2019) outlines an emphasis on seemingly significant generational relationships with technology. However, in addition to such studies limited to a quantitative methodological

approach, I argue that 'technology' is often homogenised as one entity. It is only recently that research has focussed on nature and type of digital access in terms of platform and device (Comunello et al., 2017; Jacobson, Lin & McEwen, 2017; Linke & Hofer-Straße, 2011; Pearce & Rice, 2013).

Wider empirical challenges concerning generation-as-construct persist despite growing recognition that it is empirically flawed, even if socially convenient (Giancola, 2006; White, 2013). Despite challenge, calls for clearer definitions of generational boundaries remain unresolved particularly for work contexts (Parry, 2014) and lack conceptual clarity persists resulting in generalisation (Cody, Green & Lynch, 2012; Jauregui et al., 2020) as 'generation' continues to be led by chronology. Empirical limitations can range from focus on specific occupational groups or sectors such as hospitality (Gursoy, Chi & Karadag, 2013), sample size and geographical limitations, time-period factors result in studies providing disclaimers that their research is not wholly generalisable. Yet if we continue to research by generation we continue as academics to legitimise generation as an empirically robust measure and legitimate phenomenon of investigation (White, 2013; Woodward, Vongswasdi & More, 2015).

Costanza and Finkelstein (2015) suggest 'generation' is operationalised as a categorical variable where participants are assigned into generational categories based on date of birth, regardless of other within-group differences (Joshi, Dencker, & Franz, 2011) resulting in assumed abilities, affinities and life experiences. Studies (as listed in Table 2) such as Wils et al., (2011) often fail to acknowledge the possibility of other contributing age-factors such as maturation. They may also fail to account or mitigate against between-generational similarities and differences or other socio-cultural factors such as gender dynamics, or time-period effects, which many singular one-time research insights employing cross-sectional design fail to control for. Furthermore, generation as construct and its subsequent categories are increasingly challenged on the grounds of impossibility of measurement because of poor conceptualisation (Giancola, 2006; Parry and Urwin, 2011).

Chapter 2: Approaching Age

In Section 2.5.1. I outline how much of the evidence for generational difference is mixed with a focus on a meta-analysis which examines generational difference in work contexts (Woodward, Vongswasdi & More, 2015). Yet this misses much of the potential broader socio-cultural dynamics at play (Parry & Urwin, 2021). Furthermore, much of the research is dominated by Western cultural perspectives (even if work related policy and practice would apply to global institutions). Parry (2014) provides novel insights into the under-researched Eastern hemisphere, through explorations of generational categories in India where gender and parental influences may intersect. Nonetheless, there are calls for us to proceed with caution in workplace generational assumptions (Jauregui et al., 2020) and there are further calls for increasing qualitative work in the study of generation (Lyons & Kuron, 2014) to account for more of the mediating and moderating variables between contexts such as work. Such studies can reposition the construct more as a social dynamic rather than fixed demographic variable.

In terms of discursive sites, generation as construct continues to be used in policy (Foreign and Commonwealth Office, 2021), practice (Chartered Institute of Personnel Development, 2021) and various empirical studies. Research exploring age and education and/or technology for example (Calvo-Porral, 2019) frequently adopt 'millennials' and/or 'generation x' for example as empirically established groups to be investigated and understood, co-constructing a 'generational divide' requiring attention to generationally rooted tensions and challenges (Nakagawa & Yellowlees, 2020; Nevitte, 2019). What follows are generational labels such as 'Gen Y'; 'Gen X'; 'Millennials' frequently used in media sources (Howker & Malik, 2010) and scholarship (Deal, Altman & Rogelberg, 2010) to categorise generational groups in terms of birth years, often employing ill-defined cut off points as outlined below in Table 3: Generational Labels. I will now discuss the significance of such generational labels and the further empirical shortcomings of how they have been approached.

2.4.2. Generational Labelling

Generational labels contribute to stereotyping, homogenisation of age groups, legitimisation and emphasis of assumed between-group differences (Thornton, 2002) and within-group affiliations and similarities (Meredith, Schewe & Karlovich, 2002). Whether the labels consist of 'millennials' (Howe and Strauss, 2000), 'baby boomers' (Bouk, 2018), or 'Gen Y' (Strauss & Howe, 1991) such classifications provide a normalised, taken for granted but potentially divisive language from which to generalise unspecified age groupings. Table 3 below outlines the complexity, deviation and variation of generation labels and birth dates and their associated labels, illuminating the problematic fluidity of categories and also how they have been understood and described in terms of assumed traits, characteristics, behaviours and preferences.

Table 3:   Generational Labels

Adapted from BBC Online: https://www.bbc.co.uk/bitesize/articles/zf8j92p
'Millennials, Baby Boomers or Gen Z: Which one are you and what does it mean?
And content below is drawn from Table 1: p 1609. Pritchard, K., & Whiting, R. (2014). Baby Boomers and the lost generation: On the discursive construction of generations at work. *Organization Studies*, *35*(11), 605-1626.

Year of birth	Label	Authors	General Description
1926-1945	The Silent Generation or 'Silents'	BBC Online	- Lived through World War II - Disciplined.
1925-1942	Veterans; Matures; Traditionalists; Conservatives	Strauss & Howe (1991) Dries et al., (2008)	- Value-orientated - Loyal
1925-1945	Silent Generation	Cogin (2012)	
1922-1945	Greatest Generation	Sullivan et al., (2009)	
1946-1964	Baby Boomers or 'Me Generation'	BBC Online	
1943-1960	Baby Boomers	Strauss & Howe (1991)	- Named after huge surge of births after World War II
1946-1964	Baby Boomers	Benson & Brown (2011) Cogin (2012) Meriac et al.,(2010)	
1946-1961	Baby Boomers	Cennamo & Gardner (2008)	- Committed
1946-1962	Baby Boomers	Davis et al., (2006)	- Self-sufficient
1943-1960	Boomer Generation	Kowske, Rasch, & Wiley (2010)	- Competitive
1946-1964	Me Generation	Dries et al., (2008)	
1966-1989	Gen x or Generation X	BBC Online	
1961-1981	Generation X	Strauss & Howe (1991)	
1961-1981	X'rers	Jovic, Wallace and & Lemaire (2006)	- Straddle both digital and non-digital worlds
1961-1981	Thirteenth; Baby Busters; Lost Generation	Parry & Urwin (2011)	- Resourceful - Logical
1965-1976	Generation X	Benson & Brown (2011)	- Good Problem Solvers
1965-1980	Generation X	Cogin (2012) Dries et al., (2008) Meriac et al., (2010)	
1963-1981	Generation X	Davies et al., (2006)	
1965-1983	Generation X	Sullivan et al., (2009)	

1962-1979	Generation X	Cennamo and Gardner (2008)	
1980-1995	Gen Y/ Millennials	BBC Online	- Also named as 'digital natives as born after technology became more mainstream in everyday lives - Confident - Curious - Questioning authority - Socially reliant
1982+	Generation Y; Millennials; Nexters; Echo Boomers	Strauss & Howe (1991)	
1980-1984	Digital Natives	Smola & Sutton (2002) Ransdell et al., (2011)	
1982+	Generation Me	Twenge & Campbell (2008)	
1982+	Generation Next	Macky et al., (2008)	
1982+	Millennium Generation	Dries et al., (2008)	
1981-1995	Gen Y	Cogin (2012)	
1981-1999	Gen Y	Meriac et al., (2010)	
1984-2002	Gen Y	Sullivan et al., (2009)	
1981-2001	Gen Y	Dries et al., (2008)	
1980-2000	Gen Y	Cennamo & Gardner (2008)	
1996+	Generation Z	BBC Online	- ambitious - digital natives - mobile natives - confident
2010	Generation Alpha	BBC Online	- family orientated. - highly digitally capable and engaged; - rejecting of labels!

Such labels are frequently popular, prescriptive, homogenous and ubiquitous within popular and media discourses (Bott, 2011) but can be meaningless to non-Western cultures (Deal, Altman & Rogelberg, 2010). There are fresh concerns that such constructs now pose greater risk than just empirical confusion. 'Generationalism' (Rauvola, Rudolph & Zacher, 2019) or the appeal of adopting the concept of generation in narrating social and political phenomena is suggested as perpetuating a socially deterministic and persuasive framework. The 'baby boomers' generational stereotype (Phillipson et al., 2008) has been problematised in popular discourse, used to leverage fresh ageist discourses against the cultural script of 'boomergeddon', an implicit moral critique of a generation associated with postwar 60s boom now assumed to withhold resources such as pensions and healthcare from younger people (Bristow, 2016). More recently an 'Ok Boomer' discourse constructed this age group as withholding social resources such as housing and jobs not least attached to the working later agenda (Munnel & Wu, 2012). In response to the construction of marginalisation and hostility between 'boomers' and younger generations, the Covid-19 pandemic was touted as a 'boomer remover', or a cause of fatalities in those over 50 years of age (Meisner, 2021). I argue that the generational construct creates a master discourse from which to organise society (White, 2013) such constructs can become increasingly nuanced using sub-categories and attached labels. While such representations cannot be causally linked directly to ageism, subsequent discourses and the norms they perpetuate contribute to real-life behaviours, measures and interventions that marginalise and discriminate (Fairclough, 1995; van Dijk, 1993) even if such discourses are veiled in social acceptability.

A 'generational gap' or 'generational divide' (Strauss & Howe, 1991) are often used interchangeably to convey ideas of generational tension. Such concepts suggest fundamental divides in values, attitudes, behaviours between generations from relationship with technology (Tapscott, 2009; 1998) to emotional regulation and psychological traits (Twenge, 2006; Twenge & Campbell, 2008). Critique of the generational construct has outlined that Mannheim's original conceptualisation of the 'problem with generations' was in response to social change of the time (Rudolph et al., 2020). Despite academic critique of generations on multiple grounds, including a failure to account for contemporary socio-cultural dynamics, the concept of generations has

been consistent and enthusiastically adopted by policy makers and practitioners particularly in response to anticipated multi-generational societies and workforces. I will now turn to the significance of such contextual factors for generational understandings.

2.5. Contexts of Age Discourse

In this section I will explore age scholarship within two discursive sites: firstly, work contexts, exploring the significance of 'generation' and the 'older worker', and secondly, age representations and approaches to age within the media as a domain of discursive production and practice (Fairclough, 1995).

2.5.1. Age at Work: Generations

Work contexts have been a particular area of focus for intra-generational differences and conflict, spanning attitudes, values, performance, motivation, career behaviours, work attitudes and identity from recruitment (Riach, 2015) to within-work contexts (Parry, 2014; Lyons & Kuron, 2014). Much of the extant research has focussed on within-generations similarity and between-generation difference. A meta-analysis of such findings (Woodward, Vongswasdi & More, 2015) has been adapted and is provided in Table 4 below.

Table 4: Generational Differences Research:

adapted *from Woodward, Vongswasdi and More (2015) with post-2015 sample of*

studies added

Themes	Generational differences OR no Generational Differences OR inconclusive evidence	References
Technology Literacy, Competency, and Behaviours; Communication Preferences Attitudes toward technology for work-life management	generational differences	Reisenwitz & Iyer (2009) Gursoy et al. (2008) Gursoy et al. (2013) Bott (2011) Carrier et al., (2009) Lester et al., (2012) Haeger & Lingham (2014)
Attitudes toward technology in the workplace	no differences	Lester et al., (2012)
Good Pay; job security; nature of job; Respect for authority	no differences	Jurkiewicz & Brown (1998) Leschinsky & Michael (2004) Lub et al. (2012); Roongrerngsuke & Liefooghe (2013) Takase et al., (2009) Gursoy et al., (2013) Lester et al., (2012) Hansen & Leuty (2011) Sullivan et al., (2009) Bristow et al., (2011)
Professionalism Workplace Fun Diversity Climate	generational differences	Lester et al., (2012) Wils et al., (2011) Lamm & Meeks (2009) Mencl & Lester (2014)
Power/Need for recognition/autonomy/supportive work atmosphere and teamwork	inconclusive evidence	Gursoy et al., (2013) Yu & Miller (2003) Lester et al., (2012) Mencl & Lester (2014) Busch et al., (2008) Takase et al., (2009) Jurkiewicz & Brown (1998) Westerman & Yamamura (2007) Real et al., (2010) Cogin (2012)

		Jurkiewicz & Brown (1998) Lub et al., (2012) Yrle et al., (2005) Gursoy et al. (2008)
Supervisory relationship	no differences	Brunetto et al., (2012)
Need for guidance and direction; Advancement opportunities Status within organisation	generational differences	Gursoy et al., (2013) Leschinsky & Michael (2004) Smola & Sutton (2002) Cennamo & Gardner (2008)
Work hours/work flexibility/work-life balance	inconclusive evidence	Beutell (2013) Lub et al., (2012) Sullivan et al., (2009) Beutell & Wittig-Berman (2008) Brown (2012)
Work-ethics/work centrality leisure values	generational differences	Meriac et al., (2010) Cogin (2012) Gursoy et al., (2008) Gursoy et al., (2013) Takase et al., (2009) Smola & Sutton (2002) Real et al., (2010); Whiteoak et al., (2006) Twenge et al., (2010)
Job Satisfaction Organizational Commitments/Loyalty Turnover Intentions Willingness to work overtime Compliance with work rules	generational differences	Benson & Brown (2011) Beutell & Wittig-Berman (2008) Kowske, Rasch, & Wiley (2010) D'Amato & Herzfeldt (2008) Lub et al., (2012) Davis et al., (2006) Park & Gursoy (2012) Becton et al., (2014)

The research outlined in Table 4 provides a mixed and inconclusive picture of empirical evidence for generational difference in work contexts. However, it highlights the complexity and variation in how generations have been approached. This lack of consensus of definition and empirical approach illuminates the methodological and philosophical shortcomings concerning the generational concept implying this is a matter of concern for scholarship (Cogin, 2012).

Despite such empirical fragility, the sustained acceptance and normalisation of taken-for-granted generational difference continues to be applied to organisational policy and practice. Interventions within organisational contexts have taken the form of training and development to mitigate against inter-generational workplace tensions (Parry & Urwin, 2011; Jurkiewicz, 2000, 1998; Smola & Sutton, 2002) or redesign of reward and development systems to address 'millennial entitlement' (Brant & Castro, 2019). Many executives and management structures cite generational labels as an important people management starting point (Kowske et al., 2010) and suggest recognition of generational concept as *strategically vital* to sustain and control morale, costs, turnover, talent and profit (Lancaster & Stillman, 2002). The generational construct in work contexts has been described as "fuzzy but useful" (Campbell et al., 2015, p.130), undervalued as a means of social categorisation (Pilcher, 1994) and a helpful organising framework and heuristic for work contexts (Kelan, 2014). Global organisations continue to adopt practices and policies in line with stereotypical ideas of generational categories leading to 'management-by-generation' (Reed & Thomas, 2021). Flexible working policies to accommodate older workers and secure their retention are still advocated by organisational practitioners (CIPD, 2021).

I argue the picture of generational guidance is now conflicted and contrary. This is indicated by the fact that while guidance on addressing intra-generational tensions have been promoted over the last ten years (Cogin, 2012; CIPD, 2011) later guidance warns against the dangers of generational stereotyping, citing poor evidence for generational difference in work settings (CIPD, 2020). Generational difference in various contexts has been offered as "fractured, contradictory and fraught with methodological inconsistencies that make generalizations difficult" (Lyons & Kuron, 2014, p. 139). Similarly, 'generational effects' in the workplace may be considered not generational at all (Rudolph et al., 2020) due to such poorly defined categories and confusion /conflation over generational, cohort and period effects (Rudolph et al., 2020).

There is concern that a persistent discourse of the multi-generational workforce may lead to prototypical tendencies and judgements of any given group (Lamm & Meeks, 2009) used to explain and justify disparity of treatment through 'generationalisation' (White,

2013) by encouraging subtle social divisions as a ubiquitous, morally, and socially acceptable form of ageism. This can constitute presumed differences in values (Smola & Sutton, 2002; Twenge & Campbell, 2008); work attitudes (Twenge, 2010) working practices such as task management (Wallis, 2006) and rewards (Kooij et al., 2011). Such generational differences and their subsequent discourses have been offered as the basis for inciting ideas of generational conflict and competition for resources (Pritchard & Whiting, 2014). The challenge associated with the concept of 'multi-generational workforce' is less concerned with some inherent challenge of multiple generations working together (Lester et al. 2012; Appelbaum, Serena & Shapiro, 2005). Instead, the risks stems from generalising about motivations and behaviour of entire age groups in the workplace with the intention of withholding and denying resources to specific groups (Benson & Brown, 2011), which could therefore be considered unhelpful and perhaps dangerous (McCarthy, 2014). For example, stereotypical ideas of motivation and capability based on generational classification can lead to workplace disadvantage such as lack of training and development, and/or recruitment bias (Posthuma & Campion, 2009).

Such empirical shortcomings are connected to concentration of research populations within the Western hemisphere which has specific economic and social conditions attached such as flexible retirement (Edmunds & Turner, 2005). Further research could expand the research population beyond national entities and consider possible 'global generations' based more on shared experiences because of modern connecting technology rather than inconsistently applied cut-off birth dates (Edmunds & Turner, 2005). Furthermore, recent research has described generational differences as a "broken basis" (Parry & Urwin, 2021. p.857) for HRM practice due to the absence of contextual experience of any given social phenomena, such as gender, class, education, ethnicity, and location (Parry & Urwin, 2021). Generation, it seems is paradoxically both encouraged and discouraged as grounds for empirical research and organisational policy and practice.

In conclusion to this section, the problematisation of a 'multi-generational workforce' (Benson & Brown, 2011; Cogin, 2012) realised through (often disputed) discourses of a 'generational gap' (Giancola, 2006) difference or 'generational divide' needing to be

crossed or overcome (Berl, 2006) is a social construction based on fundamental differences of opinion, values, motivations, beliefs, and politics. Similarly, I will now discuss the older worker as social and discursive construction that has been associated with similarly problematic approaches to age differences in workplace contexts.

2.5.2. Age at Work: The Older Worker

Recognition of increased longevity and improved health in old age (Government Office for Science, 2016), alongside changing demographics and falling birth rates (Office of National Statistics, 2021) have contributed to changes to 21st century legislation such as the removal of mandatory retirement age (Department for Business, Innovation and Skills, 2011). New possibilities of extended working lives have in turn impacted the labour market position of older people. The UK Government reported that by 2022, one in three employees would be aged 50 or over (Department for Work and Pensions, 2017). Regulatory shifts and policy changes such as the Code of Practice on Age Diversity (1999), the Employment Equality Age Regulation (2006) and the Pension Act, UK Government (2007) have resulted in greater attention to and recognition of the contribution and in some cases necessity of people to spend longer in the workforce. More broadly, the Equality Act (2010) now recognises age as a 'protected characteristic' alongside disability, gender, race, religion or belief, marriage/partnerships and sexual orientation. Such policy and legislative shifts have resulted in major implications for employers and organisational practice.

Employers who once assumed age-related differences in motivations and reward preferences (Van Dalen, Henkens & Schippers, 2010) have been required to adapt HR policies to ensure consistency and fairness across age groups. Guidance for organisations on adaptions and provisions for retaining and managing an older workforce have included considerations of working conditions, shift/work patterns, improving communications and building trust (Centre for Ageing Better, 2018). However, beyond flexible working policies and mid-life career reviews, actual recommendations for managing an older workforce different to other age groups are often vague and inconsistent beyond 'consideration' of values, motivations, lifestyle, and rewards (CIPD, 2019). I argue that

such lack of clarity and inconsistency fuels the prospect of reliance on generational ideas of how age is to be approached and managed at work.

Furthermore, what 'older' means in work contexts which has been, and continues to be, a matter of debate (Harris et al., 2018; Pitt-Catsouphes & Smyer, 2006; Ainsworth & Hardy, 2007; Riach, 2016). Variation in definition and membership of 'older worker' classification has resulted in cut off points beginning anywhere between 40 to 75 years of age (Pitt-Catsouphes & Smyer, 2006; Billett et al., 2011). In extreme cases, qualifying as 'older' within sectors such as IT/technology and the digital economy can begin from as early as 35 (CompTIA, 2021; McMullin and Marshall, 2010), or even 30 (Kaarst-Brown & Birkland, 2011) even if the majority (over 72%) of those working in the sector fall within this category (TechNation, 2017). Such chronological aspects of older worker construction are worthy of note as they are connected to other aspects of older worker definition and identity with consequences attached. I will now discuss these in more detail.

The variance of the 'older worker' construct renders it inconsistent at best (Ainsworth, 2001; Riach, 2007; McCarthy et al., 2014) and misleading at worst (Zacher et al., 2019). What is clear is that the 'older worker' is ambiguous, contested and context dependent on sector and role (Ainsworth, 2001). Poor conceptualisation is blamed in part on a variety of chronological age cut off points (McCarthy, 2014; Ainsworth, 2002; Kooij, et al., 2008; Ng & Feldman, 2008) but this results in conceptual confusion, research variation and paucity (Schalk et al., 2010). Older worker research tends to be rooted in Western culture and ideas, an important contextual factor that contributes to how older is conceptualised, constructed and therefore the research approach. This too has resonance for how older workers are constructed within media discourses which tend to exaggerate stereotypes, problems and exclusions (Kroon et al., 2018; 2016). The social and material outcomes for 'older' workers can be discriminatory and detrimental, connected to stereotypes and their subsequent discourse. This perpetuates homogenised ideas of older worker motivations, preferences, and capabilities (Posthuma & Campion, 2009) which I will now discuss in more detail.

2.5.3. Stereotype threat: the homogenisation and problematisation of the 'older worker'

Examinations of older worker stereotypes can illuminate the ways ageism is present through both discriminatory processes and practices, achieved and reinforced through discourse rooted in decline ideology (Tretheway, 2001). In labour terms, concerns have ultimately centred around older worker diminishing work productivity and performance (Fineman, 2011; Beier & Kanfer, 2013). They range from negative ideas of capability (Calasanti 2016; Chrisler, Barney & Palantino, 2016; Wrenn & Maurer, 2004). concerns over performance at work (Ng & Feldman, 2008) although performance has been found to increase with age when measured through peer evaluations and productivity. (Waldman & Avolio, 1986). Resistance to change (Warr & Pennington, 1993) having poorer learning capability (Wils et al., 2011) and susceptibility to greater family interference in work (Zacher, 2019) are also considered important age factors in work contexts. Ng & Feldman's (2008) study of older worker across 6 key stereotype dimensions spanning motivation, training and development, resistance to change, trust, physical health and work/family balance found that only training and development resistance was consistent with stereotypical depiction. While this meta-analysis has limitations in terms of sample size/data sets, age profile of research respondents and failure to control for other moderators, it nonetheless suggests potential ways in which stereotyping can result in self-fulfilling prophecies such as age-based-stereotype-threat (Lamont et al., 2021).

Withdrawal from training and development is common as older workers fear being perceived stereotypically (Lamont et al., 2021) and in turn, reinforce the very stereotype they seek to avoid. Training is a particularly pertinent topic in relation to older worker experience: they report they are less likely receive training when they are in employment (McNair, 2006; Simms, 2004; Taylor & Urwin, 2001) and training may be of lower quality than what is offered to their younger counterparts (Felstead, 2010), or denied altogether due to assumed diminished motivation over the age of 50 (Canduela et al., 2012). Such perceptions may be linked to ideas of diminishing returns and wasted resources by

managers (Ng & Feldman 2012) but such assumed stereotype characteristics can also be self-imposed and offered by older workers themselves (Findsen, 2015; Harris et al., 2018).

While stereotypes can be positive or negative (Hummert, et al., 1994) with 'positive' depictions of older workers focusing on ideas of dependability spanning adaptability, loyalty and commitment (Posthuma & Campion, 2009), stereotypes regardless of intention have a limiting and excluding effect. Older workers may also struggle to overcome age stereotypes attached to the time to retire (Beehr, 2014) or what constitutes an 'encore' career (Findsen, 2015). They may be perceived as economically dependent and burdensome even when legitimately retiring (De Vroom & Guillemard, 2002; Phillipson, 2002) or encouraged to be 'olderpreneurs' (Mallett and Wapshott, 2015). In certain sectors such as IT, where the profile of the older worker can vary and a particular need for life-long learning of evolving technologies is a prerequisite (Zhang, 2012) this poses a particular professional risk of deskilling or perceived deskilling of a vital professional group. This age-related, located tension is discussed in more detail in Chapter 3. Such findings suggest the need for further research into what constitutes the older worker in other cultural settings or indeed in contemporary contexts, roles and sectors previously underexplored. It calls for greater attention into how we construct older workers through language which I will now discuss.

2.5.4. Discourses of the Older Worker

Discursively, older workers can be depicted as 'past it', 'over the hill' or 'rusty and invisible' (Bowman, et al., 2017) particularly in physical professions such as construction (Kirk, 2012). They can be considered as obsolescent as the technology that they manage if working in the technological field (Zhang, 2012). Managers are constructed as 'at the end of the line' (Gabriel, Gray & Goregaokar, 2010) overlooked after the age of 50 in teaching (Redman and Snape, 2002) and trainee teachers considered a 'last resort' in recruitment (Quintrell & Maguire, 2000) that can lead to meta-stereotypes: the assumption that others will negatively view their entire age cohort (Finklestein, Ryan & King, 2013). Such meta-stereotypes can also result in barriers, obstacles and exclusion from certain types of work (Finkelstein, King & Voyles, 2015) leading organisations to

devalue, exclude and 'other' older workers from certain roles, fields and sectors from recruitment stage (Riach, 2007) to retirement. Closer examinations of worker constructions through discources outlines age intersects with other identity dimensions and discources such as gender, to produce a particular kind of older worker, such as one with assumed care responsibilities in ways that male older workers are not constructed (Ainsworth & Hardy, 2007).   Similarly, Spedale (2019) deconstructs the subject position of the older worker to highlight the discources that impact identity regulation, such as enterprise, family, death, and physical and mental health. Such subject positions move the older worker beyond binary dualisms of victim/perpetuator (Riach & Kelly, 2015) to more complex subjects of investigation. Spedale (2019) calls into question the discursive processes and complexity involved in older worker identity construction, an under-explored area of older worker scholarship which I seek to develop.

Frequently, such ideas of the older worker are discursively located within the 'potentiality' of youth' discourse common in contemporary organisations (Taylor et al., 2010. p. 74) but also in media texts which suggest diminishing skills and energy lack (Bailey, 2010; Meredith, Schewe, & Karlovich, 2002) which conflict with a neoliberal ideology (favouring free market capitalism) and enterprising culture (imaginative and risk taking in relation to business development) (Rudman & Molke, 2009). Furthermore, implied challenges for older workers such as within training and development (Ng & Feldman, 2012) creates fertile ground for discources that imply they are less capable in handling modern digital technology, a prerequisite of much of today's essential labour market skills (Wandke, Sengpiel & Sönksen, 2012; Cutler, 2005) and frequently depicted in the media (Kroon, et al., 2016). Older workers may be encouraged to be economically enterprising but restricted in doing so due to structural boundaries reinforced by discourse (Ainsworth & Hardy, 2008)

Stereotype threat at work is also linked to ideas of social norms or the social construct of 'age appropriateness' (Warr & Pennington, 1993). In work contexts, the outcomes can result in concerns about whether individuals are right for organisational grade, position and seniority as part of ideas of institutional order such as older managers and leaders (Ainsworth & Hardy, 2004; Collins et al., 2009; Perry, Kulik, & Zhou, 1999; Spisak et al.,

2014). The idea of implicit timetable for entering and leaving work, for holding certain types of job and status within organisations (Goldberg et al., 2004; Warr & Pennington, 1993) can shape organisational decisions concerning appointments, retention, development and departure and organisational relationships.

To support older workers and counteract the threat of exclusion, ideas of 'benevolent discrimination' (Romani, et al., 2019) can also create discourses of 'benevolent ageism' where language a simple as being 'happy to help' implies overaccommodation (Vale, Bisconti & Sublett, 2020). Such ideas can reproduce the very ageist attitudes they seek to address. Retirement (for example) has been reconstructed as an enterprising endeavour through the discourse of 'older entrepreneur' and 'active retirees' yet is at odds with other constructions of older people as 'wearies' that conveys a fatigued image of the older worker (Pritchard & Whiting, 2020a). The idea of retirement as later-life entrepreneurial opportunity is also at odds with the (fading) notion of older age as a time of leisure and relaxation, suggesting this is now ideologically disprefferred as a later-life identity.

Older workers themselves report they are less likely to undertake entrepreneurial work (Phillipson, 2012) and 'olderpreneurs' report hostility by younger groups due to perceived lack of creativity, energy and market competition (Down & Revelrey, 2004) in ways that would be deemed unacceptable if applied to other protected characteristics such as race and gender. A change to such culture is called for (Biggs, 2014) but there remain unanswered questions concerning the more subtle and nuanced ways ageism can manifest through everyday interactions such as language.

Despite policy and legislative efforts to further an age-diverse workforce and promote positive age at work practice, varying ideas of 'older worker' identity create paradoxes, entrench ideas of older worker identity even further and become self-fulfilling prophecies. As discussed earlier in this section, different types of older workers may be deemed more in need of support or specific types of support exacerbated by other identity stereotypes (Ainsworth, 2007; Riach, 2007, 2016). Yet text and talk intending to promote age equality and diversity can conversely promote a 'new ageism' (Butler, 1990) through the reproduction of ageist assumptions where some older worker categories are

constructed as needing physical support and adjustments (Ainsworth, 2001) or even via favourable and positive age stereotyping (Hassell & Perrewe, 1995; Posthuma & Campion, 2009). Such discourses have been debated as "encasing ageism within a rationalistic discourse" (Riach, 2007, p.1704), where discussions of workplace adaptions and other identity associations associated with life-stage imply necessary measures to compensate for an assumed, gradual decline in productivity. Such assumptions hint at inevitable doubts concerning capability and ultimately economic value beyond certain ages. Furthermore, they disrupt politicised ideas of productively 'ageing well' (Angus & Reeve, 2006).

Additionally, as discussed previously in this chapter, the discrimination against young people has been more generally overlooked in favour of older worker research (Bratt, Abrams & Swift, 2020). This is despite various claims of by younger workers of discrimination due to assumed lack of experience or capability to manage (Sargent, 2013). Such rigid ideas of managerial capability and rejection of authority, and their subsequent discourses of 'age appropriateness' in work contexts, are fuelled by broader social domains such as media discourses (Kroon, 2018; 2016). These can influence the prevention of age diversity within roles, occupations, and sectors in more subtle ways which in turn impacts how certain professions are to be perceived, understood and researched (Ainsworth and Hardy, 2008). I address the call for further examination of how other aspects of identity contribute to constructions of the older worker (Ainsworth, 2001) including how such identities may intersect (Spedale, 2019). Reflecting on such ideas I will now turn to explorations which move us beyond one-dimensional ideas of older workers to more complex understandings of being older and ageing in work contexts.

2.5.5. Beyond older worker stereotypes: older worker identity work

There has been significant interest in 'identity work' in work contexts in recent years (Beech, MacIntosh & MacInnes, 2008), or the active process/s of identity enactment, performance, and achievement within various social contexts where identity may be constructed and regulated (Beech, MacIntosh & MacInnes, 2008; Caza, Vough & Puranik,

2018). The process of identity work can result in the adaption of identity, through diminishing or amplifying certain identity dimensions in order to achieve preferred identities and meet social expectations. Empirical approaches to identity work have been said to constitute cognitive, discursive, physical and behavioural modes (Caza, Vough & Puranik, 2018) and been of particularly dominant in work contexts (Brown, 2015). It through discursive explorations that we see how identity is actively worked through text and talk (Sveningsson & Alversson, 2003) and how subjects use language, or identity talk (Hadden & Lester, 1978) to achieve desired outcomes such as secure career success and belonging (Arthur & Rousseau, 2001; Hall, 2004), professional credibility (Slay & Smith, 2011) and secure roles (Ibarra, 2003; 1999). Workers may adopt preferred identities through language such as that of manager rather than leader (Carroll & Levy, 2010) or choose their words to ensure cultural fit and team belonging (Dutton, Roberts, & Bednar, 2010) potentially through use of terminology and "insider jargon" (Gagnon, 2008, p.375).

In relation to age and generational identity at work, different organisational contexts may "enhance or supress generational identities" (Parry, 2014, p.47) indicating that certain age-related identity dynamics may not always follow an age-positive or age-inclusive reality. Studies of older workers have shown them to be active agents of downplaying their age and avoiding marginalisation, through choice of language to appear collaborative and co-operative (for example as part of a parliamentary inquiry) (Ainsworth and Hardy, 2008). The identity of the older worker can be performed through intersecting discourses and identities including non-work in order to amplify other aspects of themselves to achieve professional credibility and acceptance (Spedale, 2019). Studies of gameworkers professional identity achievement outlined how broader non-work identities which may cross identity registers (Corlett et al., 2017) were utilised to perform professional legitimacy, in particular 'work as play', or how leisure gaming activity signifies an identity of the committed, passionate and professional gameworker (Deuze, Martin, & Allen, 2011; Wimmer & Sitnikova, 2011). While this study was not concerned with age per se, it illuminates the complexity of identity management within a burgeoning professional environment, in this case a rare insight into a professional strand of the digital technology sector. It illustrates how the self-concept (Haslam, 2001; Ashforth &

Mael, 1989) is offered in work contexts to legitimise professionalism in a competitive market and secure power and advantage (Fairclough, 2015).

The significance of institutional, sector and highly localised talk (Ybema et al., 2009) in identity formation can influence identity enactment. Identity can be formed through social and cultural scripts drawn from organisational and occupational narratives and discourses (Mumby & Clair, 1997). However, if discourses are reciprocal where "people are both the producers and the products of discourse" (Caza, Vough & Puranik. 2018. p. 891) and if we accept that media discourses are a potent area of social discourse, there is potential for further exploration of the intersectionality of discourse in a way that weaves together the interpersonal, organisational and cultural (Caza, Vough & Puranik, 2018).

2.5.6. The media as contemporary site of age discourses

Media representation of age and 'old age' has a long history back to 1970s (Atchley, 1997), linking to the 'symbolic capital' of ageing bodies (Klimczuk, 2015). Print and visual media culture have long been accused of creating and reinforcing ideological presuppositions about age and older people specifically (Fealy et al., 2012; Wilisńka & Cedersund, 2010; Signorelli, 2004; van Dijk, 2005) fuelling a discourse which legitimates and perpetuates certain classifications of age, either overtly or covertly. Visual cultural representation of ageing and being older as decline (Gullette, 2004) and the 'successful ageing' paradigm (Andrews, 1999) have been reinforced by ideals of an ageless ideology (Andrews, 1999; Breda & Schoenmaekers, 2006) frequently linked to aspirations of eternal youth.

The generational construct has been a prevalent means of discursively organising age within media sources almost since the inception of the construct and of popular media itself (Donlon, Ashman & Levy, 2005). The use of various generation labels (see table 3) across print media, television, radio and all forms of popular culture has dominated how different age groups come to be constructed, positioned and understood (Vincent, 2005). Media sources typically homogenise and exaggerate generational understandings of affiliations, differences and behaviours not least outlining how media choices themselves

act as a key differentiator of intra- generational identity (Vittadini, Siibak & Reifová, 2013). Significantly,

> *"shifts in dominant (generational) discourses follow the movement of successive generations – the moving intersections of biography and history – propelled by and bringing in their wake cultural and structural challenges in (for example) institutions, regulations, norms and ideals" (Foster, 2013, p.145).*

For example, recent labelling of the 'geriatric millennial' (Hemming, 2021) unifies two distinct ideas of age lexicon into a fresh generational pairing to depict a new socially desirable generational category, deemed suitably productive for contemporary labour markets where digital expertise and maturity coalesce. This is an identity concept I return to later in this thesis.

Identities of 'eternal youth' are encouraged particularly for women (Coupland, 2007) and imply the removal of age as identity category altogether, thus continuing to marginalise and other older people in all their forms (Andrews, 1999; Spedale et al. 2014). News discourses often suggest portrayals of older people are homogenised as 'grannies and grandads', or 'little old ladies' creating subject positions of victims who are frail, infirm and vulnerable (Fealy et al., 2012). The 'successful ageing' ideology supports a 'forever productive' narrative, an enterprising old age (Rudman, 2016; Rudman & Molke, 2009). Similarly, the banishment of 'oldering' (Brown, 2005, p.8), achieved through scripts and motifs pertaining to the elimination of 'greying' (Van den Bogaert, Ceuterick & Bracke, 2020) links to media fascination with anti-ageing (Mason, Darnell & Prifti 2010). The media frequently constructs ageing project or work in progress (Coupland, 2007), evidenced in advertisements banishing wrinkles in pursuit of youth synonymised with attraction and desirability.

News is a form of public discourse, a 'frame through which the social world is routinely constructed" (van Dijk, 1988. p.8), representative of the broader social and political context, capable of shaping our culture, identity formation and treatment of certain groups. Online news is a discursive site that both reflects and sets news agendas, influencing audience perception of real-world phenomena (Machin & Van Leeuwen, 2007; Scheufele, 1999). Furthermore, news operates in an ideological web of fact (van

Dijk, 1988) that can create the illusion of truth and credible facts to legitimise certain perspectives, leading to real-world outcomes. For example, news portrayals of paternalistic attitudes towards older people leading to changes in Scandinavian health provider practice (Koskinen, Salminen & Leino-Kilpi, 2014).

Younger people have been subject to homogenisation and stereotypes in the form of negative constructions in UK newspapers during the ASBO (anti-social behaviour order) period (Pain, 2001). An exploration of how language of age was used on the social media platform Twitter illuminated how ageism is both implicit and explicit from people of different ages, typified through participant phrases such as 'youthful spirit', 'age is just a number' and 'there is so much to learn – even at my age!' (Gendron et al., 2016). Similar explorations of the Facebook platform found negative age stereotypes of older people including infantilisation and exclusion from social activities (Levy et al., 2014). While this study encompasses online data analysis, future online ethnographical explorations are a potential avenue for richer insights into the language of age (Symon, Pritchard & Hine, 2021).

Discourse can move between social realms such as the media to other discursive sites, known as 'interdiscursivity' (Fairclough, 1992; Bakhtin, 1981) discussed in more detail in Chapter 4. There are calls for greater recognition of the dangers of overlooking age representations in the media as a source of knowledge construction (Iversen and Wilinksa, 2020), the subtle and insidious ways age constructs and broader education of the tensions created by age categories and discourse similar to that of race or gender (Gendron et al., 2016). There is also call for further research on how different types of stereotyping, such as age and other identities interact (Shore & Goldberg, 2013). Examining age discourses within media texts presents an opportunity to understand how certain 'realities' about age and ageing are reified, reinforced, perpetuated and potentially transferred into other social realms such as work contexts, and how they may intersect with other topics that may form discursive events (Fairclough, 1992; 1995). Online news in particular can explicate wider social issues and their authorial intent, ideological roots and subsequent power struggles can be unveiled through critical discursive perspectives and methodologies. These can unpack the overt and covert ways

age ideologies are reinforced in the media but also recursive in other sites of discourse such as work and examine the contemporary influences on understandings and discourses of age, such as technological advancement.

Contemporary approaches to exploring age now require moving beyond traditional theoretical, methodological and research pathways to approaches allowing for convergence of ideas such as age, identity, technology and work (Spedale, 2019). Similarly, explorations of age through a discursive lens, and a critical discursive lens specifically (Ainsworth, 2001; van Dijk, 1993; Wodak & Fairclough, 2004) challenge the social and institutional practices that legitimise and normalise ideas of age. This requires adopting the same focus afforded to race or gender (Shore, 2009) and therefore involves further interrogation of the social dimensions and influencing factors that impact how we understand age in multiple ways: as identity, as social category, as classification and as discourse. Intersectional approaches may also provide insights into how work is changing within 'a new capitalism' (Fairclough, 2004) and allow for a synthesis of age and other topics (Spedale, 2019). This may move us beyond more traditional and binary understandings of age conceptualisations of old or young, prosperity or decline, victim v perpetuator (Riach & Kelly, 2015). They also may unveil where new age-related binaries are emerging, in an increasingly industrialised, modernised, and digitised world that has endured vast structural changes up until the present day. Such changes can result in new constructions and conceptualisations of age, discussed in more detail in Chapter 3: Age in a Digital World.

2.6. Concluding Points

This chapter has presented an overview of theory and scholarship in relation to age studies, particularly research focussed on age, ageing and being older in work contexts. Overall, this chapter suggests that early biological and chronological constructions of age are methodologically and theoretically limiting to deeper understandings of age experience and meaning in contemporary contexts. More interdisciplinary and sociological approaches to age enable greater scrutiny of the social forces at play in contemporary understandings of age.

In the next chapter, I explore such modern-day understandings by exploring the specific discursive linkages between age and digital life, and how synthesising our approaches to age, work, identity and the 'digital age' can offer a nascent contribution to our understanding of older workers experience. By exploring age in these ways and linking back to the topics covered in this chapter I aim to illuminate potential routes of further age scholarship and professional groups previously under-researched.

Chapter 3: Age in a Digital World

3.1.   Introduction:

This chapter builds on the examination in Chapter 2 of how age has been theoretically and empirically researched to date. I provide a critical overview of the ways digital technology has been enrolled to reify age as a marker of social difference and the significance of this for older workers in the digital technology sector and beyond.

I begin with an overview of how technology has been theoretically approached and researched more broadly within the field of occupational psychology and organizational behaviour (thereafter OP/OB). I outline the contribution of age and technology convergence through gerontechnological research, noting the focus here on how technology supports the ageing process and older subjects defined in more detail below. Building on recent interdisciplinary and critical studies of gerontechnology, I move to a specifically sociological position discussing how ideas of an age-related 'digital divide' have evolved linked to an ideological 'technologisation' of age attached to the generational construct. Age is therefore positioned as a site of technological difference and division, underpinned by a discourse of 'growing up digital', (Tapscott, 2009; 1998) and being 'born digital' (Palfrey & Gasser, 2008) which reifies binary constructs of 'digital immigrant' and 'digital native' which are discussed in detail.

I discuss how such constructs, and their subsequent discourses, are significant for work contexts particularly in relation to the social stratification of 'older workers'. Specifically, I identify relevant scholarship which provides insights into the potency of the age-technology relationship for older IT and digital technology workers. This surfaces current age-related tensions within this professional field leading to pertinent questions of how the 'older worker' is defined, constructed, and accommodated in the sector. Throughout this chapter I connect to the ways in which identity research, when synthesised with age and technology can develop new research avenues for contemporary understandings of age, particularly when critically explored. In doing so I address the shortcomings within the literature to date, namely that empirical work has often combined two or three of the

topics under exploration at most, e.g., age and technology, technology at work, the significance of age and technology in work related contexts or age as identity dimension inside and outside of work contexts. Yet studies have rarely synthesised such topics or explored them discursively in combination (Spedale, 2019). In doing both I offer a more nuanced understanding of how age, technology, and identity interplay and intersect through discourse and how they can be enrolled to both quieten and amplify age-related differences to achieve specific identities*.* I conclude this chapter by offering new frontiers for age research in ways that can support policy and practice, particularly for the evolving – and ageing – digital technology sector and those who work within it.

3.2.   Age in a digital world

It is no longer a matter of debate that we now live and work within a 'digital revolution' (Clarke, 2012) or fourth industrial revolution (Brynjolfsson & McAfee, 2012). The adoption of digital technology has accelerated since the 1980s within most if not all aspects of daily life (Kenney, Rouvinen & Zysman, 2015). The rise of Web 2.0, online publishing and platforms, collaboration, and social tools, particularly across mobile devices, means digital technology is entwined with our work, education and leisure more than ever before. Many claim the revolution is in fact 'over' (Clarke, 2012, p. 79) and/or that we are now in fact entering a third and fourth wave of revolution underpinned by artificial intelligence, robotics and personalisation (Brynjolfsson & McAfee, 2012; Philbeck & Davis, 2018). Policy makers, practitioners and researchers are concerned about the social and industrial implications of an increasingly digital landscape (Kenney, Rouvinen & Zysman, 2019; Select Committee on Digital Skills, 2015). Institutional and educational challenges linked to digital exclusion can result in poor digital skills development due to lack of access and exposure, discussed in more detail in section 3.3. Such exclusions or 'digital divides' (van Dijk, 2020) are a matter of social concern when situated within an increasingly digital society constituting an ageing population and workforce (Government Office for Science, 2016). Furthermore, debates surrounding the prospect of liberation from working through earlier retirement, or the elimination of certain roles altogether due to increase automation (Avent, 2016; Office for National Statistics, 2017) are an emerging field of empirical and policy research. Such social dynamics actively connect age and technology together in

ways that call for greater academic and political scrutiny of how they have been previously understood and approached.

This thesis argues that increasing interest in the convergence of our lives with digital technologies (Kenney, Rouvinen & Zysman, 2015) is embedded within a discourse of deepening digitisation of life often constructed as deterministic, disruptive and revolutionary (Cascio & Montealegre, 2016). Policy and practice have responded to increasingly digital existence: the UK Government 'digital by default' agenda (UK Government, 2014) called for greater industrial effort to move everyday products and services online both within Government and beyond, recognising the climate of technological disruption resulting in increased automation. While the exact nature of change remains uncertain and speculative, politics and industry agree technology will continue to change how we work and the nature of work itself (Cascio & Montealegre, 2016) described in terms of a race to be run and won (Brynjolfsson & McAfee, 2012).

Our increasingly digital working lives sit alongside concerns of how to manage our ageing workforce, which has been frequently constructed as both change and technology resistant (Becker, Fleming & Keijsers, 2012; Findsen, 2015;). Technology and age have been linked through important areas of scholarship particularly in the field of gerontechnology. This may provide suitable academic scaffolding for fresh approaches which synthesise age and technology, at least for enhancing our understanding of how technology and older and ageing citizens are empirically linked and understood.

3.2.1.　　　Gerontechnological Approaches

Gerontechnology is concerned with researching on the "biological, psychological, social and medical aspects of ageing" (Harrington & Harrington, 2000. p.2) to aid disease prevention, and the physical and cognitive decline associated with the ageing process in orderto aid independence in later years. Technological solutions can range from the earliest designs of eye spectacles and hearing aids to contemporary applications of care

robots (Frennert, 2020; 2016) and smart homes (Sengers & Peine, 2021). While much of the gerontechnological domain has employed variable-based approaches, more recent qualitative (such as social constructionist and discursive perspectives) explore the significance of how ageing is 'configured' (Bischof & Jarke, 2021. p. 197) in gerontechnologial design in ways that are potentially reductionist, limiting rather than liberating (Peine et al., 2021). For example, contemporary approaches to gereontechnology recognise 'the elderly' as a social categorisation that is frequently understood through a 'deficit paradigm' (Coupland et al., 1991, p.8). This results in drawing on stereotypical concepts and discourses that neglect the subjective and diverse experience of ageing. The 'older adult' in gerontechnological design is frequently configured through the technological framing of a 'fix' for the 'problem' of ageing, thus perpetuating the problematisation of ageing paradigm in material ways (Bischof & Jarke, 2021). However, more recent gerontechnological approaches signal future developments for how age within this research domain is discursively packaged and offered, hinting at connections to an enterprise ideology through suggestions of 'silver economy' market opportunity (Anderberg, 2020; Krzyminiewska, 2018). While this recognises greater diversity in how technology can benefit older people such approaches continues to construct ageing in stereotypical, one-dimensional ways drawing on established 'grey' and 'silver' market constructs (Quan-Haase et al., 2018).

Approaching gerontechnology from a socio-material perspective could provide a more multi-dimensional approach to technology and age. This broadens the empirical lens beyond a focus on the alleviation of ageing conditions (Peine et al., 2021). A socio-material approach provides an understanding of how technology, work and social dynamics such as language and other interactions become entangled in our everyday lives (Orlikowski, 2010; Orlikowski & Scott, 2008; 2014). Recent interest in the increase in use of virtual communication technology (such as videoconferencing/teleconferencing) during the Covid-19 pandemic outlined opportunities for older people to increase adoption of such technology to stay connected to family and friends, engage in social and community activities and cope with isolation and stress (Greenwood-Hickman et al., 2021). This illuminates how a broader social context can shift ageing identities from previous stereotypes of the technologically-resistant, 'techophobic' older subject, to more active

adopters (Nimrod, 2021). While gerotechnological approaches are by nature concerned with ageing and older people, the 'technophobic' classification as empirical starting point is rarely if ever applied to younger age groups, or conversely used to explore and understand the nature of active older technology users who resist or rebel against a 'technophobic' identity. Instead, scholarly emphasis has focussed on how to overcome a 'grey digital divide' (Mariano et al., 2021; Morris and Brading, 2007; Quan-Haase, 2018b) focussed on overcoming barriers and provision of resources to digitally engage older subjects. Conversely, research attends more closely towards understanding the nature of younger people's digital engagement in terms of online behaviour and platform/device preferences (Adorjan & Ricciardelli, 2021; Burns-Stanning, 2020). Digital difference based on age grounds is discussed in more detail in Section 3.4 of this chapter.

While such discussions provide exciting avenues for future research, the discourse and age-based scripts within gerontechnological activity suggest discourse forms a potentially potent influencing factor into how digital products and services are prioritised, conceived, framed and produced (Bischof & Jarke, 2021). The language used within the gerontechnological field could reinforce future ideas of age-related digital divides. Before I interrogate the significance of a digital divide discourse in more detail, I will briefly explore the evidence of whether age-related technological differences do exist - and if they matter.

3.2.2. Are there age-related digital differences - and do they matter?

To date, studies of internet use by older people attribute lack of use to indifference, lack of system knowledge and even lack of motivation to learn (Peacock & Künemund, 2007; Schelling & Seifert, 2018; Selwyn et al., 2003; Zickuhr, 2018). Despite some generation-orientated research suggesting age is an indicator of digital differences (Gilleard & Higgs, 2008), as outlined in Chapter 2, overall evidence of age-related technological resistance or incompetence is inconclusive. Research suggests that reasons for difference in technological engagement and competence between age groups can vary from task relevance (Selwyn, 2004b), technology in question (Enyon & Helsper, 2011; Helsper & Eynon, 2013; Zillien & Hargittai, 2009), contextual factors (Seifert & Schelling, 2018)

gender (Hargittai & Shafer, 2006) and even stereotyping of self and others (Chung et al., 2010). There are frequent outliers to ideas of older subject technological lack: exploration of seniors' use of mobiles show they are in fact keen adopters of smartphones (Jacobson, Lin & McEwen, 2017).

Older people continue to be socially constructed as digitally lacking and in need of support and resources to overcome their challenges. Furthermore, where they are understood to engage digitally, they are discursively constructed as a 'silver surfers' (Doyle & Goldengay, 2012). The term is derived from a parody of a Marvel comic fictional superhero of the 1960s (Jacobson, Lin & McEwen, 2017) and endures from the late 1990s to the present day to describe the older and post-retirement adults' online and internet use. Despite being under-researched in academic domains, the term is frequently used to illuminate and often celebrate digitally competent and confident older people featuring in popular TV shows, press and social media (Gorard & Selwyn, 2008). However as discussed in Chapter 2, foregrounding such activity as successful serves to highlight it as legitimised wider social issue (Quan-Haase et al., 2018c). Such discourse normalises ideas of the older digitally engaged person as unusual, remarkable, exceptional and 'technologically exotic' (Herring, 2008). This in turn reifies an ideology that suggests only younger people are technologically engaged (Twenge & Campbell, 2009) where the disengaged digital older person is constructed as normative, reinforcing ideas of an old-young dichotomous digital divide.

3.3.   The Digital Divide

The digital divide has been understood as digital inequality, inequity and difference between citizens mainly because of lack of computing access which can exacerbate pre-existing inequalities but also determine new ones (Norris, 2001). It has been articulated as maturing in four fundamental ways. A first level divide is connected to basic use and adoption of internet (Pearce & Rice, 2013). 'Second Level' digital divides concerns the unequal distribution of technological access among vulnerable groups even in western

countries (Findahl, 2014; Friemel & Signer, 2010; Hargittai & Hinnant, 2008; Mossberger, Tolbert & Stansbury, 2003). Third and Fourth level digital divides relate to the nature of technological engagement itself and transfer of proficiency from one device or platform to another (Ragnedda, 2018). The digital divide definition has evolved from an issue of use/non-use to the nature of digital platform and device choice, interaction and engagement (Pearce & Rice, 2013; Van Deursen & Van Dijk, 2014). This is often discussed in terms of how the evolution of Web 2.0 and the emphasis on user-generated content and participation (including sharing, friending, reviewing, and following) can be offered as new framing devices for the evolution of what constitutes digital literacy (Lankshear & Knobel, 2008).

Much of the research of age-related digital divides is located within educational settings (Bennett et al., 2008; Jones & Shao, 2011; Helsper, 2021; Norris, 2001; Selwyn, 2013; 2008). Such divides are cited on two main grounds: disparities in digital skills due to socio-economic conditions as discussed, and age-related differences in digital interest and proficiency. Focus on the teacher-pupil relationship explores the imagined blockers to learning potential of young people who are assumed to prefer e-learning methods and styles (Oblinger, 2003; Oblinger & Oblinger, 2005). Indications that teachers are less digitally capable in integrating digital methods or e-learning programmes in schools and further/higher education settings (often rooted in teachers classified as 'digital immigrants') are mostly unfounded (Bennett & Mahon, 2010). Studies tend to neglect other contributing factors such as teaching delivery and learning preferences beyond technological boundaries (Bennett, Maton & Kervin, 2008; Guo, Dobson, & Petrina, 2008; Selwyn, 2009; Smith, 2013). What is evident however is the contributing role here of a potent discourse of digital divide on age-related grounds underpinned and legitimised by the 'digital native' constructs.

Barriers to digital access (Office for National Statistics, 2019) are also implicated as a potential obstacle to digital prosperity. As discussed in Chapter 2, a reconceptualisation of a digital divide in the Western world has *specifically* attended to age, citing assumed challenges of older people in relation to deteriorating motor, technical, and cognitive skills which becomes connected to their own "technological and biological determinism"

(Selwyn, 2009, p.64). Linked to gerontechnological approaches, claims of differences in neuro-cognitive processes such as attention span (Barnes, Marateo & Ferris, 2007), and physical capability such as dexterity have been enrolled as partial explanations for older people's *assumed* incompetence and ambivalence towards modern digital technology.

However, such ideas are empirically flawed. 'Technology' or 'Digital Technology' has often been classified as a homogenous entity when such technologies are becoming ever more complex and fragmented. (van Dijk, 2020; 2006). Task-relevance in digital engagement is offered as explanation for (dis)engagement, frequently illustrated through examples of 'older' people's lack of connection to or struggle with transactional tasks. These can range from struggles with online banking (Rainie & Wellman, 2019), amplifying the benefits of engagement with social networking to alleviate isolation and loneliness (Nimrod, 2021) or foregrounding older people as particularly vulnerable to online security risks (Hill, Betts & Gardner, 2015). Yet the profile of what constitutes the 'older' citizen in such variable-based research is also a matter of chronological variation. 'Pre-seniors' (50-59 years) seniors (60-70) and 'old seniors' (70+) vary in their technological habits suggesting an 'older' aged digital divide is fragmented, fluctuating and becoming more complex (Friemel, 2016). For example, age-related variation in online social networking is now an emerging topic of scholarly interest focusing on topics such as the engagement with, and nature of, transactions on Facebook and Twitter (Blank, 2017; Haight, Quan-Haase, & Corbett, 2014). Against a landscape of broader social changes to population age and working practices (Office for National Statistics, 2021) and the emergence of new technologies and their constitutive practices, what constitutes 'older' may increasingly vary in definition, scope and complexity. More granular and qualitative understandings of age and technology linkages may be required beyond stereotypical ideas such as 'digital generations' which I will now discuss.

3.3.1   Age-Related Digital Divide: are there 'Digital Generation/s'?

Recent studies have explored the potency of the broader concept of 'digital divide' and its history (van Dijk, 2020), noting the personal and social categories of older and younger

people as an established and normalised potent source of digital division. Frequently this is attributed to 'growing up digital' (Tapscott, 2009. p. 4). 'Growing up digital' is connected to ideas that exposure to computing technology from an early age not only increases computing proficiency but also ensures economic and social success in an increasing information or digital age (Tapscott, 2009; Prensky, 2001). Such ideas are amplified by concerns from politics and industry: for example, that an ageing and digitally under-skilled population (sometimes synonymised) are ill-prepared to deliver the goods and services required within the digital economy from both educational and industrial standpoints (Department of Culture, Media and Sport, 2017). The 'digital economy' is described as the provision of skills and labour to support increasingly digitised goods and services such as online shopping, banking and other transactions (Mesenbourg, 2001) and is discussed at regular junctures in this chapter.

Running in parallel and generating much interest particularly within grey literature[4] are the pervasive constructs of a 'digital generation' or 'net generation' (Howe & Strauss, 2000; Prensky, 2001; Tapscott, 1998). Such studies refer explicitly to binary ideas of access, exposure, proficiency and engagement in certain types of technology as directly attributed to and generalised by 'generation' and generational affinities, namely the technology of our formative years. (McMullin, 2007; Vittadini, Siibak & Reifová, 2013). Self-described 'futurists' (those who are professionally engaged in predicting the future) such as Prensky (2011; 2001) and Tapscott (2009) introduce popular concepts which quickly become the zeitgeist of the time but can endure and evolve to the point where constructs such as digital native and generational division on technological grounds becomes the empirical starting point for future research.

A recent study of clinicians claims that younger generations of physicians use technology more fluently than previous generations, citing significant implications for healthcare workers, patients and healthcare leaders (Nakagawa & Yellowlees, 2020). The study not

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[4] Grey literature can be described as information produced outside of traditional publishing and distribution routes and therefore not easily findable due to lack of representation in indexing databases.

only assumes generation as empirical concept from which to base research but provides an overview of assumed generational labels, differences in technological exposure, proficiency and preference available during one's formative years. Such research not only normalises the broader 'growing up digital' script connecting age and technology with 'generation' but perpetuates the potential for future age-related digital divides as a result of the technological capability at the time. It also provides a springboard for future research based on its findings. Such research can lead to assumptions about learning preferences (neglecting any age diversity among the learners in question), such as explorations of gaming as a means of 'generational' learning in medical training (Olszewski & Wolbrink, 2017). Furthermore, those refusing to learn technological skills or engage with digital technology, labelled 'refusniks' (Klecun, 2008) or ''technophobes' (Nimrod, 2018) are assumed to be older, disassociated from 'growing up digital' and often labelled 'digitally immigrant' (Prensky, 2001). As technology was not as ubiquitous in our everyday lives until the 1990s, combined with a deep-rooted belief system in our formative years shaping much of our adult personality and identity, it is no surprise how ideas of technical proficiency become normalised as connected to 'generational' experience. (White, 2013).

Table 5 : Generational Technology Labels outlined below offers a sample of technologically associated generational labels. Within this table I have outlined the key characteristics of each generational category as offered by the author, sometimes underpinned by the technology available at the time, e.g. 'Nintendo' gaming consoles enrolled for the 'Nintendo Generation' (Green Reid & Bigum, 2003).

Table 5: Generational -Technology Labels

Generational label	Authors	Key characteristics
Generation M (M for media); C (C for connect); V (v for virtual)	Solis (2013)	Workplace: Generation capable of delivering and responding to 'disruptive' technologies and practices
The Nintendo Generation	Green, Reid & Bigum (2003)	Social: Links between childrens' exposure to gaming and their behaviour

Tech-savvy Generation	Carlson (2005)	Education: Own multiple digital technologies: multi-task and want to control learning experience
Cyberkids	Facer & Furlong (2010)	Social: Critiques 'cyberkids' and concept of digitally superior children due to socioeconomic factors which include digital exclusion
Net Generation	Tapscott (2008, 1998)	Education and Workplace: learning styles and work practices will be profoundly impacted due to young people's exposure to the internet
The Google Generation	Nicholas, et al. (2011)	Social: Information seeking behaviour will differ due to exposure to Google search engine
The Clickerati	Harel-Caperton (2003)	Education: younger people as better learners due to increasing use of computing technology for education purposes and assumed affinities with it
Screenagers	Rushkof (2006)	Social: younger people may have health issues due to inactive lifestyles as a result of assumed length of time spent on computing technologies
Homo-zappiens	Veen & Vrakking (2006)	Education: children will refuse to learn through traditional means instead opting for technology-enabled learning approaches
Silver surfers	Doyle & Goldingay (2012)	Older people may be digitally excluded and not as fully connected online as younger people which means those who are do so by exception
Generation 'Covid'	Major, Eyles & Machin (2020)	Learning at home and disrupted learning for school children and young people of university and college age may result in future inequalities in the labour market. Lockdown conditions such as lack of suitable Wi-Fi connectivity, access to digital devices etc are offered as exacerbating social barriers to future success.

This list in Table 5 above is indicative, but not exhaustive, of the labels being used across various contexts from societal, educational, and work contexts. Here we see 'generations'

are both the target of investigation and used as an empirical starting point in studies of age and technology.

Such labels suggest that technology plays a central role in generational cohesion, characterised by generalisations about childhood experience of playing with specific games consoles (Green, Reid & Bigum, 1998) or activities within online community participation (Chung et al., 2010). While generational-technology paired labels suggest essentialised views about generation-led digital boundaries (Jones et al., 2010; Jauregui et al., 2020) between-generation diversity is, like generation more broadly, empirically suspect (Anderson & Perrin, 2017; Comunello, et al., 2017). Ubiquitous 'generational' differences on technological grounds are mostly inconclusive (Bott, 2011; Corrin et al, 2011; Bennett & Maton, 2010; Bennett, Maton & Kervill, 2008; Helsper & Enyon, 2010; Woodward, Vongswasdi & More, 2015; for the same empirical inconsistencies and conceptual flaws as 'generation' itself. For example, poor definition and chronology of generation, homogenisation of technology as singly entity, overlooking inter-generational difference in technological access, recall and affinity (Parry & Urwin, 2021) all contribute to an empirically suspect conceptualisation of technological-based generational differences.

Despite the challenges to generation as construct and its subsequent technologised labels, suggestions of inter-generational difference persist. This includes claims that 'younger' people prefer digital technologies for communication purposes in their daily lives (Tustin, Goetz, & Basson, 2012). Research suggests younger people are more prone to engage in multi-tasking or "boundary blurring" (Gurung & Rutledge, 2014. p.8) but such research requires further investigation such as repeat or even longitudinal design to eradicate the possibility of other variables (personality, cognition, lifestyle, education) contributing to such preferences. This would also account for whether such differences can be applied to newer technologies and therefore provide greater understanding of early exposure to certain types of technology (Stokburger-Sauer & Plank, 2014). It would also consider whether task-technology fit and broader social influences such as peer group (Gu, Zhu & Guo, 2013) are worthy of further investigation.

There are calls for new research agendas which challenge age-technology stereotypes through deeper interrogation of what generation means when connected with technology across different contexts from macro contexts such as popular culture and social life (Palfrey & Gasser, 2011) to work related environments (Cody, Green & Lynch, 2012; Foster, 2013; Lyons & Kuron, 2014; Parry & Urwin, 2010). The digital divide concept is now over twenty years old (Van Dijk, 2020). Its definition is still connected to early binary understandings of technological exposure versus non-exposure attached to ideas of age cohorts born before or after the digital revolution. Yet I suggest while it has also evolved to mean differences in the type of digital proficiency and engagement exercised by individuals (which in turn suggests agency) (Calvo-Porral & Pesqueira-Sanchez, 2019) the construct is now connected to meanings of digital access, exclusion and disadvantage. Such ideas have been increasingly related to the educational experience of young people exacerbated by the COVID-19 pandemic which required transitioning to home working and learning (Major, L, Eyles & Machin, 2020; Ramsetty & Adams, 2020). As such, a broader discourse which constitutes the social constructs of 'digital natives' and 'digital immigrants' (Prensky, 2001) is sustained forty years on from its initial conceptualisations, suggesting how social conditions can enable the sustainability and revitalisation of this discourse which I will discuss in more detail.

3.4.2. Digital Natives and Digital Immigrants

The constructs of 'digital native' and 'digital immigrant' (Prensky, 2001) are founded on the belief that those born before 1980 failed to have sufficient exposure to digital technology during their formative years of education and peer influence. This chronological point of 1980 was offered as a 'singularity' or critical point of difference in capability of becoming fluent in digital technology (Prensky, 2001). This homogenisation of younger and older people is ideologically rooted in ideas of digital technological exposure from birth around or after 1980 (Weller & Anderson, 2013).   Digital natives are therefore assumed to be socially and economically advantaged in an increasingly digital world.

The constructs of digital 'native' and 'immigrant' have influenced an entire body of work which both supports and challenges the idea of technological proficiency and engagement drawn on inter 'generational' lines. (Thomas, 2011; Helsper & Enyon, 2010). While the native/immigrant concept is mostly associated with the work of Prensky, the idea of digital native was introduced by Barlow (1996) where he admonished parents as being terrified of their own 'digitally native' children in a world where he claimed such parents are 'immigrants'. Papert (1996) further encouraged the idea of an age-related digital divide by suggesting that older people are digitally incompetent but significantly afraid of computers. The following table offers a sample of research which either supports or critiques the 'digital native/digital immigrant' construct, illustrating how the construct remains a vibrant topic of empirical debate. The table offers a sample of research from the last 20 years exploring varying differences between natives/non atives or 'immigrants' mostly focussed on technological use in different contexts.

**Table 6: Studies of technological difference
focussing on the 'digital native construct'**

Authors	Areas of critique and approach	Critical/uncritical
McMurtrey, et al. (2012)	Not enough peer-reviewed research into elderly use of technologies. Offers a varied picture of user adoption by platform, task and purpose.	Critical: calls for more research
Selwyn, (2009) Gallardo Echenique (2014) Thirunarayanan et al. (2011)	Meta-analysis of existing studies of 'digital natives' and 'net generation'	Critical: picture is too varied and therefore inconclusive
Jones & Shao, (2011) Corrin (2014) Jones et al. (2010)	Learning styles and other related differences which could impact higher education provision	Critical: inconclusive picture as a result of too many variables spanning gender, location, technology in question, no 'fixed' gap between students and teachers

Helsper & Enyon (2010)	Survey of young people aged 14 and older	Critical: breadth of use, self-efficacy, experience and education are clearer determinants of digital proficiency and engagement. A 'digital native' could constitute any age
Bennett & Maton (2010; 2008)	Critique of the concept /Learning styles and technology use	Critical Too many variables and nuances within each age group
Brown & Czerniewicz (2010)	Technology use	Critical: age is not a key variable of difference but social opportunity and access
Selwyn (2009; 2010) Guo, Dobson & Petrina (2008)	Comprehensive review of young people and technology	Critical: no remarkable differences to note
Bakla (2019)	Study of ESL and EFL students	Critical: no difference in learning styles or technological use
Helsper (2008)	General	Supportive: claims there are fundamental differences between generational groups
Stokburger-Sauer & Plank (2014)	Technological use across multiple age groups	Critical: claims that digital nativism does exist but across a range of age groups therefore age is not a determining factor.
Ng (2012)	Explored whether undergraduates can be taught digital literacy	Supportive of digital native construct but study did not compare young sample with older
Wiersma (2009)	Examination of the concept and extant research	Supportive: claims there is merit in further exploration but accepts the empirical shortcomings

Table 6 above indicates a lack of sound empirical justification for the existence of native/immigrant differences. While research suggests little evidence to support the existence of 'digital nativism' what is evident throughout is the potency of the digital native/immigrant discourse which furthermore legitimises other constructs such as 'digital nerds and digital normals' (Thirunarayanan, Lezcano, McKee & Roque, 2011). There are also examples where the dichotomy between 'natives' and 'immigrants' is argued to be superficial and unhelpful, with 'digital learners' suggested instead (Echenique, 2014, pg 172) or developing the digital native construct to apply to all ages based on digital skill and engagement (Stokburger-Sauer & Plank, 2014). Similarly, claims about digital native ability to learn and work in specific ways and the potential ramifications for educational policy and practice have come under fire as wasted effort and resources (Kirschner & De Bruyckere, 2017). The potential for difference and exclusion of certain professions conjured through images of 'digitally immigrant' teachers stifling the learning of 'native' students has provided much academic concern about new stereotypes and discrimination unfolding (Bayne & Ross, 2007; Tapscott, 1999; Jones et al., 2010). Failure to address these concerns lead to 'ostrich tactics' (Helsper, 2008. p.1) that assume children and younger people are digital experts whose education and opportunities will be stifled as a result of assumed generational differences. Such imagined fears can lead to further poor decision making within different domains which constructs younger people as digitally capable, economically desirable and therefore they may benefit from preferential treatment in recruitment and development (Whiting, 2020a). Digital natives and digital immigrants are still considered as sound empirical starting points for how technology is adopted (Kesharwani, 2020) suggesting an enduring discourse that continues to this day.

3.4.3. Digital Natives and Digital Immigrants: A discourse of digital division

Despite fierce criticism of the native/immigrant dualism, the construct of 'native' has become a popular trope in practitioner material (Chartered Institute of Personnel Development, 2015) Government policy (Department for Digital, Culture, Media and Sport, 2017) and even forms the basis of some academic studies exploring the next level of native/immigrant experience (Dingli & Seychell, 2015).

Suggestions that the native construct offers 'societal value' in enabling us to describe a broader social and potentially economic phenomenon (Palfrey & Gasser, 2011) are consistent with earlier claims set out in Chapter 2 that 'generation' offers a useful means of describing age-group membership (Campbell et al., 2015).

However, the discourse has the potential to create lasting divisions. The construct of 'immigrant' denotes connotations of outsider, or foreigner, one who is constantly having to learn and such ideas risk becoming internalised as fact within educational and work contexts with 'dangerous' consequences (Bayne & Ross, 2007). Motifs linked to language learning, such as ideas of retaining one's digital 'accent' (Prensky, 2001) analogise age and technology as learning a first and second language, to digital fluency vs literacy, particularly potent within education and learning contexts (Pangrazio, Godhe & Ledesma, 2020). They also suggest a fatalism associated with older age group membership, suggesting a constant need to 'catch up', in a permanent state of lag, older people synomised as 'laggards' (Anderson & Perrin, 2017; Comunello, et al., 2017). There are connotations of finality and lack of agency to ever attain the same digital competency as younger age groups suggesting by implication natives have digital and therefore social and economic capital (Lin, 2002; Bourdieu, 1986). This implies a promising future for young people within an increasingly digital, mobile, and socially networked world (Ragnedda, 2018; Kramer, 2006). Conversely, such discourses suggest the disempowered, digitally immigrant, less productive and less economically desirable, unenterprising older subject.

Furthermore, such discourses can contribute to citizens' self-perception of digital lack (Quan-Haase, Martin & Schreurs, 2016; Comunello, et al., 2017) digitally limited due to lack of technological exposure or the right type of exposure at home, school or work environments (Schreurs, Quan-Haase, & Martin, 2017). This chimes with ideas of age-related limitations and self-fulfilling prophecies discussed in Chapter 2, materialising in computer anxiety (Czaja & Moen, 2004; Hargittai & Hinnant, 2008) and resistance to try newer technologies (Bott, 2011). Such ideas about digital skill deficit may also subsequently act as a barrier to future digital access (van Deursen & van Dijk, 2017) and a sociocultural barrier to organizational

or social progress due to ideas of an age-related digital divide (Stanley, 2003). Ultimately, all perceptions of self and others in this sense are linked to stereotype threat (Steele, 1997) where we may even self-stereotype as we age (Steele, 1997; Ray, Sharp & Abrams, 2006) in a bid to secure group membership (Baumeister & Leary, 1995). We may assume a lack of motivation to try new technologies if we perceive this as social group (and age related) norm, (Mariano et al., 2021). We may disassociate and exclude ourselves from technologies ascribed to other generational groupings (Fietkiewicz, et al., 2016) all because of stereotypical ideas of technological norms connected to age.

Digital natives and immigrants are now meta-stereotypes (Finkelstein et al., 2013) and the internalisation of such stereotypes can impact the very design and development of technology itself (Ivan & Cutler, 2021) central to the work of my research participants.   I have offered the ways technology is increasingly and persistently discursively linked with generation and generational understandings (Sink & Bales, 2016; Thomas, 2011; Woodward, Vongswasdi & More, 2015). Such ideas are synchronous with established views that computing is a central means of generational cohesion and networking (Kubicek & Wagner, 2002). There is a call for reconceptualization of constructs based on the native/immigrant dualism (Evans & Robertson, 2019) which itself is ageing. Despite this fact, the construct of 'digital native' has persisted and even evolved in public discourse through recent nomad/migrant constructions (Birsen, 2018)

3.4.4. A 'Grey Digital Divide'? Ageing digital natives and whither digital immigrants?

Over the last forty years, major milestones in technological development have seen the introduction of mobile computing, the smartphone, and the evolution of social technologies from MySpace and Facebook (recently rebranded Meta in October 2021) to WhatsApp, TikTok, Snapchat and Instagram (Schwab, 2017). Such technologies have facilitated more diverse means of social engagement and task completion, enabling expressions of identity across all age groups. Such online

behaviour outlines a more complex and nuanced picture of multiple and varied digital literacies and preferences (Gripenberg, 2011) beyond native/immigrant dualisms. Table 7: Technological Choices based on birth years from the beginnings of the digital revolution is outlined below.

Table 7: Technological Choices based on birth years: adapted from McMullin, Comeau & Jovic, (2007): updated to reflect post 1980 technologies

Dates	Technologies (devices and platforms)
Prior to mid 1970s/Born before 1955	FORTRAN, COBOL, IC technology, computers, PONG video arcade games, HP calculators
1970s (Born between 1955-63)	ATARI 2600 (home video game console); ATARI 400 and 800 PCs, Pac-Man and Space Invaders
1980s (Born 1964-73)	Commodore 64, TRS-80; Apple Macintosh, Tetris, Windows 3.0, Nintendo
Late 1980s-late 1990s	SimCity; Doom; HTML; Mouse, Quick Basic, Excel, Linux 02, Adobe pdf, Windows 95/96, email, PlayStation
Mid 1990s-Millennium	Internet grows to 25 million users; Netscape; Yahoo; AOL; Intel Pentium processor, instant messaging, Windows xp, Java, CD-RW, PalmPilot, iMac, Google, Napster, eBay, Mozilla, iPod, X-box; Six Degrees 1997 (first social media site)
2000-	Social Media: Blogging (MySpace; LinkedIn); Photo-sharing (Photobucket; Flickr); vlogging and video sharing via YouTube (2005); Facebook and Twitter (2006); 2006+ Tumblr; Spotify; Foursquare; Pinterest; 2009+ Whatsapp; 2016+ Tiktok. 2001+ Devices (iPhone; Amazon Kindle; GPS; Macbook Air; Samsung Galaxy Tablet) 2000+ (Skype) 2010+ Voice recognition technology: Apple (Siri); Google (Google Now and Google Home); Alexa; Amazon Echo Dot and Amazon Tap; Sonos Voice Speakers Virtual Reality (VR); AI (Artificial intelligence)

In parallel, devices, platforms, channels and online interactions are maturing and diversifying, and a broad range of skills is required to successfully navigate online worlds from digital acumen to protocols around trust and identity verification (van Dijk, 2020; Van Deursen & Van Dijk, 2017). Yet even nuanced research designed to understand online activity in more detail often still begins with generational

groupings as empirical starting point. For example, in researching the value of social exchanges on the Facebook social platform, 'the Facebook Generation', are assumed to have a younger age profile (Linke & Hofer-Straße, 2011). Similarly, research into the value of health information exchanges on Facebook assumes a potentially older audience (Brailovskaia et al., 2020), while the value of civic engagement among young people is researched via the TikTok platform assuming a younger demographic (Burns-Stanning, 2020). Research into longtime users of digital media as they age provide key insights into acquired skills and preferences of those who have accumulated familiarity with such technologies over time (Quan-Haase, et al., 2018a; 2018b; Hargittai & Dobransky, 2017). As our understanding of what constitutes a generation is constantly shifting and evolving as populations age and society changes, we face research constraints if we assume age-related user profiles of technology based on stereotypes or even age itself (Meisner, 2021). This thesis calls attention to the potential for richer insights and broader, more nuanced understandings of online and digital ethnography if we move beyond traditional understandings of age as identity dimension.

I have discussed how technology is combined with age as a means of reifying difference and reinforcing social advantage. Situated within a broader landscape of concerns about online behaviour, privacy, surveillance, technological addiction and trust, there are calls for more interdisciplinary explorations of age and online life (Supa & Trültzsch-Wijnen, 2020). From 'digital narcissism' (Twenge & Campbell, 2009) (the over-use of technology to increase self-confidence) to technological addiction (Adorjan & Ricciardelli, 2021; Twenge & Campbell, 2018) both are predominantly associated with young people and therefore come laden with age assumptions. However, we may be beginning to see a discursive shift to less positive associations within the 'growing up digital' and 'born digital' discourse which deserves closer inspection.

Research which investigates younger people in terms of technological overuse or similar also risks constructing and stereotyping them in such ways (Supa & Trültzsch-Wijnen, 2020). However, such behaviours are not confined to younger people. 'Sharenting' (where parents post images and stories of their children online) and in

particular 'over-sharenting' is understood as the excessive online sharing of images and text where both adults and children are the objects of risk (Leaver, 2020). Furthermore, studies of young people suggest they both positivise the idea of online addiction and claim their parents/adults are equally addicted (Adorjan & Ricciardelli, 2021). We begin to see an evolving risk landscape where certain age groups are constructed as 'at risk' from the online environment, suggesting a return to ideas of developing 'digital wisdom' (Prensky, 2011). Described as consisting of qualities such as judgement and experience which are synonymous with adulthood and maturity, digital wisdom (Prensky, 2011; Sadiku, Shadare & Musa, 2017) is becoming increasingly essentialised for all age groups in order to successfully navigate an increasingly digitised and untrustworthy world. It signals a potential retreat from a eulogised, fetishised discourse of younger people endlessly constructed as digitally gifted and privileged (Meredith, Schewe, & Karlovich, 2002) but importantly suggests digital capital has evolved to become more afforded to older age groups. I will now discuss digital capital in more depth.

3.5.   Age and 'digital capital'

Social capital (Bourdieu, 1986) can be described as the value of resources attributed to relationships and social ties acquired via social networks, enabling mutual success in various social realms and connections with power holders. Our skill in developing such connections online and the accumulation of digital competencies (information, communication, safety, content-creation and problem-solving) has come to be known as 'digital capital' (Ragnedda, 2018, p.2). Rooted in ideas of information capital (Bourdieu & Wacquant, 1992) the concept can be considered a dependent variable influenced by technological use (Sum et al., 2008).

However, a preoccupation with the idea that digital capital is an independent variable explaining technological use can lead to assumptions that only some factors, such as age, contribute to digital differences. It dismisses other influences that can explain *why* differences occur, such as identity, social context or life events such as retirement, isolation and ill-health that can result in withdrawal from online interaction rather than vice versa (Russell, Campbell & Hughes, 2008). Indeed,

digital exclusion, perceived or otherwise, can now be considered a legitimised form of social exclusion (Helsper, 2021; 2017; Norris, 2001). Research into the afforded technology identities of university students outlined how perceived access to technology due to socio-cultural factors act as barriers in similar ways to gender stereotypes in work contexts (Goode, 2010). If we understand the workplace to be a site where stereotypical ideas of age-technology differences can flourish, it follows that it is also a potential site for the realisation or denial of digital capital (Kramer, 2006). I will now discuss the significance of this in more detail.

3.6.   Work as context for future age-related digital differences

Approaches to technology in the OP/OB field have explored technology through four key paradigms: technology as *context* or the environment within which we now work; technology as *causal* or connected to work outcomes; technology as *instrumenta*l or directly impacting work outcomes and technology as *integral*, where the outcome of work is the interaction between ourselves and the technology in question (Landers & Marin, 2020). Whether technology is deemed as causal, instrumental, contextual, or integral, each of these paradigms has gained popularity at different historical junctures and resulted in how technology has been theoretically approached and therefore researched. Overall, scholarship has evolved from perceiving technology as somehow separate to ourselves to more integral, entangled and enmeshed in our everyday behaviour and identities, or 'digitalisation' (Brennan & Kreiss, 2016).

Earlier in this chapter I discussed the empirical challenges associated with generational labels (Table 3) and generational-technological labels (Table 5). Connections between generational belonging, and assumed technological exposure/preferences, are transferred to assumptions concerning work performance and therefore labour value. Digital Natives have been constructed as natural problem solvers, entrepreneurial, inventive, and enthusiastic (Thomas, 2011) and creative, energetic and entrepreneurial (Kwiatek, Papakonstantinidis & Baltezarevic, 2021; Palfrey and Gasser, 2011). This implies a call to action for industry to leverage digital natives, or de facto younger people, to help

organizations increasingly digitise and revolutionize their operations more broadly, securing competitive advantage (Dingli & Seychell, 2015). Yet this implies such action is at the expense of, and therefore denying opportunity to 'digital immigrants' or older people.

The subject positioning of older and younger workers is achieved not least by the ways in which they are empirically researched. Topics often seem embedded in generational assumptions linked to the growing up digital narrative. 'Millennials' are offered as preferring the use of digital social networking platforms to seek answers, share knowledge and connect to others; they are said to prefer gamification in learning and collaboration (Trees, 2015). Yet studies fail to assess the role of context (Deal, Altman & Rogelberg, 2010) task management, personality, aptitude or other identity dimensions instead resorting to stereotypical discourses that naturalise younger workers as preferring 'future facing' technologies (Kane, 2015). These risk homogenising all 'younger' people as sharing various working, learning and collaboration preferences that in turn enable them to stay digitally relevant and skilled (Meyer, 2011) thus continuing to perpetuate the idea they have labour advantage.

Conversely, the suggestion that older adults underuse computer technology is attributed to their fears about embarrassment of revealing a lack of ability, and thus confirming the very stereotype they are seeking to avoid (Mariano et al., 2021. This suggests a generalisability of stereotype threat across other technologies at work and elsewhere. Digital upskilling interventions aimed at 'older' people, such as reverse mentoring with younger, assumed, digitally astute colleagues (Hershatter & Epstein, 2010) are suggested as a potential way forward to guide older people in best practice in mobile and social technologies (Lee, Chen & Hewitt, 2011). However, such approaches reflect the paradox of the 'older worker' more broadly (Riach, 2016; Ainsworth and Hardy, 2007), and risk legitimising ideas that age-technology differences do exist requiring resource and interventions. Such focus on a discourse of need (Drury et al., 2017) connected to the high warmth and low competence model of older people (Cuddy & Fiske, 2002) risks reinforcing the stereotypes organisations and institutions work to avoid.

In this thesis I argue that if our relationship with technology is connected to, and discursively constructed by chronological age or age-related dynamics, it stands to reason such constructions influence our perceived capability for and engagement in certain types of work. As we see in Chapter 2, perceptions of the older worker more generally can be stereotyped and lead to division and discrimination. This calls into question the significance of age-related technological (in many cases generational) labels within work contexts. Further research exploring age-technology discourse is required to highlight potential future divisions as work technologies and practices continue to evolve. I will now discuss the contributions and limitations of how age has been explored within IT and the digital technology sector to date.

3.7.   Age in the digital sector: the site of new digital divides?

The Digital Economy is defined as consisting of ecommerce, e-business (the trading of goods or services over computer networks such as the internet) and the supporting infrastructure for such processes including hardware, software, telecommunications (Department for Digital, Culture, Media and Sport, 2016; Mesenbourg, 2001). The digital technology sector differs from more traditional understandings of IT work, in that it extends beyond the provision of technology (namely hardware and software) to cover many other services and products considered digitally enabled (Office of National Statistics, 2015). The digital economy also encompasses roles which may not sit directly within a digital business but can be described as digitally enabled and vice versa (Spilsbury, 2015).

Overall, more than 1.5 million people work within the UK digital technology sector, or in 'digital tech' roles across other sectors, with an annual turnover estimated at £170bn. It's contribution to the UK economy stands at £97bn. (TechNation, 2017). Technology which supports the digitalisation of the finance industry, known as FinTech, is the fastest growing and most influential part of the digital technology sector for UK business (TheCityUK, 2018).

The sector has expanded to impact most of our lives including but not limited to consumer, health, social, leisure, financial and work. There may be increasing

blurring of lines of what constitutes 'the digital economy' as businesses are increasingly finding ways to become digital (Office of National Statistics, 2015). Compared to the original industrial revolution and classified as just as important, the sector is frequently described as 'disruptive' particularly in relation to goods and service delivery within the creative industries (Hearn, 2020). Additionally, the sector is described as making the transition from the information age to the internet age (Huws, 2014) and linguistically represented through lexical and interdiscursive pairings linked to e-commerce such as ''e-conomy' (Baily and Lawrence, 2001 and 'Industry 4.0' (Lasi et al., 2014). Here we see a taxonomy associated with the broader digital revolution, suggesting a discourse where material can come to mean virtual and intangible transactions and practices changing established business models, products and services (Cooren, 2020) Furthermore, the convergence of content, technology and people are also said to change our approach to what constitutes knowledge, work, goods and services though increasing digitisation and virtualisation, a move from consumption to self-production, or 'prosumption' of goods and services (Kotler, 2010).

All of which suggests a highly disruptive shift in organisational and industrial power as a result of structural changes to how goods and services are provided through digital means. In Chapter 2 I discussed common stereotypes of older workers as lacking energy, creativity, drive and capability to meet the demands of the contemporary workplace. This calls into question what this means for workers who are ageing and older in the Digital Technology Sector, as a sector frequently constructed as highly energised and youth-orientated (Scheilber, 2014; BBC, 2017; Chang, 2014). While the digital and IT sectors do differ, extant research from IT workers, particularly older IT workers can provide valuable insights into the challenges facing this professional group.

3.7.1. Drawing learnings from IT worker age research

The IT worker has been explored previously across a range of topics encompassing topics such as professional identity (Brooks et al., 2011), skill and training

requirements (Charness & Fox, 2010) and cultural fit (Guzman & Stanton, 2009). Identity work research has outlined a need for belonging and appreciation of skill and credibility (Brooks et al., 2011); career commitment and satisfaction (Fu and Chen, 2015), job performance (de Koning and Gelderblom, 2006) and skill and training (Brooks et al., 2011; McMullin & Marshall, 2010).

Cconcerns about older worker identity posing professional risks reveal tensions concerning skill retention and training provision (Charness and Fox, 2010; Jovic and McMullin, 2016). The accumulation and retention of skills in particular, and perceived need to constantly upskill (Pazy, 1990) suggests the fear of professional obsolescence (Joseph and Ang, 2010; Zhang et al., 2012) as an important element of identity negotiation, realised discursively through expressions of precarity such as 'being on thin ice'. (Pazy, 1990). However more sociological dimensions such as generational affinity (McMullin et al., 2007) have been considered as important aspects of IT worker identifications, and as such identity work to preserve credibility and professional belonging (Brooks et al., 2009) become attached to upskilling in modern technologies.

Tocci (2009) discussed how the typical professional profile of the 'computer person' is male, insular, anti-social yet highly intelligent. Similarly, certain discursive labels can accentuate such ideas: 'Geeks' and 'Nerds' are intrinsically linked with identities that have strong affiliations with science and technology more broadly. McArthur (2009, p. 62) defines 'geek' as typically male, stigmatised as social outcasts, obsessive about computing technology. Similarly, 'Nerd' has been used to describe more scientifically minded, insular, anti-social and mostly male individuals (Varma, 2007). Such stereotypes have been frequently reproduced in media discourses (Mendick and Francis, 2012) and have evolved to become more positively associated with age-agnostic desirable identities (Tocci, 2009). Therefore, we see IT professional identity in connection to age encompasses broader identity dimensions beyond traditional 'older worker' understandings where identities are discursively negotiated through a range of identity dimensions to enable the circumvention of negative age connotations.

Broader studies of 'identity work' have explored how professional identities are complex, negotiated, performed or constantly being worked on (Coupland & Brown, 2012) within role, organizational and institutional settings (Brown 2001; 2015; Slay & Smith, 2011). Identities do not easily compartmentalise but can cross fertilise, coalesce, contradict, or conflict across work and non-work contexts (Riach & Kelly, 2015). This illuminates how professional identity can be situated within more complex social structures, which may complement being older or may conflict with social understandings of the older worker identity (Brown, 2015; Spedale, 2019). For example, Hennekam (2015) researched older creative sector workers being forced into self-employment, resulted in new forms of identity work, as 'entrepreneur' or 'retireee' to gain acceptance. In studies of fashion and new media employees, Neff, Wissinger & Zukin (2005) professional legitimacy was only secured if employees attended non-work events which conflicted with other identity dimensions linked to family responsibilities. Such research highlighted important examples of often insidious and subtle age-related constraints which require careful negotiation on the part of the older subject (Ainsworth & Hardy, 2008).

The significance of age on identity work of older digital sector worker is under-researched but an important route for future exploration, according to both theorists and researchers. Bourdieu (1991) suggested cultural products more broadly, digital or otherwise, are infused with power relations in their production and distribution, implying the need for future scrutiny of the actors involved. Cutler (2005) outlined that technology has a powerful role to play in affecting ageism itself, by contributing to and perpetuating ageist attitudes via the design, development and marketing of the technology in question. Therefore, understanding more about the professional group who proactively design for, develop for and market to digital products and services to older people can illuminate the extent to which they recognise and respond to stereotypical ideas of older people. Such stereotypes can act as inhibitors of understanding real user needs (McMullin et al., 2007) that may 'reconfigure the user' (Vines et al. 2015. p. 39:2) creating an 'ageist portrait' of the older user (Cutler, 2005 p.67). There is a recognised risk of younger technology designers and developers focussing on

younger markets as a result of recursive stereotyping connecting age to technological use and non-use (Drury et al., 2017). Cotten (2017) suggests technology is uniquely placed to address substantive issues faced by our ageing population but calls on research to go beyond variable-based research and self-report, which can also reproduce stereotypes to interrogate more public discourses of age and technology that can perpetuate stigma in order to challenge it. However, ideas that the 'older' IT worker may be best placed to address ethical issues attached to emerging technologies is worth further exploration. The view that they demonstrate higher levels of ethical awareness in connection with technological development, avoiding "rash decision making and short-termism" (Wilford & Wakunuma, 2014, p 270.) has the potential to create fresh stereotypical ideas of older worker capabilities.

3.7.2.   The 'older' digital sector worker: profile and prominence

While the older worker within the IT and digital technology sector varies in similar ways to those discussed in Chapter 2. 'Older' appears to be set at 'younger' ages within digital technology sector contexts. Research outlines how 'older' can be defined as over 35 (Rosales & Svensson, 2021) or even over 30 (Kaarst-Brown & Birkland, 2011).

However, there seems to be a confused picture between stereotypical ideas of what constitutes an older technology/digital worker and the labour market reality. On average 72% of UK digital tech workers are over 35 (TechNation, 2017) despite the sector's associations with a youth-orientated ideology underpinned by values of innovation, agility and creativity, often referred to as a 'start up culture' (McAveeney, 2018). Similarly, there is much discussion of perceived ageism within the IT and more recently the digital technology sector. Media accounts talk of 'IT's dirty little secret' (Harbart, 2011), of 'greying tech workers' taking drastic measures such as plastic surgery to appear youthful (Henley, 2014; Kerr, 2019). Recent practitioner research reveals a prevalence of ageist language experienced by 41% of those working in the sector, from 'grandad/grandma' or 'old fart' considered 'banter culture' (Sevilla, 2019). The media frequently amplifies a culture of ageism

in the sector, exposing age discrimination cases such as the 2019 lawsuit against Google (Kelly, 2019). While statistical data outlines a broader picture of age diversity within the sector, such media accounts raise interesting questions concerning what it might mean to age and be older in this sector if 'digital work' is consistently, if fictitiously, linked to youth. To date there are minimal empirical UK based research exploring the experiences of older digital technology sector workers. Rosales & Svensson (2021) attend to age stereotypes and ageism in contemporary tech, acknowledging its research paucity. Their findings highlight how workers over 35 are considered 'old', expected to become managers, considered less interested in learning new technology or upskilling and assumed to need more support than younger counterparts in learning new software. The study explores the impact of wider cultural dynamics including the fetishization of entrepreneurship, professional embeddedness, altruism, and how ageism is reinforced in the sector by certain stereotypes. Such stereotypes depict even older tech workers as disinterested and less capable of learning new technology, of being more family orientated and refers to perceptions of older employees as more expensive (Bentley, 2003).

Ideas about digital disengagement and connecting technology type to age profiles can have multiple material effects for digital workers in terms of their own identities *and* professional output. While such ideas may breach equality acts (UK Disability and Discrimination Act, 1995; Equality Act, 2010) they could hinder lucrative new product development opportunities to support older people (Drury et al., 2017). They may also exacerbate pre-existing self-limiting beliefs about interest in new technologies, capability and cultural fit which can hinder career progression and sustainability (Jovic & McMullin, 2016). Research of intra-generational differences between IT workers showed there were no substantial differences in work values (Davis et al., 2006). However, my concern and connected to the need for my research is the significance of generation as research variable within such studies. IT workers themselves have offered their generational affinities to achieve identity acceptance by mobilising 'generational' discourse with computing technology, e.g., the 'Atari generation' despite reflecting on the limiting impact of such identity work in terms of others' perceptions of their skills

(McMullin, 2007). Previous research of the professional identity of game workers, while not focused on age as identity dimension per se, outlined an inseparability of their identities from the products with which they work (Wimmer & Sitnikova, 2012; Deuze et al., 2007). This seems to indicate age and technology interact in complex ways to discursively achieve identity that connects to other dimensions of identity beyond age itself.

3.8. Concluding Points

In this chapter I have discussed how technology is enrolled in perpetuating new and established age-related differences and divisions, and how such divisions are discursively achieved. Such digital divides have tended to focus on social exclusion and disadvantage as a result of poor technological access (Van Dijk, 2020). I have argued that age is also enrolled in the digital divide debates connected to discourses enlisting generational divides, 'grey digital divides', 'growing up' or being 'born digital', and 'digital generations' as markers of age-related digital difference. I have also suggested the potential for further explorations of the interdiscursivity of technological language in age discursive domains such as work that links technology to ideas of employee capabilities and preferences.

Vines et.al (2015) proposes a renewed research agenda where our motivation for studying ageing is rooted in challenging social attitudes but located within studies of age within contemporary contexts, particularly post social events such as the technological impact on our global society post COVID-19 pandemic (Hodder, 2020) in order to identify sites of future inequity. There is a broader call to resist simplistic age typologies in the digital age by avoiding generalisations which can lead to stigma and discrimination (Brandtzæg, Heim, & Karahasanović, 2011). I suggest that the reification and recursive nature of age-digital discourses may lead to future divides linking technology and age particularly within work contexts. There is a specific need to understand more about the normalised discourses within the professional group charged with future technological development and delivery to avoid influencing bias on tech products and services (Sandvig et al., 2016).

Therefore, this thesis responds to various calls for new research avenues which challenge naturalised and established discourses of age by stimulating and initiating new research conversations about age-technology discourses and their potential material impact. In the next chapter I will discuss the theoretical basis for this thesis reflecting on the significance of political and social undercurrents that contribute to age classifications and divisions, and the linkages to technology and ultimately power.

Chapter 4: Theoretical Framework

4.1.   Introduction

This chapter outlines the rationale for the theoretical framework and perspectives underpinning my research thesis. I begin by returning to my research aims and questions to illustrate my research paradigm within which this thesis is situated. I discuss social constructionism and critical theoretical perspectives, applying approaches of Fairclough through a Foucauldian lens. This leads to a broader discussion of critical discourse as a theoretical approach (Chouliaraki and Fairclough, 1999) noting its methodological application as discussed in more detail in Chapter 5. I discuss the rationale for adopting Fairclough's model of text, interaction, and context more specifically, and the role of interdiscursivity within this research before outlining the challenges to such perspectives and where some of the theoretical challenges and incompatibilities may lie.

4.2.   Research Aims

As outlined in Chapter 1, my research questions are as follows

- **In what ways are chronological age and digital life discursively linked in UK popular media?**
- **To what extent and in what ways are such discourses offered in the identity accounts of 'older' digital professionals?**
- **What are the implications for how such discourses sustain and evolve for older digital sector professionals?**

These questions have evolved from an exploration of the relevant age literature that highlights how age itself is symbolic, a social construction, discursively managed by actors and frequently offered in various ways to secure identity achievement within different contexts. Therefore, such research questions have led to the following ontological and epistemological positions which I will discuss in turn.

4.3. Interpretivism and social constructionism

In this thesis I adopt an interpretivist ontology. My research interest is located in how age in certain contexts can be interpreted and constructed, how meanings are afforded to phenomena such as age (Gergen, 2009) and how such phenomena persist or changes over time (Potter, 1996). The focus of this thesis is to illuminate and interpret the potential meanings and values attached to age within a contemporary context and the conditions that give rise to such meanings. I also seek to explore how 'realities' and 'knowledge' attached to age become normalised and accepted, underpinned by certain ideological standpoints and how these become operationalised through discourse. In exploring age in this way, I contribute to work that illuminates the challenges of previously under-explored groups and gives voice to the hard-to-reach, all of which are in line with the theoretical aims of social constructionism (Andrews, 2012).

4.3.1. Social Constructionism: definitions, opportunities, and challenges

Social constructionism, a core concept within sociology, views the world as constituting co-constructed, socially produced ideas by self and others through language. It is not concerned with a discoverable or knowable 'reality' or what others would consider 'real' or discoverable, but instead focused on how any phenomenon becomes accepted as a shared, objectively factual but subjectively meaningful 'truth' (Gergen, 2009; Berger & Luckman, 1991). Mainly associated in the early work of Berger and Luckman (1991), social constructionism is said to take place through externalisation (how humans act in the world), objectivation (the artefacts and practices resulting from acts) and internalisation (when such acts become accepted norms and enter the social realm, when concepts become objective facts) (Berger and Luckman, 1991). Pre-existing ideas in the world become internalised by people, normalised as objective 'truth claims' or accepted facts about 'how things are' which over time can form their understanding of the world and world-view (Gergen, 2009; 1999).

Social constructionism has received various definitions: as theory, as theoretical position or orientation and its status has fluctuated from high popularity (Burr, 2003) in recent decades to fierce criticism (Hacking & Hacking, 1999). The perspective has varied historical roots ranging from social psychology and hermeneutics such as the identity work of Mead (1934). It has also become linked to social history through connections to Marx & Kant, and It is said to be constituted by weak' constructs (that rely on brute facts which cannot be explained, such as that the universe exists) and 'strong' constructs (those afforded meaning by people through interactions and social conventions). Religion, culture, gender, race, and age have all been offered as strong constructs and artefacts that are contingent, contextual, precarious, open to deconstruction and reconstruction throughout history (Burr, 2003). Such phenomena are said to be afforded meanings subject to the 'human agreement' of what constitutes them (Searle, 1997) rather than possess any inherent truth and may be ideologically linked: for example, the concept of 'human rights' renders its meaning through connection to ideas of western moral imperialism (Burr, 2003).

Critics accuse social constructionism of being narrow, anti-realist, in denial of any causality or biological impact on people and culture, that the perspective fails to adequately define 'social' or 'society' or recognize that meaning can vary from person to person (Hacking & Hacking, 1999). Over the past 30 years influential social constructionist perspectives offered by Billig (1996) and Harré (1984) suggested that we ultimately co-create our existence and identities within it, including the human condition. In essence, critics challenge the social constructionist view that humans are social products completely, that what it means to be human is entirely constructed. This suggests the theory is flawed by prioritisation of fashion over theoretical value (Sokal & Bricmont, 1999). I am particularly interested in the fundamental role language plays in the construction and constitution of what is considered 'knowledge' (Deetz, 2003) and how interrogation of such language can illuminate its social, economic and political impact in previously underexplored ways (Gergen, 1991; Potter and Wetherell, 1987). Within this thesis I am also attuned to the role of individual agency in language use and interpretation of meaning, where 'agency' is broadly understood

to mean the capacity for humans to make choices determining their actions. However, I note that agency is conceptually complex but for the purposes of clarity within this study I define agency as "the socio-culturally mediated capacity to act" (Ahearn, 2001. p.130). Critical theoretical perspectives and methodological approaches offer the opportunity to scrutinise ideas such as the extent to which language is choice and open to human agency or whether subjects are confined by structural boundaries in language use (Phillips & Hardy, 2003). I will now explore critical perspectives in more detail.

4.4.   The case for adopting a Critical Perspective

Critical paradigms are rooted in the critical tradition constituted of the Frankfurt and neo-Marxist schools and writings of theorists such as Marx, Gramsci and Althusser (Bohman, 2005). Critical theorists such Foucault (1972; 1980) discussed in more detail below move beyond the boundaries of descriptive analysis of language, concerned with interrogating how power and ideology are produced, sustained, reified, and reproduced by it. The "critical" turn of the 1960s and 1970s, linked to Gramsci, Marx, Horkheimer and Giddens was interested in societal oppression, internalised hegemony, coercion and consent. This implied a potent role for language in such social dynamics, assuming privileged actors who achieved and sustained such privilege through text and talk (Fairclough & Wodak, 1997; van Dijk, 1996). The critical paradigm is consonant with my interest in hidden meanings and intentions within language, both by the language user and by other actors, and the subsequent potential advantages and injustices that may result where language is considered and operationalised as a valuable resource, forming part of one's capital.

Connected to neo-Marxist theorisations of power and control within the critical tradition, capital is more recently linked with theoretical ideas of Bourdieu (Bourdieu, 1986 in Richardson, 1986) and considered social and/or cultural. Capital can be defined as any phenomenon which constitutes value that can afford subjects a higher social position, and therefore can determine one's role in the social world (Lin, 2002). In this thesis I do not draw directly on the work of Bourdieu per se but

instead focus on the ways such work has informed extant capital scholarship, such as what constitutes social and cultural capital within an increasingly technologised world as outlined in Chapter 3. While capital can be embodied (one's appearance, skills, tastes, attitudes, and behaviours including use of language), objectivised (material belongings and possessions) and institutionalised (authority, credentials such as qualifications) more recent ideas of capital in connection to contemporary forms of power are realised through technological skill and engagement (Russell, Campbell & Hughes, 2008) specifically 'digital capital' (Ragnedda, 2018; Ragnedda & Rulu, 2020) is explored in more detail in Chapter 3. While Bourdieu's conceptualisation of social capital is understood as the reproduction of class and status over others (Bourdieu, 1986), I explore power and status within Foucauldian and Faircloughian terms, namely how preferred identities can be achieved as a result of language use and the reproduction of such language across different discursive sites.

In Chapter 2 I discussed how constructions of age via discourse can move beyond associations with pure chronology to become a 'fundamental organising principle' of society (Spedale et al. 2014, p. 1586) and a significant cultural symbol (Gullette, 2004). I argue that age is an artefact used to legitimise social attitudes and even policy changes (Fealy & McNamara, 2009). Critical perspectives can also be broadly defined as *any* approach, macro or micro, which questions and interrogates the status quo, and discourse can act both as site and vehicle for power relations (Wooffitt, 2005). However, much of critical approach to discourse analysis draws implicitly or explicitly on the work of Foucault. While there are many other contributors and perspectives to the critical paradigm, I have located my thesis partly within the Foucauldian tradition the reasons for which I will explain now in more detail.

4.5.   Foucault and Orders of Discourse

Much of the critical school were concerned with institutional and hegemonic power such as Marxism, Foucault (1972; 1980) offers a post-structuralist theoretical

viewpoint that focussed on where power resides in an evolving world where meanings can change. Foucauldian perspectives encourage a shift of focus from power itself to the subject of power (Foucault, 1980), how such subjects become objectivised (Foucault, 1980) and how discourse reflects and constructs the social world via the different agents who use it or are situated within it. The orders of discourse are the discursive practices of a society or an institution, and in Foucault's view, it is not possible to access a *pre-existing meaning* (Foucault, 1980) but instead we should attend to analysing the 'episteme' or conditions of possibility that make meaning possible.

Within the more transformative and postmodern critical perspectives, Foucauldian theoretical approaches view language as more than a system of representation but a means of producing, sustaining, and reproducing power relations (Wodak & Fairclough 1997; Wooffitt 2005) underpinned by specific processes and systems. I was particularly drawn to the Foucauldian ideas of archaeology and genealogy, where archaeology traces a topic or idea related to how it appeared within the context of culture and history and therefore asks us to examine the discursive possibility at a given point of time (Foucault, 1972). In exploring discourses of age and ageism, this aids our understanding of how ageism emerged as a social product (Phelan, 2018). In contrast, genealogy considers the propositions upon which the topics or ideas are founded or, for example in this context, how ageist stereotypes can regulate how older people are seen and treated up to and including the present time. It enables an examination of the constitution of and relationship between discourse-knowledge-power inter-relationships in the world (Foucault, 1980). Within my analysis I explore how age discourse transfers from one social domain to the other, which in turn reinforces what we constitute as knowledge and the power holders of such knowledge (Fairclough, 2015). Consequently, how adults are viewed and treated can be based on age identifiers such as negative or positive subject positions such as the social construction and normative discourse of older adults as frail, dependent, asexual or less valuable to society (Nelson, 2004). From there, value is afforded in terms of capability for economic productivity, but essentially it is rooted in what is considered socially 'valuable' at a given time and context.

Foucauldian CDA takes a postmodern turn, claiming that power is historical, social and political and does not purely reside within dominant, hegemonic institutions and individuals, residing everywhere and anywhere. Importantly, power can be internalised and used by subjects in ways that achieve localised power. For example, the reproduction of age categories in ways that are limiting, or over-positivised, ultimately establishes power for certain actors involved such as resistance to change or offering certain types of identities (Zotzmann & O'Regan, 2016). Foucault also faced criticism (and self-criticism) for the limitations of his arguments: his ill-defined conceptualisation of discourse which he himself confessed to (Foucault, 1972); his views on power and the relationship with knowledge also criticised for lack of clarity (Smart, 1983). However, my interest in this thesis is concerned with Foucault's radical questioning of power, its effects, the historical conditions, discourse and its formations and transmission and circularity between texts and domains, and fundamentally the question of the subject and power. I argue that pre-existing discourses and constructions of age may provide the episteme for new discourses of age to exist, particularly in work and institutional settings. However, to establish such pre-existing discourse and their nature, a critical discursive approach is required, and I will now outline the theoretical contribution of such approaches and the rationale for its application within this thesis.

4.6.   Language and Power: Critical Discourse as Theory

Discourse has been described as how things come to be represented through talk, text, visual means and objects (Parker, 1992). This takes place through a range of socially agreed patterns in accordance with different life domains such as education, law, the media, medicine and everyday activities. Such 'patterns' are constituted by the norms, rituals, roles, subject positions and delivery of certain topics between subjects in given contexts, the particular means of understanding the world (Phillips, and Jørgensen, 2002).

Critical discourse as analytical approach (CDA) gained momentum in the late 1970s through critical linguistics, via seminal works from Halliday on Systemic Functional Linguistics and broader social and political perspectives (Hodge & Kress, 1993). CDA

is specifically concerned with how language unveils the workings, social systems and structures of society (van Dijk, 1993). Critical discourse constitutes various theoretical perspectives and methodological approaches more broadly connected to critical perspectives (Chouliaraki & Fairclough,1999). They are collectively concerned with unveiling the sources and mechanisms of power and social control via language (van Dijk, 1993). The complexity of discourse suggests it is congruent with and 'inseparable from the… social phenomenon in question" (Taylor, 2013, p. 9). Indeed, critical discourse analysts claim they explore the role of language beyond the descriptive to explore the political connections and social inequalities language can lead to when operationalized in different contexts (Van Dijk, 2003; Potter & Wetherell, 1987). Within organisational and work contexts the research focus has been on how text production, its producers, audience, recipients and the organisational topics in question may shape the contexts in which they themselves are produced, received and disseminated (Johnson et al., 2012 in Fairclough, 1995). For example as discussed in Chapter 2, age-friendly practices can paradoxically contribute to injustices and inequities (Appannah & Biggs, 2015) intentionally or otherwise (Phillips & Ravasi, 1998) with subsequent effects that marginalize and exclude older workers.

The sociological heritage of critical discourse is connected to the work of Bourdieu (1991). Specifically, the topics of field (system of power relationships and structures within a given domain), and capital (the skills, habits, tastes, belongings and status gained by belonging to a social class or group) can hold particular relevance to our understanding of professionalism, productivity, value, resource access, group membership and status in work contexts (van Dijk, 2005; (Bourdieu, 1991; 1986)). Through the use of language, meaning is achieved through connections and relationships between words to form broader concepts and ultimately 'interpretive repertories' or "bounded language units" (Wetherell & Potter, 1988: p 171) or in Foucault's view through 'systems of representation' (Hall, 2001). Most situations require adherence to contextual norms (Foucault, 1972; 1981) that implicitly and explicitly establish, perpetuate and reproduce values, stereotypes and accepted ways of seeing the world through language (Fairclough & Wodak, 1997). Discourses can be examined on various analytical levels such as micro (the actual text in

question); meso (the social interaction and local context, such as institutional, organisational) and macro (the broader social, political and economic context surrounding the discourse) (Boje et al., 2004).

Critical discourse analysis can be offered in two ways. "Big D Discourse" or "Discourse" spelled with a capital "D" as informed by theorists such as Fairclough, Hodge & Kress (1993), Wodak (1996a, 1996b), van Dijk (1997a, 1997b) and colleagues, concerned with unveiling and challenging the forces of power and control which are achieved through language interactions and other activities (Gee, 1990). However, little 'd' discourse, that is 'discourse' spelled with a lower case 'd' is the analysis of language in use, while acknowledging big D' discourse enables that language in use to happen (Gee, 2015). Lower-case discourse does not call for *transformative action* as a result of analysis of text and talk, and social action is not always a given. Instead, discourse illuminates the more subtle, insidious ideological underpinnings of a given discourse in order to stimulate conversation and debate (Wodak & Chilton, 2005). Such sites of discourse can range from, and see discursive transference between, broader realms of public discourse such as institutions, the media and politics to everyday interactions which may appear neutral, tacit and unproblematic (Fairclough, 1992).

My thesis is concerned with both macro and micro use of language and challenging both the broader and localised ways in which language is used to secure identity achievement and power (Ainsworth & Hardy, 2004). It is the nature of such discursive transference between different social realms (Fairclough, 2015; 1995) and it is the implications of such transference which I discuss in more detail in Section 4.8. I am particularly interested in the ways these may be connected to identity achievement and identity work via language (Bauman, 2000). In this thesis I focus on text rather than visual or other elements, attending specifically to the qualities of how language constructs the world and the social within it (Phillips & Hardy, 1986).

4.7.   Fairclough and interdiscursivity

This research thesis is concerned with three contexts: the broader social context of media, the professional context/s of the digital technology sector and the interview as an immediate and local site of discourse operationalization. Fairclough's three-tier model of text, interaction, and context (Fairclough, 1992) enables exploration of language operating on three levels: local, individual and wider social levels. These encompass distal or distant contexts (such broader society and political life, media, economic class, environment, geography and political influences) and proximal or local contexts such as institutional or organizational text and talk, social interactions and other everyday activity (Alvesson & Deetz, 2000; Weick, 1995) From this perspective, discourses are present within different sites of discourse, known as interdiscursivity (Fairclough, 1992) originating in the work of Bakhtin (1981; 1986).

 Fairclough discusses interdiscursivity to mean the wider appropriation of styles, genres and the ideological assumptions underpinning discursive practice (Fairclough, 2015). For example, the normative behaviours, language, objects, visual elements within a particular context which can then transfer or interpenetrate to other contexts and social realms such law, medicine, politics, education, technology, science, advertising, academia and consumerism (Fairclough 1993). In relation to this research, such interdiscursivity can highlight where technology is enrolled in age-related discourses by actors to persuade, gain entry, assign and establish membership and positive identity associations. I argue that interdiscursivity takes place between two social realms explored in more detail across Chapters 6 to 10: that age is being technologized and technology is being age assimilated through a process of interpretation and discursive practice, outlined in Figure 1 below.

Figure 1: Fairclough's model of Text, Interaction and Context

(Fairclough, 2015, p. 58)
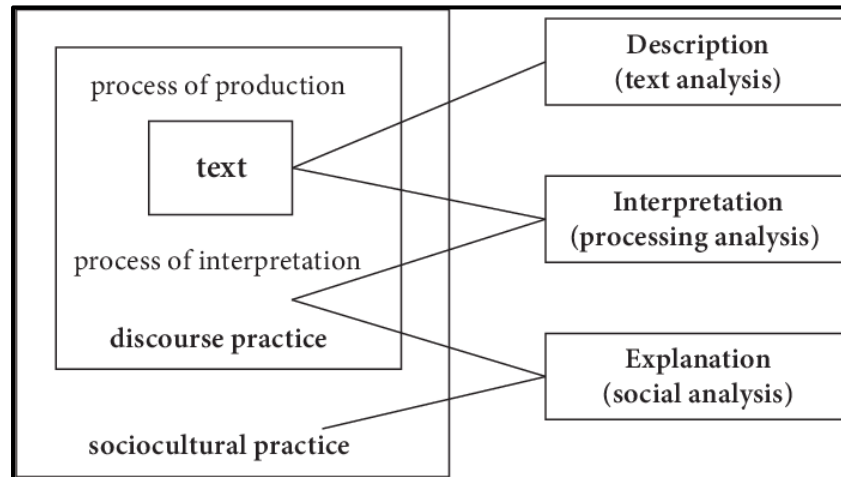
According to Fairclough (1992) discourse has three dimensions which enable socially produced ideas to be enacted through discourse: description, interpretation, and explanation. Firstly, the pieces of talk or text in question are explored, secondly the collection of texts that gives them meaning, such as institutional or media discourses, which Fairclough describes as possessing 'mediated power' (Fairclough, 2001). The units of exploration are *micro* context (the level of the text); a *meso-*context (at the level of social interaction between texts and audience) and at a macro level of the social world in which the texts are situated (Boje et al 2004). The model allows for a critical exploration of how discourses constitute different types of *categories* (Fairclough, 1992; Hardy & Phillips, 1999; Wodak, 1996) and the ways categorizations can elevate or marginalize individuals and groups, known as the discursive order of power, agency and transfer (Fairclough, 1992). Fairclough's model views language as operating on an ideational level (the construction and representation of experience in the world), a relational level (the enactment of social relations) and a textual level (the production of texts). Both meanings and expressions interface with phenomena outside language, particularly with social life or identity (Bauman, 2000) to such an extent that "the social is built into the grammatical tissue of language" (Chouliaraki & Fairclough 1999. p.140). By careful examination of specific texts or interactions researchers can illuminate the social

relations which they reflect, configure or reproduce, and learn about the social context in which these relations are embedded.

While Fairclough's early intentions were rooted in calls for social change through interrogation of discourse, I chose this theoretical model in order to highlight the more subtle, insidious and everyday ways discourses can result in inequalities. (Fairclough, 2015). Such discourses may begin life as critical analysis of the text in question (with a small 'd') but evolve into capital 'D' resulting in calls for direct social change (Gee, 1990). For example, ageist discourse can occur within local speech events, (or first level discourse within Fairclough's model discussed below), where the interpretation of such discourse (second level) can lead to ageist social practice at recruitment of organisational level (Coupland & Coupland, 1993) thus resulting in social awareness of potential inequalities and subsequent calls for action (Phelan, 2018).

Applying this model also enables me to interrogate the dynamics of agency versus structure in relation to discourse adoption (Ybema et al., 2009). In other words, the extent to which individuals deem themselves capable, worthy and independent to choose their actions, or whether they are restricted by necessity in discourse adoption. Agency has been defined in a myriad of ways but what all definitions share is the agreement that agency is "socioculturally mediated, both in its production and its interpretation" (Ahearn, 2001, pg 112). While this thesis is not concerned with questions of non-human agency or in interrogating the complexities of the concept for its own sake, for the purposes of clarity and simplicity I will adopt Ahearn's definition that agency refers to "the socioculturally mediated capacity to act" (Ahearn, 2001, pg 112).

When discourses become **amplified,** such as age associations with decline or wisdom, the 'episteme' or 'conditions of possibility' (Foucault, 1972) can arise to enable actors to engage in certain discursive moves and rhetorical strategies in new settings, such as organizations - or even more broadly an entire professional sector. This can serve to introduce new ideas of what is natural and understood, described in critical theory as 'doxa' (Bourdieu, 1991): the rules within a given field, the

possible discourses that can be used. Such 'possible' discourses can also illuminate unsuitable ways to write or talk about a given phenomena within a particular context such as an institution (Bourdieu, 1991).

Texts do not exist in isolation but are artefacts or products of socio-political and historic events (Farahmandpur & McLaren, 2001) which have contributed to wider social understandings of a given phenomenon. Political accounts (for example) often contain rhetoric, are time-sensitive, based on the interaction between discourse and social realities in order to gain meaning (van Dijk, 1997b). Such phenomena can then be produced, reproduced, and interpreted in text and talk (Machin & Mayr, 2012) within systems such as the media but also other realms such as law, education, health settings, organisations (Macdonald, 2003) and professional discourse (Bhatia, 2010). In turn, less powerful discourses (and therefore alternative beliefs and ideological position) can become marginalised, misunderstood, and ignored in favour of broader, popular ways of articulating and discussing a given phenomenon (Taylor, 2013). Foucault's (1977) concept of power as 'disciplinary practices' allows for an exploration of how evolving discourses can be deemed good and bad in different contexts and have alternative meanings.

As discussed earlier in this chapter, distal and proximal contexts are locations for discourses which can be transferred between sites. I also extend the utility of the model to exploring interdiscursivity of discourses between sites and over time. Using the model in this way enables me to explore discourses at different junctures in line with the broader discursive and social changes taking place, reflecting on the ideological ideas and voices that may be present at the time as well as the implications of such changes (Fairclough, 2007). This research explores how over the course of time certain identifications present in both the media text and participant accounts may be attached to a wider socio-cultural ideas or phenomena. Discursive linkages between wider social texts and local accounts (Fairclough, 1992) can suggest power imbalances, prejudices and ideologies leading to new 'discourses of difference' (Wodak, 1996, p. 126).

The following model provides an interpretation of how Fairclough's three tier model of text, interaction and context is applied within this thesis : the data selected is discussed in more detail in Chapter 5: Methodology.

<u>Figure 2: How Research Questions relate to Fairclough's Model of Text, Interpretation and Discursive Practice</u>
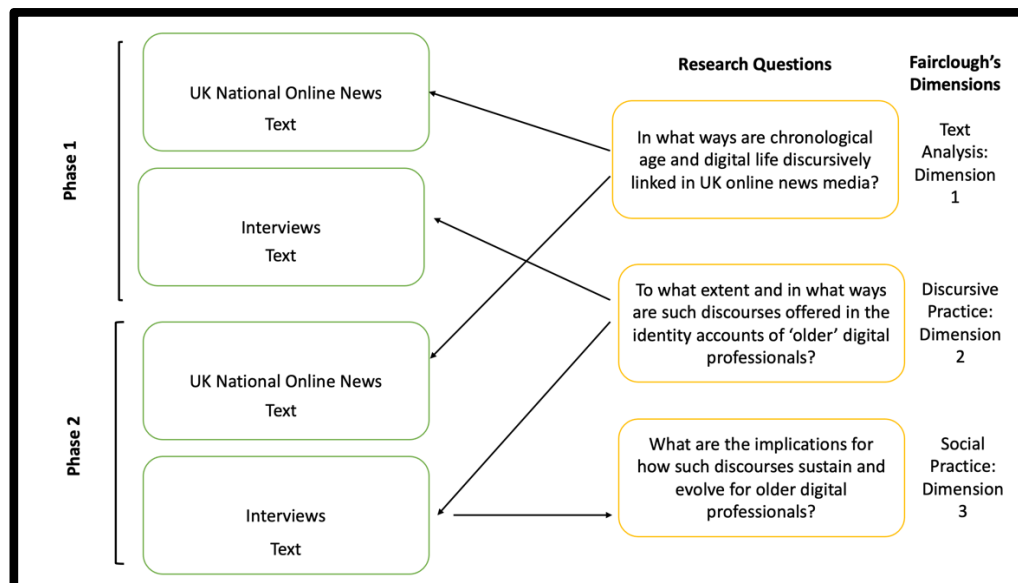
As discussed, applying Fairclough's model enables an interrogation of the authorial intent and voices attached to certain discourses at Dimension 1 and how they are produced. For example, Herring (2008) outlines how adults are authors of the 'internet generation' discourse afforded to younger people, while the voices of 'young people' themselves are unheard in such discourse: adults who have spoken for them, about them, offering ideas of age-related difference and societal challenge which could therefore be potentially in the interests of some. Questioning 'in whose interests' such discourses are is an aim of both social constructionism and of critical discourse, however as discussed below the actual material effects of such discourses is less explored by discourse alone.

Additionally, how meaning is afforded in discourse is historically and culturally located within certain contexts and may sustain, discontinue, or expand over time. Such discourses may become localized, globalized, institutionalized and socialized

and contribute to our sensemaking processes in different contexts (Weick, 1995). Adopting a critically discursive approach to how reality is constructed focuses on the variability of how phenomena can be interpreted allowing for interrogation of the starting points and background assumptions of certain phenomena. However, as discussed earlier, much of the critical school is focussed on questioning and unseating power as understood as located in hegemonic, institutional domains (Bourdieu, 1986) while overlooking more localised, insidious, and subtle forms of power relationships and struggle. This is the key reason for combining both Fairclough and Foucauldian perspectives.

4.8.   The case for combining Fairclough and Foucault perspectives

Fairclough and Foucault share some important perspectives, recognized and applied through the systematic study of texts within the organisational studies field (Knights and Wilmot, 1989; Bergström & Knights, 2006).   Both Fairclough and Foucault enable the exploration of social impact in connection to wider ideologies such as capitalism and neo-liberalism through an examination of the cumulative effect of language and their connection to broader social texts, voices, relations and structures (Alvesson & Karreman, 2000). Both discuss the limiting and disciplining nature of discourse: either through 'technologies of power' or 'technologies of the self' (Foucault, 1980). Fairclough asks us to examine the extent to which the subsequent discourses transfer between different social realms, from local to global, proximal and distal. This seemed particularly pertinent for this thesis in a bid to understand the institutional (in this case sector) norms and hierarchies, and the extent to discourses hold currency both socially and locally. **In essence, Foucault provides as a way of allowing the researcher to attend to meaning making and agency/intentionality, while Fairclough provides the technical infrastructure for how this can be achieved. Adopting Fairclough's model of Text, Interaction and Context (Figure 1) as theoretical framework enabled me to explore how meaning making and intentionality is interdiscursively achieved between discursive sites.**

Therefore, I draw on both Foucault and Fairclough approaches for the following specific reasons in line with my research questions:

- how we use discourse to solidify 'statements' about the world (Foucault, 1972),
- how discourses reify social norms and practices to create and sustain the 'conditions of possibility' (Foucault, 1972) for social and institutional practices to continue that constitute 'knowledge'.
- how individual speakers might draw on *broader social discourses* as 'a form as social practice' (Fairclough & Wodak, 1997. p. 258)
- A consideration of both the wider social/macro (everyday life and work contexts) and local/micro settings (such as the interview setting) (Fairclough, 1995) in order that identity and power is achieved
- Questioning the 'archeology of knowledge' (comprising of the systems, networks, arrangements), archeological domains such as institutions and organisations and the 'apparatuses' such as the stories, features, policies and other forms of communications which reify and reinforce perspectives (Foucault, 1972) – considering what is amplified or downplayed
- In accordance with Fairclough's model exploring the implications of the production, distribution, and consumption of discourses where it is possible to do so
- Fundamentally, the actual material impacts (Foucault) of the production, dissemination, interpretation and reproduction of discourse often overlooked in even critical linguistic studies (Hardy & Thomas, 2015)

4.8.1. Fairclough and Foucault: Their differences and their critics

Fairclough and Foucault are frequently accused of differing in their approaches and attention to agency, meaning and materiality and ultimately power and the holders of power (Alvesson & Karreman, 2011). I outline some of these key differences below but also offer ways in which they can be reconciled (Hardy & Thomas, 2015) in order to offer fresh perspectives and a valuable contribution to our understandings of age within this thesis.

Like much of linguistic scholarship, Fairclough is accused of being too preoccupied with the granularity of the text (Alvesson & Karreman, 2011; Hardy & Grant, 2012). While early work of Fairclough is concerned with power within the text and discursive practice, he is accused of only attending to power within textual artefacts themselves, rather than attend to any deeper preoccupation with their meaning and outcomes, such as that connected to agency or materiality. In terms of power forces, debates surrounding the value of Fairclough's three tier model question whether individuals and groups always acquire discourse through consensual 'hegemonic' control (Gramsci, 1971) or if coercion or even force is involved (Burman & Parker, 1993). Debates surrounding the actual reasons for acquiring and using discourse may be many, varied and complex (Howarth & Stavrakakis, 2000) and, unlike most of the critical school rooted in Marxist ideology may not always be concerned with achieving social action. Fairclough's CDA has been accused of being in danger of theoretical inconsistency, of lacking coherence (Burman & Parker 1993) and for an attachment to orthodox Marxism which they discredit as irrelevant to contemporary society. Critical discourse perspectives have also been challenged as too focussed on negative extrapolations which presume a deterministic nature to discourse (Martin 2004; Luke, 2002). Fairclough (1996) however claims that critical research while traditionally firmly in the political left could also be right wing in the interests of critical balance (Fairclough 1996). Fairclough is accused of "substituting positivist determinism with a 'deterministic discoursism of a linguistic kind (Conrad, 2004. Pg 428).

While Fairclough suggests discourse is rooted in deterministic hierarchical structures that are used to persuade and oppress (Fairclough, 2015) Foucault claims discourse is can be both antecedent and precedent of power, found anywhere and anywhere (Hall, 2001). The idea of drawing on 'members resources' in order to make sense of text and therefore participate in the social order is also critiqued as meaning can be subjective and unshared and that the analyst can be too quick to move towards the interpretation stage, without sufficient consideration of context (Slembrouck, 2001).

The attention to linguistic granularity associated with the text rather than attend to the context e.g. how texts have been previously consumed and interpreted and therefore meaning may be subjective is cited as a criticism (Burr, 1995). Critics also challenge Fairclough's failure to explore what happens after the text is produced, consumed, whether meanings are taken up elsewhere which I also attend to in my analysis. Critics also cite Fairclough's failure to define exactly what is meant by context (Leitch & Palmer, 2010) and the ways it is mostly neglected in scholarship (Phillips & Oswick, 2012). Yet if we accept that identities can only be determined within the context in which they are accomplished (West & Fenstermaker, 1995) and that discursive formations are shaped by rules outlining what does or does not exist (Hardy, 2011), context is an important area for further exploration.

4.8.2. Fairclough and Foucault reconciled

While such perspectives may seem superficially incompatible in their approach to, for example, agency and material outcomes (Alvesson & Karreman, 2011) Hardy and Thomas (2015) discuss the significance of discourse and material outcomes by revisiting Foucauldian perspectives outlining ways in which they are not as estranged as we may assume. Fairclough's three tier framework indicates an early affinity with Foucault who was highly concerned with both agency and material outcomes (Fairclough, 2015) and has provided a useful template for discursive empirical work. The interrogation of how power transcends from one social realm to another through language particularly within work and organisational studies and the inclusion of the dimension of agency within the model make a valuable contribution to organisational studies (Hardy & Thomas, 2015). The idea that there are many different and overlapping types of discourse analysis share a foundation in social constructionism that apply "insights from Foucault and/ or Fairclough" (Hardy & Grant, 2012 p. 558).

There are calls for more 'positive' approaches to CDA to improve rather than revolutionise and transform the world, that provide more indications of everyday inequalities and shortcomings (Martin, 2004). Luke (2002) proposes there is an opportunity for a new, positively oriented CDA to focus on hearing new voices and

interrogating the subtle and insidious ways discourse reinforces power to shift to more positive perspectives. Breeze (2011) suggests that critical discourse approaches could be accused of creating their own 'habitus' of presumptions of power struggles within all texts, of 'ideological manipulation, a way of disqualifying the competition" (Breeze, 2011, p 519) where they may attribute all texts with a deterministic nature. This suggests critical discourse theorists view language as never neutral but necessarily ideological (Widdowson, 1996). In my research I intend to discuss the potential material implications for a specific professional group drawn from the analytical process but exploring the subtle and insidious ways language can give rise to social practices and material outcomes.

4.9. Concluding Points

This chapter has provided the rationale for adopting and combining a social constructionist perspective and critical discursive approach, and the theoretical perspectives of Foucault and Fairclough. While this thesis explores the language being used within given contexts it is with the intent of exploring potential sites of power and how discursive power is used in order to secure identity achievement which in turn affords power. Unlike a singular focus on linguistics, I am also keen to explore the potential material and social impacts and their ideological roots for a particular professional group, and furthermore how this may change and evolve over time.

While adopting both Foucaudian and Faircloughian approaches may seem overly complex and potentially obscure, social sciences have increasingly called for pluralism of approaches (Clegg and Hardy, 2006), the critical tradition has welcomed complexity of approach, arguing that an openness to critical discourse and the different philosophical schools etc is a strength rather than a weakness (Chouliaraki & Fairclough 1999). There is a recognition too that discourses of age are continually evolving, shaped by the social and institutional, (Wetherell & Potter, 1992) and while the emphasis on language and or power may vary between different scholars, they retain the same shared collective aim to create a better world, effect transformation and empower the oppressed by identification of disorders of

discourse (Wodak, 1996). Within this thesis I hope to explore the hidden 'causes and connections' (Fairclough, 1992, p.9) of power within language uncovering under-researched ways of "how people use language" and "how language uses people" (Alvesson and Karreman, 2000, p1126).

In the next chapter, I outline the methodological approach taken using critical discourse analysis in more detail which enables me to decontextualise the text and talk in order to interrogate it (Breeze, 2011) and explore the ways language constitutes knowledge (Foucault, 1980) and gains meaning from its use within given contexts (Burr, 2003; Gergen, 1994).

<u>**Chapter 5: Methodology**</u>

5.1.   Introduction

This chapter presents the research methodology used in this thesis. I begin by explaining the rationale for the research design and analytical approaches chosen including justification for choosing interviews and online content as primary data. I then outline the reasons for adopting a longitudinal design and the methodological opportunities and challenges that presented. Next, I discuss the analytical process in detail including data selection and analysis of online and interview data across three phases: pilot, phase one, and phase two. I then describe how both phases of data were bought together in a final stage of analysis, the 'comparison' stage. I conclude this chapter by reflecting on the research process more closely, summarising the methodological journey and offering some concluding points.

5.2.   Research Design

The design of my research is provided in Table 8: Timeline of Research Phases below. It consisted of four phases in total.

<u>**Table 8: Timeline of Research Phases**</u>

Date	Research Phase	Time period
October 2014-December 2014	**Pilot Phase:** Collection and Selection of Google Alerts/online data Conducting 3 x pilot interviews Initial analysis Using pilot to finalise research questions, online corpus and participant profiles	3 months
January 2015-March 2016	**Phase 1** Collection and selection of 20 x UK online news stories Conducting 15 x participant Interviews Analysis of online news stories Analysis of interview transcripts	15 months

	Initial comparison of findings	
April 2016-October 2017	**Phase 2** 15 x Interviews 20 x UK online news stories selected Data Analysis	19 months
November 2017-May 2018	**Comparison of Phase 1 and 2** Data Analysis /Final comparison of findings from each phase	7 months +

I will now explain the rationale for the research design drawing on the relevant theory and research, discussed in detail in Chapter 4, which informed my methodological approach.

5.3.   Rationale for research design

As discussed in Chapter 3, this research is based on an interpretivist ontological and critical epistemological position. I embarked on a qualitative methodological approach using critical discourse analysis (CDA). CDA allows the researcher to examine the ways a discourse is operationalised, but also extends the examination to explore how language through text and talk creates, legitimises, and reinforces taken for granted assumptions about the world (Hardy & Phillips, 2004; Phillips & Hardy, 2002). My examination of the contribution of critical research approaches to age and technology in Chapter 2 and 3 suggests that power is intrinsic to how social and historical understandings of age have been formulated, reified, and sustained. Furthermore, 'discourses of age' and 'ageist discourses' are social, relational, require context to be operationalised, have meaning and become 'knowledge' (Foucault, 1980). A broad examination of extant literature suggests a contemporary and under-explored interplay and intersection of age, technology, identity within discourse, with subsequent inequalities attached.

While in the initial stages of my methodological journey I was still unclear of the precise nature of my research questions, I knew that my chosen method required access to discursive sites or contexts where age and technology are discursively linked.

5.3.1. The rationale for choosing online sources and interviews as primary data

Methodologically, CDA is concerned with how social phenomena and inequalities are produced, sustained and reproduced within and between contexts via discourse as social interaction (Wodak & Meyer, 2009; Wodak & Fairclough 1997). I drew on Fairclough's approach and application of CDA in order to explore the following in line with my research questions:

- how individual speakers might draw on *broader social discourses* as 'a form of social practice' (Fairclough & Wodak, 1997, p. 258)
- A consideration of both the wider social/macro (everyday life and work contexts) and local/micro settings, such as interviews (Fairclough, 1995) to achieve identity and power and the interdiscursivity between discursive sites (see Figure 3 below)
- the production, distribution, and consumption of discourses (Fairclough, 2015: see Figure 3 below)
- The role of context in identity accomplishment and how broader social dynamics can (re) produce and distribute discourses in local settings (West and Fenstermaker, 1995).
- How participant identity is performed discursively and the inferences and indications of power effects within the discourse (Zotzmann and O'Regan, 2016).

Figure 3: How Media Texts and Interview Talk are located within Fairclough's Model of Text, Interaction and Context:
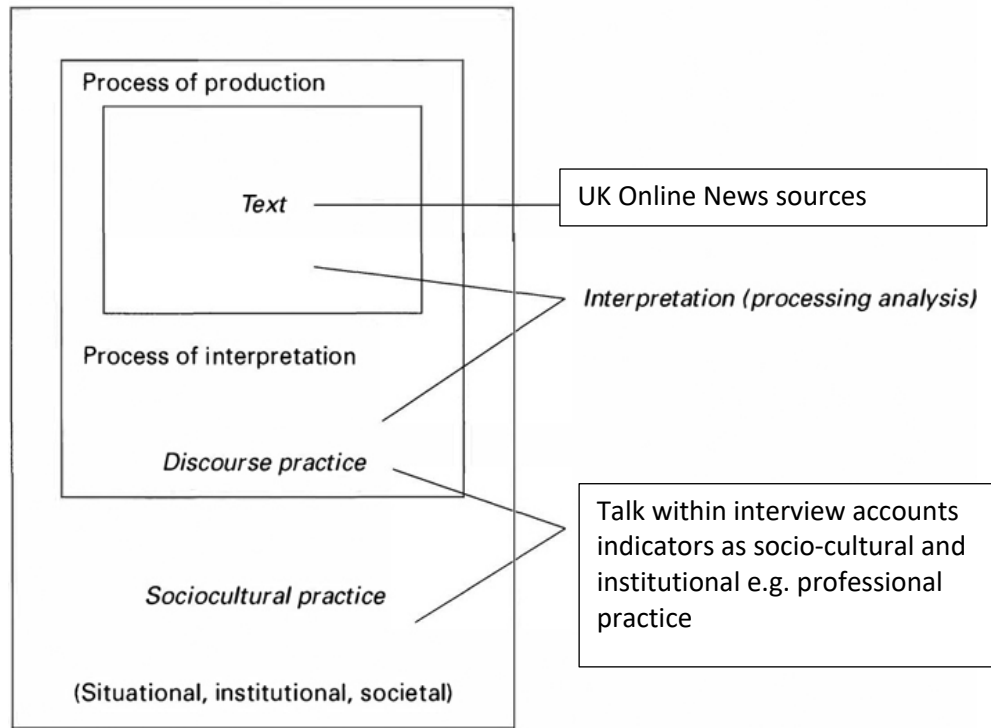
I was keen to understand the extent and power of discourse within and between 'archaeological' domains and apparatuses (Foucault, 1972) but also to consider what these signalled about wider age/technology 'knowledge' or 'truths'. I considered policy, practitioner, media, and/or organizational material as discursive sites that offered potential 'primary' data. However, I was drawn to material from online sources as a) online information is now entwined with our daily lives (Hine, 2015) and b) technology-as-topic is integral to this study.

At the very start of the research journey, I experimented with a broad range of data available freely on the internet, via keyword combinations outlined in Table 9 below, using Google alerts[5]

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[5] a feature available to Google account holders where users can establish a regular alert using keyword combinations that retrieves content tagged with those selected keywords.

Table 9: Initial keyword searches via Google Alerts

'age' and 'digital'
'age' and 'technology'
'aging' or 'ageing' and digital*
'aging' or 'ageing' and technology
Generation and digital
Generation and technology
Generation labels: Gen X or Y or Z or Millennials or baby boomers and digital and/or technology
'age discrimination' and digital and/or technology
'ageism' and/or technology
'digital native' (See example of this alert in Figure 4 below)
'digital immigrant'

Google alerts retrieved a daily proliferation of links (see example in Figure 4: Example of a Google Alert below).

Figure 4: Example of Google Alert
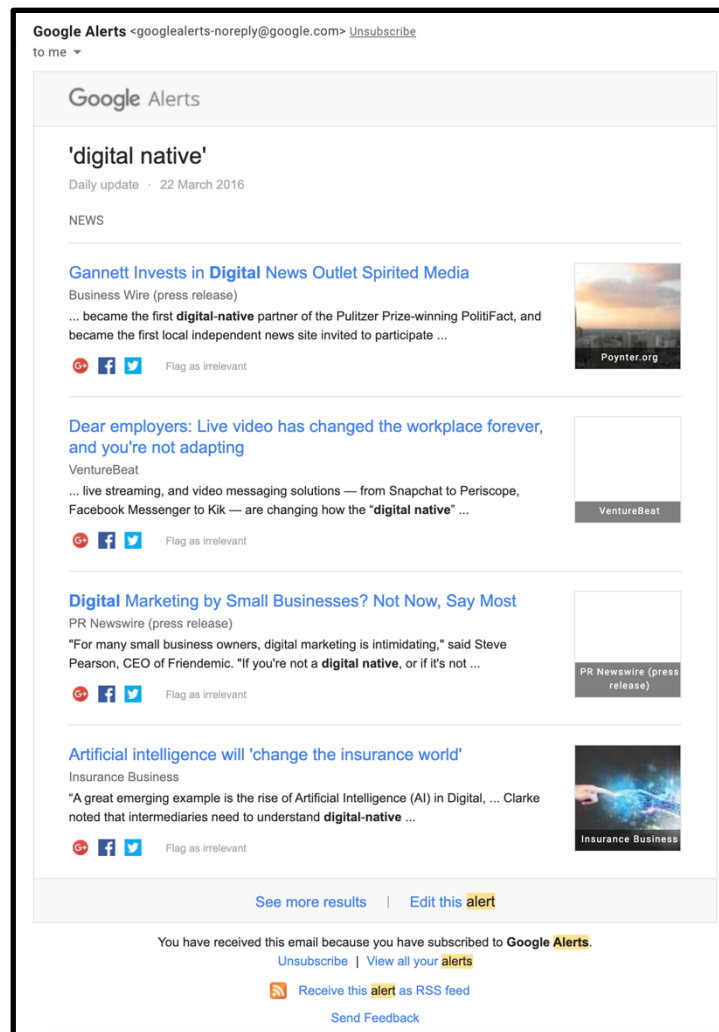
While this is drawn from Phase 1 of my research (discussed later in this chapter) it is typical of the kind of alerts I received during the pilot phase. Google alerts such as this, sometimes consisting of 20 links or more, highlighted the breadth, depth, complexity and volume of data which combined age and technology available on the internet. Sources varied from online news, user generated content such as blogs and social media contributions, websites and webpages spanning a range of different topics. However, much of the content was irrelevant, the volume was overwhelming and establishing a clear corpus of sources was needed to ensure relevance, data manageability and consideration of ethical constraints (Hine, 2013) discussed in more detail in Section 5.8. Ethical Considerations. I will now discuss my reasoning for selecting UK online news as primary data.

5.4.   UK online news as research data

As discussed in Chapter 2, the media is an active site of age discourse holding a particular power to perpetuate certain depictions, categorisations and stereotypes of age, particularly through generational difference (Bailey, 2010; 2005; Bott, 2011; Healey & Ross, 2002).   95% of UK adults say they consume news, with 60% of those consuming news online at the time I began collecting data (Office of Communications, 2014). Considering the extant literature which interrogates age depiction in the media and the ethical issues I decided to focus on sources of UK online news only (in terms of online source of primary data) using the keyword search terms outlined in Table 9.

Furthermore, within the Pilot process (discussed in more detail in Section 5.4.1) research participants outlined that they consumed online broadsheet, tabloid and broadcast news online daily. In line with Fairclough's model, participants may potentially draw influences or interpret meaning from broader social discourses within such media which they later use in other contexts. My research participants for this study, discussed in more detail later in the chapter claimed they rarely consumed news in print, instead choosing to access news online via mobile and desktop devices. They also confirmed they consumed mainly UK rather than local or international news, instead opting for broadsheets and tabloids[6]. Participants identified this as a daily activity aligned with their working patterns and habits for both leisure purposes and to inform their work, accessing news via mobile devices while commuting or at their workplace. Consumption of UK national news was identified in some cases as a requirement of their professional role as well as a personal choice to stay across national and global news developments, technological or otherwise.

While the consumption of news as discourse in print form has been a matter of scholarly interest for some time (van Dijk, 2005, p. 1991) attention to official online

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[6] Broadsheets are considered as large newspaper formats when in print form, and tend to be more factual in approach while tabloids are known as smaller newspaper formats when in print form which are mostly sensationalist in approach to stories

news sources (i.e. provided via official news publication websites, supported by alerts available on social media platforms such as Twitter) is an evolving area of news scholarship (Allan, 2006). More research is required to distinguish differences between news consumption across digital, broadcast and print media (Mitchelstein & Boczkowski, 2010), whether this differs in user experience in terms of what is consumed and how from print medium (Sade-Beck, 2004). Such content is now commonplace but adds a complex dimension of internet ethnography (Hine, 2013; 2008) providing insight into public mood concerning a given topic (Hine, 2013) but it also introduces various methodological and ethical dilemmas (discussed later in this chapter) particularly when attached to research of controversial topics such as racism (Hughey & Daniels, 2013). For that reason, I only analysed the media stories as artefact rather than accompanying imagery and/or public comments. This was also due to requiring access to the story in question via Birkbeck College library if content was behind a paywall, and this was partly due to my interest in the media as architect and archaeologist of discourse (Foucault, 1972). Having worked through the logistics I began to shape and solidify my initial research question 'in what ways are chronological age and digital technology discursively linked in online UK news media?'. I will now briefly discuss the rationale for choosing interviews as methodological approach.

5.5.   Interviews

Interviews remain a dominant means of data collecting in qualitative research and discourse studies (Alvesson & Ashcraft, in Symon & Cassell, 2012) and can be a force for understanding social dynamics at play beyond the interview setting (Cruickshank, 2012) that illuminate aspects of social difference, belonging and experience. The research interview is also offered as a site where identities are enacted and performed (Zotzmann & O'Regan, 2016).

Interviews can also enable an exploration of the micro level of discourse through the 'talk' and performance of the interview (Brinkmann & Kvale, 2015). The 'talk' can also constitute discursive elements drawn from forms of 'text' outlined within Fairclough's model highlighting the interpretive practices, cultural regularities and

beliefs of participants suggested through the repertoires, constructions, and subject positioning they offer. Such performances enable the researcher to see how participant view themselves and the world in relation to the topic under investigation (Alvesson & Ashcraft, 2012) and critical approaches illuminate the ways 'knowledge' is produced and reproduced visible in interviews (Thomson, 2003). I will now discuss the case for adopting a longitudinal/repeat design in more depth.

5.6.   Run, Review, Reflect, Repeat: the case for longitudinal/repeat design

Longitudinal qualitative research (LQR) is described as qualitative research consisting of at least two phases of data. Such data is gathered with sufficient time in between phases in order to observe, examine and document change and the process of change within and between moments of enquiry, in many cases at least one year apart (Menard, 2002). Concerned with the "lived dynamics of social change (Smith, 2003, p.277) LQR can aid our understanding of topics which span various disciplines and approaches, such as social adjustment, identity formation and construction, power relationships, process, individual and/or collective change (Holland, 2011).

Conducting my research part-time presented an opportunity to contribute to this under-employed research methodology (Farrall, 2006) where repeat-designs are infrequent, underexplored and under-utilised (Read, 2018; Saldana, 2003).   A longitudinal research dimension offered an immersive ethnographical potential to understand how discourses evolve, sustain, diminish, or disappear over time and make a valuable methodological contribution to the field (Thomson and Holland, 2003) which is discussed in more detail in Chapter 11.

In repeat interviews, the first interview is often described as mostly exploratory of any given topic/s. Second interviews usually involves three parts: looking back to the previous interview, focusing on the status quo for the participant and what they were experiencing in the 'here and now', and looking forward (Read, 2018, p.1). Repeat interviews are concerned with analysis of any changes since the first or

previous phase, noting any influencing factors of such changes whether macro (world and life events) or micro (specific to the individual and/or related to interview setting). Repeat study allows for an unravelling of identity elements, such as how norms of age are conformed to or resisted in such a way that one-time interactions or 'one and done' do not due to trust building or learning about interconnected topics (Read, 2018). This can result in increased participant candour and provide further opportunity to explore dimensions of a topic more deeply, leverage insights that may only become apparent or offered at particular times and that may change such as identity dynamics and/or power relations (Read, 2018; Thomson 2003).

Similarly, I wanted to track the ways texts developed and evolved over at least a year rather than conduct a one-time search and simply select as sample of UK online news. This too presented additional richness in indicating how certain discourses within this period unfolded, were repeated, developed or disappeared at a later stage and which 'new' discourses linking age and digital life were presented. Whether certain discourses endure, dissipate or disappear and in what formation responds to Wodak's 'discourse-historical approach' concerned with the connection between language, power, context (including multi-modality such as online discourse) and social change (Kendall, 2007).

5.6.1. Longitudinal/Repeat design: practical and personal considerations

The researcher/participant relationship in longitudinal study can be constant and intense, and repeat phases rather than constant contact or observation offer more social distance, objectivity and reflexivity without compromising on rich enquiry of the subject (Thomson, 2003). Securing two separate investigations was less labour intensive than ongoing ethnographical work which can be expensive and difficult to achieve due to organizational/community ongoing access and dropout rate (Hine, 2003; Vallance, 2005). Participants also welcomed a final agreement of keeping to just two research phases and further phases may have been characterised by participant/ researcher fatigue, boredom, information overload, tensions and fear of disclosure as a result of change or stasis between the last research phase (Holland, 2006). I experienced this within the interviewee/interviewer relationship from one participant which I discuss in more detail in Chapter 10. Longitudinal research interviews can also be a demanding process posing risks to both interviewer and researcher in terms of exhaustion from persistent probing (Pettigrew, 1990). I was mindful of this and ensured participants were offered regular breaks and the opportunity to feed back if any questions made them feel uncomfortable.

Conducting longitudinal/repeat studies was not without challenges, particularly in relation to interviews[7]. I encountered inconsistency, paradox and contradictions in accounts and different responses to the same stimuli at different times (Read, 2018) which is offered in more detail in Chapter 11. I mentally shifted my approach from frustration to appreciation, noting this is the nature of qualitative research (Symon & Cassell, 2012) and that I was not concerned with unravelling and revealing empirically realist hidden truths but simply noting and later interrogating potential reasoning for inconsistencies. These are discussed in more detail in Chapter 11.

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[7] After establishing a rigorous system from which to select and manage online data this no longer posed the same challenge as it did at the beginning of my research.

Having outlined the rationale for my methodological approach I will now discuss the timeline of research and research steps within each phase.

5.7.   Research Timeline

This research consisted of four phases: Pilot Phase, Phase 1, Phase 2 and Comparison Phase. I will now discuss these in more detail.

5.7.1.   Pilot Phase: October 2014 – December 2014

The pilot phase was exploratory in terms of data selection, collection and analysis and took place over three months involving the testing and refinement of data type, source and research question (Yin, 2011). This pilot consisted of collecting online data and conducting participant interviews to finalise the nature and source of data I would collect and refine the precise research questions (based on general topics of enquiry) within my thesis. In the pilot phase I began with a broad approach to identifying suitable online data sources and a small selection (three) of interviews.

I began 'tracking' (Pritchard & Whiting, 2020b, 2012) online content using the keyword combinations outlined in Table 9. Tracking is best described as a qualitative means of collecting existing internet data using specific key word searches. As discussed earlier in Section 5.3., Google alerts generated daily emails which included links and summary texts to specific URLs featuring the keyword combination selected and this continued over a 3- month period.

As little as two weeks into the search, I quickly became overwhelmed with the number of daily alerts this search returned, sometimes up to ten per day, containing up to 30 links. Google simply aggregates content in digest form and failed to provide advanced search tools to enable different types of content to be differentiated. I also noted that in some cases, web links were no longer accessible or discontinued: I therefore abandoned the pursuit of their content. Additionally, sources ranged in size from lengthy reports of up to 50 pages to online articles consisting of 300 words or more.

To manage the content, I directed them into a dedicated folder within my Gmail account, and reviewed the content entries within each email alert in turn every few days and to eliminate any entries which seemed too niche or alternatively contained the keywords set but did not discursively link them in terms of meaning. For example, entries often contained the words 'digital' and age' may discuss 'the digital age' but do not feature age as chronology or life-stage etc. Most of the content was easy to access via the URL provided in the email except for specialist publications where the full article was only available via membership or paywall.

Part of the pilot process was to verify the "practical, ethical and legal aspects of data collection" (Pritchard & Whiting, 2012. p. 341) While handling the data during the pilot period posed various challenges in terms of volume and complexity, they provided an initial crucial insight into the authenticity (and risks attached to using unsolicited and unverified sources) particularly from online sources. Such risks include blurred boundaries between public and private spaces, defining and confirming participation, anonymity, and informed consent (Whiting & Pritchard, 2017; Hine, 2013). Such practical issues are in addition to exploring the authorial voices, intent, audience, reactions, power dynamics and socio-historical context that surrounds and contributes to the texts being examined. I was also aware of the risk that examining text online rather than print could change how the interpretation and receipt of the text was intended (Regmi, 2017) considering that online sources now contain images, links, social media, menu structures content types that constitutes the 'user experience'. However, text as artefact is central to critical discourse analysis (van Dijk, 1996) and for the purposes of manageability and meaning I focussed on article text to critically explore how the linguistic detail connecting age and technology serves to builds a broader discourse. Other avenues for potential for future analysis beyond the scope of the PhD could involve visual analysis of images accompanying such articles (Pritchard and Whiting, 2017) or online ethnographical content (Hine, 2017).

I also consulted the literature concerning handling large volumes of data which advised developing structure and focus (Smith, 2003) therefore early on I established a folder structure and started selecting web links to include in NVivo for

initial analysis. However, I was mindful of the transitory nature of web content and that it may be deleted from the internet or fail to be accessible via the original weblink (Whiting & Pritchard, 2020b). Therefore, after reviewing the available ethical guidance on collection of online data and considering the practical and theoretical risks attached to online research, I focused on exploring only online news as data source.

News articles and features tended to be the most frequent type of content retrieved and I also noticed that the same 'story' could appear in different publications. I was also conscious of the focus given to news as a vehicle for discourse and a means of framing and enacting present-day culture discursively (Machin & Van Leeuwen, 2007). For reasons of retrieval, participant consumption, access and potential for discursive impact (often through the same story being repeated across different publications), I decided in the main phases of analysis to only select UK online news as the final source of online data. While I expected to require fuller versions of stories featured in those publications only available via a paywall and/or licensing agreements, I was able to obtain access to such publications via the Nexis database provided by Birkbeck College library.

Once I had decided to scan for and select news stories drawn from UK national online news publications, I viewed the articles via the URL, printed the page making initial notes (see Figure 5: Image of a hardcopy press text below) before also uploading the link to NVivo software and issuing each story with a unique identifier.

Figure 5: Image of hardcopy analysed press text

I decided to narrow my data set going forward into Phase 1 to only online UK news media published within the date range of October 2014 – September 2015. This therefore enabled me to tighten my first research question to:

In what ways are chronological age and digital life discursively linked in UK online news media?

Reviewing the retrieved content over a 3-month period, I gained a sense of the trends in how age and technology are discursively combined and the regularity of such discourses. This offered further potential keyword combinations that explore ageism and age discrimination in digital life more specifically, but also allowed me to review my own knowledge of search terms and assumptions about age/technology labels and terminology. In reviewing the initial content within the Google alerts, I was careful to consider and locate any further potential search terms which may also be considered age-technology constructs or have such meanings attached. For example, I decided to include 'early adopter' in my

additional search terms set out in Table 10: Detailed keyword searches via Google alerts in Phase 1 below. In more rudimentary terms, I also added new keywords to accommodate inconsistencies such as the varied spelling of 'ageism/agism'.

I carefully considered the ways search terms could identify stories that would surface meaningful perspectives of how age-technology discourses were formed. In Phase 1, I retrieved stories through purposeful sampling, relying on my own judgement of information-rich texts (Suri, 2011). This enabled me to focus on articles from news media that moved beyond age as a marker of digital ability and/or engagement to how it was directly connected to workplace settings and commentary regarding the role of age identities in the digital technology sector.

Table 10: Detailed keyword searches via Google alerts in Phase 1

Age/Ageism/Age Discrimination/Ageing and 'digital' or 'technology'
Age/Ageism/Age Discrimination/Ageing and the 'digital economy'
Age/Ageism/Age Discrimination/Ageing and the 'digital sector'
Age/Ageism/Age Discrimination/Ageing and the 'digital technology sector'
'Silver surfer'; digital native; 'net generation'
'Ageing' and 'digital professional' or 'digital worker'
'Ageism' and 'digital professional' or 'digital worker'
Ageing and/or ageism and various digital economy companies e.g. Amazon; Google; Facebook; Microsoft; Apple
'Early adopter' (*a term used to describe individuals of all ages who adopt and experiment with new technologies and social interaction via digital means before the technology and/or practices become mainstream). However, this construct tended to be used in stories where age plays a dominant role and often used mainly to describe young people. It became interesting to see how frequently this took place*.

From the Google alerts I selected 5 articles which combined age and technology explicitly. I conducted an initial discourse analysis of these articles using guidance from relevant chapters of Abell et al., (2008) which provides general guidance on

analysing a range of corpus from print to interviews. Conducting a generic discourse analysis at this stage meant I could familiarise myself with the process of discourse analysis more broadly. Here I noted guidance concerning corpus, linguistic devices, authorial perspective and (becoming more critically orientated), values and ideological position. After initial analysis I noted how discourses were constructed along generational, societal change and skills/competencies lines. I will now outline the pilot process of interviews which I used to guide participant recruitment and interview design.

I selected three interviewees for the Pilot phase. Their ages and roles are outlined in Table 11: Pilot Participants below.

Table 11: Pilot Participants

Pseudonym	Role at time of Interview	Age
Meg	Product Development Manager	35
Lorraine	Digital Communications Manager	35
Jill	Civil Servant	50

For the pilot my criteria for selection were deliberately open in terms of working role, sector, career stage and other aspects of work and life experience. This was in order that I could decide upon a final participant profile. I was keen to identify voices who were not particularly tied to an organisational or institutional membership but who would still willingly contribute to a discussion of the topic. The only eligibility criterion I employed was that all participants must be roughly 34-50 years of age at the time of interview, and they would therefore qualify as a being a 'digital immigrant' born before 1980 (Prensky, 2001), even if working as an older worker as classified by the technology sector.

I recruited participants via my own professional network and connections and via 'snowballing' (Farquarson, 2005). I asked the participants if they consumed online

news media and if so, *what* they consumed: all stated that they consumed their news from the BBC but also online news media consisting of various national broadsheets and tabloids.

Each participant interview took place between October – December 2014, was between 60-90 minutes long in duration and held in neutral locations e.g., cafes or community spaces. Interviews were recorded via a secure audio recording mobile phone application called 'voice memos'. While location was important for purposes of travel and safety, locations which were suitable for audio recording were also key considerations in agreeing locations.

The interview agenda comprised a core set of open questions which served to elicit participant accounts of age/digital topics (Garton & Copeland, 2010) **and these are provided in Appendix 4. I** used newspaper headlines which referred to cases linking age and technology such as stories of 'digital natives' securing jobs, or controversial cases concerning ageism in the digital sector such as a story about women 'freezing their eggs' to advance their career (The Observer, 19/10/2014). I showed these headlines to participants at the beginning of the interview to 'warm up' the participant to the topic. Objects[8], particularly visual, have been increasingly used in interview settings to elicit and prompt unrehearsed, real-time reflections (Willig, 2017). Such headlines provoked a reaction such as surprise, disgust, and sympathy therefore I continued to use this stimulus throughout both phases of interviews. **While I was conscious that the circulation of newspaper discourses within the interview structure could have framed participant responses, the nature of my questioning also invited challenge to the ideas within the articles. I was conscious to use the material only as a prompt to the discussion and broadened out the questioning in a way that invited other perspectives, ideas and themes relevant to age and technology to be discussed (See Appendix 4: Interview Guide). Furthermore, reflexive engagement across two sets of interviews allowed me the scope to explore a range of issues in relation to the broader social context of the time with participants.**

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[8] The 'object' in this case is a print of the newspaper headline and article.

After conducting the interviews, I transcribed them, noting any initial discursive themes present in their accounts which specifically linked age and technology, and noting instances where discourses present in the online news article pilot information were offered. I noted any discursive constructs or subject positions that connected age and technology, in particular any terminology I encountered in both the literature review and news article analysis e.g. 'digital native' or 'digital immigrant' or use of terms/motifs present in the texts such as 'silver surfer' or generational labels.

A digital technology sector worker (Product Manager) proved to provide the most insightful and relevant account for me of how age and technology are intrinsic to their professional life and identity. In their interview they provided glimpses of how this was achieved in various ways which were both present in the sample of UK online news media analysed and insights drawn from the literature review. I therefore progressed beyond the pilot stage to recruit more participants of the same profile (over 35 years of age) with roles specifically drawn from the digital technology sector. This also aligned with some of the content drawn from the online texts within the pilot phase concerning age tensions and in some cases discrimination within the digital technology sector and solidified my second research question

"to what extent and in what ways are such discourses offered in the identity accounts of 'older' digital professionals?"

 In the next section I will outline how I conducted my research in Phase 1.

5.7.2.   Phase One: Data Selection and Analysis

Having decided to only focus on National UK online news as data source, I sampled 20 news articles, gathered initially via Google alerts, and then followed up in the Nexis database or online. I chose this number for the purposes of manageability, and I became increasingly aware of repetition of key stories and themes across various online news articles and selected stories that varied as much as possible.

Over 20 items discursive themes were repeated and therefore generated "diminishing returns" (Mason, 2010. p. 1) in terms of discursive insight. I was also mindful to choose a range of sources which seemed to tackle various discursive themes to answer my first research question '**in what ways are chronological age and digital technology discursively linked in online UK news media?'.** I have provided a list of the final media articles selected below:

Table 12: Selection of UK online news media articles: Phase 1: _In publication date order_

Publication	Date	Article Title
The Observer	19/10/2014	_Yes, I froze my eggs but I am a victim of a new fertility racket (used for pilot study)_
The Telegraph	16/02/2015	_How Silicon Valley is trying to cure ageing_
The Guardian	2/04/2015	_Age discrimination is still seen as okay in the workplace_
The Guardian	23/07/2015	_16 trends that will define the future of video games_
The Observer	2/08/2015	_How does it feel to be a 'grey entrepreneur'?_
The Guardian	5/08/2015	_One downside to digital innovation: as formats die we lose our past_
The Guardian	13/08/2015	_Why finance must embrace the millennial mindset_
The Mirror	28/08/2015	_Digital Heroes 2015: Vote for your Silver Surfers Winner!_
The Telegraph	5/10/2015	_We're tired of these stereotypes of older people in the media_
The Times	9/11/2015	_The online boss who some might think is barely out of nappies_
The Independent	07/10/2015	_Apps and dating sites for an older generation_
The Times	07/11/2015	_To update your social status, get on Facebook_
The Guardian	19/01/2016	_Businesses are missing a trick by writing off older women_
The Evening Standard	27/01/2016	_Jobs are back – as long as you're one of the new generation of digital natives_
The Independent	27/01/2016	_Why does the tech industry ignore the elderly in favour of the snapchat generation?_
The Evening Standard	04/03 2016	_Generation A: the young Londoners helping to shape the world one GIF at a time_
The Independent	26/03/2016	_It's true, life really is speeding up – and we all benefit from it_
The Independent	26/03/2016	_Ageism affects applicants who 'sound older' on their CVs_

| The Independent | 30/04/2016 | *Banks urged not to leave older customers behind* |
| The Daily Telegraph | 27/05/2016 | *Ageist' Eurostar puts cheap tickets on Facebook only* |

I uploaded the final selection of UK online news sources to NVivo software and labelled by alert date, online publication date, source, intended audience and content type. This involved providing a unique reference number for the source, coding some initial discursive devices using nodes. I decided to conduct a critical discourse analysis only of the text within the article due to methodological challenges discussed earlier in this chapter.

I made use of qualitative research tool NVivo and its principles of structuring of data online such as creating sets, coding etc. noting how different types of linguistic content can form a wider discourse. However, I found NVivo complicated and unwieldy to use. In many cases I resorted to the use of highlighter pens on printed versions which enabled me to see visually at immediately how patterns evolved, write notes in margins, even if this method did not provide the luxury of aggregation all discursive themes together which NVivo can provide. In Table 15: Analytical Steps within this chapter I provide the analytical steps taken for both media articles and interviews, but by adopting an inductive analytical process in online analysis, I arrived at three **unifying** discourses: digital disruption, digital division, and age problematisation. I will now discuss the process of managing and analysing interview data.

Within this phase of data collection, I aimed to address the second research question requiring interview data collection:

"**to what extent and in what ways are such discourses offered in the identity accounts of 'older' digital professionals?"**

Discourses of digital disruption, digital division, and age problematisation informed the analytical process for my interviews and I specifically attended to how and if these discourses were present, and if so in what ways they were offered by participants through subject positioning, argumentation, and other approaches outlined in Table 12 of this chapter. However, I was mindful to also observe any

additional or secondary discourses connecting age and technology if they were of significant or interesting to note.

I recruited participants in the same way as my pilot participants, through snowballing and professional contacts. A full list of pseudonymised participants, their ages, occupations and locations and dates of interview is listed in Table 13 below. Various participants were digital technology workers employed by some of the tech giants or the 'Big Five' (Naughton, 2019) such as Apple, Google, Facebook, and additionally Twitter as well as by smaller tech companies and start-ups. Participants were based in London, Glasgow and Edinburgh. I decided on 15 participant interviews to ensure my study was both manageable and meaningful. I was also conscious of time constraints across two phase of interviews and again keen to avoid becoming overwhelmed with data volume and complexity (Guest, et al., 2006). In Phase One all participants were interviewed in a neutral location such as a café or community space.

At the start of each interview, I provided each participant with an outline of my research project and an ethical consent form which participants were asked to sign, this is available in Appendix 1. After each interview I transcribed it as part of the analytical research process. This enabled an initial first phase of analysis and a refresher of the interviewer-researcher dynamic before I conducted any more detailed analysis. Interviews were transcribed verbatim, initially analysed by hand, uploaded to NVivo 10 software and given a unique identifier.

A list of final research participants is provided in Table 13 below.

Table 13: Research Participants in Interview Date Order of the first interview

Pseudonym	M/F /NB**	Age*	Role	Interview 1	Interview 2	Location
'Meg'	F	38	Head of Product Development	3/10/2015	7/04/2016	London
'Robin'	M	35	Head of User Experience Design	3/10/2015	25/04/2016	London
'Donald'	M	45	Digital Strategist	15/03/2015	20/08/2016	Brighton

'Laura''	F	38	Head of Digital Communications	22/10/2015	22/08/2016	London
'Helen'	F	40	Programmer, Mobile Apps	20/10/2015	29/08/2017	London
'Sean'	M	42	Content Strategist	29/11/2015	30/08/2017	London
'David'	M	52	Head of Sales	29/01/2015	20/04/2017	London
'Alfie'	M	40	Digital Advocate	16/03/2015	20/07/2017	London
'Nigel'	M	38	Digital Marketing Manager	1/04/2015	21/05/2016	London
'Tracey'	F	42	Head of Product Delivery	11/09/2015	24/05/2017	London
'Margaret'	F	44	Head of Digital Services	11/01/2015	7/03/2017	London
'Gordon'	M	42	Head of social media	11/02/2015	19/10/2016	London
'Craig'	M	40	Web Design consultant	25/07/2015	01/04/2017	Edinburgh
'Bob'	M	40	Head of Data Visualization	22/04/2015	16/06/2016	London
'Jill'	F	42	Content Producer	25/01/2015	20/06/2016	London

*Age at point of first interview
- *Participants work across public and private sectors, from start-ups to global technology firms, within a range of roles that provide products and services to the digital economy and digital technology sector.*
- *Roles cut across in-house and consultancy and some participants are drawn from major technology firms of Microsoft; Google; Facebook; Twitter; LinkedIn.*
- *All participants were interviewed with 1 year minimum-18 months apart and dates were scheduled depending on participant availability.*

**NB indicates non-binary

I was interested in whether this specific group could provide useful insights to stimulate further debate and conversation regarding age-technology linkages through language, rather than provide insights that are somehow generalisable for an entire population. I will now discuss the second phase of data management and analysis. As much of the steps of data collection, management and analysis have already been discussed, I will focus on any details within this phase which differs from Phase 1.

5.7.3. Phase Two: Data Selection and Analysis

The same research process employed in Phase 1 was repeated in Phase 2 across both online data and interviews in a similar way, which took place between April 2016-October 2017. A sample of UK online news was selected from this period using the same search criteria and a table of the final UK online news media articles analysed is provided in Table 14 below.

Table 14: Phase 2: UK online news media articles: Phase 2 June 2016- December 2017 In publication date order

Publication	Date	Article Title
The Times	8/06/2016	*Older women are the new vlogging stars*
The Independent	6/09/2016	*Retired Apple software whiz couldn't get a job at the genius bar*
The Observer	11/09/2016	*The big issue: increased longevity means working practices must change*
The Scotsman	1/10/2016	*A day to celebrate the number of elderly online*
The Times	2/01/2017	*Corbynistas go high-tech to secure the youth vote*
The Telegraph	3/1/2017	*Five New Year's Resolution for parents of the Digital Native*
The Telegraph	24/02/2017	*The dark side of middle-aged dating*
The Independent	25/03/2017	*What kind of scams are you in danger of falling for?*
The Telegraph	01/04/2017	*Child of our Time: Professor Robert Winston on how the digital world is really affecting the next generation*
The Financial Times	28/04/2017	*Notes from the digital bunker: no country for middle aged techies*
The Telegraph	13/07/2017	*Draw up your will in a text message*
The Financial Times	31/07/2017	*Silicon Valley Ageism: 'they were like, wow, you use Twitter?'*
The Financial Times	31/07/2017	*Experience Counts for little in tech's young dream*
The Telegraph	2/08/2017	*Good old Yellow Pages announces final edition after 51 years*
The Telegraph	5/08/2017	*Further questions over 'Making Tax Digital' as HMRC demands 7p from 83 year old*
The Guardian	14/08/2017	*They said I was too old to work at a start-up*
The Sunday Times	27/08/2017	*…be a digital luddite*
The Daily Mail	2/10/2017	*Lumley: Digital world making us more lonely*
The Sun	13/11/2017	*OLD SCHOOL: These tweets about retro gadgets will make you feel VERY old*

The Times	5/12/2017	*Curb children's use of technology for their own good, urge experts*

During this analytical phase I returned to the first research question, asking in what ways chronological age and digital technology are discursively linked in online UK news media. I also returned to the second research question concerning the ways and to what extent discourses linking age and technology (present in the media texts) are offered in the identity accounts of 'older' digital professionals.

The same group of participants were interviewed a second time as per repeat interview protocol. Again, I presented each participant with a sample of news articles and their respective headlines drawn from this round of media articles. Throughout the research period some participants changed role, were promoted, demoted, and experienced different work and non-work life events. However, throughout the process all participants continued to work in the digital sector and all participants willingly agreed to returned for a second interview.

I scheduled the interviews as close to a year apart as possible, combining longitudinal research recommendations (Langley & Stensaker, 2012 *in* Symon and Cassell, 2012) and participant availability. Interviews were conducted in the same way as Phase One, this time using a fresh corpus of printed online news articles which I analysed from Phase Two. Also, in this phase I offered a summary of the themes and topics drawn from their last interview as an elicitation tool, provided in Appendix 2. I provided this to prompt discussion and reflection on what has changed, remind participants of previous discussion topics, review what they discussed, recall any changes to their professional lives and elicit any new or different accounts of various topics: in short, to review, to reflect and recall and then look to the future (Thomson, 2003).

5.7.4. Detailed analytical steps across interviews and online data across both phases

In this section I outline the analytical steps taken across online articles and interviews. While it is recognised that there is no 'one way' in which to analyse texts

discursively (Phillips & Hardy, 2002), the critical orientation of this research within the work of Fairclough and Foucault and across two differing sites of discourse required careful investigation of various 'how to' guidance within texts and papers. I decided to draw on two analytical approaches which provided a highly comprehensive and complimentary basis for analysis across both interviews and media/news texts and also complimented the theoretical foundations of Foucault and Fairclough. The approaches below reflect the distinctive aspects of analysis of interviews and media texts.

Table 15: Analytical Steps of Critical Discourse Analysis (drawn from Machin & Mayr, 2012 and McGregor (2003). The 'Texts' below refer to both online text and to interview transcript.

Where differences between areas of specific linguistic approaches are relevant these are outlined.

Step 1: Observations
• Read texts to establish pre-analysis orientation: explore initial discursive themes such as 'generation' • *Online Data*: Make initial notes on tone, language, grammatical forms, linguistic devices used, authorial perspectives and any early indications of power intentions • *Interviews*: transcribe and read interview transcripts. Note first impressions, initial discursive themes linking age and or technology • *Interviews*: Note the contextual features of the interview: first impressions, setting, • Both interviews and online data note high level observations of how language constitutes the discourse through key words, phrases, regularity, dominance. • **Analysis of the interview transcriptions vertically (as a single entity)** and then horizontally (discursive theme by- discursive theme) across all 15 interviews.
Step 2: Identification of codes based on discursive themes that link age and technology across both interviews and online data
Identify discursive codes relevant to research questions across three analytical levels of: • **Ideological**: social groups, power, interdiscursivity, and intertextuality • **Discourse and Semantics**: metaphor, presuppositions; context and register • **language/lexical/grammatical across** Field, Tenor and Mode e.g. pronouns tense and aspect, evaluation, genre (e.g. news), source, excerpts, words, repetitions, surprises, opinions, frequency, and anything related to theories and concepts. Note objects, processes, people and positioning, such as subject positions and

social structures or etc. Also note the following

- **Pronouns and Participant Choices:** how readers and audiences are positioned e.g. as allies with share beliefs and knowledge? Query how or what is backgrounded, or marginalized and Individuals v groups?
- **Passive/Active Forms:** what is used and by whom to elicit agency e.g. Transivity Choices/agency: note what is questionable and unquestionable.
- **Time - Tense and Aspect**: use of present can reinforce reality or fact; present perfect simple construct a past event of being currently relevant; Creates different semantic effects re time frame of an action but also the representation of that action as true, relevant or significant
- **Adjectives, Adverbs, Nouns, Verbal Processes** – How are persons/objects/subjects constructed through loaded terms e.g. 'surely'; 'obviously' - positions as inconvertible fact. Inscribed and evoked evaluation – 'excellent' 'terrible' – what ideological values are revealed?
- **Metaphor –** how people see/represent the world – readers relationship to phenomena.
- **Presupposition/Implication:** instances of (for example) 'isn't it the case that?' 'would it not be fair to say?' – help to represent construction as convincing realities. Use of factive verbs and embedded evaluation.
- **Medium** – e.g. interviews v news media: check for instances of Interdiscursivity e.g. the language of technology used to describe age and vice versa, any other domains language is drawn from e.g. environmental in order to 'naturalise'; Who are intended audiences, what is used to persuade and project?
- **Age, Class, Disability, Gender, Race, Equity and Sexuality** Issues – methods to depict less (or greater) social value; stereotypes to legitimize what is naturalized.
- **Begin with open coding:** then split between relevant and irrelevant codes. 25 codes into 10-15 codes, into 5/7 overarching codes. Specifically explore linguistic choices and structures which denote meaning which interlinks age, digital life and work. Bring ideas which go together under one discourse in online data then interviews.

Step 3: Orientate myself in the discourse/s present across Phase 1 (online data followed by interviews) **then Phase 2**

- Unify similar or paradoxical/contradictory discursive themes in online data and interviews
- Draw on initial discourses identified in online data Pilot Phase and in online data to understand discourses from interviews
- Question if text/s are 'typical' considering audience and context of consumption; how the text will be understood; how the text was produced where known; other ways the text or account could be written or spoken; what is missing; reflections from broader social context or society; in whose interests this text lies and consequences for challenging views held within it.
- Note the production distribution or consumption of media sources
- Note researcher reaction to any discourses /reflexivity
- Consider context as part of that orientation: what are the political, social, economic and industrial challenges/climate of the time and how might this

influence and be reflected in the discourse/s.
Step 4: Prioritise the **primary and unifying** discourses from latent discourses cross both research phases
• Return to coding in relation to what is most relevant to research question/s. • Provide overarching discourses that dominate and explain how they manifest themselves in online data and interview
Step 5: Comparison of Phase 1 and Phase 2
• Compare discourses between Phase 1 and 2 to arrive at final discussion points in relation to Fairclough's Model of description, interpretation and explanation. (See Table 16). Discuss broader social-economic context as potential reasons for changes, e.g. the 'archeology' which makes norms reified by discourse possible • <u>Consideration of interview context in terms of findings and final interpretation</u>
Step 5: Discussion and interpretation of overall findings • Discuss and interpret results considering previous studies, theories or concepts in the field. • <u>Offer ways in which the consideration of context is key in longitudinal work (See Chapter 11: Discussion and Conclusion)</u>

The analytical process consisted of initial familiarity with the text, followed by a critical discourse analysis of texts within each phase, and concluded with a comparison analytical stage. From here I was able to underline the discursive strands which were consistent throughout and infer how these were connected to theoretical and ideological ties which I could then link back to literature discussed in Chapter 2 and 3.

5.7.5.   Comparison of Phases 1 and 2: Media and Interviews

While longitudinal qualitative research is well established in social sciences (Smith, 2003) I struggled to find analytical approaches which incorporated both longitudinal and discursive analytical methods that were suitable for both

interviews and online media sources. Boeije, (2002) outline the significance of having a systematic plan in place for LQR, with a clear outline of the analytical steps taken, the dimensions of comparisons and clearly stated aims that such comparisons were based on. I was keen to establish such a framework for this research, despite the lack of practical frameworks suggesting step by step qualitative comparison of two phases of research using CDA within the field of organizational studies.

The most valuable readings on the principles of qualitative longitudinal research, focused specifically on comparison of interviews over time (Menard, 2002; Ruspini, 2003; Farrall, 2006; Holland, 2011). It was beneficial to draw on the approaches offered by Holland (2011) concerning the role of discourse in identity construction, formation, process and change over time. Menard (2002) advises on focussing on patterns, new structures, granular changes and objects offered through linguistic signals that may offer contextual cues to wider social changes. These enable us to link the micro to the macro context (Farrall, 2006), thus attending to the ways discourse is offered as text, social practice and discursive practice in line with Fairclough's model offered in Chapter 4.

However, the most practical, rigorous, comprehensive but adaptable framework I found was offered by Vogl et al., (2017) which accommodated multiple perspective, qualitative longitudinal interviews. While the framework only considered interviews as data source, data used in this study was drawn from at least two different realms, collected at two junctures and within them contained multiple perspectives. While the collection of 'multiple perspectives' (as employed by Vogl et al., 2018) was not employed in this research its strictest sense, the same questions were asked of similar phenomenon. Vogl and colleagues also state the framework was developed and can be used to analyse different qualitative data types, using various approaches if the aim of the analysis concerned comparisons. Importantly this model allowed me to explore the role of context in both reflecting and influencing discourse over two different points in time and across two different sites. I have simplified the model in line with tightly focussing on the research questions set rather than be too concerned with between-participant differences particularly within the same phase of research.

The following table outlines a basic framework I used to compare the discourses across both sets of similar data based on Vogl et al., (2018). Dimensions of data comparison are based on comparing cross sectional data (between each type of data) and longitudinal data (between same data different phases). In summary, the aim in this phase is to identify the discourses, describe how they are achieved and compare and relate to the other data set: as Bazeley (2013) states describe, compare and relate.

Table 16: Analysis of both sets and phases of data

Adapted from Dimensions of comparisons in qualitative longitudinal research

and related aims (Vogl et al., 2017: p 181)

	Within-phase analysis across both data types	
Cross-Sectional analysis of changes between Phase 1 and 2	Media Phase 1 - Digital Disruption - Digital Division - Age Problematisation	Interviews Phase 1 - Digital Disruption - Digital Division - Age Problematisation
	Media Phase 2 - Digital Determinism - Digital Dangers - Digital Elder	Interviews Phase 2 - Digital Determinism - Digital Division - Digital Elder

Having two phases of data offered particularly rich insights regarding contextual factors that may influence the data: enabling an exploration of the data 'horizontally' or within a given point in time and 'vertically' or chronologically, or how it has evolved (Thomson & Holland, 2003).

As discussed in Chapter 6-9, the results differed across both phases. I explored the ways discourses converge, compliment, diverge and contradict each other, where there are instances of multi-layering and complexity. I examined the ways these change over time, noting features such as different use of language on the same issue but also identifying patterns of consistency, convergence, dissonance, contradictions, unusual or 'outlier' discursive features across phases or across different discursive sites. I considered the significance of revisiting the interviewer/interviewee at a different juncture even though this research differed to 'walking alongside' participants as we did not meet at regular intervals (Calman, Brunton, & Molassiotis, 2013; Holland et al.,2006) but I was

particularly keen to note contextual cues that signalled changes in life course, life stages.

It was challenging to maintain a systematic approach for analysing this type of change across different types of discursive sites. I paid close attention to guidance of Vogl et al., (2017) and began with in-depth reading and inductive analysis of media accounts in each phase to establish a typology of discourses. This provided a 'conceptual profile' of the way age and technology is discursively offered in media articles and provided a comparative framework which I could apply to participant discourses. I was also aware of keeping the research aims and questions front of mind, noting that discourse analysis is an iterative process, and in this comparison stage steps don't have to be linear, and there may not be the need to include them all: what is paramount is a process which facilitates a good understanding of the data : "you don't have to compare everything with everything else" (Vogl et al., 2017, p. 185). Overall, this was a cross-sectional analysis followed by a longitudinal analysis that enable the traceability of change (Vogl et al., 2017).

5.8.   Ethical Considerations

Throughout my research I followed the appropriate subject and institutional guidance and processes (British Psychological Society, 2009; ESRC, 2010; BGRS College Ethics code of conduct) to understand and mitigate against potential risks involved in conducting this research.

5.8.1.   Ethical considerations of the Interview

As discussed, I provided all participants embarking on this research with an information sheet providing an explanation of the purpose of research, how data will be used, a request for permission to record the interview and an agreement form, an example of both is provided in Appendix 1. Additionally, I explained the

steps I would take to maintain their anonymity and the consent form provided a request to participate in future interviews due to the longitudinal nature of my study, an explanation that my research would be used to inform a PhD thesis and provide content for conferences and academic papers. I explained to participants they would be anonymized throughout this thesis.

I understood at the outset that in terms of interviews my research would not intentionally cause harm, discomfort or distress in any way. My information sheet (discussed in Section 5.6.1.) made clear I was interested in the relationship between age, technology and professional identity. While ethical considerations were not problematic across either online data or interviews, I was cognizant at all times of the difference between provoking discussion and deliberate interrogation about the presence of age discrimination in the digital sector. Ethical challenges attached to seemingly 'benign' interview topics can become 'problematised' (Gatrell, 2009) either through public attention or through participants feeling they have later become affected, even exploited by the process (Hollway & Jefferson, 2000) and I was mindful of the recent media attention age discrimination was receiving in the press and its potential to generate participant unease (Holland et al., 2006). I therefore engaged in 'member checking' in the second interview round (Birt, 2016) to ensure they were both comfortable to continue at regular junctures and to repeat the process at a later date.

I had prior professional relationships with two of the participants. I consulted research specifically discussing the pitfalls and advantages of prior relationships in this case 'acquaintance interviews' (Garton & Copland, 2015, p.5). I noted this could result in the co-construction of the meaning of certain ideas, topics (or language), that I may draw on aspects of interviewee/interviewer relationship from outside the interview context to increase participant self-disclosure. However, I was interested in 'co-categorical incumbency' (Roulston, et.al., 2001, p.748) where both I and the interviewee can produce a certain type of talk and interaction due to our group membership and shared world in this case working in the digital field. As such these could provide an interview resource which could increase interviewee-interviewer affinity and invoke participant identity (Garton & Copland, 2015) in this case as digital expert.

I was also cognizant of the fact that while participants initially agreed to participate in two separate interviews over a two-to-three-year period, a certain renegotiation of consent for each episode of data collection was required to ensure participants did not feel pressurised and had the option to withdraw if they wished (Thomson, 2003). I offered to return to participants after all the interviews were concluded to discuss the interview experience: most were keen to embark on a third interview which was not needed in the end, but several are interested to read the final thesis.

5.8.2.   Ethical Considerations: Online Data

The field of digital scholarship, sometimes called e-research or e-social science (Dutton, 2013) continues to evolve at pace. Research has been impacted by digital disruption in terms of what research is conducted, how it is conducted, the data, sources and digital environments for conducting and disseminating research (Torrisi-Steele & Wang, 2021; Hine 2005). This also presents new ethical challenges such as gaining consent from authors and participants of online content such as message boards (Fielding, et al., 2008). Most online material I accessed via freely available online content via the publication's own websites and what the BPS classifies as 'public space' (BPS Code of Ethics and Conduct, 2006). As discussed earlier in this chapter I did not use other ethnographic information from message boards within the site that hosted the article under investigation. However, conducting online research in whatever form presented an opportunity to learn more about digital ethics concerning privacy, confidentiality, access, data integrity, intellectual property authorial consent, reproduction of contributions and professional standards (Whiting & Pritchard, 2018; Hine, 2013; 2008; Buchanan, 2010; Ess, 2009; BPS, 2007). The use of public comment and message boards in particular when attached to news content provides an exciting avenue for future digital ethnographical exploration in this field (Peacock, Scacco & Stroud, 2019).

5.9.   Reflections of a challenging methodological journey

Reflexivity was an ongoing and iterative process throughout my research. From the beginning of the research process, and during the analytical stages I was wary about adopting ideological presuppositions about the data. I have also reflected on the increasing challenges for social scientists in relation to online data generation, whether the online object in question is produced by humans, algorithms or automation. I noted the ways that

> *"this does not render the data valueless as long as we .. recognise the context…and reflexively account for it in our data interpretation" (Symon, Pritchard & Whiting, 2021, p. 9).*

This is in part what influenced my original decision to focus on news content. I recognised that I am at the beginning of a longer journey in navigating digital work and the field of digital sociology.

I was also conscious of the risks of 'hypereflexivity' (Alvesson, Hardy, et al., 2008; Leitch & Palmer, 2010) described as a constant process of reflecting on the research and one's role in the research process. As part of this I was mindful of participant subject positioning, how such positions chimed or challenged my own professional hopes and fears.

Finally, knowing when to bring the research to a close can be a key challenge of LQR. Pettigrew (1990) discusses the complexities of subject and researcher exhaustion from persistent probing into the topic in question, I became most aware of boundaries within the research journey, and the disappointment of sharing with research participants that this was our final meeting: at the end of the second interview some participants commented the interview experience was a therapeutic experience (Birch & Miller, 2000).

I found no particular problems in recruiting interested research subjects and to my surprise, no reluctance from participants during initial contact about the possibility of open discussions regarding 'age', 'ageing' and even 'age discrimination' in this sector or discussing these themes in conjunction with technology more broadly.

This was despite frequent US and UK publicity at that time around age and gender discrimination in the field which I felt may have made some potential participants reticent about being interviewed.

The analysis of online data and interview discourse, sometimes in parallel, was labour-intensive and required discipline of following a process of analytical steps outlined earlier. I was constantly surprised by the data, even in the final stages of analysis. Flexibility and responsiveness to the analytical and interpretive process was paramount. I acknowledged the broader challenge of knowing when to stop analysing, or 'analytical closure' (Thomson, 2003) and understanding that revisiting the same data at a later date or re-running the entire research process again could result in different interpretations and findings.

Despite wider acceptance that CDA presupposes that language data will indicate power relations I worked hard to avoid adopting 'a priori' notions about actors, authors, protagonists, or ideological ideas about the holders of power within institutions including stereotyping the media, organizations or assuming 'sector' power interests (Blommaert, 2001). I was keen to guard as much as possible against approaching the data with preconceived notions about 'what the data is doing' although the extent to which that is entirely possible is unclear. While CDA is concerned with the importance of decontextualization in the analytical process I considered the impossibility of ever being truly context-neutral due to my own identifications, political leanings and research interest. I was also aware in the interview context of my pre-existing experience and ability to draw on familiar language, or use 'member resources' (Fairclough, 2015. p.167). Fairclough outlines how we call upon such resources to make sense of texts: I noted that I could not only make sense of them, but that I had exposure to and understanding of certain ideas conveyed in the text because of my own experience of work. I also noted instances in the analytical process of 'text trajectories' (Blommaert, 2001, p. 15), that discourse has the capability of shifting across contexts, for example notes from the media analysis moving across to interview notes and further notes and academic work such as this thesis and future researcher papers etc. I was conscious of the preconceived ideas which informed how I interpreted the texts even to the granular level of making notes in interviews.

I was aware of the risk of crossing a border between the 'etic' (outsider) and the 'emic' (insider) of the research process (Beals et al., 2020). As such I noted instances where I had a particular personal reaction to the text (interviews or online data), such as taking a dislike to any participants, although strong feeling can sometimes be beneficial if we stop to question it and potentially treat it as an additional data source (Kisfalvi, 2006). Through noting world and social events which had taken place between the first and second phase of interviews such as the UK vote to leave the European Union in 2016, and even the Covid-19 pandemic which took place as I was writing up my thesis, I reflected on how findings from one phase of data analysis can influence the design and analytical process of the next (Smith, 2003). This is evidenced by the powerful accounts and reflections by participants of the broader social changes that had taken place particularly in Phase 2. It would have seemed very irregular to not cover these within the interview discussion (e.g. Brexit and the US Presidential Election of Donald Trump) and in any case, participants openly discussed them without prompting. Such new contexts allowed for a re-orientation of the research and respond to 'shifting foci' (Langley & Stensaker, 2012, p.160) by using world events to probe interviewees more deeply about the passing of time and ageing process. Vogl (2002) suggests reflecting on the research process itself between interview phases and amending the approach or topic of enquiry where possible.

5.10. Summary and Concluding Points

In this chapter I have explained my ontological and epistemological positions as rationale for the methodological choices adopted to answer the research questions of this thesis. Additionally, I have outlined the opportunities and challenges afforded by choices in relation to research design, data collection and analysis, and ethical considerations presented by both interviews and online data. I have offered reflections on the complexities and contributions of longitudinal qualitative design and the value of repeat interviews for this research specifically.

In conclusion, this research design was intended not to mirror any ideas of 'reality', or 'generalisability' but to understanding meaning: in what ways a group of social

actors interpret and negotiate identity through available discourses and from there draw on the potential implications of this for their professional future. Additionally, a longitudinal study offers a unique ability to link 'the macro to the micro' enabling a review of what constitutes the social and how such dynamics change or remain over time (Farrall, 2006). Chapters 6, 7, 8, 9 and 10 offer analytical findings as a result of the methodological research process offered in this chapter.

Chapter 6. Phase One: Analysis of Online Media Texts

6.1 Introduction

This chapter presents the results from a critical discourse analysis of fifteen UK online media sources sampled from Phase 1 of this research. The list of articles and their publication dates are provided in Chapter 5. This analysis was conducted in response to the first research question:

In what way are chronological age and digital technology discursively linked in online UK news media?

I offer three ways in which such linkages are achieved, namely through:

- Discourses of digital disruption;
- Discourses of generational division and
- Discourses of age problematisation.

I explore the various ways in which these are mobilised and offer concluding points on the wider social ramifications from a critical discursive perspective.

6.2. Digital Disruption

In Chapter 4 I discuss how media texts create the conditions of possibility or '*episteme*' (Foucault, 1966) that enable a form of social action to take place. This is achieved through socially normative beliefs (Fairclough, 2010) frequently reified and reinforced through discourse. The texts analysed suggest that the 'digital revolution' (Weller & Anderson, 2013) is a reified social construct which has also become a discursive event (Fairclough, 1992) providing the social conditions in which subsequent discourse/s can be produced and interpreted. I suggest that the broader social acceptance of an increasingly digitised society operating at pace provides fertile ground for a meta-discourse of 'digital disruption' across the media texts.

Almost all the texts I analysed in this phase present a pervasive suggestion of on-going, accelerating social and technological transformation suggested in the following excerpts:

"A report from Age UK said … amid the march of technology and services such as online banking, it said, around 4.5 million over-65s are "digitally excluded". The charity argues that if some of the initiatives launched by financial firms were rolled out more widely, it could "revolutionise" the way in which they interact with older people." (The Independent, 30/04/2016)

"The major trends that we picked up on, all of which could completely change the way games are made - and played - in the near future." (The Guardian, 23/07/2015)

Carefully hedged militaristic metaphors such as 'march' and 'revolutionise' convey a sense of broader social revolution both influenced and precipitated by technological development. This serves to embed a sense of a normalised permanent friction in our lives, achieved through language choices such as 'major' and 'completely'. The use of structures and grammatical forms also create a mood of desirability for this new world, of 'yearning' as described in the article below, presented as an opportunity to draw clear divisions between the past and present:

"In our yearning for convenience, the market itself has quickened. We digest stuff quicker. Fashion arrives and is replaced by a new look when that delivery sells out. Films open on a Friday and can close a week later. Our computers used to take minutes to crank up; they now take milliseconds and are connected online 24/7. Predictive text guesses what you want to say before you have thought of it for yourself… since the digital age began. Life in the 21st century has actually got quicker. In part, this is obviously about the technology which has transformed so much of our work and life…It's more profound than merely digital magic…; we operate swifter nowadays across the board. We eat faster and we walk faster, running to catch the bus which we pay for by simply tapping in. No more faffing around to look for cash in our pockets or collecting tickets. That's all yesterday's behaviour." (The Independent, 26/3/2016)

In this extract relatively mundane activities ranging from physical movement to making payments are punctuated by repetitive sentence construction that builds to a crescendo suggesting the pace of change is exacerbated by technological development. The excerpt constructs digital technology as mystical via the phrase

'digital magic' but also situates technological change within a broader social changing landscape. The relationship between society and technology is reciprocal and recursive: broader social change both influences and is influenced by technological advancement. Similarly, the following text offers an apposite example of where no part of the lifecourse is immune to technological intervention particularly parts of life we would disassociate with technological impact:

"Willing (which is currently US only) is another start-up focused specifically on this market and wants to disrupt the end-of-life legal market by letting users draw up legally valid wills on their smartphones and PCs within minutes at no cost and without any lawyers." (The Independent, 7/10/2015)

Within these texts speed and time are offered as motifs to build the groundwork for accepted beliefs that some ways of life, behaviours and norms could potentially be lost or at least are under threat. The following article openly states that a quickening pace of life is 'factual truth':

"It's a cliché of ageing. Everything seems to speed up, they say. Our childhood seemed to go on for ever; our teens took a glorious age to spin out. Then the decades get faster - your thirties and forties go past in a blur, and thus it continues. Rather annoyingly, this phenomenon has now been found to have some factual truth to it, at least since the digital age began. Life in the 21st century has actually got quicker. In part, this is obviously about the technology which has transformed so much of our work and life." (The Independent, 26/3/2016)

By connecting concepts of speed and time to ageing and the subsequent biological changes associated with the ageing process serves to reminds us of the human inability to control time itself. This is developed further through a synomisation of the ageing process with changing technology: *"We're ageing – and the internet is ageing too" (The Guardian, 5/08/2015).*

An article featuring how women in some technology firms are being offered the chance to freeze their eggs in order to advance their careers and postpone motherhood also reinforces the linkages between the physical and the professional realm. The 'buying more time' idiom conveys a pressure to somehow freeze youth and time itself: *"I wanted to "buy more time" and "create a window of opportunity…" (The Observer, 19/10/2014)*

This idea of concurrent physical and technological ageing is used as a persuasion device to imply that certain practices (mostly digital related) within roles and sectors are now irrelevant, particularly to a younger workforce. I argue this serves to reinforce the idea of a broader need to adapt and respond to such disruption:

> *"many of the tasks performed by a finance professional…don't appeal to tech-savvy millennials. The finance industry needs (to adopt) modern systems: (The Guardian, 13/08/2015)*

Here the use of 'tech savvy millennials' serves to homogenise all youth as digitally astute. There is an implication that industry must act now i.e. ensure they use modern technology if they are to remain competitive and appealing to young people which in turn suggests industry needs young people to remain competitive.

In the following article presented in first person narrative the voice of young people is offered to emphasise and provide legitimacy to stereotypical ideas that younger people work and learn faster, but the reader is left assuming this is faster than the older subject:

> *"We (younger people) consume news at a rapid pace …This means we learn more, and faster. (The Evening Standard, 27/01/ 2016)*

Here further calls to action are offered through the repetition of modal verb 'must' and figures of authority are implored to attend to a looming productivity crisis, but the suggestion is willing to adopt the challenge through use of 'embrace'

> *"Smart CFOs must work to overcome these barriers…CFOs need to embrace the challenge of making work more attractive to millennials … must embrace the millennial mindset' (Guardian, 13/08/2015)*

The overarching narrative is one of an increasingly digitized existence which enables doing more in less time both within and outside the workplace, supported by the future workforce of (currently) younger people.

The texts analysed reify time as a commodity that cannot be wasted. This is heightened in extracts utilising personal accounts such as the following which create a sense of inevitability of future changes:

> *"It's only a matter of time before one goes public, allowing private equity firms to profit from raw human materials." (The Observer, 24/10/2014)*

In the articles the present time is also depicted as a social object that we try, but fail, to control. Through language choices such as 'spin' 'blur' 'swifter' 'faster' (The Independent, 26 March 2016) the syntactical structures and grammatical forms within these texts become punctuated with the same rhythmic style. We see glimpses into a dizzying and overwhelming future - exacerbated using absolutes and predictions emphasised by modal verbs such as 'must' and 'should'. There is also the suggestion that our previous behaviours were slower, sluggish and less productive: the idea that we wasted time is evidenced through lexical choices such as 'faffing':

> *"No more faffing around to look for cash in our pockets or collecting tickets. That's all yesterday's behaviour." (The Independent, 26/03/2016)*

There is a sense of age-related economic panic (Bennett et.al., 2008) in these articles imploring industry to avoid missed market opportunity suggesting mass co-ordinated action: it's time to gather, to 'mobilise' in order to seize the opportunities such disruption offers:

> *"A growing cadre of people like Munshi see that it's time to mobilise for the ageing tech opportunity" (The Independent, 27/01/2016)*

In summary, most texts present an overarching discourse of digital disruption where youth as subject is constructed as digitally astute and therefore vital to future commercial success. I will now offer ways in which a second discourse of 'generational difference and division' link age and technological ability and engagement within these texts.

6.3. Generational Divide and Division

In many of the articles explored in this phase of analysis, the construct of 'generation' is used to emphasise normalised, age-related differences based on assumed membership of different age cohorts. The media texts examined offer many linguistic devices which reify a socially established 'generational' construct. Through linguistic pairings, metaphors and tropes, texts offer generational related groupings on homogenous lines familiar in the literature (Benson & Brown, 2011; Twenge & Campbell, 2010; Applebaum, 2005) ideas of shared life experiences, behaviours, tastes, preferences and skills to others in similar age cohorts. This is achieved through repeated use of taken-for-granted generational labels such as 'millennials' 'generation x, y, x and z' and 'baby-boomers'. There are also various specific constructions used to describe younger people (under the age of 30) such as 'millennials':

> *"A holistic integrated experience is expected by millennials whose social lives are driven by a cohesive system where the click of a button can switch their attention from one social media platform to another" (The Guardian, 13/08/2015)*

Within all of the texts analysed, age is consistently enrolled as a point of between-generational differentiation. Younger people under the age of 30 are *assumed* to be technologically capable and engaged while 'older' people are afforded characteristics of being technologically lacking. Such ideas have been around since the early 2000s (Prensky, 2001) but ideas of 'digital nativism' are frequently present in these media texts and used to develop the construction of 'generation' even further: *"the new generation of digital natives" (Evening Standard, 27/1/2016)*. Texts frequently contain identifications where 'generation' is lexically paired with technological terminology:

> *"switched-on generation" (The Evening Standard, 17/01/2016)*
> *'the snapchat generation' (The Independent, 27/01/2016)*
> *"the swipe generation seamlessly navigates between the digital and the real world" (The Guardian, 23/07/2015)" (The Guardian, 23/07/2015)*

Such constructions serve to consistently depict younger people not simply as different, or indeed different in technological terms, but as homogenised and positivised as intelligent, curious, energetic, creative as well as naturally digitally skilled. The overarching metaphor of 'fluency' so frequently attributed to 'digital nativism' and 'growing up digital' (Tapscott, 1998) is afforded to young people, where digital skills are synomised with our physical behaviour in the natural world where they are *"swimming in the digital sea" (The Evening Standard, 25/03/2016)*. Conversely, the 'older' generation are juxtaposed as less than fluent, as paddling rather than swimming reinforcing a sense of what is un-natural, of struggle, reified by first-person narrative account which voices a broader collective through 'us'"

> *"Generation A… they swim the in the digital sea while the rest of us just paddled" (The Evening Standard, 25/03/2016)*

Where texts overtly offer the 'digitally native' construct, young people are positioned as economically and professionally desirable, in-demand, privileged actors afforded the best professional opportunities on condition of being young.

> *"jobs are back – as long as you're one of the new generation of digital natives… (Evening Standard, 27/01/2016).*

Texts also suggest a naturalised digital ability impacts cognitive processes, behaviours and characterisations in addition to digital skills and preferences:

> *"The main thing they've got going for them is drive and ambition. They're engaged, they work far harder. And they're not just digital natives, they're mobile natives" [The Evening Standard, 27/01/2016].*

There tastes and behaviours are constructed as logical predispositions to possessing energy, drive and ambition but occasionally the suggestion of such positive descriptions can be is mixed: Here 'chutzpah' can suggest the subject as stimulating or irritating, and 'green juice' could be interpreted as a symbol of that which is medicinal, healthy and nutritious – if difficult to consume:

> *"being around younger people infects you with their energy…chutzpah…and taste for green juices" (The Observer, 2/08/2015)*

While older people are not explicitly mentioned in this text they implicated through opposition effects: 'they' (the digital natives) 'work far harder' than others, others being 'older workers'. In the second extract, The Evening Standard text develops the metaphor of fluency even further where 'digital nativism' leads to 'mobile nativism'. This locates the text within an ongoing revolutionary stage of social change from desktop to mobile computing practices, suggesting an economic desirability of hiring and accommodating each new(er) generation of worker as our world becomes increasingly mobile enabled.

In the following text, children using technology at an ever-younger age serves to legitimise and reinforce a sense of 'naturalised' generational difference which again plays with the 'fluency' metaphor:

> *"34% of children under 11 have a tablet and they are now tending to get their first smartphones as they enter secondary school. "(The Guardian, 23/07 2015)*

The native/immigrant dualism is further exacerbated by glimpses of interdiscursivity of technological lexicon embedded in such characterisations: use of words such as:

- 's*witch*', (from 'the 'switched-on generation' : The Evening Standard, 25/3/2016)
- *'swipe'* : *"the swipe generation seamlessly navigates between the digital and the real world", The Guardian, 23/7/2015*
- *'mobile' (they're mobile natives" [The Evening Standard, 27/1/2016)*

Such language draws on the lexicon of technology to describe age identities and catagorisations, thus reifying that digital nativism exists, is evolving and has various forms.

Generational discourse is also present within the texts through a residual discourse suggesting a neo-liberal, commercial opportunity if the 'market' of older people is catered for, discussed in more detail later in this chapter. However, this is predicated on accommodating an understood, taken-for-granted digital 'skills gap' faced by this age group (discussed in Chapter 2). This is realised in various cases of linguistic adjunct of 'greying' or 'silver':

- *'grey generation' (The Independent, 7/10/2015)*
- *'grey pound' (The Independent, 7/10/2015)*
- *'grey entrepreneur' (The Observer, 2/08/2015)*
- *"Vote for your Silver Surfers winner! This award is for an older person who has embraced the digital world" (The Mirror, 28/08/2015)*

'Silver surfers' is a reoccurring construction depicting the digitally engaged and capable older person, usually over 60 years of age. Use of the term foregrounds a sense of novelty, where such behaviour is framed as unusual and unexpected for older people. Therefore, digitally engaged older people are framed as remarkable to the point of having their own label - even if 'silver surfers' is essentialised as positive. This is emphasised by the Mirror article, where 'silver surfers' are to be celebrated, to the point they are worthy of an awards initiative. However, by highlighting the older digital subject as novel reinforces the normative stereotype of older disengaged digital subject, usually in need of support and resources in order to upskill (despite a lack of empirical evidence as explored in Chapter 3). Older people are also commoditised through prefixes of 'grey' and 'silver' labelling, constructed as a valuable economic opportunity, to accommodate for a *'rocketing market segment' (The Independent, 27/01/2016)*. The marketisation of age problematisation and how this is achieved is explored further in the next section.

I have offered ways in which the text draws on and offers a broader generational discourse to link age and digital technology in the online UK media texts analysed. I will now turn to the third discourse present in the texts – problematisation.

6.4.   Age Problematisation

Various texts analysed presented an evident 'problematisation' of multiple age cohorts in the workplace. Descriptions of key differences between young and old people are legitimised primarily through concepts of 'digital fluency' and 'growing up digital' (Tapscott, 1998) fostering the beliefs that younger people don't just act differently, they ARE different – cognitively, behaviourally, and socially, possessing a *"millennial mindset" (Guardian, 13/08/2015).* This is also reinforced by voices present in the articles themselves (such as The Evening Standard article) which expands:

"…the way my (younger) colleagues bounced between social networks and chat windows, jokes and thoughts…left me dazzled" (The Evening Standard, 26/3/2016)

"They (Digital Natives)…can simply sort out your smartphone "in seconds". [The Evening Standard, 27/01/2016)

Younger people's ease with technology at work through lexicon such as 'bounced' and 'dazzled', troubleshooting technological problems 'in seconds' suggests an opposite older digitally struggling subject. This is amplified by a self-depreciating authorial voice that identifies as being uneasy with digital life, as bewildered and in awe of assumed digital skills of younger people.

This is further exacerbated in the media articles where the theme of digital life is repudiated by the authorial voice:

"Tech start-ups are usually seen as a <u>young person's game</u>, so founding a website in my late 50s has been <u>something of an adventure</u>." (The Observer, 2/08/ 2015)

"last year I got a job at Buzzfeed. <u>To call it a culture shock was an understatement</u>: this was a firm that not only catered to twenty-somethings but was largely staffed by them" (The Evening Standard, 27/03/2016)

"While wanting to stand up for my generation, I've also found it thrilling to be setting out in something new, especially as people in tech seem to be so open, and ready to help. Every week, every day - every conversa- tion! - I may learn something I didn't know before. But then I still have to work (it) out " (The Observer, 2/08/2015)

By presenting the work and location of a digital start-up as adventurous and thrilling exaggerates the experience and locates the digital space as problematic for older subjects and confines it only suitable for younger people. This also reifies the idea that technology more broadly is an uneasy space for older subjects, that adjustment is constantly required and necessary.

Such accounts serve to reify differences of capability, skill, needs, expectations between younger and older workers within a digitally disrupted landscape. Such themes further legitimise ideas of digital disruption, the increasingly digitised nature of labour and broader narratives of generational difference at work (Benson

& Brown, 2011). I offer the view that technology is enrolled in age discourse to highlight differences in response to such disruption and those differences are subsequently problematised. Younger people are constructed as more adaptable as a result of and in connection with technological engagement, older people less so. Older voices within texts often self-problematise their age as an indicator and identity marker of generational tension and unsuitability for the working environment:

"(I'm) old enough to be their mother" (The Observer, 02/08/2015)

Being digitally out of step risks not simply falling behind in productivity and professional success but in complete annihilation in work contexts illustrated as being 'mown down' in the following excerpt:

"As I send an email or a WhatsApp message … if we are <u>not going to be mown down or left out</u> by inexorable acceleration, we must acquire new skills" (The Independent, 26/03/2016)

Authorial voices describe themselves in generational labels which again reify mythical ideas about generationally bound digital skill and 'growing up digital':

"The fact is that baby boomers like me haven't grown up with computers. …" (The Observer, 2/08/2015)

tech-orientated twentysomethings" (The Observer, 2/08/2015

The problematisation discourse is further evidenced through ideas of what constitutes *professional competence*, often synonymised as 'digital competence' within the texts. If the reader assumes digital competence is a labour market necessity, but is mostly located in younger age groups, assumptions about broader professional capabilities of older workers and labour market value are suspect. Furthermore, as creativity and innovation are offered as concomitant with technological ability (discussed in the characteristics of those who work in digital technology sector in Chapter 3), younger people are positioned as the most desirable professional candidates.

"Their tech experience and propensity to creativity makes them ideal candidates for being strong analysts and business partners…Recognizing that millennials bring a greater degree of tech competence and a strong propensity to innovation and creativity, CFOs need to embrace the challenge of making work more attractive to millennials to harness their skills for the benefit of organisations" (The Guardian, 13/08/2015)

The social object of 'multi-generational workforce' (Benson & Brown, 2011) is used within several of the texts to persuade the reader of a wider social challenge exacerbated through age-related technological differences e.g. *"We are often caught up in a generational sandwich" (The Guardian, 19/1/2016).* Different age groupings are both problematized and positivized in different ways to illustrate assumed (rather than evidenced) intra-generational tension and equity struggles.

The theme of outliers is strong at both ends of the age spectrum. *The Guardian* offers a feature where a man over 50 is constructed as unusual in being entrepreneurial in the digital economy, where such attributes are therefore only associated with young people (Cook, 2020). The lexical pairing of 'grey entrepreneur' foregrounds his age as a key identity marker in much the same way as 'silver surfers' does:

"How does it feel to be a grey entrepreneur? Tech Start-ups are usually seen as a young person's game…so founding a website in my late 50s has been something of an adventure" (The Observer, 2/08/2015)

Here again we see older people foregrounded as unusual, an outlier, even exotic if they fall outside of social norms associated with work. Texts offer glimpses of a naturalisation of older age with work experience. This is achieved through accounts of roles and positions considered discordant with social expectations such as such as people under 30 working in high-profile roles (Posthuma & Campion, 2009). This is typified through infantalising references connected to children, such as '*boss barely out of nappies' (the Guardian, 19/01/2016)* or in the example above, positioning older people as out of place within a start-up environment. This serves to reify ideas of limiting, one-dimensional ideas of cultural belonging within certain work environments, and also implies digital tech sector environments are unsuitable for the older worker. Texts are also punctuated with reminders about

stereotypical ideas connecting age, experience and wisdom through reflections such as *"with age comes a new set of wit and wisdom…" (The Guardian, 19/01/2019, 2016.)*

The sense of technological problematisation in both directions of the age spectrum extends beyond ideas of digital ability and engagement to technology access, highlighting ideas of 'digital divide' (Van Djik, 2017) discussed in Chapter 3. Lengthy descriptions foreground everyday digital tasks such as basic online security practices as problematic for older people or construct older people as increasingly excluded from everyday digital transactions:

> *"Age UK said that, for some, the cost of getting online is "prohibitively high", while others may lack a computer, digital skills, or access to training. Some may also have concerns about security issues amid frequent reports of scams and financial abuse. In addition, older people may have problems remembering passwords." (The Independent, 30/04/2016)*

> *Banks urged not to leave older customers behind…more attention must be paid to the needs of an older generation" (The Independent, 30/04/2016)*

In the Age UK excerpt above we see the acknowledgement of cost of getting older in monetary terms which adds credibility to the assumption about age as burden, but also a market opportunity. While older people are visible within these texts they lack voice, problematised as 'struggling' as 'falling behind', or needing to 'catch up', both physically and cognitively challenged by 'getting their head around' the technology in question. Gerontechnological ideas are accented within texts which offer institutional and social calls to action – 'banks urged' – to attend to normalised age-related digital difficulties, and the digital technology sector is ultimately called out as being ageist and exclusionary of older people. However, this is again achieved paradoxically through narrow views of older people's digital practices, assuming they are not users of certain platforms and devices such as Snapchat:

> *"Why does the tech industry ignore the elderly in favour of the Snapchat Generation?" (The Independent, 27/01/2016).*

> *"Businesses (in technology) are missing a trick by writing off older women" (The Guardian, 19/01/2016).*

"It's time to mobilize for the ageing tech opportunity" (The Independent, 27/01/2016)

Linguistic devices such as first-person author testimonies again present self-deprecating identifications with the technological struggle of the older person as seen in earlier accounts. There is a suggestion that attending to such struggles are a neo-liberal market opportunity to attend to the 'grey market' or 'grey pound' as discussed earlier in this chapter.

However, by constructing older people as willing but under-accommodated digital users and consumers, their assumed digital struggle becomes commoditised and monetised as potential opportunities for future products and services:

"Older people: the demographic dynamo - …according to a recent study by charity Age UK, the number of people aged over 65 is expected to nearly double (48%) to 16 million by the end of the next decade. This presents a market opportunity. Whether it is saving cinemas or boosting tourism, retailers and service providers are increasingly chasing 'the grey pound'" (the Guardian, 2/04/2015)

"techboomers...teaches older people all over the world how to use popular online services such as apps and dating sites" (The Independent, 7/10/2015)

As we have seen through the construction of the 'grey market' and repeated in the above example, the provision of products and services focussing on 'upskilling' older people to digital technologies or adapting them to accommodate needs, is also presented as altruistic, even philanthropic. *The Independent* article praises the entrepreneurship of companies to 'enable' older people to develop online skills. Although texts increase the visibility of older people by discussing them in market and consumer terms, stereotypical identifications homogenise all older people with assumed needs requiring intervention and support. Yet again, stereotypical symbols such as 'rocking chairs' and social and health decline are presented in the text which combines old-age stereotypes with digital lack. This digital lack is then commoditised and classified as an untapped market opportunity, perfect for the right entrepreneur willing to help, through reminding the reader of an ageing population within an increasingly technologised society.

"With people living longer and having more access to innovation, [mobile] phones, texting all the applications whatever it is enables our generation to keep active rather than sit at home and grow old in a rocking chair" (The Independent, 7/10/2015)

"I have parents who could really use new ways of dealing with issues such as memory loss, immobility, shrinking social circles, boredom and of course, escalating healthcare needs. I've searched for products and services that would be truly helpful and built for them, not built for the life-hacking, smartphone-glued, Snapchatting crowd". (The Independent, 27/01/2016)

However, in the articles above older people are still connected to one-dimensional ideas of cognitive, physical and social decline even if such decline can be increasingly digitally managed by the right social entrepreneur tapping the market opportunity:

"I look at the boomers and I'm like 'God, there's so many ways I can help these people. No-one is doing it. I'm going to do it" (The Independent, 7/10/2015)

Following on from the marketisation of older people, both aspects of ageing are presented as being capable of being overcome by technology but additionally old age itself. I argue an interdiscursivity is taking place where the problematisation of old age is constructed and offered as a logical, almost technological problem to be solved, a code to be hacked, which again constructs ageing as disease, illness to be 'cured':

"Ageing is simply a medical problem for which a solution can be found…Investor Joon Yun launched the Palo Alto longevity prize offering $1million to anyone who could 'hack the code of life" but now Silicon Valley scientists believe they are on the cusp of discovering the cause of ageing, which will help them achieve the unthinkable: find a cure"" (The Telegraph, 16/02/2015)

The authorial voice within texts occasionally challenges ageist stereotypes that exist elsewhere in the media. The Telegraph article below challenges age discrimination practices elsewhere in the media, explicitly referring to the normalisation of technological struggle in older people. By referring explicitly to

other forms of media such at television and film, they also distance popular press from such practices rather than self-critique as being part of the problem:

> *"It's easy to feel like popular media is becoming increasingly age friendly…but today's films and TV shows are still filled with ageist stereotypes are often harmful and demeaning. From being computer illiterate to making light of memory loss, we round up some of the most annoying stereotypes around" (The Telegraph, 5/10/2015)*

> *"Age discrimination comes in many guises. More often than not it is the result of lazy stereotyping" (The Guardian, 2/4/2015)*

Traditional stereotypical ideas of older people as digitally lacking being critiqued as outdated, pastiche and 'lazy'. However, in contradiction to the intention to challenge, in the following texts use the term 'old' pejoratively to suggest outdated or lazy:

> *"Hashtag? What's a hashtag?... maybe it's time for Hollywood to admit the "old guy doesn't know what a computer is" punchline is getting old"? (The Telegraph, 5/10/ 2015)*

And

> *"the finance industry must build trust with the millennial generation' …Many of the tools used in finance are old, obsolete and show their age…the finance industry needs modern systems that remove barriers of complexity…a cohesive, integrated system is expected by Millennials" (The Guardian, 13/08/ 2015)*

Within these texts, 'older people', 'older systems and practices' and even 'being older' are constructed as bureaucratic, obsolete, lacking in quality and capability to meet the demands of the modern world. However, both articles paradoxically reinforce the ideas that they seek to challenge about age stereotyping through the lexical choices and idioms they present such as 'show their age'.   This is further exacerbated by media texts which place the spotlight of missed market opportunity in industry ignoring the 'needs' of older people by both assuming they are not users

of certain platforms and devices, but also ignoring the increasing number of older people who are going online, or becoming 'tech-savvy':

"The proportion of those 65 and older who go online rose from 14 per cent in 2000 to 59 per cent in 2013…another driving factor is the ageing of baby boomers, typically defined as those born between 1945 and 1964." (The Independent, 7/10 2015)

"reports have shown that the older generation are becoming increasingly tech savvy" (The Telegraph, 5/10/2015)

"Banks and building societies must step up their efforts to make banking easier for older customers…more attention should be paid to the needs of older customers…around 4.5 million of over 65s are 'digitally excluded'…" (the Independent, 30/4/2016)

By foregrounding the obstacles faced by older people, and a call to action to address greater inclusivity to avoid exclusion simply reinforce ideas that older people are disengaged with certain digital practices. In the following Telegraph article, the emphasis of a missed opportunity to buy cheap Eurostar tickets simply emphasises the idea of digital disengagement:

"Ageist Eurostar puts cheap tickets on Facebook only" (The Daily Telegraph, 27/05/2016)

The subtext here is that of a well-intentioned message of social responsibility but simply reinforces broader ideas of older people lacking agency, of being marginalised:

"don't write us off" (The Guardian, 19/01/2016).

There is an emerging picture of the recognition that dualist digital/non-digital ideas of the old and young are outdated. New concepts and constructs linking age and technology begin to emerge, suggesting the potential for new labels and stereotypes e.g. the rise of the 'gamer parent' (The Guardian, 23/07/2015).

'We are now seeing the first generation of parents as gaming advocates…these 'gamer parents'' (The Guardian, 23/07/2015)

Such ideas imply a potential challenge and evolution of the digital native construct.

In summary, age and the construct of generation are used to reinforce ideas of an age-related digital divide, reified through a persuasive argument for how technology can support the ageing process. However, this is achieved through highly stereotypical and one-dimensional ideas of ageing, reinforcing a 'discourses of deficits' (Vines et.al 2015) that continues to implicate old age with degradation and decline (Tretheway, 2001).

6.5. Concluding Points

My analysis of the texts within this chapter highlights how social disruption, generational difference and subsequent age-related problems are constructed. This creates the conditions for both young and old to be commoditised, dehumanised and reduced to economic assets. Professional and economic desirability is conditional on certain age groupings and classifications that outline how subjects can be objectivised (Foucault, 1980). These echo how negative associations of age/ageing sustains unequal power relations (Fairclough & Wodak, 97) and suggest the media show little interest in offering a broader and more complex exploration of human reality where all ages are constantly changing, learning, evolving, and adapting to social changes - including technological ones.

As discussed in Chapter 3, the media can be a vehicle for discourses orientated in neo-liberal ideologies, where age/digital understandings can be used as a lever or even a weapon and justification to create and sustain divisions which have material consequences. In the next chapter I analyse the discourses present in interviews with older digital sector professionals, and in Chapter 11: Discussion and Conclusion I explore the potential social and economic implications of age-technology discursive connections.

Chapter 7: Analysis of Interviews of older digital sector professionals

7.1 Introduction

This chapter presents the results from a critical discourse analysis of fifteen 'older'[9] digital technology sector professionals sampled in Phase One of my research. In this chapter I respond to the second research question: To what extent and in what ways are such discourses offered in the identity accounts of 'older' digital professionals?

The analysis of online UK news media outlined in the previous chapter provided the discourses that will underpin an analysis of the interviews in this research data round. Those discourses are:

- Digital disruption;
- Generational divide;
- Age problematisation.

- I will offer a critical view of the ways in which such discourses are present in identity accounts of participants In line with Fairclough's three tier model (2015). In accordance with this model, I will explore the extent to which, and significance of the ways, they are potentially drawn from a broader social level (tier three), interpreted and implicated at institutional level (tier 2) and localized within the interview setting. In my analysis of the interview data, I decided to focus on the themes derived from the media analysis. While this had the potential to omits other important discourses that may be present in the interview data such as for example, workload or work satisfaction (and this is discussed in more detail in Chapter 11), this decision specifically responds to the second question set " To what extent and in what ways are such discourses offered in the identity accounts of 'older' digital professionals?". My research objective within this thesis is to explore and outline

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[9] Defining 'older' in IT varies across scholarship and practice. For the purposes of this thesis 'older' is defined as over the age of 35 at the time of first interview. On average 72% of UK digital tech workers are over 35, challenging the stereotype that jobs in this sector are the preserve of those born after 1990. East London, the site of Silicon Roundabout, is the only region where the majority of digital tech workers (51%) are under 35.

the extent and nature of interdiscursivity of age-technology discourses between discursive sites.

As examined in more detail in previous chapters, a critical discursive analysis considers the performative linguistic nature of how the participants engage in interview interaction through discourse and discursive acts (Fairclough, 2015). Such acts may be influenced by the stimuli presented to the participants at the beginning of the interview as discussed in Chapter 5: Research Methodology where I outline how I offered a sample of UK online press media to kickstart the discussion on age and technology language.

7.2.   Digital Disruption

Across all interviews participants routinely acknowledge and offer accounts of wider social and economic upheaval within their professional and personal lives, not least as a cause and effect of digital change. However, while there are strong acknowledgements that such changes are precipitated by advancing digital technologies, 'disruption' is interpreted and responded to via different subject positions which are punctuated with linkages to age. I outline these subject positions of eyewitness, social commentator, digital insider and predictor of future digital disruption illustrated from interview excerpts:

Table 17: Participant Subject Positioning within Discourse of Digital Disruption

Subject Position	Interview Excerpt
As an eyewitness and social commentator of the broader disruption taking place	*"You know how old is YouTube? How long has it been around? …it's wallpaper now… when in fact these platforms and products we have only just lived through they have been with us less than 15 years…the entire landscape has dramatically changed. Amazon and Google were just starting out twenty years ago and now they are some of the most dominant players in the market" (Alfie)* *"I do believe it has enabled amazing things in the world we as a species has improved rather than regressed." (Craig)*

	"I firmly believe I have lived through one of the most incredible periods of history … this incredible (technological) transformation of the world." (Alfie) *"technology is moving faster than ever, and technology firms are having to move with it if they are to remain relevant"* (Bob) *"I think you certainly need to be prepared for big disruptions and upsets and changes…. We've all had to live and adapt and now these mobile platforms that didn't exist five years ago are the default environments in which we are all now operating"* (Bob)
As a 'digital insider' who monitors the changing landscape and predicts change:	*"there will be companies that don't exist yet and they will be doing things and talking about things that I don't know about …"* (Alfie) *"You watch and wait to see what the next set of changes will be and we are lucky here, we have all the monitoring software and connect with all the communities so you can track stuff. You need to keep an eye on things as stuff changes so fast."* (Helen)
As a predictor of the consequences of failing to attend to digital disruption:	*"The ground is shifting all the time and very very fast and certainly up until about 2-3 years ago there was the badge of honour of digital illiteracy which was the same badge that senior managers in the 60s used to use about not being able to use a typewriter it was perceived as a tool and something that secretaries did – it was beneath them to do what was seen as a menial process and digital was seen as a menial process. I think that is shifting quite fast and I think because you have now got and entire strata – certainly within the states and increasingly within the UK of people in the 40s whose entire career was lived in the digital world and you increasingly have a level of people – board level people, C suite people who will completely eat for breakfast people who are wearing their digital illiteracy as a badge of honour"* (Donald) *"I think everything is moving incredibly fast and if businesses are not doing their market research (in the area of technology) as a forefront runner then they are going to be left behind much quicker and harder than they used to be…"So now…I think it's so much more fast paced than what it used to be. You can come up with an idea but it could be yesterday's idea…?"* (Tracey)

These subject positions and views about digital disruption construct participant response to the pace and scale of changing technologies. Across all excerpts participants construct themselves as holding a *unique vantage point* from which to view, predict and influence such disruption as a result of working in this sector. Through explicit descriptions of their ability to anticipate, understand, navigate, manipulate and troubleshoot technology, participants construct a broader identity and membership within a 'digital elite'. This affords them localized power in the interview setting as they account for their skills, talents and future predictions directly to the interviewer. Such subject positions are frequently achieved through explanations of what they *can do* for clients, colleagues and the broader organization, accounts are syntactically structured to suggest their expertise is what can help with 'the technology' referred to as frequently as 'it'.

The following excerpts illustrate how this is achieved through accounts of how social media, mobile tracking devices, data management and smart technology are mechanisms which advantage the participants because of their professional knowledge in this field.

> *"The current terror is social media. I'm going to be blunt if you use social media for the wrong purposes, it's a dismissible offence …the fear (in organisations) is that people will complain...(through social media)… the world becomes more individualistic … these things personalize our lives so much. My phone learns what I like. It knows what I want. It's scary - and I can help with that"* (Nigel)

> *"a lot of tools help me do things a lot quicker, but it also means you can do a lot of stupid things faster. (Gordon))*

> *"It {smart technologies such as Amazon Echo] knows all this stuff about you, about us and it's only going to get smarter and we can get to grips with it." (Sean)*

By constructing technological developments from social media to smart technology as objects of caution and fear provides a platform for participants to outline the futility of change resistance but also position themselves as specifically positioned and capable to assist. Participants talk of struggle and battle with other individuals and groups at institutional level, who (they claim) have struggled or failed to adapt to digital changes. 'They', which can refer to colleagues, managers and leadership

bodies are persistently belittled: to resist digital technology is to risk professional irrelevance, which materializes in participant accounts as failing to 'keep up' or risk 'falling behind'.   In contrast participants elevate themselves by affording themselves the positioning 'steps ahead' (Laura, below) and skills and acumen to support broader industrial and labour market changes, or to 'help with that' (Nigel).

The construct of being 'left behind' risks professional/market obsolescence for the organization and resistance to the technology and misunderstanding it's value is referred to explicitly and implicitly in participant' accounts:

"So yep lots has changed. I think my perception has been that inside the technology industry especially when you are looking at enterprise technology there is still a lot of resistance (from others) to modern ways of working and modern technologies." (Meg)

"I would like to think that I'm a couple of steps ahead of what the company is actually ready for… they struggle to understand it themselves." (Laura)

Utterances such as 'so, yup' participants acknowledge the digital revolution as social fact when then enables them to locate themselves, and their value, within it. The metaphor of sleep is employed through lexicon such as sleepwalking, awake etc used to describe other's ignorance of digital change. In both accounts participants distance themselves from this wider derogated collective and position themselves as observers of impending doom:

"I want to shake the lot of them and tell them to wake up, this is the way the world is moving" (Sean)

"if they don't get with the programme they'll be overtaken….sleepwalking into a takeover probably" (Jill)

'It's a never-ending battle waking the place up to what customers are actually doing and what they want' (Helen)

The metaphor of the 'badge of honour' is used to suggest purposeful ignorance in relation to the business contribution of technology. Similarly the struggle to deal

with technological resistance is constructed in militaristic terms as a 'never ending battle' requiring fight, persuasion

> *"I have had to fight for the last six months to change the culture and change this attitude from older people that have been in the organization a long time and have not been really used to driving [change]…it's not just this magic box and the direction of the technology comes from the business not the other way around…a lot of business owners don't get the whole end to end process….maybe they see it as a headache. so, its whether you are keeping pace with stuff and you cannot wear that badge (of honour) anymore" (Tracey)*

Tracey constructs herself as a warrior fighting in a battle of persuasion in order to mobilise digitally ignorant subjects of the significance of attending to technology to drive business objectives. She amplifies their perception of technology as mysterious and misunderstood through the 'black box' idiom, offering her frustration at their digitally lacking identities which she claims they wear with pride, like a 'badge of honour'. The lexicon and statements of frustration vehemently classify other institutional members as less capable, intelligent and alert to digital possibilities - with explicit linkages to age, where being 'older' is offered as a relevant subject description and somehow connected to such institutional resistance.

Below, Gordon recounts the how the broader context of the Occupy movement in London during 2011 and 2012 created a crisis which – finally – enabled him to receive professional respect and recognition of professional relevance and value to his company which he claims he previously lacked. In the following account he constructs himself as 'misunderstood' and ignored by his managers. Through use of sarcasm and patronizing language to describe managers as "*the top people*" and through comparison of social media to the telephone, Gordon synonymises their resistance to digital technology with '*getting used to the typewriter'*, Gordon frames management attitudes to social media as unacceptable and out-of-date, constructing institutional resistance as ignorance and irrelevance:

> *"the resistance was very strong. Because the top people doubted the abilities of the people below and get with the programme in terms of corporate messaging and they were worried … But quickly it was reminded to them that we*

got used to the telephone we got used to email and we'll get used to social media!"
(Gordon)

Gordon clearly outlines the institutional hierarchy as significant in digital and non-digital groups, employing idioms about being digitally relevant ('*get with the programme')* and explanations which take a passive aggressive tone through use of the definite article, for example: 'it was reminded to them'.   Through this we see glimpses of institutional power ranking through references to 'the people below' of which Gordon locates himself as a member - 'we got used..'.   Similarly, in the following quote, Alfie constructs colleagues /the institution as ignorant or unresponsive to digital change (either by accident or purposefully), and by describing ignorant or digitally disengaged groups as 'baggage'. This suggests his own subject position as agile, capable of moving at speed to respond to a competitive market:

> *"So yeah, companies always want to move more quickly, and I think that there is still in bigger companies a lot of organizational a lot of organizational erm…baggage, structural baggage" (Alfie)*

Such positioning is further solidified by offering examples of where they have intervened in a crisis (Gordon), rescued projects (Sean) and such identities are offered as axes of professional legitimacy.   These are performed in this interview through anecdotes and stories about 'the time when…' their skills in navigating, predicting and solving digital challenges were in demand. Accounts are punctuated with linguistic cues and rhetorical devices such as factive verbs e.g. 'you know' 'I firmly believe' 'I think" and 'the possessive "I have' aiming to persuade the listener to share their perspective or insider knowledge:

> *"They didn't have a clue about how search engine optimization (SEO) could help them be the first choice for people searching…someone told them I could help with that, so I did otherwise we'd have lost revenue" (Sean)*

> *"I firmly believe if I didn't sort out that project (involving rewriting new code for a mobile app) it would have been a disaster for us." (Helen)*

In the following excerpt, Alfie uses rhetorical questions to reminisce about the importance of industry making the relevant adjustments to changing technologies

- and his role in that process. Additionally, by describing change in terms of 'upsets' Alfie also suggests that disruption is not always positive for all, which adds to the sense of imperative that we should anticipate and be prepared for change. The tone of Alfie's account is urgent, using rhetorical questions posed to the interviewer to reflect the enormity of the social developments but also describing the necessary tactics required by this professional group to upskill:

> *"I mean who saw android coming? Who saw a whole load of these things coming? We've all had to live and adapt and now these mobile platforms that didn't exist ten fifteen years ago are the default environments in which we are all now operating. Which we are all coding for and which we are all targeting in terms of mobile businesses. You know if people hadn't been prepared to switch from being developers to being software developers …we'd be screwed" (Alfie)*

Another power tactic employed by participants in the interview setting is to construct themselves and their profession as somewhat mysterious, an exclusive club or digital elite. There are moments where participants seek to distance themselves from the interviewer by assuming I have no idea what they do. This is demonstrated by a need to describe and offer statements (framed as questions) that assume I do not fully understand their roles or what they deliver, illustrated through use of passive aggression '*I don't know if you have seen it*' and neologisms ('production-y and creation-y):

> *"So, my role here or my job title is something called Developer Advocate which to people not in tech probably doesn't mean very much …" (Alfie)*

> *"my role is very production-y but also very 'creation-y' (Bob)*

> *"I do web-based stuff…actually web-based applications…I did the [names famous company] application…I don't know if you have seen it" (Craig)*

> *"are you familiar with different types of UX? Not many people are and my role is pretty niche" (Sean)*

> *"I wouldn't say now there is a wizardlry so much as, well my generation are seen as sort of mystical you know" (Donald)*

Such exchanges and the lexical/grammatical and syntactical structures offered here are power devices within the identity performance intended to reinforce a sense of mystery attached to their role and sector. Participants use the occasion of the

interview to enact discursive moves that suggest a distinctiveness and specialness of such work. However, such moves also serve to construct participants as a distinct and special person capable of doing such work (and therefore deal with digital disruption). There is a departure from focussing on the complexity of the technology itself to fascination with those assumed to have grasped it regardless of age (which is notable by its absence in such accounts, except when describing others). Identifications which deflect and reject age-related barriers are discussed in more detail in the rest of this chapter.

7.3. Generational divide and division

This section describes how the discourse of generational construct is offered as an assumed, legitimized, taken-for-granted marker of age difference within participant identity accounts:

> *"people of my generation" (Alfie)*

> *"I suppose it is a sort of age thing, it's a generational thing…the stuff I was learning when I was a bit younger was the most up to date stuff - Flash was even then was one of the most up to date things you could be using to build websites" (Craig)*

There are hints here of linkages to familiarity and affiliation with certain types of technological software which suggests a certain generational belonging (which could be beneficial or limiting depending on context as discussed in Chapter 3).

Such generational discourse includes the use of the term 'digital natives' (Prensky, 2001)

> *"there are probably some there who are digital natives but others who just throw themselves into it (learning new skills) regardless of age." (Bob)*

> *"they see someone coming in at the start of their career and they make this assumption somehow that they are a digital native" (Margaret)*

> *"I think I can use the term digital native for them (people under 30) in an absolutely unqualified absolutely hard way… they are definitely digital natives and*

the specific thing about that generational group is that people who are not comfortable with digital are unbelievable outliers" (Donald)

Participants also consider themselves to have digitally 'nativist' characteristics again typified by the construct of 'growing up digital' (Tapscott, 1997) even if they acknowledge they do not meet the age criteria of doing so:

"I suppose I consider myself to be, erm, am I a digital native well I maybe I suppose I'm slightly too old to be one but well I guess I grew up with technology erm I started using computers from a very early age you know the first computer we had in the house was a Spectrum from the early 80s so I had a very early introduction to technology. And I suppose for that reason I don't really fear it as maybe some other people do so maybe I'm slightly older than what one considers to be a digital native well you know it's not something that I'm fearful of and I kind of embrace it. (Meg)

Here, Meg not only accepts and offers the digital native construct but reconfigures the definition from birth date and age connection to technological affinity and exposure in order to meet and offer a preferred identity of herself. She acknowledges that while she does not strictly meet the age criteria, she locates herself firmly within a nativist identity and membership.

Despite an open acceptance of generation as taken for granted phenomena in their accounts, participants do contest some of the lexicon and labels offered elsewhere such as 'millennials', or 'digital immigrants' as unfamiliar, unappealing or simply pastiche. The following extract provides an example of where certain terms generate disapproval or even ridicule of those who choose to use the term.

"I think the term millennial has become very devalued in probably the last two years. Apparently, there is a programme online that changes the word millennial to something else when you read a text and I laugh out loud when I read that because it's such a stupid thing now. It had a meaning for a short period of time and I think now it's become very much hipster douchebag" (Alfie)

Alfie's discussion of the use of the term 'millennial' alongside the derogatory, caricatural term of 'hipster douchbag'[10] repositions the term usage as deeply

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[10] hipster douchbag' is an insulting term used to describe those who follow trends and think their opinion superior to others.

undesirable and places judgement and criticism on anyone who would choose to use the term. This suggests a recursive and agentic nature to Alfie's commentary in dealing with the evolution of the discourse itself: he is enabled to challenge current labels while simultaneously offering other terms such as 'hipster douchbag' in order to reify his position and therefore elevate himself to a superior position.

As explored in the Chapter 3, 'digital natives' has connotations of naturalized digital ability, capability and engagement and is embedded in participant accounts. However, the term 'digital immigrant' (Prensky, 2001) was less known to the participants and also appeared less palatable. This became apparent at the beginning of the interview when participants were offered news headlines and stories (some of which talked about digital immigrants and natives) in order to kickstart the discussion about technology and age:

"Erm I've heard of digital native but not digital immigrant… " (Robin)

"I don't know if I would use the phrase 'immigrant' …I think native sort of works because it implies born after the 1990s in a way and it's like having digital by default…that is what native implies but 'immigrant'….I think that is probably the wrong language to use alongside native. …yeah, I think that yes immigrants can fall in love with digital because it's so easy though…I mean even my mum is on Facebook sharing stuff…" (Tracey)

"No I don't agree with Digital Immigrant…that doesn't sit easy with me, it's like a race thing? I get Digital Natives yeah and it's probably a bit iffy but I get it" (Sean)

The explicit connection to race through the connotation of 'immigrant' appears to infuses the term with a stigma leading to participant rejection and disapproval, even if the term is normalised and prevalent within popular media. This not only suggests an acceptability and positivisation of the native construct but equally hints at the nuances of acceptability in age labelling, namely labels that connect to race become politicised reminding us that race is a more socially sensitive protected characteristic than age, and that both digital natives and digital immigrants are interdiscursive.

"Digital native' is understood and offered as a positivised and playful identification yet 'immigrant' appears far more problematic construct and identity, with negative and socially unacceptable connotations attached.

Generational boundaries and understandings are offered as accepted means of age-technology difference within participants accounts – despite such ideas being openly rejected when participants are directly questioned about them. They are embedded in subtle ways within the discourse depending on the topic of discussion: such as contradictory positionings within participant accounts during exchanges about managing different age groups at work, discussion of workplace benefits, diversity and diversification. For example, Alfie frames his relationship with younger colleagues in terms of cultural reference points such as music, gaming, and other pastimes which have clear generational markers attached. Paradoxically, he also offers the following discussion of generational difference while switching between a broader age-relevant v age-irrelevant discourse where he indicates he has not experienced age discrimination but has born witness to it:

> *"… where everyone is talking about different music to the stuff I grew up on and we'll often be having lunch and talking about TV shows from when we were kids and we are talking about stuff that was on ten years ago rather than stuff that was on twenty or thirty years ago but I don't feel any kind of discrimination or disadvantage here but you do see it …you feel it" (Alfie)*

Alfie discusses 'generational difference' in abstract terms without naming 'it' directly. Instead, he chooses to describe the perceived difference in abstract and ephemeral terms: *'you see it you feel it'* but this hints at homogenising entire groups of younger (and older) colleagues as sharing little common ground, and therefore implies imagined barriers between colleagues. Furthermore, Alfie positions himself in an 'older' generational category, and in doing so legitimises himself as being at the forefront of digital developments during the early days of the digital sector:

> *"you know there is a whole generation of us who - so – you know when I started in digital media it was the late 90s and there were not that many people working in digital and it was quite a nascent industry and I was one of the first intake so to speak". (Alfie)*

Other participants also reflect nostalgically about being at the forefront of the evolution of the profession, discussing being '*there at the beginning'* and the early sector experience as the 'wild west'. This suggests an anarchic professional sector when it was in its infancy:

> *"It's never going to be as much fun as it was at the beginning when it was a bit like the wild west …you were making it up as you went along and that was great! I was very lucky to have the opportunity to be doing it at that time"* (Margaret)

> *"I loved working on the early web stuff…no-one had a clue what we did and it felt like we were on the cusp of something really exciting and learned on the job"* (Jill)

By constructing themselves as at the forefront of the profession they suggest a new (but unlabelled) early professional sector membership and identity. This chimes more broadly with discourses of generation and generational understandings of our relationship with technology. Participants also discuss a new sense of intra-generational difference at work. David at the time of the first interview is a 52-year old working in a famous global technology firm and discusses how the environment has changed since he joined.

> *"Everyone in my work environment is way younger. When I joined the average age was around 28…People are still in that flush of youth where mortality, and it's a gloomy word mortality but it doesn't even occur to them. For example, in [names previous firm] everyone was effectively offered a benefit of buying a Bupa Healthcheck and stuff like that. 8 years ago when I got here I wasn't offered anything like that and not surprisingly I mean who from that generation would want it?" (David)*

Through the example of desired and undesired employee benefits also enables David to emphasise generational differences through a discussion of age-awareness and 'mortality' which links to scholarship of embodiment and ideas of marginalisation.

Finally, participants also suggest that technological product and service provision is generationally linked by becoming less 'natively' and therefore 'youth' orientated.

His account describes a widening of market appeal in terms of how and which digital products and services are targeted:

> *"The younger age ranges are more digital. But what is interesting is as we are going on year after year, the people who are familiar with digital and are being targeted digitally are going further up the range. What we are finding now is that people who didn't grow up with it or for want of a better expression were not 'geeks' they are getting into it more. So, I will now target families through it, especially now we are targeting baby boomers, downsizers. Which is the (age of) sixties". (Nigel)*

This account discursively achieves two things: it reinforces stereotypical ideas of age-related digital normality, that younger people are more digitally engaged: "the younger age ranges" but also provides an account of how this is changing by offering socially accepted generational labels such as 'baby boomers' and 'downsizers'. Nigel constructs himself as a professional who has become increasingly aware of changing generational -technological habits and how he will professionally respond: '*I will now target families'.* However, he does so through emphasising his belief in the existence of a generationally-rooted realism on which to base his professional decisions.

Overall participants offer generation as a legitimised and normalised age-related construct, in their own identity accounts, to describe others and as a social object that directly impacts and influences the services and products they provide. In the next section I will discuss the third primary discourse from the first phase of participant interviews: age problematisation.

7.4. Age Problematisation

From the first phase of media texts analysed, the problematisation of age was outlined as a primary discourse. In the interview accounts 'age problematisation' in the digital sector and more broadly is approached in different ways. Participants may repudiate age as problematic, and/or they may accept age can be problematic but deflect this being an issue directly impacting them, and/or they may accept age can be problematised in their professional field and they are planning for it, often

through identity construction. I explore each of these below.

7.4.1 Repudiating age problematisation

Participants frequently repudiate age-related tensions by denying age-as-relevant to them and/or their profession. In the following excerpt, Alfie performs an identity that suggests fluctuating view of an age-relevant, age-irrelevant world:

> *"I generally cease to ask or notice people's ages. And this is a true story again, when I turned 40 there were three other gentlemen in this office who also turned 40 this year. And we were all like 'oh yeah so we are the old boys in the office now' kind of thing. But I didn't think any of them were over 40. Well, I thought one was already over 40 but not the others…. actually, that is not true I thought TWO of them were already over 40 and one of them I thought was much older and more senior than when I joined in terms of organizational role. But it wasn't an issue. I don't look at them and think "this is a problem" (Alfie)*

Alfie offers himself as someone who does not 'notice' age as a persuasion tactic to convince the interviewer of the 'truth' or authenticity of the account via 'this is a true story'. He then continues to actively voice the ways in which he *has* noticed age and describes himself and other colleagues in stereotypical terms as the 'the old boys'. He then briefly reflects on the ways age might be occupationally relevant. Similarly, participants craft professional legitimacy by accepting that occupational boundaries exist, that some are age-related but suggest they they can be circumnavigated through agentic acts of retaining and performing specific identities. Here the identity of the passionate digital professional subject is offered through 'geek' or 'nerd' identifications epitomised by Sean's account:

> *"Look, I really don't think I need to worry about the future and getting work. I've always been into this stuff and I'll continue to be so. I've always been a bit of a Geek. You just need to take a look at my CV…I'm relevant. I'm on it" (Sean)*

Sean offers a contradictory identity performance as both age-concerned and age-indifferent, precipitated through interjections such as 'look' used as discourse markers signalling authority. Frequently symbols and identity markers are used by participants to indicate they (and their colleagues and/or professional sector) are immune to age-related challenges, but they suggest this is conditional on certain

identity criteria are met. In the following excerpt, Meg compares herself to the late and iconic BBC DJ John Peel[11].. In this example, Meg describes how her passion and engagement for digital technology is analogous to John Peel, offered as a role model to employed 'zest for life' as one ages or in this case 'right to the end':

"but you know an example that will always spring to mind is John Peel. I always think of him because with music, when you are young and you are really into music you get very passionate and excited about it… for most people you lose that as you get older … But someone like John Peel he loved discovering new music right to the end …I think it is entirely possible that you can get into your seventies and eighties and still get excited by this stuff you know I mean? I still get excited about things particularly technology, I'd really like to be thought of in the same way as John Peel" (Meg)

John Peel is used to symbolise life-long curiosity, passion and energy and through this comparison, Meg neutralises the negative identification of ageing to achieve agelessness, and importantly avoid older age-stigma. Curiosity, passion and energy are used as armour in dealing with the wider disruptions and changes in life (and were discussed as key identity markers of professional success in Chapter 3).

"I have so many interests and hobbies, I've recently got into the whole robot scene. I'm even building my own robot. I think for people like me having that ongoing interest is key, never thinking that you cannot be bothered anymore, that it's just a job. No way. Look, I love messing about with tech at home" (Sean)

More broadly, identity markers such as hobbies and interests signal socially constructed ideas of professional legitimacy in digital professionals and are used by participants to repudiate stigma. Identities are constructed and performed by foregrounding non-age related

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[11] John Peel was a British disc jockey, radio presenter, record producer and journalist. He was passionate about new music, with social commentators affording him a timeless and youthful identity (The Guardian, 2004)

7.4.2. Geeks and Nerds

In this section I offer testimonies that are punctuated with descriptions of passion for certain topics and interests (such as technology past and present) that suggest identifications of collective membership and even tribalism. Group membership essentialises participants with fixed traits and abilities and afford them agency and in control of how others perceive and treat them. This is achieved in part through identification with the identity constructs and labels of 'geek and nerd': 'geek' (Tocci, 2009) and 'nerd' (Anderegg, 2007) are also present and discussed the media articles chapter (e.g. T*he Evening Standard, 4 March 2016*). Such identities form part of the legitimising talk of the digital professional and participants positivised and reclaimed the terms as discussed in Chapter 3. Professional legitimacy is crafted through the geek and nerd construct and such identifications are doubly positive as they are conveniently viewed as age-irrelevant.

"It's totally being reclaimed you know, words like geek and nerd. But I don't see myself as a nerd, nerds are engineers, geeks are designers… People think I'm a geek, they say I'm a geek, I have no problem with that … I think of it affectionately and I am proud to be a geek.. you know it's not an insult." (Margaret)

"Yes very interesting ok so those terms (Geek and Nerd) were derogatory no question at all and it is only in the last ten years those terms have become less pejorative but not entirely positive now ….. My wife uses nerds without any negative connotations … she considers herself to be a nerd because she is into computers and she can code and she is into comic book art and sci fi so she does fit the stereotype … these are my people and I consider that to be a very strong identity … I embrace it because I'm with someone who is positive about it and I recognize that my humour is slightly geeky" (Bob)

Here such social labels are reclaimed and positivised, creating a social glue and group membership which are proudly offered as signifiers of career passion/calling and career embeddedness. Many of the interviews were punctuated with exaggerated and prolonged monologues from participants offering descriptions of their interests, pastimes, upbringing and history. Identities are constructed in terms of a life-long love affair with technology, and participants are keen to stress that working in their role, the sector and in some cases their organisation is less 'job' and more 'lifestyle' and vocation. This serves to deflect attention away from age-

related restrictions and challenges, exacerbated by the language offered where 'passion' and 'curiosity' are described in enthusiastic, repetitive, absolute terms:

> *"I love technology, I absorb technology as I go through my life but I'm more aware of the challenges and drawbacks and issues that are societal but I'm still excited" [Meg]*

> *"As well as in my job, (at home) II do still look on there (listed social media sites) for all sorts of stuff such as design ideas, ideas for events for work to personal things like health and fitness, things like that. I look on Pinterest …, I look on Tumblr…a lot of the younger stuff too" (Laura)*

Similarly, belonging and allegiance to their role and 'institution' (where 'institution' can represent both current and previous organisations and/or the wider digital sector itself) are achieved through tribalistic identifications. Professional membership of the digital sector entails more than simply working within it: the work needs to align with one's character, behaviours and attitudes. Digital professionals perform their identities as a synchronised intersection of their professional role, childhood, current interests and personality working in harmony. Other identity symbols such as dress code are offered as legitimizing criteria for professional credibility, for cultural fit into a predominantly youth-orientated sector as discussed in Chapter 3.

The following excerpts openly describe the desirable and necessary characteristics of those who work in the sector: participants offer a common self-concept (and therefore socially constructed professional legitimacy) of being 'different' to other occupation. They construct themselves as part of a curious, collegiate, passionate, energetic tribe which cherishes outside interests:

> *"people that I work with in digital media they are all quite different people - but they have some common traits and that is a kind of intellectual curiosity, they are excited by new things and new discoveries" (Meg)*

> *"I think that is quite common in some digital media workplaces where people are really keen to share things - I mean it could be something from a newspaper or … like a geeky cartoon you know whatever it is but you think that your peer group will like. And that is something that is quite important to my peers at work, as we are very much into the tech and constantly sharing stuff. Often it will be articles that we have read, things like that." (Meg)*

Interests and hobbies outside of the work context connected to technology are frequently offered such as working with robotics:

> *"I have so many interests and hobbies, I've recently got into the whole robot scene. I'm even building my own robot. I think for people like me having that ongoing interest is key, never thinking that you cannot be bothered anymore, that it's just a job. No way.   Look, I love messing about with tech at home"* [Sean]

Similarly, in reinforcing the measures she takes to 'stay young' and therefore digitally and professionally relevant, Tracey uses discursive devices such as placing her son as a social object to demonstrate her own digital capabilities. This indicates that that Tracey views youth as desirable identity state, her son is used as an extension of her own digital identity to persuade the interviewer of her identity and there is a suggestion of competition in the discourse marker 'as you do'

> *"So, my son has a robotics group at his school…so I'm thinking this is a primary school and God that's the way it's going. I'm having some of that. So, I did actually buy myself a little robot to build, as you do"* (Tracey)

She continues by expanding on the qualities of being digitally engaged as a personality trait, an innate quality via the phrase 'natural instinct' -unrelated to age specifically.

> *"if an older person was to sit beside me and say 'oh I don't use an iPad' then I would probably be a bit dubious because I would think oh well you just don't have that interest then…as it's about the interest of being connected, and looking at stuff. It's a natural instinct thing - just a natural instinct there to want to be involved…it's just a personality thing".* (Tracey)

The metaphor of the 'game' is present across participant accounts and represents different aspects of the participant life and worlds and how they navigate digital disruption and age associations in their organizational and institutional contexts. Age is contradictory: it is depicted as both central and irrelevant to the 'game' being played. Description such as 'playing ball' or 'playing hardball' indicate where compliance, complicity and resistance exist in meeting the expectations placed upon participants in their roles and career identifications:

> *"you would be expected to develop (professionally) … it was organisationally considered something you would have to demonstrate to the firm… that you are playing ball" (Bob)*

> *"I think you would have to work a bit harder, play hardball, to convince people that for example you had the same intellectual energy as say a 25 year old even though (Bob)*

> *"So, I think it is always there in the back of my head. You know working in digital media – there is always that fear that at some point you will not be able to keep up anymore, that it's a young persons' game." (Meg)*

While participants are keen to stress throughout the interviews that age is of no or little consequence to how they are perceived, they locate their identities within a broader site of age tension through the 'game' metaphor. This also suggests an environment with rules and protocols attached and suggests they have agency and ability to influence the outcome of the game, conditional on amplifying age-neutral identity markers such as interests or labels such as 'geek' and 'nerd'.

7.4.3.   Deflection of the challenges of ageing at work

Deflection of age-related tensions is achieved by attending to other professional legitimising devices, such as the construct of 'value'/'added value'. 'Value' and 'adding value' is predicated on professional credibility which most of the participants suggest is achieved through maturity and experience. This enables participants to frame being older as an important contributing factor to professional legitimacy. In the following example Robin positivises age by linking it to his own (desirable) professional experience. He suggests that his age and experience brings clarity of focus (and therefore improved productivity) representing economic value for the organization/institution/client base:

> *"As you get older there is kind of less about proving yourself, you are more confident in your abilities, so it's not like you don't go above and beyond, of course you do, when you get older but you are more focussed, you know how to add value, you don't need to scattergun to add value…you don't need to work 12 hour days as you given them 8 hours of pure gold" (Robin)*

Through metaphorical statements such as '8 hours of pure gold', less focus on having to 'prove yourself' and describing younger workers as needing to 'scattergun to add value' and below derogating younger colleagues as 'inexperienced children' Robin implies younger people are less productive, credible and effective. He continues to offer a positive older worker identity by celebrating the idea of having grey hairs suggesting they symbolise his experience, authority and therefore quality:

> *"Erm….I'm not…I'm not concerned …I mean I think if anything …I like the grey hairs in my beard, I like the grey hair on my head…I think it gives me a little bit more authority…going into meetings they know I'm not an inexperienced child and that I have the years of experience to back up what I'm saying. So, I'm not at all worried about me ageing in my career …I think it's going to be a benefit rather than a curse…" (Robin)*

The core construct of 'value' is also offered by Sean

> *"I'm hoping that they now see me as a thinker not a doer, doing strategy, adding value not like the kids doing the coding and will send me into Career 2.0"* (Sean)

Here Sean interdiscursively combines technology lexicon with his career implying parallels between handling one's identity and career progression in similar ways to the design, development and deployment of technology itself.

Through such accounts participants offer acceptable and unacceptable characterisations of age that don't adhere to traditional associations of the digitally disengaged older subject that can problematise being older. There are also suggestions of paradox: while youthful qualities and identifications are desired in the sector, youth itself comes with associations with immaturity which are derided. Gordon is particularly hostile about *younger people* working in the digital sector, ridiculing their behaviour and work ethic through use of derogatory phrases that suggest they lack judgement and agency. Through comparison of younger workers *to* 'trained chimps', Gordon constructs them as mindless to the point of negligent of their work:

"Erm…. If I go out and I look at all the jobs that are going and in terms of marketing and I go onto the websites of the agencies it's hipsters with silly hats talking and they are repeating the same stuff over and over and over again…they have all drank the kool aid … when you challenge them for example and they try to sell you something you still get a script … they are just like trained chimps… they are just regurgitating the same stuff over and over. And they are often a lot younger and working for a lot less than other people. It's a very young crowd. Out there. And there will be someone older running it. When I look at [names website] everyone is really, really young. So they don't necessarily get a lot of the heavier stuff than we do. The reputation management stuff." (Gordon)

Euphemisms such as working with 'the heavier stuff'; lacking judgement and critical ability through idiomatic expression 'drinking the Kool Aid'[12]; and through ridiculing identity markers such as dress codes 'hipsters with silly hats' derogates younger people as deeply unprofessional.

There are instances where participants perform surprise when confronted with the topic of ageing for the first time, part of a 'deflection' performance. Discourse markers such as 'hang on' and 'umm' (below) indicate deeper reflection of question and laughter and sarcasm is used to deflect the idea that age is an issue for them:

"I think….hang on the last time…no I can say I'm rarely interviewed by people younger than me….hmmm, when it happens they are only about one or two years younger….so I have this mental perception that I'm going to keep up with that (laughs)" (Donald)

Craig openly discusses his concern about his future career; in other instances of the interview he did not offer or recognise age as a potential problem until prompted and then deflects through a rhetorical question:

"should I be worried? You've got me thinking now…[laughs]" (Craig)

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[12] A reference to the 1978 cult mass-suicide in Jonestown, Guyana. Jim Jones, the leader of the group, convinced his followers to move to Jonestown. Late in the year he then ordered the group to commit suicide by drinking grape-flavoured Kool-Aid laced with potassium cyanide.

But participants take an individualistic rather than collective view: their accounts suggest that a recognition of contexts and adaption is needed including the consideration of how others might perceive you in relation to age identity:

> *"You go into firms and other companies and increasingly they are younger and younger and you get to an age where even the senior people get younger and younger and so there is a fear that you can't keep up or you are not where you should be at the age you are at. So yes - I carry that around with me constantly." (Alfie)*

In this section I have offered examples of the ways traditional age-related tensions which demean the older worker are deflected through the construction of professional value. I will now discuss the ways participants do recognise and accept the existence of age-related tensions.

7.4.4. Acceptance of age-related tensions

Participants indicate an acceptance of age tensions and age discrimination by offering instances of it in their accounts, however these are framed as unconnected to them directly, through a bystander subject position and through self-constructions suggesting individual agency. Through descriptions of work-related choices, they construct themselves as professionally in-demand and socially desirable. Tracey suggests age-related tensions in the digital sector specifically through concern of how she will be perceived, leading to potential rejection, regardless of her own self-perception:

> *"I think well if in another ten years' time I'm going for another job in a digital agency and yes I do wonder how are they going to view me? Because obviously I'm going to look older but is my experience and my mindset enough and then picking up on all of this is it going to be enough because I am older are they going to say 'oh no I don't want her in here' so I can see the thinking but if they are going to be ageist are you going to want to work with them anyway? I'll just go elsewhere" (Tracey)*

While Tracey's account actively acknowledges that age bias could be a future challenge, her rhetorical question of *'are you going to want to work with them anyway*?' frames her future self as having sufficient choice and agency to work

elsewhere. Participants offer instances indicating suggesting personal agency and power to choose their employment conditions and using the social object of 'cultural fit' they deflect attention from age to other aspects of identity determining their professional success. However, there is also an acknowledgement that age as identifier can also constitute cultural fit, and that youth is preferable at least in appearance:

> *"I love what I'm doing. I'm good at what I'm doing, and I fit in here as I'm relatively young looking" (Alfie)*

Participants also demonstrate an acceptance and vulnerability connected to the ageing process. Through accounts suggesting anticipated physical and cognitive changes, resulting in a need to slow down, they suggest the sector is not suitable for older workers and working longer:

> *"You know the older that you get, you know the brain slows down. When you are young your eyes are wide open, its constantly like having your head turning in different directions and that is great but the older you get – its tiring. You slow down and I suppose you increasingly have this sense of wanting the world to slow down and it doesn't…. One day I'll wake up and I don't know if I can keep up with this anymore. I'm in my mid to late forties, if by early fifties and you know on the one hand the government talks about us working longer and longer and yet I know I work in an industry where everyone is really young." (Meg)*

The motif of speed and slowness are juxtaposed against accounts that champion staying youthful and there is the suggestion that the ultimate desired identity, and environment is one of agelessness and statis. Some participants offer accounts that draw on current experiences which combine fear and excitement of ageing, but the fear is not of ageing itself but of the environmental unsuitability to accommodate the ageing digital worker – the challenge of keeping up and fear of apathy:

> *"I do find that (younger employees) are always bringing new things to the table … I really love learning new things all the time but it's also you know quite scary as well because you can see that they have grasped things, they get excited about things and they are totally on top of things. You know the older you get, the harder it is to keep up with it all and keep getting excited" [Meg]*

There is an implicit desire conveyed within participant accounts for older age to be positivised through association with valued experience. In the following account

Alfie discusses commonly held beliefs about the potential for of cognitive decline. He locates that as challenging in relation to wider social disruption and pace of life. This suggests a vulnerability which he constructs in terms of his economic cost versus the cost of younger counterparts

> *"I'm concerned about it (ageing/getting older). In my role I'm concerned about it. I think there are at least two aspects to consider. Once of which is the cost of younger people. The cost of experience. … And the other aspect is…. erm I have to wonder how quickly my brain will be operating and will I still want to be keeping up the pace of life that we operate at now. Equally if I'm at least twenty years from the grave and more I don't want to be scared and worried about things at this point I want to do what I can. I think that smart companies will continue to look for solid experience and backgrounds and they won't look at age. Equally I can imagine scenarios where that would be an issue but I'm hoping against all hope…"* (Alfie)

By 'hoping' that 'smart companies' (even if not industry more broadly) will recognise the value of the older worker in this sector seems to suggest that participants accept a potential lack of agency to navigate such challenges. Participants reflect on the challenges of ageing in the sector more broadly and frame them in terms of struggle, by 'grappling' with a phenomenon which they also suggest is underexplored

> *"And so those of us who started doing this in the late nineties or whatever we are now getting to a stage where we are in our late 30s and 40s and starting to grapple with those issues of what it's like getting older in this industry. It's really interesting you don't see much written about this you see lots of stuff on older people and digital media generally but not people getting older who work in the industry itself. I'm not sure there is much written about it."* (Alfie)

While participants offer an acceptance of struggle and discuss perceptions of ageing as associated with lacking energy and other attributes critical to digital sector membership, there is also discussion of identity performance where appearances can change social perceptions and therefore secure 'belonging'. Age associated norms connected to appearance and career trajectory are offered again in terms of energy and passion:

> *"However, if you <u>don't look dynamic</u> …older people … are often treated with suspicion of 'why aren't you a partner yet?' Because certain career paths have a trajectory associated with them. Normally people will quit consultancy if they*

haven't reached a certain level by a certain stage…My last job was in a consultancy but it's funny because it works both ways. If you are young and you are put in front of a client who is buying your expertise… you are not perceived as old enough to have lots of experience for the sales job required." (Bob)

We see how age is problematised in both dimensions, young and old. This is achieved through discussion of expectations of 'older' career trajectory norms and with youth being associated with lack of experience (implying in this instance that experience is more valued). Bob suggests the challenges faced by older people as having to extol extra effort to persuade employers (and clients) of economic value. He recognises and anticipates the broader social struggle and moral indifference to it – suggested by the phrase 'rightly or wrongly' - to convince and persuade others of professional and economic value:

"(you need to) work a bit harder to convince people that you had the same intellectual energy as, say, a 25 year old even though…yeah either rightly or wrongly I would perceive there to be bias if I was 55. Well I don't feel any less energetic than I was at 35 but I anticipate having to fight a greater subconscious of my likely energy levels. I would be suspicious that there would be a pre-supposition". (Bob)

While being older has many positive associations for participants such as wisdom, experience and trust, the perception of being older seems only acceptable with accompanying 'agelessness' or 'youthful' professional identity markers (passion, enthusiasm, creativity, innovation, association with Geek and/Nerd identifications, symbolising 'John Peel'). Participants work hard to disassociate themselves from examples of colleagues offered who are 'older' and problematised. This is discursively achieved through vivid descriptions of older colleagues' shortcomings, described through derogatory descriptions such as 'grandfathers', 'baggage', 'off the pace' 'outmoded' and importantly naive to the capability of technology for business development. Several participants become very animated about older colleagues who they suggest frame being an older digital worker as highly negative. This is an important identity performance in the interview as participants offer themselves as capable of recognising the signs and signals of a negative older worker identity that is deviant and risks professional relevance:

"The very senior, literal Grandfather…the frustration is already there in

this business: they are outmoded, they are off the pace…I even used to speak about them (older people with poor digital skills) yep there was digital naivety when I was at IBM"" (Alfie)

"I think that there is still in bigger companies a lot of organizational… a lot of organizational erm…baggage, structural baggage." (Gordon)

The ageing process and being older is not the problem it seems, but the potential for negative perceptions of being older which participants work hard to avoid.

In an account of a recruitment process Bob discusses optimal qualities of the preferred candidate in terms of experience and wisdom euphemised by the expression *'they do need a bit of age about them".*

""we are currently interviewing for a replacement UX (user experience) designer, someone who does have a bit more of an ability to influence others – a bit of age about them- and think strategically which does require a certain amount of experience and one of them was in his mid to late twenties (and another) was probably approaching 40 and one was probably round about 50. I thought why does he want this role? Why does this person want this job? He was surprisingly old for the job we were advertising which was relatively a mid-level role. Why have they chosen to do this at his stage of their career?...I would never hire a coder over the age of 40, they simply would not be able to innovate" (Donald)

Such an account indicates normative assumptions about age and career trajectories and treats outliers with suspicion, as somehow deviant. This account also offers a clear example of bias where Donald disassociates creativity and innovation with being older and 'over the age of 40'. While I as researcher will never know the actual outcome, this account suggests age norms in the sector that problematise age in ways that suggest recruitment decisions.

In this section I have presented where age-related tensions are recognised, feared and how the problematisation of age is connected to social perceptions and stigma not ageing or being older itself.

7.5.   Concluding Points

This chapter responds to my second research question: to what extent and in what ways are such discourses offered in the identity accounts of 'older' digital professionals?

Through discourses of digital disruption, generational difference and age problematisation participants navigate their age identities and offer themselves as primarily privileged, mostly agentic but conflicted about challenges and opportunities presented by their older worker status.   Through various contradictions and paradoxes age is both recognised and accepted as potentially significant, but conversely denied as problematic or even relevant. This is achieved through their identity work revealing insecurities that suggest concerns about ageing impacting all professions but noting those specific to the digital technology sector. Overall, discourses suggest a strong undercurrent of agelessness as the ideal and preferred identity in order to sustain professional value as one gets older in the digital technology sector. **This reveals the specific ways in which age discourses transfer from one social site (media accounts in Chapter 6) to another (interviews as explored in this chapter) (Fairclough, 2015). It suggests that while 'knowledge' of what constitutes positive or negative age identities may also be transferred, such meanings can be interpreted in various ways (Foucault, 1980).**

I will now turn to Phase Two of the research analysis in Chapter 8: Phase Two Analysis of UK Online Media texts.

Chapter 8: Phase 2: Analysis of UK Online Media Discourses

8.1.   Introduction

In this chapter I offer the results from an analysis of the UK online media news articles from the second phase of data collection, between 1 May 2016 and 31 December 2017. There was at least one year from the first story collected in phase 1 and the first story collected in Phase 2, with collection timed to run alongside the second phase of interviews.

While there were many similarities to the first round of media discourses analysed in Phase 1, there were also notable differences highlighted during analysis resulting in a distinct set of discourses outlined below. The differences are discussed in detail in the next chapter, Chapter 10: Comparison of First and Second Phases of Data.

The discourses identified through my analysis from the second round of media data are:

- Digital Determinism
- Digital Dangers
- Digital Eldering /The Digital Elder

Each of these will now be explored in turn.

8.2 Digital Determinism

While a discourse of digital disruption is presented in the first phase, the discourse in this phase is better described as 'digital determinism'. Here digital life is depicted in more inexorable terms: it is constructed as less revolutionary, less ambiguous, more normalized, embedded and taken for granted across a broader range of media texts. The following article headlines describes events and topics which are now considered in place or in development:

> *"Corbynistas go high- tech to secure the youth vote' (The Times, 2/7/2017)*

> *'Older women are the new vlogging stars'* (*The Times*, 8/06/2016)
> *"Good old yellow pages announce final edition after 51 years"* (*The Telegraph, 2/09/2017*)
> *"The cutting-edge technology of yesteryear now looks like baffling old rubbish to the youth of today" (The Sun, 13/11/2017)*
> *"Lumley: the digital world is making us more lonely" (The Daily Mail, 2/10/ 2017)*
> *"Draw up you will in a text message" (The Daily Telegraph, 13/07/2017)*

Texts contain descriptions and depictions of future or present orientated actions. The articles depict new processes as being already underway; changes are planned; activities are in train. This is achieved through use of the past or present tense and grammatical forms such as modal verbs used across headlines and within the text itself such as 'going' 'gone' 'done' 'are already'. As in phase 1 analysis, generalised characterisations of age groupings are used in order to homogenise, stereotype and sensationalise age identities e.g. the use of '*older people' 'pensioners' 'the youth of today' 'digital natives' and 'millennials'*. However, instead of warning individuals and groups about forthcoming changes or events which may disrupt their lives, texts present age subjects as having *already* adapted, or *are currently adapting* to increasing digitized lives.

Therefore, digital life is no longer discursively framed as novelty, possibility or prediction. Instead, it is orientated as a social reality now facing all of us through a refocus from shock and awe to calling attention to our responses and adaptations to such changes. For example, the ways in which subjects and actors within the articles both accept and resist increasingly digitized lives moves from sensationalized language and textual structures of outrage and urgency (such as those used in Phase 1) to calls for action on how to best adapt to this inevitable (as used in the article below) new reality :

> *'tax is inevitably going digital…the controversial policy to move all of the country's tax systems online will begin to take effect from April" (The Telegraph, 15/08/2017).*

Similarly, pensioners are described as being *'disadvantaged' 'left behind'* and could *'struggle'* (The Telegraph, 15/08/2017). Such language reinforces stereotypical, one-dimensional and problematized views about older people: that they cannot or

will not access content online almost without exception. First person narratives and expert statements from trusted sources such as Age UK support this further e.g. '*Pensioners often don't trust computers*' however issues of trust concern the technology itself rather than the groups and institutions such as HMRC or businesses behind the technology and in control of its content.

Texts vary between editorial intent and publication readership, between offering critical or positive stances of how different age groupings such as 'over 60s' or 'under 40s' or more broad age categories of simply 'young' and 'old' may be impacted by increasing digitisation of everyday life. Standpoints are manifested in the language of approval or disapproval of how life is changing for specific groups. For example, The Telegraph offers an article about the changes to the Yellow Pages publication, (a directory of local service and product suppliers which used to be delivered to local addresses) and older people are singled out and depicted as inherently disadvantaged by the changes. Described as 'lamenting' the abandonment of the print version, the lexicon constructs older people as non-digital, technologically disadvantaged older age group concerned with nostalgia, regret and reflection of a bygone era.

The article continues to describe a famous TV advertisement featuring an elderly gentleman who cannot find his book in a bookshop and returns home feeling sad. This is a strategically placed metaphor to remind the readership that it's characters (and stereotypes) such as this – the older gentleman struggling to regain his past – as the impacted group.

Other texts romanticise about the passing of phenomena described in fond and historic terms: e.g. the Yellow Pages directory described as:

> '*iconic homeowners bible*' *and* '*souvenir*'*; (The Daily Telegraph, 2/09/2017).*

Sentences are punctuated with grammatical forms such as conjunctions and adjectives that reinforce the stereotypical older person as unable to move beyond past norms, while simultaneously implying technological interaction is less joyful,

less meaningful, more isolating, and somehow less 'human' than non-digital exchanges:

> *"The 71 year old said she insists on waiting for a cashier in shops rather than using self-service checkouts, because she wants the 'pure joy of human contact it involves' (The Daily Mail,, 2/10/2017)*

> *"I hate social media. Meaningful friendships will continue without Facebook". (The Sunday Times, 27/09/2017)*

Texts present authors who write of "caution' and 'concern': of experts who 'warn'; of celebrities who express 'worry' for older people and offer actors willing to speak 'on behalf' of older (and younger people):

> *'Those who cannot or choose not to use digital technology should not be disadvantaged or made to feel like a second-class citizen'* (The Daily Telegraph, 2/10/2017)

Celebrities are enrolled as spokespeople to represent or speak on behalf of older people who are assumed to be without voice in the increasingly digitized world, and furthermore to present a particular perspective of technological struggle, assuming older people reject technology. There nonetheless remains a sense that to contest such moves are in vain. Articles frequently offer closing statements which serve to shut the topic down from further debate: practices and even laws have already been changed (The Telegraph, 15/09/2017); support for change continues (The Telegraph, 13/07/2017); certain behaviours are 'dying out' (The Daily Mail, 2/10/2017); consultations may be taking place but while challenged likely result in 'inevitable' change (The Telegraph, 13/07/2017). Articles typify a broader, naturalized, taken for granted social context of increasingly digitization; this discursive shift is a marker of where the discourse of digital revolution has shifted to suggest digital convention.

The reoccurring discursive theme of digital challenge of older people is further called into focus in '*Draw up your will in a text message'* (The Telegraph, 13/07/ 2017). Here there is a discord and juxtaposition between an act traditionally

associated with being a considered, solemn, face to face experience as now instant and impersonal:

> *"Deathbed changes of heart could be recorded and used to overrule an existing valid will"*
> *"Experts urged caution amid concerns older people could be pressured into last-minute changes"*
> *"Elizabeth Neale, partner in private wealth team at the law firm Bircham Dyson Bell said that weakening the rules could have 'worrying' implications for vulnerable people"*

Described as a '*radical overhaul of inheritance laws proposed by the Government's legal advisers' (The Telegraph, 13/07/2017)* with the implication such changes are for the worse, rules will be *'weakened'* rather than changed. Grammatical forms such as scare quotes where experts describe the changes as 'worrying' serve to deride digitisation. The article is fiercely critical of such a move describing it as 'controversial' and 'radical' providing 'expert opinion' to support the view of the shortcomings of moving such activities to the digital realm. Yet this text, like others analysed above, frames events as necessary, describing current practices as *'outdated'* and emphasising the need to 'keep up with the digital age'. The language and syntactical structures suggest a modality that implies disapproval and dissatisfaction and vital consultation required, rather than outcry and outrage.

There is juxtaposition of 'serious' with 'trivial' within the article, that the impact *'deathbed changes of heart could be recorded and used to overrule an existing valid will'* foregrounds the troubling aspect of this leading to family arguments.

Within an article from The Sun, our increasingly digitized lives are offered as a light-hearted, nostalgic invitation to reminisce about historic technology to a reminder about the negativity of ageing and getting older:

> *"how would you feel if a youngster didn't even recognize the gadgets you once considered cutting edge? Pretty old and clapped out, we'd wager" (*'Old School: These tweets about retro gadgets will make you feel VERY old', (*The Sun, 13/11/2017).*

Through the use of first-person narrative and rhetorical questions and answers, the author addresses the readership directly in a conversational style about 'retro gadgets'. Here readers are compared to technology, where technology is a social object used to remind the reader that they are ageing just like the technology in question. There are juxtapositions between neutral or positive descriptions of such items - *'gizmos' 'gadgets' 'one beloved technology'* and negative depictions of the same items as *'baffling old rubbish'*. A reminder of age-related 'between generation' tensions is achieved through phrases such as *'hilarious and heartbreaking generation gulf'* suggesting a broader and more poignant set of generational differences more significant than simply the technology itself.

The structure of the article draws the reader in but belittles them by implying that the very items they may reminisce about are no longer valuable or relevant: the reader is patheticised by suggesting that *"faced with their own impending obsoleteness, people have taken to social media"* to reminisce about old technology that is furthermore described as 'yesterday's news'. The implication is that the reader would identify with being 'clapped out' (a euphemism for old/tired/dysfunctional) constructed as a once valued but now irrelevant and obsolete subject. **This in turn suggests there is little if any social or economic advantage** in being older beyond the entertainment to be gained by reminiscing about the past. The long-established narrative of age defined in terms of decline and degradation is offered. However,   a sinister subtext is present that suggests the very people and things we may cherish and fondly recall are simply no longer valuable.

Texts offer characterisation that reinforce ideas of old age with digital disengagement. Central to an article within the Sunday Times entitled *'…be a digital luddite'* are individuals who simply refuse to engage with technology on any level, constructed as 'luddites'. [13]. Through popular media and other realms, the term has been reclaimed to also represent people who refuse to engage with modern technology. The text sets the scene with an unequivocal assumption about our

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[13] The historical definition of 'luddite' relates to 18th century workers who destroyed machinery which they claimed was threatening their jobs.

technological behaviours *"we are a nation of tech addicts: 89% of UK adults used the internet in the last three months" (The Sunday Times, 27/08/2017)* and firmly construct 'luddites' in question as older people explicitly listing the ages of the characters enlisted to exemplify the authorial view. Characters are described as proud, 'stubborn' and 'anachronistic' , constructed as unusual, out of touch subjects whose refusal to digitally engage is not simply amusing - but can prove dangerous. This is relayed through tales of life choices being impeded such as travel:

"I could do with sat nav. But because I don't have it I avoid driving to new places" (The Sunday Times, 27/08/2017)

Or putting children at risk

"we were once separated at a fireworks display when the children were little and my husband went apoplectic and forced me to get a mobile phone" . (The Sunday Times, 27/08/2017)

The author mockingly offers the justifications and explanations for the character rejection of technology and patronises them citing their choices as ignorant and primitive. This is typified in the description that they are living *"in internet darkness",* the antithesis of the enlightened citizen.   The author demonstrates his/her frustration and disdain at such people through the statement:

"You are missing out!" I feel like shouting". (The Sunday Times, August 27/08/2017)

Such binary all-or-nothing character construction is not simply ridiculed but publicly denounced as unacceptable. The voice of Martha Lane Fox is enrolled as respected expert as part of the argumentation strategy, quoted as saying *"we need to insist we are in the 21st century"*. While citing age as a technological barrier, Martha claims that the increasing digitisation of products and services in our everyday lives means that age can no longer be used as an excuse to digitally disengage. This is further developed by character descriptions that construct them as intellectually capable

"Well I can turn a computer on" says Mary, whose achievements include first class honours degree in English and Grade 8 piano." (The Sunday Times, 27/08/2017)

This article offers no final resolution to the problematization of 'luddites'. Instead, it draws to a conclusion using the subject voice protesting their helplessness. A fresh hegemony is offered here through the patheticising of voices of the digitally disengaged and framing them as facing inexorable digital change impacting all of us and the futility of resistance as they are constructed as 'knowing' they cannot continue in this way forever:

"they know they must oblige, but they really don't want to". (The Sunday Times, 27/08/2017)

And as before, rarely if ever are such characters presented as young, or even marginally engaged (or disengaged) with technology. As per other media texts, discursive techniques such as enrolling expert and authoritative voices (in this case Martha Lane Fox and Francis Maude) are enrolled to reinforce editorial viewpoint of the text. What is significantly different here is we begin to witness a discursive shift from the threat of digital change to the *risks involved in failing to adapt*. New threats are implicated by the evolving and increasingly digitized world for older and younger people; these will now be explored in greater depth.

8.3.   Digital Dangers

As increased digital access for *all age groups* results in greater online usage (except for minority of 'luddites' outlined above), there are glimpses of older people constructed as becoming more digitally engaged, and described in more evolutionary terminology in terms of digital change: they are 'adapting' and 'accessing' and 'adjusting' and becoming 'accustomed' rather than 'struggling' as they were before:

"great strides are being taken in order to increase the access that older people have to the internet…a growth in those aged 60-74 being active online up from 66% in 2014 to 69% in 2015…a positive indication that older people are

becoming more able to access the same networks and more accustomed to online life" (The Scotsman, 1/10/2016)

The evolutionary terminology of 'growth' and 'strides' imply increase in access leading to a new agency of older people willing to digitally engage and offer a more positive account of older people's online access which the authorial voice suggest is to be encouraged suggested by the headline

'a day to celebrate older people online'. (The Scotsman, 1/10/2016)

The social conditions that support the generalised construct of the digitally capable youngster have now evolved to situate older people as gradually and increasingly becoming more digitally literate. However, as risks and threats to both older and now younger people begin to emerge, younger people are foregrounded as particularly vulnerable to increasing online threat due to their (assumed) more digitally embedded lives:

"by living our lives online we are making ourselves more vulnerable to fraud, especially younger people who are quicker to adopt new technologies rather than traditional methods of storing and tracking personal information" (The Independent, 25/03/2017)

As such, there is an implicit call to action for parents to reject digital complacency and inadequacy and upskill to increase their understanding of online risk to protect themselves and their children. We begin to see digital dangers no longer constructed in terms of access and literacy barriers which can lead to economic and social advantage but as something potentially more sinister: a discourse which switches the lens to new online threats where actors consisting of victims, perpetuators and protectors.

"The authors (of a Digital Childhood report) feature detailed recommendations for specific age groups. The authors say that the use of all technology by children under six should be 'adult guided'. Many younger children are left alone with tablet computers and have come across inappropriate content on apps such as YouTube Kids that has not been properly screened" (The Times, 5/12/2017)

Articles are punctuated with terms suggesting a new climate of threat has emerged requiring 'protection', *'safety'*, *'boundary setters'*, *'protector from risks'* and noting of *'danger'.* An emerging discourse which positivises parents within new subject positions is emerging: adults are constructed as protectors and rescuers possessing qualities of judgement, maturity and experience to safeguard children from online abuse discussed in more detail later in this chapter. This affords older people more social desirability than before: their life experience and being older is now constructed as desirable and necessary, rather associated with social and economic limitation.

Furthermore, texts now offer a rallying cry for older age groupings to improve their digital literacy *in order to meet these new demands* framed in terms of parental duty. This is achieved through calls to action positioned as 'new year's resolutions' (The Telegraph); increased surveillance (The Times); skill in recognizing types of online fraud or 'scams' (The Independent):

> *"Five new year resolutions for parents of the digital native"* (The Telegraph, 3/01/2017)
> *"Curb children's use of technology for their own good, urge experts"* (The Times, 5/12/2017)
> *"What kind of scams are you in danger of falling for?"* (The Independent, 25/10/2017).

There is a notable discursive shift in the charactersation of youth from digitally desirable to digitally vulnerable. The Independent news story openly states that while people of all age groupings can become victims of fraud: (assumed) digitally astute young people are singled out as being particularly vulnerable and in need of protection, paradoxically, the *'web savvy digital natives'* as being most at risk.

> *"However, it's the web savvy digital natives who are increasingly falling for newer, more sophisticated scams. Almost 25,000 record victims of fraud were under the age of 30 and the number under the age of 21 rose by a third"* (The Independent, 25/03/2017)

Use of 'however' implies reader surprise that digital capability is not enough to succeed in an increasingly technologized world. Instead, judgement and

understanding of content, user intent and identity behind the platform is now offered as holding more value.

An article which shares the story of characters featured in the BBC documentary 'Child of Our Time' presents normalised generational difference as central to the story, which hooks onto key differences between old and young people – or the children/parents featured in the documentary. All actors are located within a

> *"revolution in technology and communications which is changing the way we live, love and work" (The Telegraph, 1/04/2017)*

Celebrities are frequently positioned as experts within these texts. The documentary psychologist Dr Tanya Byron seems to support the sweeping generalisations about younger people, offered through affirmations about what has impacted such subjects *"this is the first generation who will have spent all of their lives online"*. The article continues by reaffirming generational difference drawn on age-technology divisions even further

> *"these are the first true digital natives – every moment of their existence from 3D baby scan to first breath shared on Facebook pages and across social media by their parents. Who can even guess what effect that will have on them?"[The Telegraph, 1/04/2017]*

Assumptions about homogenized behaviours of both parents and children exaggerate notions of a digital generation gap where 'the digital generation' lives are completely lived and captured online. The inclusion of the rhetorical question concerning the 'effect' will have taken place suggests there will be one: a threat which we will all have to address.

As previously offered in this thesis, such claims are legitimized as they are situated within a wider normalized social frame of the 'digital revolution' where anything and everything is possible. The rhetoric of a digitized generation like no other is strongly emphasized in this article supplemented by statements from the children themselves suggesting helplessness and lack of agency:

> *"if they took my phone away, I literally don't know what I would do…nearly half of teenagers polled were checking their devices multiple times overnight"* (The Telegraph, 1/04/2017)

> *"Everything they experience is underpinned by a technological shift…no-one exemplifies the power and appeal of social media better than triplets Megan, Phoebe and Alice who communicate with their friends hundreds of times a day online and even with each other in the same room via their phones."* (The Telegraph, 1/04/2017)

In the extract above, technology is constructed as almost toxic: the article goes on to discuss the number of emails one child receives in a day is described as 'horrifying'. First-person accounts from the documentary subjects depict a contradictory picture where technology is both infantilising and dangerous through suggestions of compulsive behaviour, 'addiction to screens' and being 'constantly online'. The broader structure of the article presents ideas of digital generation divide through a range of sophisticated linguistic cues, from rhetorical questions *"Who needs selfies when you have a camera crew to follow you around?"* to lexical devices such as alliteration, metaphors and tropes that construct younger people as an exotic species drawing parallels with nature documentaries, *"just how this newest generation is finding life on Earth?"*.

However later in the article technology is momentarily offered as an enabler of confidence development in young people. Yet the benefits are left to the concluding point, positioned as an afterthought in the interests of balance/to persuade the reader all angles have been considered. The authorial voice is firmly focused on the perils of technology throughout used to persuade the reader that our increased digitised lives come with greater social threats attached.

The discursive theme of digital threat and risk is further extended to older women in the article '*The Dark Side of Middle-Aged Dating'* (The Daily Telegraph, 24/02/2017). Here women are described as 'middle aged' and foregrounded as being particularly vulnerable and potentially gullible, through descriptions such as 'suffering' and 'grieving' widows whose lives have 'crumbled'. Characters are framed within a storytelling text style, the author opens with the line "*he was meant to be her happy ever after – a fairy tale ending*" and continues to describe

characters and events based on real-life case studies, supported by official reports, statistics and expert views. The story is relayed in chapters where the finale of the story – the *'grim final chapter'* as it is described - builds to a climatic end where the key subject of the story, a widow who believes she is about to be happily remarried after personal tragedy, is killed by her new partner.

Various tactics are used to infantalise older women within the text, construct them as victims, synonymising their online behaviour as vulnerable children: *"It's not the online exploitation of children that is raising alarm bells – research suggest older women are, in fact, the internet's most vulnerable users"* (The Daily Telegraph, 24/02/2017). Later in the article these women are constructed as highly vulnerable, susceptible to falling victim to 'predators' and 'grooming' and desperate: *'quite often will go for someone who validates her"*. The language, structure and tonality depict images of older, needy women but there is an absence of commentary about other potentially vulnerable groups such as widowed men or younger people who have suffered loss. However, the technology itself is demonised within this article rather than the 'perpetuators' of fraud, affording an agency to the technology itself where events can reveal *'the seedy underbelly of the digital world'.*

The internet/digital technology described in terms of 'darkness' is a metaphor carried throughout the article from headline and beyond where a life truly determined by digital technology is potentially frightening and requires extreme caution. Such discursive devices anthromorphize the technology as perpetuator of evil, affording the technology itself power rather than the humans interacting within it. The text continues by urging users to increase their understanding of technology in order to guard against fraud through *'checking privacy settings'* so we see a mixed and confused picture between 'technology as agent' and 'agents of technology' in terms of what we need to guard against or educate ourselves about.

Furthermore, we are warned against an over-reliance on technology for social stimulation in an article entitled *'Digital world is making us more lonely' (The Daily Mail, 2/10/2017).* Within this text the actress Joanna Lumley is enrolled as a

concerned spokesperson for digitally disengaged older people. Readers are reminded that she is also over 70, and in an extract from an interview with her (which may or may not have been focused on age related topics) her contribution is edited in such a way that it is framed as a warning to readers against an additional social threat also attributed to our increasingly digitised lives – loneliness. Human interaction in its entirety is framed as a persuasive device to depict the value of in-person, face to face and non-digital interaction, with no positivity or attribution of the benefits of online human interaction. *"The actress says she worries for elderly people who are being 'deprived' of engaging with others because of the digitisation of modern life…"*. The text sensationalizes the idea of a loneliness epidemic in older people by describing human interaction as 'dying out', where digital life is weaponized as a metaphor for life endings and end of social interaction itself.

Her own behaviour is offered through descriptions of strong resistance to technological engagement: that she *'insists'* on being served by human cashiers and smiling at people on public transport. The article uses Joanna's celebrity and potential position as older female role model as a resource to reinforce one's right to reject an increasingly digitised world, suggesting developments have gone too far. However, the article finishes abruptly with no resolution and as such the reader is left hanging with just the story of how Joanna rejects this world without an alternative view or counter claim about the potentially beneficial nature of digital technology for any age group.

Other 'digital threats' are discursively realised through articles which openly highlight age discriminatory experiences and practices. The article '*Retired Apple software whiz couldn't get a job at the Genius Bar*' (The Independent, 6 September 2016) tells the story of a retired 54-year-old man rejected for a lower status job by his previous employer, Apple. While the central character is positively constructed through descriptions depicting his experience, digital prowess, described as being a 'whiz' and 'leader' who '*pioneered a major change to the Mac operating system'* he is also depicted as powerless and entangled in a current battle against Apple. The event is framed as a 'David and Goliath' tale where Apple as constructed as macro institution or the 'tech giant' that favours younger employees in store:

"*Apple's high street stores which tend to be staffed by younger people*". The author is keen to emphasise the inevitability of age-related challenges he would face, through describing his competition in absolute terms: '*sure enough, the other applicants at his group interview were all half his age*". Using a storytelling syntactical structure, utilising accounts from former colleagues the text presents a tale of hopelessness and inexorability of age discrimination in the digital technology sector. However, it presents the matter as lighthearted, and ironic using a cliffhanger ending "*wonder if Apple will finally give me a callback on that genius bar interview?*" that suggests this may not happen, the subject may have been discriminated against. Yet the brevity of the text and narrative style suggest a reflective tone about a situation which while serious cannot be prevented or changed.

Similarly, there is also a call for tech sector companies to demonstrate that they welcome older employees or face legal action (The Financial Times, 31/07/2017). The threat of age discrimination is the focus of several articles, offered as a persistent and serious issue, framing age discrimination as unsustainable due to longer lives and working later. Within *The Big Issue: increased longevity means working practices must change, (The Observer, 11/09/2016)* interdiscursive phrases such as *'upgrading of skills'* where 'upgrade' usually describes moving to a newer version of a digital device or software package, suggests current working practices and measures as outdated and calls for government and institutional action. Phrases such as this remind us of the persistent linkages between age, technology, time and value.

In this section I have offered examples of where discourses of digital threat are present drawn from my analysis. I will now turn to the final discourse present within the media texts from this second phase of analysis: the Digital Elder.

8.4.   The Digital Elder

Discourses purporting an inexorable digital determinism, and a new digital risk landscape also suggest a new relationship between age and digital life. The social object of 'digital wisdom' (Skiba, 2010; Prensky, 2011) is introduced and connected to ideas of maturity, experience, trust and by implication adulthood and framed as desirable. From my analysis I offer the term 'digital elder' or 'digital eldering' to describe such a discourse. The term itself is emerging and punctuated across a small number of sources such as marketing (digitalelder.co.uk in references) with links to a similar term of 'modern elder' (Conley, 2018). However, before I discuss digital elder in more detail, it is worth noting the continuing reification of the 'digital natives' within the same texts. Within Phase 2 the digital native construct continues to be offered as a legitimate means to describe age-related differences in digital skill, exposure and engagement in connection with youth:

"seeking digital natives in job ads is problematic, because it implies someone who grew up with the internet' (The Financial Times, 31/07/2017)

"Five New Year resolutions for parents of the digital native" (The Telegraph, 3/01/2017)

"the web-savvy digital natives" (The Independent, 25/03/2017)

"a tech-savvy campaign to get out the youth vote" (The Times, 2/06/2017)

The enduring nature of the digital native construct indicates that the idea of growing up and being born digital is still a seductive and pervasive means within the media of classifying age groups via technological means.

In contrast, and similar to the first phase of media analysis, older people who *are* digitally engaged and proficient are highlighted, celebrated and therefore such instances are considered newsworthy thus perpetuating the normalcy of the digital illiterate older person, such as in this article from *The Scotsman*:

"A day to celebrate number of elderly online" (*The Scotsman, 1/10/ 2016).*

However, alongside such traditional age-technology associations are emerging fresh identifications of older people's relationship with technology. In '*Older Women are the new vlogging stars' (The Times, 8/06/2016)* older women are constructed as unleashing creative talent and embracing new social media technologies and online platforms for professional and social gain. Digital ability and engagement continue to be framed in age-related terms through age-technology lexical pairings e.g. *'online elderly'* '*generation selfie'* or euphemisms such as ''*women of a certain age…the older generation of beauty vloggers/vlogging stars' (The Times, 8/06/2016).* The older women of this story are positivized and constructed in terms of utilizing technology for their needs and the needs of their age group associated with health, wellbeing, and social connection. They are constructed as agentic in their use of digital technology but nonetheless foregrounded as remarkable novel and therefore newsworthy and ultimately disruptive to ideas of age-technology norms.

However, through my analysis I identified that a notable discursive shift and role reversal could be found. In *The Times, 8 June 2016* the authorial voice derides and ridicules the digitally engaged younger person through use of sarcasm via phrases such as '*generation selfie'*. The reader is asked to 'forget Zoella' (a young youtuber/vlogger who has a large online following), the implication being that it is now older digital enthusiasts who are adopting the limelight. While older people are celebrated as digitally engaged and agentic this continues to be achieved through typical generational stereotypes such as the '*fabulous baby boomers'* or where the age-range is offered ''*a glamorous fifty-something*''. In the phrase "*an over 50s beauty blogger that's fun, fierce, fabulous and not going down without a fight*" there is a deliberate suggestion that ageing is normalised in terms of decline. Furthermore, the menopause is constructed as a market opportunity and while the term never explicitly mentioned is implicated and euphemized through characterisations of the text subjects as '*hot and flashy'* or experiencing *'hot flash years' (The Times, 8/06/2016).*

Identifications and identity enactments have become associated with using life experience, wisdom, knowledge and maturity gained with age in order to harness

the power of technology in new ways. This involves moderating against poor commercial decisions associated with technology, protecting young (and old) against present and emerging online threats and understanding trust and digital behaviour in relation to online identity and privacy. This is played out discursively across various texts where subject positions offered are those of *gatekeepers* and *protectors:* The Telegraph article '*Five New Year's Resolutions for parents of the Digital Native'* offers new year's resolutions for parents and children in order that both can enjoy so they can be

'digitally sane and safe 2017' (The Telegraph, 3/01/2017).

The article suggests that guardians from different social realms of family, school understand and adopt behavioural changes in their relationship with technology in order navigate what it describes as '*new territory'*. Here we see discursive overlap between digital dangers discourse outlined earlier in this chapter. The article exhibits linguistic tactics as repeated instructions consisting of short catchphrases offered sequentially such as '*don't assume' 'keep a check'.* Through such instructions, the text makes a direct call to action to the readership to act on the risks, affording them responsibility and agency to do so, rather than just observe the risks around them.

Adults are implored to take more responsibility and *'set boundaries and share expert knowledge'* however the author implies that parents and guardians first gain necessary knowledge, hinting that this may not be the case which again indicates a growing up digital rhetoric. The article speaks directly to parents through calls to action: 'S*how your child how to use tech well*' and with the text comparing the learning experience of older people to children, parents must now '*also do their homew*ork' in order to understand privacy settings and good online practice, in order that they can effectively instill self-discipline and moderation in their children's technological usage. The metaphor of 'homework' is used as discursive device to compare adults to children (who normally have homework to do) achieving a role reversal of subjects where older people are simultaneously

infantilized in order to reinforce the point that they must learn new skills but instructed to become responsible adults.

The text poses questions directly to the reader:

> *"How should they keep privacy settings up to date? Which apps are in the highest risk when it comes to security and misuse? What does a bad digital footprint look like and what are the possible consequences? What are the most common mistakes made by teenagers on social media? How do you keep yourself safe from strangers? How do you get help if you are worried about something? What should I/you do if you are subject to cyber bullying?"* *(The Times, 5/10/ 2017).*

Though the reader is rhetorically invited to consider these issues, the text does not supply any answers and assumes the reader will not be able to do so either. This is a powerful tactic to create persuasive discursive effects outlining what action the parent, guardian and/or adult needs to take.

The Times article *'Curb children's use of technology for their own good, urge experts', The Times, 5/12/2017)* moves beyond parents and guardians to the Government and digital institutions to protect children from online threat. Using quotes from psychologists and other experts, and through persistent use of nominalization of 'they' to represent institutions the author accuses such institutions of negligence through addictive and persuasive means. This is suggested by the phrases such *'trend to hook teenagers'.* Such phrases serve to direct the causality for digital threat and the blame squarely at the institution and calls on officials from government and institutions to take greater responsibility. The author discusses taking fierce action through 'force' in order to protect children against what it describes as 'extreme risks' which it currently states are 'overlooked' and therefore risk a historical change in how children develop. Here children are constructed only in passive, vulnerable terms susceptible to risk: they are afforded none of the previous identifications of being digitally astute (and therefore no value is attributed to digital skill here). I offer the view that the lack of focus on digital skill per se, coupled with a new emphasis is on imposing actions 'to' children and teenagers where activities are either 'banned' or 'adult guided', and heavy use of modal verbs such as 'should', 'must' have the discursive effect of author commanding others to act and reaffirm adults as being in charge.

In an article by the Independent *What kind of scams are you in danger of falling for? (The Independent) – 25/03/2017)* the author assumes an adult readership consuming the text who are susceptible to fraud. The text is punctuated by language which frames our lives in terms of perpetuators and victims, asking questions directly to the readership with an emphasis on when not i*f* they will become victims of online fraud by focusing on the ways they are certain to become victims. The article continues by providing examples of common types of online fraud and how these vary depending on age groupings. Using digital native dualism to describe younger people as '*web-savvy digital natives',* a tactic to differentiate between how different types of online fraud impact different age groups, authors are keen to point out the particular vulnerabilities of digitally astute younger people as a mark of their assumed ease with digital platforms and devices. Here we see a discursive shift from value afforded to those assumed to possess digital acumen and skill (often attributed to younger people) to value afforded to those assumed to have greater understanding of riskier content and user intent, namely older people. The article supports a broader discourse which offers a fresh ideological framework to suggest wisdom and new sensibilities gained by questioning and checking should be part of how we now navigate online life. There is a power within the discourse offered through expert views, reports and statistics; there is active talk of *'sensible measures' 'staying vigilant'*, '*taking responsibility' 'keeping watch' 'checking'*: other articles suggest moderating our and our children's online behaviours more thoroughly through '*digital detoxes'* (The Telegraph, 3/01/2017).

'Digital Detox' is an interdiscursive term that synthesises concepts of complete separation from technology for given period with traditionally health orientated ideas of physical cleansing/detoxification processes. By implication, the converse of this description is 'digital toxicity', suggesting that is in fact the usual state for most of us is of poor digital health. By drawing parallels with good health that unify ideas of digital behaviour with better 'health' choices seems to imply the same behaviour changes, choices, and responsibility as health management. The implication here is that only older people are constructed as having the necessary life experience, maturity and agency to adapt. Such agency involves making better and informed choices. Conversely, younger people are afforded identities as

dependent on such adult changes in order to flourish in the digitally determined world.

There is a notable shift too of the presence of voices of older people and their experiences of working in technology. In '*Notes from a digital bunker – no country for middle-aged techies' (The Financial Times, 28/04/2017)* older people are again foregrounded as exceptional by pairing professional position with age: they are not just techies, or older techies but here they are *'middle aged techies'.* The text signifies the challenges of older people working in the digital technology sector exemplified through ageist accounts of younger people:

> *'I can't imagine working with someone over 40' (Notes from a digital bunker – no country for middle-aged techies' The Financial Times, 28 April 2017)*

The emphasis is firmly placed on the value their experience brings to such roles. This signals a shift in emphasis of older subject voice and visibility. Closer attention is paid to sharing the voices of older people bringing their experience and wisdom to the sector and calls to challenge discriminatory practices: *"it had better start valuing people over 40"* (*(The Financial Times, 28/04/2017).*

Texts also explicitly share personal case studies of first-person narratives of age discrimination in the digital technology sector "*They said I was too old to work at a startup" (The Guardian, 14/08/2017).* These articles present scenarios where discrimination flourishes, where the characters are recipients of such discrimination and are still central to the story as their voices speak of the challenges and struggles for acceptance. The article presents the older women as still struggling but their accounts offer suggestions on how to navigate such difficulties to secure success. Subjects offer advice to succeed, such as *"stay close to your advocates" (The Guardian, 14/08/2017)* and *"the role models I've had have really helped me too…the CEO was just fantastic in creating an inclusive working environment".*

Foregrounding changes at institutional and individual level enable older people to be presented as motivated, agentic, energized

"I feel more motivated in my career than I ever did in my 20s". (The Guardian, 14/08/2017)

Challenges and discriminatory practices continue to form the centre of the story but a fresh emphasis on how such challenges are *navigated* construct older people as increasingly attuned to the assets they have, and how to use them - to sustain their careers. Therefore, by implication this affords them a new value. This is further illustrated in an article from the *Financial Times: 'Silicon Valley Ageism: "They were like – wow – you use Twitter?".* In this article the 'modern elder' construct is explicitly used to describe the central character Bob Crum, an older employee aged 52 working for startup-up Airbnb. Age-acceptance in such environments is described and depicted as dependent on identity adjustments by the characters to adopt changes to dress codes, learning institutional terminology, understanding and challenging the presence of *"weird stereotypes…one called him grandpa"*. Yet the author presents the ways in which characters talk of overcoming such prejudice through addressing some of their own preconceptions:

"be humble and learn other employees habits and favourite acronyms" (The Financial Times, 31/07/2017: 'Silicon Valley Ageism: "They were like – wow – you use Twitter?".

And to actively choose preferred identities in the workplace by *"adopting the role of mentor and intern"* or as the author of the articl*e* Bob Crum describes it *"modern elder".*

Additionally, as seen in the interviews in phase one, identifications with preferred qualities of the digital professional identity such as curiosity and energy are supported in the text, evidenced in first person narrative from text characters:

"My best tactic was to reconceive my bewilderment as curiosity and give free rein to it". (The Financial Times, 31/07/2017; Silicon Valley Ageism: "They were like – wow – you use Twitter?".)

Such texts offer a notable shift in power dynamics and relationships from focusing on conventional ideas of professional 'scrapheaps' for the over 40s to positivisations of older age through associations with preferred characteristics of wisdom, experience, maturity and judgement. This is a marked shift from previous older digital professional identities associated with rejection, professional obsolescence and helplessness/lack of agency.   Media stories such as these continue to remind us of the broader social order of things and in some cases call for ageist practices more generally to be changed at institutional and policy level *(The Big Issue: increase longevity means working practices must change. The Observer, 11/09/2016].*   Therefore, new frames and framing devices are created from which to view the older digital professional and potentially older workers in general. While stories that tell of digital professionals continuing to battle outright discrimination (and such stories are deemed newsworthy) there is a narrative shift to one that challenges and shapes the status quo and the material effects such challenges produce, such as institutional (and self!) acceptance. We may be seeing glimpses of fresh perspectives, views and allegiances of an evolving readership in response to the media who tends to mediate between power holders and the public (Fairclough, 2015).

Finally, some of the texts are punctuated with lexical fusions /hybrids that create new discursive frames, implying readers need to draw on member resources (Fairclough, 2015) in order to fully understand them. For example, the 'blogosphere' (The Times, 2 June 2017) requires an understanding the combination of 'atmosphere and 'blog' to create a new space/constellation of blog. Similarly, '*upgrading the skills'* (The Observer, 11 September 2016) fuses worlds of moves and changes to new technology models and versions (both devices and software) with skill development.

8.5.   Concluding Points

This second phase of analysis of media texts has addressed the research question: *In what ways are which chronological age and digital media are discursively linked in online UK news media?* I analysed three key discourses of how such linkages are

achieved in this phase of analysis: digital determinism, digital dangers and digital elder. This analysis has suggested a discursive shift taking place from the first phase of media analysis, and a shift in how the media now frames certain ideas about age-technology linkages impacting the ways and extent to which such discourses are reciprocated and reproduced in other domains such as the workplace.

While generational and age-technology constructs and labels are still essentialized through traditional and mostly negative understandings of age and ageing, some emergent diversification of age-technology understandings which positivise older people is taking place. Most notably, the 'digital elder discourse' subverts previously established ideas that equate youth with digital value, and consequently implies social desirability. This reinforces the Foucauldian idea of how contextual norms and values can shift and can be both reflected and enabled through discourse (Foucault, 1972). I reflect on how the utilisation and development of such discourses could provide promising opportunities for older people, both within and outside the digital sector, to disrupt established and normalized ideas of the older worker.

The extent and ways in which such discourses are present in the identity accounts of 'older' digital professionals in Chapter 9: Phase Two: Interview Analysis will now be explored.

Chapter 9: Phase 2: Analysis of interviews of older digital sector professionals

9.1. Introduction

Following the analysis of Phase 2 media texts in Chapter 8, this chapter responds to the second research question: *To what extent and in what ways are such discourses offered in the identity accounts of 'older' digital professionals*?. Discourses offered are drawn from the second phase of online news media analysis which differed to those in Phase One. I have summarized the discourses from both Phase 1 and Phase 2 as follows:

Table 18: Discourses from both research phases

Discourses from Phase One Analysis	Discourses from Phase Two Analysis
Digital Disruption	Digital Determinism
Generational Division	Digital Dangers
Age Problematization	The Digital Elder

Therefore, the discourses which will be explored in more detail in this chapter are:

- Digital Determinism
- Digital Dangers
- The Digital Elder

A full comparison of both sets of discourses will be provided in Chapter 10: Comparison of Phases 1 and 2.

Similar to the first phase of interview data analysis, I decided to focus the analysis of this data set based on the themes derived from the media analysis in Phase 1, again to respond to the second research question "**To what extent and in what ways are such discourses offered in the identity accounts of 'older' digital professionals?**"

I will now offer a critical account of the ways in which such discourses are present in identity accounts of participants drawing on the framework of Fairclough's Model of Description, Interpretation and Explanation (2015). I will explore the ways they are localised and occasioned within the interview setting, but also offer insights of the ways in which such discourses may be institutionally generated and drawn from broader social practices and relations offered by the media and beyond.

9.2.   Phase 2: Social and Political context

The schedule for this second round of interviews took place between June 2016 and October 2017. As such, interviews took place before, during and after various world events such as the UK vote to leave the European Union (June 2016), the election of President Trump in the US (January 2017) and terrorist attacks at London Bridge (June 2017). Some participants refer to such events in their accounts. This provides the opportunity to reflect on the contextual factors contributing to such discourses and how the discourse is implicated in relations of power. In turn, such factors can contribute to how identities are offered and realised (Fairclough, 2015). I will now discuss each of the discourses in turn.

9.3.   Digital Determinism

My research found that the discourse of 'digital determinism' offering a perceived deterministic and inexorable landscape of digital life is underway. This is offered in the analysis provided below and is achieved through three discursive themes within the interview accounts: *future agency and control; Comfort v unease* and *Identity conflict.* The analysis of theses will now be presented in more detail.

9.3.1.   Agency and Control

When prompted to do so, participants discussed what has changed (or not) between the first and second interviews and provided glimpses of the extent to which they perceive themselves to have agency in such events. Through accounts

of their professional and personal experiences, including role changes and difficult life events such as bereavement and job changes, their statements often demonstrate identities they wish to retain, reject, change or simply reflect upon. Statements often contain rhetorical and sometimes existential questions indicating a notable shift in tone between the first and second interview (discussed in more length in Chapter 8*).*

For example, Nigel experienced a job loss between the first and second interview and presents the changes impacting him through declarative exaggerative and metaphorical statements:

> *"Software will eat the world. And software has eaten my job. I used to say your job is all about adding value. Your job is to add value…I used to be good at saying well we need to do this this and this and it all gets done. But computers are doing it. Computers are organizing it. So interesting it's taken away a chunk of my value-add and is out of my hands." (Nigel)*

For much of the interview, Nigel describes himself in past tense, emphasising what he 'used' to do and what he 'used' to be good at doing. Here technology is afforded agency, they are 'doing it' or 'eating the world' it is the subject that has removed his professional value or 'value add' (*a key discursive theme from the first phase*). He constructs himself as partly powerless in this broader landscape of technological determinism, of 'software eating the world', and in doing so he depreciates his professional value and devalues his current identity. He describes how he used to guide his employers on 'search engine optimisation[14]' in a digital marketing role but was then replaced by artificial intelligence (AI) software. Nigel draws on the theme of the wider precarious nature of his work and in turn the future where he attributes power both to the technology in terms of what it can now achieve and the power of the protagonists, or managers within his institution to change to his role and therefore depreciate his professional value.

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[14] Search Engine Optimization simply means being 'findable' online via a search engine such as Google. It can be achieved manually through use of keyword tagging or inclusion of 'metadata' to describe the online content in question or via algorithmic means.

In the interview he describes his previous institution and management very much as 'the other' signified by a persistent and constant use of the pronoun 'they':

> …'They sat down and made a decision…'
> 'They sat down at a great big conference"
> "They brought in the accountants"
> "The people who are sat in head office who want to get all the glory"
> "so, they picked up what I had done, and run with it and you'd have thought I'd never had anything to do with it" (Nigel)

Nigel's hostility towards his previous employer suggests a notable switch of agency from the first to second phase: he accuses them of eradicating his professional position and replacing his tasks with artificial intelligence, due to cost effectiveness. However, Nigel is keen to comment that such tasks, namely search engine optimisation, were a value-chain process he introduced the firm to. The experience leads Nigel to posing bigger more existential rhetorical questions to the interviewer about the stability of society as well as his professional status:

> "I ask myself if this is the kind of society, I see myself and want to live in and that is probably my biggest concern. I think the thing is it's not on my terms and I think it comes down to what is my niche? What is my role in this world? Can I can paint a picture in my head about what I think I'm good at etc? It depends on whether people want that anymore" (Nigel)

Statements that refer to 'it' or 'the world' and 'the thing' and in particular the idea of loss of control – that the future is 'not on his terms' - signals tensions between which life events can and cannot be controlled for and how fearful that can be '*the world you cannot escape from is scary*'. Nigel frames his professional self as 'disposable' within a bigger structured world of professional constraints, drawing parallels with social platforms technological examples of Snapchat etc. He deliberately demonstrates the interconnectedness of his identity with bigger world events.

His account also suggests a belief system of common age and generational divisions regarding platform choice and use. This evolves into a discussion about his ability

to evidence future value to employers and clients where he positions himself within a wider professional cohort within the digital technology sector and outlines his prediction for the challenges they may face:

> *"I think the ability to prove what you can do is going to become one of the biggest challenges for us (digital professionals). And it's easier if you are younger. They (younger people) live in a world where life is disposable. Snapchat and all this. I know it sounds awful but, we live in a world where if you left school, you get a job you progress your way up where you work hard, you go to Uni, you buy a home, you meet someone life was about building on top of each other. … For us, I think it's harder. I mean, I've done the shift once, I fear I'm going to have to do the shift again and I say fear because I don't want to step back any further, but needs must eventually, but I think and this is what I say about the oncoming wave because this is going to keep coming at us. I don't know how many times I can justify myself. I don't know how many times I can do it. Having to change my life again and again and again"(Nigel)*

Nigel frames his experience in terms of social expectations of a clear career and life trajectory which is steady and stable but suggests this professional landscape (for him and others like him) no longer exists. Instead, the broader professional climate is less predictable and linear thus recharacterizing his professional identity a 'disposable'. Using metaphors of waves and euphemisms such as 'the shift' to depict life changes, Nigel constructs himself as struggling to keep up and stay positive about changes. He normalizes his job loss by homogenising everyone of his age group who work in the sector as experiencing or destined to experience difficulties via the collective noun 'for us'. Nigel enrols himself as spokesperson for his professional group outling the need for movement and to avoid stasis (a topic I return to later in Section 9.4.2 of this chapter) the compulsion to keep moving and avoid stagnation:

> *"I do wonder if I will spend the rest of my life kind of running in front of a wave. Just constantly running and running and dodging and trying to find a way to stop it overwhelming me. I think that is becoming something that worries me. But the trouble is I'm 42. I'm fairly pigeon-holed" (Nigel)*

Such statements are punctuated with a lexicon about escape from looming threats: 'running', 'dodging' and being 'overwhelmed' chime with traditional fears, conflicts and schemata of professional obsolescence (Pazy, 2005). Nigel also offers his age in this reasoning, he concludes that being '42' places him within a defined career

position and professional categorisation that denies him the flexibility to move into other roles. However, conversely (as outlined later in this chapter in section 9.5) such perceptions have the potential for participants and others to perceive themselves as positively as expert or specialist.

Despite all the challenges offered, Nigel is still optimistic about working in the digital sector and his professional place within it:

"Digital life is still something I want to be a part of. I think it is the future. You have a choice. You can either go to something that will escape it completely like a coffee or flower shop or you go all in. Because it's going to pour in everywhere." (Nigel)

Nigel is describing two contexts in this account: working in the digital sector more broadly and the wider social context which has seen the inexorable rise of technology. This is achieved through binary classifications of consumption and self-positioning of total belonging, of 'all or nothing' terms, i.e. you go 'all in'. He describes how working on the fringes of the sector is not an option for him (and implies that it is not for others too). Lexicon such as 'pouring' signify a permeation of technology in all forms of life. He constructs his identity as powerless in challenging the pace and scale of technological change and instead his focus is simply on professional sustainability and by implication of fighting waves etc. – of survival.

Other participants construct the speed of change as difficult to control or grip, as an agentic force in itself through naming the abstract as 'it' - 'the shift', 'the speed of change', the 'rollercoaster'. Such characterisation implies the subject is situated within an uncontrollable external force and the experience is framed as both exhilarating and frightening. Participants suggest they are unable to remove or escape from this broader social dynamic of technological change, even temporarily:

"It's constantly changing you know, the landscape is shifting all the time. Move with it or get left behind" (Helen)

"it's such a bloody rollercoaster. You have small periods of excitement and then you have weeks where you think you are embarking on something new and its really pressured or people are yelling for stuff" (Meg)

"I think if I didn't say this to you last time I frequently refer to working at [names firm] as a roller coaster and by that I mean that it's a rollercoaster because it's a company and a product that is very much at the heart of society right now so the best and worst of humanity happens on our platform" (Alfie)

In the broader discussion about what has changed since the last round of interviews, participants link the changes in their lives to the process of age and ageing and offer age-related reasons as to why the changes they have experienced or anticipate experiencing are challenging but inevitable. David describes the challenges he faces as a result of his role changes (although he remains in the same job) and questions the broader rhetoric of 'change as constant' equating change to judgement of one's value in the workplace:

Interviewer: is it harder now (to adapt to change) that it would have been ten or twenty years ago?

David: "So, I don't know. Change is a natural and constant state in life and we all say that but actually it's not is it really? We say we get used to change and we live in a world where there is moderate churn of people and ideas and behaviours, and everything is constant but actually the big changes when someone says what you have and can do is no good - and we need a new set of things. And that's a self-judgement by the way that's not someone saying it to you. So, ten or twenty years ago you did not have this idea that in ten or twenty years of change but then actually there is the reality that you will (have to deal with changes). When you start work in your twenties someone tells you what to do and you get on and do it and if you don't like that you change jobs and you do something different. But when you have been doing something for a long time and you think you have it cracked and you are not expecting it to change in the same way or in any way in particular beyond your understanding of what change means then inevitable it feels like more of a challenge. But I don't think that's because you are older – well it is – but it's a cause and causality thing – is it because you have been doing the same stuff for twenty years and therefore you have an idea of what things should be like or could be like or is it or is it the opposite of that. I dunno" (David)

In a similar way to Nigel, by introducing the idea of linear career journey David reveals the social expectations of one's professional identity in the current context and how (in his view) it can become devalued as one ages, ironically (as he puts it)

just when you think you are fully in control *or 'have it cracked'*. Yet he offers a contradictory and mixed picture about whether age is *central* to views about professional changes: *'But I don't think that's because you are older – well it is*". David is struggling to form a coherent identity narrative where he denies but simultaneously ascribes the issues in question to his age. Such discourse suggests potential identity struggle with challenges of ageing, but in parallel suggests a conflict in not attributing ageing or one's age as the reason for such professional challenges (potentially as they are out of one's control). There is also a broader discussion in the abstract, of professional estrangement, or 'what you have and can do is no good' but David is keen to remind the interviewer that this is not his experience but his own self-judgement.

Agility and receptivity to change at work has been previously discussed as part of the identity work of a digital professional. However, change fatigue and resistance are often linked to ageing within participant accounts in Phase 2 interviews and participants link such phenomena directly to stereotypical views of age and ageing. Sean discusses a change of role which he claims has 'aged' him, again linking to a wider discourse of age-decline references:

> *"God the changes over the last year or so have aged me. I'm unsure about the future in general here" (Sean)*

Using the word 'aged' as verb to describe personal impact, Sean suggests that changes have aged him beyond a biomedical explanation and irrespective of chronology: his implied meaning is that change has de-energized and exhausted him. This outlines a construction of age beyond associations of managed decline (Tretheway, 2001) but lack of engagement in life. Additionally, Laura offers technology as a vehicle or enabler for broader social changes to be feared, such as the rise of social media and new platforms (discussed in more depth later in Section 9.4: Digital Dangers).

> *Interviewer: What do you think of changing technology and the world right now?*

> Laura: "…this is a world that you cannot get away from and it's universal. It's universal for all of us and that's what really scares me" (Laura)

However, in this case, she uses the definite article 'it' interchangeably to refer to both social media use and the 24-hour society more generally, constructing the relentless pace and ever-present nature of technology as enabler for social communicate and contact as inevitable and inescapable.

On discussing the US elections and UK referendum to leave the EU, Alfie is emotional and vocal about his views:

> 'Fuck. Shit. What the fuck is happening in the world? I'm shocked, upset and angry about what is going on in the world but I'm hopeful that we as a species can get through it…we can help others through it too at (names firm). If you look at the US things are sliding back to something resembling a modern middle-ages but I still think that some progress is being made in smaller but still significant areas which give me hope for humanity" (Alfie)

The 'smaller, significant areas' Alfie refers to are situated within the localised context of his own organization and the digital sector more broadly. Alfie works at a major social media company and expands later in the interview about being uniquely positioned in this work to encourage free speech and debate which such channels have developed. In doing so, participants construct themselves in specific ways which elevate them in the interview as uniquely positioned and capable to drive positive change in local and social contexts through almost existential claims about assisting 'humanity' and the 'species'. This construction of their professional contribution as bigger and more meaningful than 'simply' working on technology itself frames the technology as a powerful armour to challenge a bigger 'morality threat' (Cohen, 1972). However, by introducing the idea that technology and in particular this sector can alleviate social risk affords 'digital determinism' a new poignancy.

The next section discusses the ways in which participants *construct identities*, at times offering 'multiple identities and shifting realities' (Vincent, 2014, p.1) in response to such digital determinism with particular emphasis on the challenge and resistance to the speed and scale of change.

9.3.2.   Identity conflict: preferred and dis-preferred identities

In relation to planning for one's professional future within a digitally deterministic landscape, participants are conflicted between identities of planning or being impulsive in their response to personal and professional change.   This is accomplished through their accounts about *the value* of future planning. Their accounts suggest preferred and dis-preferred identities in relation to whether they are, and should, be fearful, excited or indifferent to future developments and therefore whether to plan for them.

I questioned participants about 'the future' via a general question ("describe how you feel about the future") phrased to elicit as open responses as possible. Across many of the accounts, participants sometimes offer conflicting views of how the future 'does' and 'should' make them feel. There are evident tensions between fear and excitement and a sense of conflict between how they *do feel* and how they think they *should* feel.

In the following account from Meg, the future is constructed as generating fear and something to be feared:

> *"I guess in here there doesn't seem to be much of a sense of excitement about the future its more something to be nervous about and trepidatious. I suppose I'm trying to think am I more excited now (than when I was younger), do I feel more excited about the future (laughs) I suppose there is a sense that in accordance to this I don't think that far ahead too much. And maybe I should try to maybe I should try to think where do I see myself in five or ten years' time? But I don't think I'm that comfortable doing that. I think even though I'm a planner at heart I tend to operate in the here and now and taking opportunities that come along. And waiting to see kind of whether a new opportunity will present itself where I am. And thinking, where do I go from here? What does the next five years look like? I think I could become quite reactive rather than proactive about my career. (Meg)*

By describing herself as opportunistic but also as 'a planner at heart' Meg constructs her identity as both organized and agile and therefore responsive to the demands of the job and profession: the desired identity is whatever is required. but importantly links to the previously desired identity of having interests and being curious. I argue that the rhetorically self-questioning nature of her account also reveals her attempt at contemplating what version of herself is best to offer the

interviewer. The uncertain digitally deterministic environment is navigated by being both 'organised' as someone who plans but importantly not losing the desired identity markers of being agile and spontaneous to new ideas and opportunities, so frequently associated with stereotypical ideas of the digital technology worker (Hearn, 2020).

Here Meg constructs a 'reactive' identity as a positive and counter to being older. Meg also constructs herself as conflicted between how she 'ought' to feel and how she does feel achieved through modal verbs suggesting social expectation: *'I guess…I suppose…I'm trying…maybe I should …I think I could".* She continues this trajectory through use of rhetorical questions at the end of the excerpt where she questions how the future will be and openly compares her current views with that of her younger self. While firmly describing herself as 'a planner at heart' instead she constructs herself as also prepared (or at least offers a willingness to persuade the interviewer she is prepared) for the future.   Yet her account suggests an incongruence between the pressures of social expectation regarding professional identifications, and a conflicted idea of the preferred identity of the digital worker suggesting that the older worker is often connected to ideas of experience, maturity and being organised.

Alfie's positions ageing as central to whether the future is to be positively anticipated or feared but suggests that 'trying' to be excited (again a desired identity marker of the digital professional as discussed in previous chapters) will take effort:

> *"There are some potential changes in the pipeline which I'll try to get excited about. You know it's kind of ridiculous. We are ageing. We are thinking about pensions and retirement although you do have more of your working life ahead of you than behind you but I'm probably living in this stupid bubble that it will all come good in the end which as someone who is educated and reasonable I know is incredibly naive you know but it's the easiest way to be because if I over think things I just tend to get myself stressed" (Alfie)*

By enlisting examples of practical age-related life events such as retirement and pensions in his account he draws upon established ideas of adulthood and responsibility. The apologetic tone to the interviewer concerning his lack of

preparation : '*I know is incredibly naive*' suggests an awareness that planning and being organised are important social indicators of getting older but potentially at odds with other aspects of his identity, namely a desire to be spontaneous. Alfie compares his description of an uncertain future directly with the process of ageing and reveals the strain and pressure involved in 'making an effort' or thinking too far ahead. The social object of the 'plan' or identification of being a 'planner' is offered in various ways by participants. Alfie constructs himself as avoiding the responsibility of future planning through the idiom of 'living in a stupid bubble' and reiterates an identity of disorganised and spontaneous, the 'a man without a plan'. I argue that in doing so, Alfie constructs himself as sitting outside of age-related realities, thus reinforcing the idea of their undesirability particularly within this professional group:

> *Interviewer: Do you still see yourself as the 'man without a plan' - your words from the last interview?*

> *Alfie: "Absolutely that is still the case …you know I've got no plan. My wife has a lot of ideas and bless her for that, but I get stressed as every time she gets a new idea and I now need to think about it!" (Alfie)*

In terms of broader identity construction, having a plan (or not) appears to symbolise a tension between the desire for being perceived as organised versus spontaneous and opportunistic, connected to other identity markers of creativity, curiosity and carefree - also associated with younger worker status. However, this also indicates a rejection of an age-related identity to plan for a future without work. This is potentially in conflict with being perceived as professionally committed by demonstrating (at least) a sense of career planning which may vary due to age related factors associated with experience and maturity or 'shifting realities' (Vincent, 2014). We may see that the professional identity of the digital worker is conflicted in this sector and may vary depending on age and perceived career stage.

When discussing future planning, Craig offers hesitation, reflection, humour and changes his mind halfway through statements using discursive markers such as

'hang on' and *'I suppose'* that highlight a laissez-faire and relaxed approach about the need to organise one's future professional or otherwise.

> *"I suppose I'm just always deciding what to do with the rest of my life and the rough plan is sort of probably try and get a job and keep on some of my self-employed work. That is the vague plan. But then I end getting loads of work and it just kind of gets shelved. Plan B I suppose" (Craig)*

Craig who openly asked me in the first interview if he *'should be worried*?' about his professional future now actively offers himself as someone imagining the future, if only in the localised setting of the interview. The planner/opportunist identity is also connected to a further identity conflict offered by participants, whether they should be and demonstrate career ambition or remain in their current roles which I will now discuss.

9.3.3 Ambition v stasis:

In these interviews, the idea of being in one's professional comfort zone or within a steady state of career statis is offered as an object of talk connected to normative beliefs about age, professional career stage and other characteristics of the digital technology professional.   Meg discusses how her sense of excitement or enthusiasm for her role has potentially waned, she is content to remain at her current role and level or to 'sit' within the situation and reflect on her material benefits. However, she suggests her current state may be at odds with social expectation: she questions her motivation in the interview to change, and in doing so suggests there may be a broader professional pressure to consider moving:

> *"I suppose in terms of comfort I feel I can do the job, I'm well respected, my team like me and my manager seems to think that I'm doing a good job. And it's easy just to kind of sit with that. The salary is pretty decent. It could be better, but it could be worse as well. I have the money to do the things I want to do. So, I suppose it comes down to what is the motivation?" (Meg)*

Other participants also describe their current roles in terms of comfort, contentment and ease through rhetorical questions and popular idioms such as being able to do their job 'blindfolded':

"I'm quite comfortable at the moment and don't want to move onto another role, what is the point for the same money and conditions at my age?" (Helen)

"I can kinda do my job blindfolded at the moment. It's good and it's not good when I'm not here, people do things that are silly and they get into trouble. I really need to think about what I do next but what do you do? I really like my job and it's varied" (Gordon)

'I can do/am doing my job standing on my head' (*Alfie; Meg; Bob; Helen; Sean; Gordon and Jill - all say this in their second interview*)
The language choices of doing work 'blindfolded' and 'standing on one's head' suggests both a professional confidence bordering on arrogance through the use of physical agility depicting youthful connotations working counterpoint to what could be considered a dangerous and staid oldering issue: to stay in one's job for a long time. The conflict between stasis versus movement is presented through identifications of remaining in one's role or moving on and reveals important reflections on social norms and expectations for this professional group that may be at odds with other aspects of their identity. Later in the interview Meg hints at a potential social taboo suggests it's almost better to "*lie to your boss and certainly in an interview*" than to ever suggest being in a steady state at work. There is a surreptitious nature to the exchanges in the interview on this topic: the idea of this professional group being 'comfortable' can be shared in the localised confines of the interview but it is also clear in the interview process that it is firmly resisted as a *preferred* identity state. This suggests it is incongruent with professional identifications focused on perceptions of restlessness, and curiosity. As Helen's account offered above suggests it is incongruent with institutional and sector expectations - or how your career in the digital sector – is *determined* through broader social expectation.

Meg suggests that if this preferred identity is not met (and indicates this is a socially rather than individually preferred identity) , she could find herself a victim of age discrimination. This is illustrated through idioms within her account such as being '*replaced by a younger model'*. She clearly states a future determined by her own identity performance depending on how she performs institutionally (i.e. what she is prepared to say to people) in, for example, a job interview or discussion with a

colleague and in doing so also acknowledges the trust relationship of the interviewee-interviewer exchange:

> *"Yeah, there is a difference between me saying I'm in a comfortable place to someone like you or saying that in a job interview. I'd never say that in an interview…they need me to stay interested or they'll lose interest and I'll be replaced with a younger model." (Meg)*

While the statement indicates an identity performance and discursive practice from the participant within an institutional order of norms, it also paradoxically suggests that the performance of 'being interested' suggests an appetite to remain interested. This in turn implicitly hints at a continued pursuit of career advancement, but within the confines of institutional expectation. Such accounts provide strong indicators of acceptable and unacceptable identity markers within the broader discourse of the digital identity professional, and of the disciplinary effects of the discourse, that is which topics and identity dimensions should be visible and which should be hidden. My analytical findings suggest that being 'comfortable' and content within one's professional role is associated with an oldering identity which it is suggested is incompatible with other implied expectations of the role such as that of change agent. For example, Robin discusses instances where being in a digital role, frequently perceived as innovative and creative, is also expected to challenge workplace norms in order to achieve innovative solutions rather than 'repeat the cycle':

> *"People just go back to being comfortable …If you don't challenge and push for innovation you are just repeating the cycle" (Robin)*

'Comfort' is also at odds other accepted identity markers for this professional group , that of ambition, career progression and age-related career stages. As one ages, acceptable 'enthusiasm' for digital work appears to shift from enthusiastic practitioner identity to senior digital manager holding responsibility. What the desirability of professional advancement is normalised and expected through indications of acceptable and unacceptable age-dependent career stages and roles. The strongest age-dependent indicator yet offered by participants is from Donald, who despite being keen to construct himself as non-biased on grounds of age draws

on modern native-immigrant categories and the broader narrative of 'growing up digital' to inform his own hiring processes in the workplace:

"I would say that there is more a sense of, among the more technically obfuscated you are in that those who are under 30 will have been exposed to the latest technologies, they will have grown up completely digitally native. And will have a fundamental understanding of how to make, how to build and how to develop while someone who is 40 something has not – they have learnt it and integrated it and I think if I was hiring a developer and they were clearly very good and 24 (years of age) for some tasks, for some tasks you would want that person ahead of someone who was 44. You would want the 44-year old manager but you would want the 24 year old coder. Just because the 24-year old would have grown up with already knowing the very specific technologies that are going on right now. They won't have the bad habits of the technological older. Certainly, from a knowledge point of view, I'm trying to qualify this I would definitely have a time when I want someone older but that is when you know you are talking about team leaders or people who are organizing big systems but there is definitely that thing that the younger someone is the more they won't be utterly flummoxed with a particular platform or program." (Donald)

Donald's account contains some striking and unpalatable depictions of age discrimination. Through descriptions of hypothetical young people as a more naturalised professional fit for certain types of digital work which others older workers are 'flummoxed' and 'technically obfuscated' unveils a belief process deeply embedded in ideas of 'growing up digital' and exposure to certain types of technology hinting at generational connection. Donald evidences how his assumptions can and do shape work practices relating to recruitment. This also hints at how such ideas could impact perceptions of suitability for professional development, promotion, and retention. Such assumptions fail to account for or recognise a potential for diversity of those working in this field from a range of diverse life experience such as career changers, expert practitioners who wish to remain as matter experts and other professional identity variations. The identity of expert practitioner seems at odds with older worker identity which surfaces some questionable issues for older digital professionals and their future agency.

Similarly, Meg's account of what she would and would not say in a job interview and Sean's comment below reveal that any contentment with one's current role and the status quo must be concealed. Participants do refer to desire to move up

and move on but suggest the timing and nature of how that will happen may be out of their control, suggesting depletion of professional agency:

> *"I've only ever wanted to move forward at a pace where it feels comfortable for me but I have always wanted to move forward." (Meg)*

> *"you can't just stay put in this business or you'll be out" (Sean)*

The idea of identity resistance to managerial ambition is offered most starkly by Robin who argues the case for professional legitimacy as the 'the good practitioner' subject although he suggests positioning himself in this way leaves him vulnerable to age-related discrimination and bias. Robin describes a pressure to move into management which disinterests him, but repeated use of 'definitely' emphasizes the reality of this pressure at least for him

> *"I think in some sectors (the expectation you will move into management) definitely. There is an expectation that the more senior you get you are no longer just practising you are just leading people and I don't know if it's a public service thing but I've definitely seen it in agencies as well. And that is a real shame because I definitely want to be a really good practitioner." (Robin)*

Robin also reinforces the social expectations of those of his age group by locating himself in what he describes an 'old fashioned' workplace.

> *"Because I'm in an environment now where they are so old fashioned in their thinking [about age and seniority] that my portfolio my CV is not full of those cutting-edge examples. Its full of coaching and managing and supervising. And actually as I've described I don't feel I'm practicing. [Being senior] is naturally foisted upon you. If you are good about your job people want your consultation". (Robin)*

Margaret reveals an insight into a broader sector-wide, macro landscape of expected evolution from generalist to specialist:

> *"someone once said to me you can't be a digital generalist anymore you have to say 'I'm particularly about digital marketing or UX (user experience) or something but that also needs to change as you get older and the stuff changes anyway'" (Margaret)*

David describes similar career constraints, anticipating the social expectation and eventuality of making the change from high-status and well-paid practitioner to manager. He constructs himself as disinterested in status or ambition through the idiom of having no 'wish to be a big cheese':

> *"and I'm now in a place where I may need to look for another role any time from now on. And the thing about that is that I will do so but then the big question is for me to do what I do and to get paid as well as I do, do I have to take a more senior role? And I get tons of offers from head-hunters who get in touch saying would you like to be a sales director and get paid x and I have no real aspiration to be a big cheese. I just want to do an interesting role and get paid for doing it. I don't have to become the man at the top of the pyramid. I'm quite happy being the middle. But I don't' know if I can stay in the middle …. Or am I simply unwelcome being the middle because in the middle they just want the twenty-year olds and the thirty- year-olds. Which are cheap." (David)*

While David constructs himself as professionally in demand the syntactical structure of his account is punctuated with hesitancy, and conveys a sense of plea achieved via short, punctuated statements. There is a deeper suggestion here of capitalist constraints, where being older is associated as being a more expensive employee/worker. Here we see a status threat posed by the identity of being and older worker, a desire to remain in his current position but a realisation that due to social expectations this may not be possible.

There are also indications of self-imposed career norms via 'chronological markers' from interview participants suggesting a conformity and desire to professionally advance. These are freely offered within participant accounts within the localised context of the interview – and the age of '40' is offered as cut-off point:

> *"Yeah I think that by x age I should be at x point. Everyone thinks that. So in your 40s you should be at director level" (Margaret)*

> *"I think if you are not at a certain level by your 40s people get suspicious and then you are not even considered good at the job you already do" (Sean)*

Value and professional power as an older digital professional is frequently synonymised with promotion, seniority and being a strategist rather than practitioner. This older senior digital professional identity is normalised as credible

and respected. Bob offers the view that desire for promotion should be an individual choice, but within his account he also offers perceived career norms while conversely, he denies forms the basis for his own judgement of others in his field. He contradicts himself that age should come with *some managerial or project responsibility*:

> *"Erm so I wouldn't say that everyone should be striving for those things (e.g. Promotion) this is an expectation and a challenge that I place on myself however I wouldn't say that I judge people who are not at a certain level…. But If I look at the people in my team two of my team are 35 years old and one in particular is on a low salary and I think well if you were going anywhere, you would have been there by now. So, I do think that if someone is at x age and they are only at a certain level there is a reason for it that you know maybe they are not that bright or capable but that doesn't mean that everyone should be striving to be a director. I judge people at slightly lower levels, and I think well you are 35 and while you should not necessarily be running a department by that age you will have want to have some managerial responsibility or been wholly responsible for delivering some smaller projects or something." (Bob)*

Bob also offers age bias of the young and old equally in his account, expressing a compliance with career stage norms through the narrative of age suitability for certain roles and levels of responsibility at both old and young ends of the age spectrum.

Alfie offers himself as motivated by and active in the process of moving into more strategic and managerial roles and describes his approach as a series of manoeuvres driven by, in part, manipulating the perception of others:

> *"Letting the director know I'm interested in moving to the next level… I have applied for more senior roles as those things are creeping up on me mentally as people do see you in a certain way and there are things I want to do, they are things I want to do and progress and those are the things that have struck me most as they are very active in my mind right now." (Alfie)*

Finally, David concludes by questioning whether a naturalised career trajectory for digital professionals into senior positions is even possible due to volume of roles available and lack of opportunity. He suggests severe career limitations as a result of normative beliefs about careers:

> *"The thing about that is, it's a sort of a weird thing. How can there be roles where everybody is, there's not room is there? The counterpoint to that is that my wife went to work at [names company] last year and no-one there is over 40. And you sit here saying 'where did the over 40s go?" (David)*

In this section I have discussed how participants navigate the social and professional expectations on them in dealing with a broader climate of digital determinism at both a social and local or institutional level. I outline the subsequent identity work they perform in order to achieve preferred identities which establish belonging, status, respect, credibility and continuity in the field. I illuminate some of the constraints shared by older workers within other sectors and professions but also illuminates those specific to this older professional group.

The next section explores the discourse of 'Digital Dangers' which was present in the media texts and how this discourse is offered in identity accounts of participants in the second round of data analysis.

9.4. Digital Dangers

The discourse of 'digital dangers' present in the media texts of the second round of analysis manifests itself through three key discursive themes: The Wild West (lack of online regulation), and Meaningful Work. Like the media texts, discourses contain reference to topics such as cyber bullying, 'sexting'[15], online identity, cybercrime and control of information. The discourse of digital dangers presents within the media texts in Phase 2 suggest how risk is integral to the broader digital landscape within which participant professional and personal identities reside. These are now explored in detail.

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[15] To send (a person) a sexually explicit or suggestive message or image electronically, typically using a mobile phone; to send or exchange (sexually suggestive or explicit content) in this way [Oxford English Dictionary]

9.4.1. The Wild West

A wider professional landscape euphemised as the 'wild west' is offered by research participants within this phase of interviews. Margaret contextualises the professional reality of a digital risk landscape through a narrative of comparison to her past working experiences which she describes in affectionate terms as carefree, sometimes careless, but importantly devoid of regulation or agreed processes:

> *"When I first started the profession and sector was like the Wild West…we were doing things where there were not any rules and you could just try things and experiment. You could try something and see where it led you…we did not have a clue." (Margaret)*

Through the metaphor of the Wild West, Margaret depicts an environment of unregulated lawlessness without the structural confines of boundaries or rules suggesting a freedom for expression, innovation, exploration and experimentation.

In contrast the current risk landscape in which we live and work today is depicted as less playful and implied as more 'sinister' as risks and threats have evolved. Laura expresses her concern as both a digital technology profession and being an aunt, and offers her identity as an aunt to illustrate the challenges she faces in and outside work contexts. Laura describes the subject of risk through use of indefinite article 'it', intended to mean social media and its users. Managing, moderating and understanding the impact of such content is not just central to her professional role as a social media communications manager but causes her to reflect on the risks presented by social media use, now an integral part of everyday life for many. Importantly Laura indicates such 'fears' may be age-related and linked to technological familiarity:

> *"It's not so much a case of being scared - it's just part of life now. However, when my nieces and nephews do grow up to be a certain age we'll probably all get scared again but it's become a much more integrated part of my life than it was say 18 months ago… I was having a conversation with my friend the other day and when I was three, I think we had an Atari [laughs] and just the fact we now have all of our music on these tiny little things like phones and that to me is incredible that is the exciting part. But I suppose it is the more sinister part that comes with it about what people …what it can turn people into." (Laura)*

Laura utilises the past to convey a time of innocence but is keen to express that somehow the fear of technology is reoccurring, that *'we'll all be scared again'* by a certain age. By describing the perceived threat of social media abuse or certain types of behaviour online as contingent on being 'a certain age' constructs the perception of risk attached to the threat landscape as age connected. Laura locates her fears within nostalgia '*I think we had an Atari'*; but moves between associating the resulting social changes accelerated by technology with fear e.g., *'the sinister part of all this'*; acceptance *'it's just part of life now;'* and excitement: *'we all have music on these tiny little things'*. Laura also seems to attribute people as the risk factor here, not the technology itself:*'what it can turn people into'* and indicates a recognition of human agency and choice rather than life as purely determined by digital technology.

However, Nigel suggests the reverse about who or what is in control in our broader social and professional lives, expressing that we are truly 'enslaved': if not technology then by data, illustrated through the lexicon of masters and slaves. Nigel claims that humans are far from agents in their relationship with technology and instead affords agency to the 'technology' and its output (e.g. data) in question:

> *"I think people will become slaves to data. And I think data should be a tool not a master. And I think related to that is age for a lot of us. I have been startled. When they* (his senior managers at his last place of work) *sat down and told the board that they were planning to bring in…that they would be able literally be able to segment every customer by their credit history it just hadn't registered. But right now you have a computer that can look at you and go duddledumm oh right they have got that many kids that age and duddledumm they own that size of property they - the amount of data that they can do on you and you think this is simple. This is just machines making a calculation. If x,y and z works then a, b,c and I'm startled by how rapidly its grown, where your machine makes personal recommendations about what you should buy your wife. I mean this is the world we are living in.". (Nigel)*

By outlining that we (both in professional terms and broader social terms) will become 'enslaved' by data (which is also onomatopoeic performed to mimic actual data processing as 'duddledumm') Nigel offers a picture of a world that suggests

artificial intelligence will overtake the human side of professional value including his professional value.[16]

The idea of attributes such as judgement and trust of online content attributed to age as discussed by participants in a variety of conflicting and contradictory ways. Nigel attributes 'generational' membership as a key determining factor of future success. He offers predictions based on common socially held ideas about 'growing up digital' suggesting that one's prior experience and engagement with technology may also determines the level and nature of risk it poses and is entirely related to birth cohort. 'Judgement' and subsequent risk is enrolled as generationally embedded, therefore suggesting risk types are time bound and sometimes temporary, and will eventually diminish as people age and 'new' threats emerge (again 'generationally' based):

> *"I wonder if this is a temporary thing. I mean you are talking 12-year-olds… let's be honest I mean we are the generation where our children are going to be around 10 or 12 by now and I wonder if it's because we have not had the experience of what happens on the internet? I mean I'm startled by it I mean I have lived digitally my whole life but it's a wonder some of the things that go on I mean if these children or at least the next generation the ones who will be parents and the next generation they will bring their children up to say you know what you can't believe everything you read on the internet because you know in some respects this is terrifying stuff….and let's be honest no-one that age has the ability to filter because they are emerging into the world and we are actually the original gatekeepers. We control the information that went to them. But they are bypassing us. They may even be too intelligent for our porn filters for example"(Nigel)*

In contrast to broader sweeping judgements and stereotypes about younger people lacking online judgement and 'experience', Nigel also suggests *experience itself* could be the risk in question. He implies the assumption connecting 'his generation' who grew up with certain forms of technology outlined in his account "*I have lived digitally all my life*" – is potentially now inadequate. Conversely, it's the type of technology and the nature of the engagement which he expresses as relevant to risks posed. Nigel attempts to enrol the interviewer into his point of view about

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[16] In the second interview Nigel describes how he lost his job between the first and second interview due to artificial intelligence being able to predict and manipulate search engine results faster than he could achieve in his role. He was made redundant from his role as a result.

younger people being less astute online with the expression '*let's be honest*' followed by '*no-one that age has the ability to filter*'. However, Nigel offers a contradictory discourse of who or what is victim to online risk: his account positions younger people as vulnerable through their 'inability to filter' (meaning to judge what is appropriate content and/or factual in any given context). However, he suggests younger people are more empowered than older people due to their assumed digital exposure to the 'right' type of technology which then enables them to '*bypass us…. they may even be too intelligent for our porn filters"*. The use of 'our' to prefix 'porn filters' suggests that governance structures and measures are also age related: Nigel suggests 'we', the 'older generation' set them but suggests the danger here is we risk being outmanoeuvred.

Laura is equally fatalistic in her discussion of how a complete lack of privacy and control or 'governance' of content in terms of sharing and publication could impede our sense of freedom of expression and trust in content:

> *'Erm I don't think there is anything that hasn't already happened apart from a complete loss of autonomy (laughs) this feeling that you can't go anywhere and trust that if you fall over and flash your knickers it's going to be on the front page of the Sun… you see something moving so fast with such little governance around it and at the moment you have got situations where people are topping themselves [committing suicide] because they read something bad on Twitter… Yes, I mean I think for example God just look at the news there is no news anymore if you want information on something you can take information from Twitter from anyone and that is not journalism. It makes you think that the most innocuous comment you can put on Twitter or a picture uploaded can be thrust into the mainstream. A very innocent photo of you doing something. So instead of being frightened of it I'm just very conscious of what I do and don't do, in my line of work. …. it's that phrase 'dance like no-one's watching'. Well, you can't do that anymore. There is always someone watching, and it could end up on social media. So you adjust your behaviour." (Laura)*

In suggesting that our online lives remain highly unregulated Laura adopts the subject position of cautious participant, having to self-regulate her own behaviour in various social situations in fear that losing her inhibitions could be captured, recorded, and shared. There is a hint of professional dread of this happening through the phrase 'in my line of work'. Through choosing the phrase 'dance like no-one is watching' to illustrate an irony of historical shift, she suggests a culture of constant surveillance by the presence of social media in our everyday lives.

Robin disputes whether threats and dangers are in fact 'generationally' related or even age relevant. In discussing online privacy, he is keen to dispel any popular myths about there being age-related differences to what matters and uses sarcasm to challenge such ideas.

"I'm less concerned about privacy issues. I think privacy obviously is very important to young people as we know from all the sexting that has been in the news recently [laughs sarcastically] that 'brand new phenomenon' [he gestures inverted commas with his hands] that we did never when we were growing up. Take a polaroid of yourself…did no-one ever do that? [laughs] So obviously yeah even with youngsters' privacy it's a huge deal and even with even though we think yeah they are sharing everything on Instagram or Twitter there are still things they want to keep private. My parents are on Facebook probably more than I am, sharing everything about their lives. It is not a generational thing." (Robin)

Robin's use of scare quotes in his identity work and interview account exaggerates his dismissiveness about such technology being novel or enabling of any different behaviour. In discussing the news articles that I brought to the second interview, Robin remarks that when it comes to age generalisations: *"You can't believe everything you read online" (Robin).* His resistance of a conventional 'immature youth' discourse reinforced his preferred identity of being age-aware and even age-enlightened.

While Laura attributes humans as central to future control of 'digital dangers', even if they fall victim to the outcome of how technology is used, humans are still constructed as protagonists of the danger. Laura positions relinquishing control of such technology and failing to engage with it as missed opportunity. However, there is some recognition that the volume and nature of content is overwhelming, where friends 'just can't be doing with it' but introduces the idea that this is not confined just to 'older people' and in doing so reinforces ideas about older people 'fearing' technology as mainstream:

"I think if you are (not participating then you are) missing out if you do because it is an incredible opportunity to share and exchange knowledge and be part of …it brings the world closer together doesn't it if you are looking from people's ideas from different countries or what have you….I think you are missing out on amazing opportunities just because of fear. (of the technology). I don't think

it's impossible to not be involved I know some people that completely shun it and not just older people, there are people around my age who say 'I just can't be doing with this' (Laura)

But also talks about stupid behaviour online:

"I suppose that is something to be wary of at work…. if we are using a blog we like to think that people are adult and have a brain and there have been plenty of cases where people on blogs or forums have been abusive or offensive and they have got into trouble with it. But … there are a hundred ways of being an idiot. It's just that with the whole digital side of things there are more new ways" (Laura)

Laura discusses the threat posed by behaviour on social media (which is fundamental to her role as a digital communications manager) and by introducing the topic she can construct herself and colleagues as morally responsible:

"if you saw an adult hitting a child and a policeman wasn't around would you intervene? We all have a social and moral obligation to look out for each other I think and there is still that massive … social media could be such a huge force for good." (Laura)

By synomising online moderation and intervention with physical violence she locates online life within the broader social world where the same moral behaviours apply and not separate to it, and connects technology as means of reshaping society if used in morally positive ways, similar to the points below made by Sean.

Sean discusses how the UK vote to leave the European Union in 2016 (Brexit) has unearthed a culture of bullies and 'trolls' on social media. He continues to frame his role as opportunity to be an interlocutor, to work with the technology to become a positive enabling tool or 'force for good'. The paradox of technology constructed as looming threat versus a force for good, evident in the media analysis of the second phase affords participants opportunity to adopt various subject positions, first as <u>interlocutor:</u>

"we need to be part of the conversation when you see such rubbish posted online although I do believe in free speech" (Sean)

"They (social media companies) can't really get away with it for much longer…not stopping people like Trump coming out with all that rubbish all that fake

news. Yeah, we are getting to a place where we can't turn a blind eye anymore, I think" (Helen)

The accounts above explicitly offer technology and the professional identity of this group as integral to moral achievement within a changing society which links to earlier accounts that elevate their professional role to being part of broader solution that can help 'save the species'. To do so however, participants recognise their ability and agency to participate in what they offer as 'meaningful' work.

9.4.2.   Meaningful work

In analysing these interviews, the discursive theme of meaningful work is used as a discursive device to position participants as contributing to social good and as a legitimizing device to distance themselves from 'meaningless' work. This links to the idea that their professional purpose is to play a leading role in navigating and handling the online risk landscape. This is the type of work and working practice which many participants take the opportunity to attribute to their younger colleagues. Discussion of meaningful work and attributing meaning to participant work is also a means of achieving professional value.

The construct of meaningful work is realised through different forms of identity work:

Empathy for the client "*doing a good piece of design, meeting the client's needs" (Robin*)

Ethical - '*stopping technology getting into the wrong hands' (Alfie)*

Being a Guardian and Gatekeeper - "*my job is to stop stupid people doing stupid things'* (Gordon)

Social good "*Making the world a better place" (Helen)*

Catering for the future 'generation' in the following excerpt:

> *"We need to address that there is a whole generation of teenagers now where their mobile phone is their primary computer. They are going to be lawyers in ten years' time, and they are not going to be putting their phone down. What are we doing about it? They won't open up this creaky old computer what we think now*

are our flashy Mac books but not to open it up in ten years' time just to run this piece of software. We have got to be thinking about our staff working on what is cutting edge and what is mainstream right now and cater for the next generation. Because in ten years' time it will be and we don't want our software that is clunky and horrible. When something is ten years old? How horrible it feels not even now but for the now of the time" (Robin)

Through a prediction of the future based on current trends or the 'now of the time' Robin suggests a starkly different future where what we consider valuable today will not simply be devalued but considered 'old' and 'clunky' which he synomises with uselessness but also as 'horrible', expressing complete disgust at the idea of using today's technology in future. Thus, Robin positions himself as duty bound to consider future needs (again based on generational understandings) suggesting the threat of obsolescence (professional and technological) if not considered by this professional group.

In the next section, discourses of 'digital dangers' begins to establish the existence of 'problems' that our participants suggest they are uniquely placed to solve through identification as a 'Digital Elder'.

9.5.   Digital Elder

Previously I set out my analysis of the 'digital elder' discourse within media texts and explored the attribution of wisdom, experience, maturity and trust in older people in a way that moves the emphasis on *digital ability* defined in technological handling terms to *digital wisdom*. This idea is discussed in Chapter 2*.* From the presence of the discourse within in the media texts, discourses of 'digital elder' or 'eldering' can best be described as the discursive shift from digital power residing in *purely technological capability* to a more holistic approach to how we interact with, moderate and govern digital platforms, devices, content and access. As such there is a potential shift of emphasis on what behaviours and attributes are positivised, desirable and socially valuable. Such considerations have become more associated and essentialised with 'older' people due to assumptions about life

experience and maturity achieved in the offline worlds which could be transferred to online interactions.

Here my analysis is structured into three section headings below: Maturity and Infantilisation and four subject positions adopted by the participants which contribute to the broader discourses of Digital Elder; Gatekeepers, Guardians, Curators and Experts.

9.5.1.   Maturity and Infantilisation

My analysis outlines the presence of the digital elder discourse in the following ways within the interview context. The generational construct is frequently central to accounts where 'eldering' takes place: both in describing what older people offer but importantly what they offer *in order to counteract what young people do online*. For example, Nigel provides a critical view of young people and their role in the technology sector particularly in a discussion about computer programming and coding. He suggests placing younger people with responsibility for AI (artificial intelligence) programming is dangerous due to their perceived lack of experience and argues that longer term there is the risk it may create ill-conceived digital products and services:

> *"I just think…who teaches the AI to be innovative? Who teaches the AI experience? I think this is perhaps an age-related thing but its kids programming these computers now. What experience do they have? I'm not being a raging ageist here but I think we all know and look back at the things we did when we were 20 and think oh God not with regret but with a certain amount of oh if I only knew then what I know now" (Nigel)*

By denial of the subject position of 'raging ageist' Nigel conversely calls attention to, and potentially warns the interviewer of, the potential for an ageist perspective to follow, but shields himself from the label. He infantilises younger people skilled enough to programme computers as 'kids' and foregrounds the relevance of experience and hindsight hinting that younger people are more prone to acts of carelessness and stupidity.

The idea of what is fashionable and on trend is discussed by participants; the focus is squarely with younger people being overly conscious about current trends at the potential expense of other choices better placed for organisational outcome or business value.   In the extract below, Meg mocks the construct of 'cool' by reinforcing the view that new and 'cool' are not necessarily 'better', particularly when it comes to technological decision making in work contexts. She exaggerates the behaviours of hypothetical 'younger' colleagues via repetition and hand gestures:

"It's like everything is cool and have you seen this cool thing (points) and that cool thing (points) it's just exhausting. And everyone thinks it's fantastic and it's the next biggest new thing. And your younger colleagues are like have you seen this and have you seen that I think those things get more exhausting and more tiring as you get older. It's like I said before it's that kind of cut through the crap what is actually important here" (Meg)

Through the repetition of clauses ''it's fantastic…. it's the next best thing….have you seen this….have you seen that' Meg performs an imagined, infantilized account of what (she views) her younger colleagues say in the workplace. By concluding that it's also 'exhausting' suggests their (younger people's) energy levels and enthusiasm surpasses hers. However, she also suggests such enthusiasm is perhaps misplaced or certainly not directed at the 'right' things. Her language and intonation suggest she views younger people as incapable of filtering the correct information to inform better business decisions or as she describes it being able to filter good information from bad, to '*cut through the crap'.* This is further illustrated through her use of terms such as '*waffle'* and *'weeds', 'noise' and 'clickbait'* to describe the sheer volume of online content to be discerned. Through these constructions, Meg and other participants suggest industry require experienced and discerning workers possessed with 'insight' (such as online statistics) to navigate the noise:

"Don't get bogged down in the waffle…. You have to cut through the noise…without any insights it's just clickbait" (Meg)

"you can get drawn into the weeds, but it won't do you any good" (Sean)

Meg also reflects on how her colleague's enthusiasm for what she considers to be misjudged ideas may be attributed to normalised, biological age-related factors, that energy levels drop in general but also that excitement for new digital developments may wane:

> *"it's maybe to do with age that I think you do get more tired and cynical as you get older. Or a lot of people do so you are just not as excited about the next new thing. So, you just want to say just tell me things that I need to know." (Meg)*

"just tell me the things I need to know" echoes the new emphasis placed on discernment and information filtering in order to arrive at what is truly important in to your role. This sense of honed judgement in order to drive business value is echoed by Nigel who openly denigrates the opinion of younger people in meetings; in his view they don't think strategically about how to get the best from digital tools. Instead, he claims they consider the important thing is to be present on the platform rather than the value extracted from using the tool, or learning the rules of the 'game' as he describes it:

> *"What you find is that you are sat in a meeting often with younger people and they'll say 'we've got to get on Facebook' or whatever and they'll get on Facebook (an account for the company) and they'll think 'job done'. What they don't realise is that it is just the start of game. I used to bring in information about where the business came from, where the people came from where do they go to. We might get a lot of clicks, but we don't get a lot of sales. I could bring them the lead (online), the click, then the sale…they need to look at the end point. How they go to there from there" (Nigel)*

Here again Nigel impersonates the voice of younger people making choices which feel right because they are potentially 'new' but he positions himself as subject with broader understanding of the organisational goal. Through the metaphor of game and signposting various process 'points' Nigel elevates himself as more in control that the object of the younger person or 'them', that he adds more value by taking younger colleagues, customers, and the organisation through the process via considered steps.

Similarly, Gordon discusses how being in a management role and overseeing the institutional social media activity means adopting a role as advisor and strategist.

His role involves enabling and equipping others of when and how best to use social media, requiring judgement of risk versus opportunity. As before, Gordon uses the term 'kool' and 'kool aid' in particular to illustrate fads. He stresses the importance of moving past simply engaging in what is the latest fad (which Kool Aid metaphorizes) to achieve strategic outcomes for the organisation. While age is not mentioned directly in this extract below, earlier accounts drawn from Gordon's second interview illustrate how age identities are very much implied and younger colleagues are undermined. His subject position of strategist versus mere enthusiast for the technology frames him as professionally superior.

In the following account he describes how colleagues have become more aware of why social media oversight needs 'management' or intervention at 'management level'.

"People are a bit more realistic about the expectations at a management level they are wise to the limits of it and the problems it (social media activity and engagement) can bring as well as the advantages. The Kool aid has worn off and a lot of other people has skilled up. … it's about what is a good use of your time. What are the outcomes you are looking for? What is a good outcome for you and how do you want to get there?" (Gordon)

Through the use of rhetorical questions Gordon frames himself as a considered employee who (similar to Nigel earlier) actively questions the objectives and how to use digital tools in order to achieve those objectives rather than remain fascinated with their novelty

The construct of generation and generational differences are frequently utilised - and weaponised - to demonstrate the value of being a 'digital elder'. Robin, Nigel, Laura, Gordon and Sean outline what they perceived as key differences in online behaviour between the 'younger generation' and 'elders' such as themselves from lack of self-regulation in device usage:

"They are constantly eyes down. At least I take a break and realise there is world outside the screen" (Sean)

"I think it's about choosing your channels …what I do find a little bit unnerving looking around at the younger generation is that they are constantly with something in their hand looking at it they don't talk to each other anymore they do it through this" (Nigel)

"they are all just tools (do to other things with) not just digital or technology for it's own sake' (Margaret)

In the following extract, Nigel suggests younger people, (again homogenising all younger people) are being 'lured into' fads and fashions without sufficient understanding about the quality, editorial content or control of information being posted online.

"I wonder if younger people's assessment of it (a topic online) is simply by volume. Take veganism. If you see the same piece of information again and again and again you will really believe it" (Nigel)

Nigel discusses the recent popularity of veganism, noting it's assumed health benefits and younger people's fascination with it. He compares it to compulsive sharing of personal content often described as 'digital narcissism' or – in generational terms - 'Generation Me' (Twenge, 2006)

"if you are so busy updating your every move on Instagram and taking selfies and what have you and it only works if you use digital to get to people … it's just picking up what's real and what's not, being sensible and being an adult about it, not so Generation Me Me Me." (Laura)

"my younger colleagues basically live life online and it's unsettling and in an case it's not the whole story "(Sean)

"It's (popular social media and technology) just full of people asking how can I be like x or make 100 million dollars by the time I'm 30 and all of that kind of shit. Its full of people in their early 20s thinking how can I take over the universe and how can I be a superstar? (Meg)

These excerpts echo many of the concerns expressed in the literature surrounding younger people and online narcissistic and compulsive behaviour (Twenge, 2013). Laura directly offers the label 'generation me' exaggerated through repetition to drive home the point that younger people are self-obsessed and incapable of discerning good and bad; Meg affords younger people as mercenary in their pursuit of online notoriety. Use of the phrase 'being adult' about online choices and

behaviours is employed as a discursive device that serves to emphasise maturity and separate 'older' people (i.e. participants) from younger people derided for their assumed and stereotyped relationships with online technology.

9.5.2.   Gatekeepers, Curators, Mediators and Experts

Through my analysis I suggest that participants adopt different means of 'eldering' in a bid to construct themselves as members of a Digital Elder ingroup. To be digitally 'eldered' is to have, and importantly to be perceived as having, judgement, discernment, experience, expertise and fundamentally to be trusted to support making good business decisions.

Jill's response to the same question at a separate interview:

> *Interviewer: What do you think of changing technology and the world right now?*

> *Jill: "I think we have a lot to do within this profession and a lot to offer as things are just getting more complicated and scarier for them" (Jill)*

While participants frequently offer their views of technological change running in parallel to broader social changes, participants emphasise they are conveniently located i.e. have the conditions of possibility (Foucault, 1972) to be part of the solution to online challenges, risk and business needs. While participants do discuss their fears, they also frame a digitally deterministic society as opportunity. For example, Sean describes those who work in technology as having an opportunity in being uniquely placed – as we also saw in phase 1 - in having a 'vantage point' – to be solve broader social problems.

> *"We have a huge opportunity here we need to be part of the solution (to world problems). We are intelligent and open-minded people and I work with good people. With great people. And I for one want to be part of the solution.' (Sean)*

Through the identification of regulator or 'gatekeeper', Nigel reflects on various roles involving digital content management in his sector. This foregrounds his

history and experience as a digital professional from the early days of the 'Wild West' offered by Margaret earlier in the chapter suggests 'digital eldering' is not new:

"We are actually the original gatekeepers" (Nigel)

Gordon constructs himself as playing a key role in his organisation and positions himself as part of the solution for the unregulated nature of online content. He also offers himself as a regulator and again explicitly uses the term 'a gatekeeper'. He playfully describes his role as:

"I think I read yesterday that [mentions news company] is getting more articles written by algorithms and stuff like that. I was a bit more worried about being replaced by an algorithm but I'm less worried about that now. I think in terms of my job my job is to be a gatekeeper. But even more so. I don't think there has been a radical shift in the skills that people are bringing and the intuition for problems or where things could lead them (control of social media) . I've got about three slides on a PowerPoint which say 'don't feed the troll'. My job is to stop stupid people doing stupid things" (Gordon)

By highlighting that his role is to gatekeep others from misuse of the technology, such as engaging in exchanges with 'trolls', Gordon also constructs himself in terms of professional value, and qualifies this by stating he is less at risk from replacement by artificial intelligence (which happened to Nigel in the research journey). By foregrounding the guidance and training material he has provided containing the message 'don't feed the troll' in order to stop 'stupid people doing stupid things' he indicates a disdain for others using social media who are less skilled in discerning online content than he is.

There is an acknowledgement from participants of how technology has enabled and exaggerated various human traits in an online environment and given 'bad' behaviours a platform.

" as the years pass I realise more and more that editorial side of things - what we run with and what we don't is not going to be replaced by a chat bot. Or an algorithm. Or someone that is just a junior in a departmental level making the calls themselves - there has got to be a strategic view. Although you have all these new tools <u>that can do little things it still needs someone wise pulling together"</u> (Gordon)

Gordon constructs himself as a curator or aggregator of aspects of what different parts of the technology can do. This is exemplified by the phrase 'pulling together'. He suggests that it is he, not younger colleagues or the technology itself that can provide value and make better decisions or 'the calls' as he describes but someone with wisdom, implying they are older like him and 'not a junior'. Here too there are echoes of immunity to professional obsolescence or being replaced by algorithms and artificial intelligence by virtue of maturity, judgement, and trust which he implies only reside in humans.

Trust is also realised through being perceived as expert in one's field, but expertise is paradoxical for this group in several ways. Too much expertise in particular systems and practices can be viewed as too niche and quickly outdated or even unnecessary if 'younger' people can be hired to successfully complete certain tasks:

> *"I learned python (a computer programming language) years ago and it still gets used it's my go-to language, but I think do I need to learn the other stuff now? And how long will that last if I do? Or is it better to just get kids in to do Swift (computing language used by Apple) if we need it?" (Sean)*

Conversely, too little of a particular skill can be inadequate for the work required. While adopting a strong subject matter expert identity can be perceived positively, the negative aspects of such an identity are also bound in ideas about unwillingness to be a manager or leave one's skillset behind. In a discussion about being proud to be an expert practitioner and understanding client needs. Robin is almost defensive in his 'refusal' to change:

> *"I refuse to lose my integrity and change who I am …and I have a very specific skillset and every client knows what they want but every client I've given that to they have it. So, I won't compromise we are experts in our field". (Robin)*

Years of experience are used to suggests that through experience you can simply repeat processes and apply basic approaches which younger people have to learn (and fail at). He frames this repetition in terms of 'exploiting' wisdom and/or

experience but does suggest simply taking this approach may not be fool proof, that it is open error of judgment, and one should keep learning:

> *"Secondly let's try to exploit the wisdom – or let's call it experience – of age that says no matter what it is you are selling no matter what it is you are doing these basic approaches should still hold. Now I might be wrong and if they don't hold then I have made a big error haven't I but for now I will try to acquire new knowledge while holding on the wisdom that I still have" (David)*

Within this section participants have offered different versions of being a digital elder within their identity work, adopting different subject positions in the process in order to achieve and sustain professional power, value and credibility in their field.

9.6.   Concluding Points

This chapter analysed 15 participant interviews drawn from a second round of data analysis to answer the second research question: To what extent and in what ways are such discourses offered in the identity accounts of 'older' digital professionals?

Three discourses were unpacked: digital determinism, digital threats and the digital elder offered within participant identity accounts. Discourses demonstrated tensions and conflict between certain preferred and dis-preferred identifications such as planning versus spontaneity and expert versus generalist. However, participants often used age-related identity and discourse markers in this research phase suggesting the ways they draw on discourses available to them as a form of social practice (Fairclough and Wodak, 1997). This implies participants may utilise current practices and norms to secure personal advantage (Foucault, 1972). From this we see how more subtle 'discourses of difference' (Wodak, 2008) can be utilized in order to have power effects locally, institutionally and socially via discourse hierarchies. The next chapter of Summary of findings offers a comparison of discourses from the first and second phases of analysis in a bid to answer the third research question: What are the implications for older digital sector workers of how such discourses evolve over time?

Chapter 10: Comparison of data analysis across both phases

10.1.   Introduction

In this chapter, I summarise the results across both phases of research. I provide observations concerning changes and similarities across both phases of data analysis, drawn from the within-phase and cross-sectional analysis of media and interview data as discussed in Chapter 5: Methodology. This involves a description of the discourses followed by a discussion of how they compare, contrast and relate to each other (Bazeley, 2013). Along the way I offer commentary on the broader contributing factors that may influence the changes or consistency of discourse (macro and micro events) in line with Fairclough's model discussed in Chapter 4: Theoretical Framework. Discourses within both phases offer differences and consistencies in equal measure across the different data sets. I have summarised a visual diagram of the different discourses drawn from my analysis offered below, in line with Table 15: Dimensions of comparisons in qualitative longitudinal research and related aims outlined in Chapter 5: Methodology.

Table 19: Discourse Typology.

Table adapted from Dimensions of comparison in qualitative longitudinal research and related aims (Vogl et al., 2017: p 181)

	Within-Phase and cross-sectional analysis across both data types	
Cross sectional analysis of changes between Phases 1 and 2	**Media Phase 1** - Digital Disruption - Digital Division - Age Problematisation	**Interviews Phase 1** - Digital Disruption - Digital Division - Age Problematisation
	Media Phase 2 - Digital Determinism - Digital Dangers - Digital Elder	**Interviews Phase 2** - Digital Determinism - Digital Division - Digital Elder

10.2.   Similarity across both research phases

There are several similarities across both sets and phases of data: digital revolution as the explanation for discourse and sociocultural practice; age as a master signifier of digital difference; and generation as a means of conceptualising age and belonging. I will now discuss each of these in turn.

10.2.1.   Digital revolution as the explanation for discourse and sociocultural practice

Age-related differences are sustained, emphasised, and reinforced in polarised ways reified by the macro discourse of social and economic digital transformation. Across both phases of research subjects and objects are located within a broader

digitally revolutionary context, whether disruptive and transformative:

"Technology has transformed so much of our work and life…it's more profound than digital magic" (The Independent, 26 March, 2016 – Phase 1 media analysis)

To a more deterministic in Phase 2 Interviews

"Software will eat the world. And software has eaten my job" (Nigel)

Media texts analysed in Chapter 6 offer a discourse punctuated by the need and urgency for digital skill in order to sustain future economic productivity and market competition for organisations to flourish. In Chapter 6 and 7, the discourse of digital disruption is expressed in relation to different social dynamics and objects, and through media emphasis of time, space and speed impacting communications, work and labour practices, civic and social life. Changes are connected to 'our yearning for convenience' (The Independent, 26 March 2016) through 'the march of technology …that will 'revolutionise the way we interact with older people" (The Independent, 30 April 2016).

Consistent across both phases are the ways the digitally disrupted society is leveraged by all subjects across both phases of text and talk, within media and interviews, as an ongoing, accelerating event where society and technology are now viewed as mutually constitutive and a market opportunity. This serves to reify economic, cultural, civic and social changes drawn on digital lines as real, non-negotiable and necessary - even though in Phase 1 participants vocalise the institutional and individual digital resistance they deal with, or the 'battle' (Helen), the 'fight' (Tracey), the 'sleepwalking' (Jill) and the objectification of (often older digitally resistant) colleagues labelled 'the 'baggage' (Alfie). Discourse is punctuated with digital inevitability and relentless digital development leaving no room for older people who, media voices suggest, are ill-equipped to deal with such changes.

Voices across both interviews and texts are dismissive in an 'adapt or die' ideology. This risk landscape is integrated into the broader discourse of digital

revolution/disruption and leveraged, even conflated through the identity work of participants in the second phase of interviews. Participants leverage the identity of digital insider/worker and professional to offer a newer status encompassing social good:

> *"We have a huge opportunity to be part of the solution (to world problems)..we are intelligent and open minded people" (Sean – Phase 2)*

Their identity through the social conditions elevates them to a new status of social and economic relevance and value, distancing themselves even further from typically understood ideas of older workers which they themselves have offered. This offers a new contradiction of the older worker: suggesting that older workers offer more value than younger workers within a digital landscape by virtue of being older and its subsequent associations with experience, wisdom, and trust. However, paradoxically, participant accounts also disqualify other older workers from suitability for certain roles and tasks resulting from assumptions about their skill base linked to age and generational membership. In parallel, accounts of ageism in the technology sector are more prominent in the second phase of media articles which participant accounts confirm through their interview accounts.

The digital expertise of participants is further elevated in the second round of interviews by accounts that emphasise them as institutionally positioned to navigate a new risk landscape. I argue the identity of the 'digital elder' is now offered within both media texts and negotiated through participant talk linking to a newly foregrounded ideology of age synomised with wisdom which juxtaposes younger people as digitally skilled but socially immature, and that digital skill is no longer enough to be socially successful in an online world. This is a primary discourse despite a new variation of age categories and identity offered across the texts and talk analysed in the second phase where embodiment of ageing through 'greying' for example is more prevalent. There are further accounts of how technology can support the ageing process (even if this serves to reinforce stereotypes), discussion of the meaning of 'middle age' and parallels drawn between age and technological 'health'.

The construction of the desirable younger digital subject is reversed in Phase 2: Here younger people are instead depicted as lacking the necessary skills to navigate a digitally treacherous world, evidenced in Chapter 8.

> *"By living our lives online, we are making ourselves more vulnerable to fraud, especially younger people who are quicker to adapt to new technologies" (The Independent, 25 March 2017 – Phase 2 Media Texts)*

> *"Curb children's use of technology for their own good" (The Times, 5 December 2017 – Phase 2 Media Texts)*

Overall, the second phase presents a shift of value and meaning attached to digital competency and a shift of who is best placed to provide it. However, what is consistent are the ways in which age is fundamentally associated with such value, it is never considered neutral or unconnected to digital competency, skill and engagement. As such, age is an agreed and socially understood signifier of digital difference by both media voices and participants across both phases.

10.2.2. Age as master signifier of digital difference

Throughout both research phases age is presented as a young or old dualism, where such terms are mutually exclusive and homogenised. Older and younger people are regulated as having distinct characteristics and behaviours: older is understood to mean digitally incompetent (exceptions are presented in the media as outlined in Chapter 6 – the 'techboomers' and 'silver surfers'), younger to mean digitally skilled:

> *"This award is for the older person who has embraced the digital world" (The Mirror, August 2015 - Phase One Media Texts)*

> *"the swipe generation seamlessly navigates between the digital and the real world" (The Guardian, 23 July 2015 – Phase 1 Media Texts)*

> *"Older women are the new vlogging stars" (The Times, 8 June 2016 – Phase Two media texts)*

Within the first phase of analysis, being older and ageing is denigrated and problematised through a broader technological discourse underpinned by age-related digital identities outlined in Chapter 2 and 3. This frequently takes place through the digital native-immigrant constructs, where being born and/or growing up digital (a vital requirement for the future labour market) is essentialised as young. Such discourse is lexicalised through fluency, connected to language learning, suggesting an interdiscursivity of technology and ageing. In Phase 1, youth is markedly more consistently positivised and this is discursively achieved within the media texts through depictions of naturalised digital competency and engagement of subjects (e.g. media authors, audiences, characters). Conversely, older subjects are foregrounded as digitally struggling and incompetent not just by the media but by participants too:

> *"tech-savvy millennials" (The Guardian, 13 August 2015 – Phase 1 Media Texts)*
> *"literal grandfathers" (Alfie – Phase 1 Interviews)*
> *"tech start-ups are a young person's game" (The Observer, 2 August 2015 – Phase 1 Media texts*

Across both phases and sets of data, age is also offered as a master signifier of digital competence or incompetence. However, this varies depending on context, discussed later in this chapter. Younger or older subjects are derogated or venerated depending on how 'digital competency' and desirability is defined. Media voices across both phases use linguistic devices of dramatization, sensationalism, exaggeration, and escalation to persuade readers of the perils of poor digital engagement, lack of skill and ignoring more institutional response to increasingly digitalised society suggesting a digital naivety often attached to age. Paradoxically however media voices warn the reader against ageist attitudes, foregrounding companies who fail to accommodate older and lesser digitised citizens such as "Ageist Eurostar" (The Guardian, January 2016). This opens a space for resistance. Similarly, research participants recognise and offer a discourse reinforcing a digitally dominant society which they localise at institutional level through discussion of recent changes.

However, age is the constant thread linking digital desirability and preferred

identity, frequently realised through generation as construct which I will now discuss.

10.2.3. Generation as means of conceptualising age and belonging

Generational difference is a constant, naturalised, socially established and accepted phenomena and basis for digital difference across both phases of media texts and participant talk. This results in a further reification of age-related difference and therefore grounds for intervention and extra resources within the workplace. This socially constructed 'reality' of generational difference is exacerbated by accounts of increasingly digitised labour practices interwoven with concerns of an ageing workforce.

As discussed in Chapter 3: Age in a Digital World, and expanded further in Chapter 11: Conclusion, the media offers the ways age is regulated by generation that reinforces the social conditions, or the 'episteme' (Foucault, 1972) to substantiate taken-for-granted age differences drawn on generational lines. Both media text and interviews offer discourses underpinned by generationally led technological affiliation where generational categories are recognised, offered and adopted. Participants construct themselves as category members of some (but not all) of the generational-technology labels discussed by the media but significantly participants also matter-of-factly offer labels such as 'silver surfers' in identity accounts when discussing others such as relatives, colleagues and associates. Such labels are present within media texts to indicate outliers from established age categories, descriptions drawn from assumed and naturalised levels of digital skill or lack, such as the novelty of digitally proficient older people labelled as 'silver surfers' foregrounded by the media as notable and newsworthy.

In the first phase media texts are punctuated with generational terms and labels often combined with technology lexicon: "tech-savvy millennials" "millennial mindset" "switched-on generation", "snapchat generation", "swipe generation" "mobile natives" and 'digital native' is a construct used throughout both sets of media texts.

Research participants negotiate their identities of being 'older workers' and strive to achieve a valued professional identity using generation as discursive device which provides a sense of collective membership, where they shared group characteristics, affiliations and technological exposure 'growing up' with certain computing technologies.

> *"we had a spectrum in the early 80s" (Meg- Phase 2)*
> *"I suppose I could consider myself to be a digital native" (Meg Phase 1)*
> *"you know there is a whole generation of us" (Alfie – Phase 1)*

Participants engage in positive identity work often rooted in generational membership – and claim membership of 'digital nativism' even if they do not meet the age criteria. By foregrounding capabilities, connections and cohesion with a wider community of digital professionals sharing an unregulated professional journey within the 'wild west' (Margaret, Phase 2) suggests a cohesion and affinity within this professional group:

> *"people that work in digital media…they have common traits, a kind of intellectual curiosity" (Meg: Phase 1)*

> *"It's a natural instinct thing, a natural instinct to want to be involved" (Tracey: Phase 1)*

Consistently across both phases participants reject self-stereotyping of older worker status through identity work punctuated by positive characteristics such as curiosity, creativity, and energy with subject positions such as digital insider in phase one, enrolling constructs of geek and nerd in Phase 2, then positioning themselves within a more **unifying** discourse of Digital Elder in Phase 2. I will now turn to the key difference between both phases of discourse across data sets.

10.3.   Changes across both research phases

The key changes across both phases are the means by which ideas of age and technology are constructed, offered, and realised, from disruption to determinism; a shift in the object of digital ignorance; and next. I will now discuss each of these in turn.

10.3.1. Digital Disruption to Determinism

There is a discursive shift within media texts between first and second phases of depicting digital future as urgent, anticipated, and necessary to acceptance that much of our lives are now lived online. Digital life is no longer desirable or questionable but mandatory. There is also a divergence from calls to attend to increasing digitisation itself to a discourse punctuated with more nuanced responses to how we deal with many of the social challenges exacerbated a new digital risk landscape, positioned in Phase 2 as inevitable and present. This also suggests a broader social and political shift, where an emphasis on new dangers and risks offer a negatively framed world. This calls into question the social and political events of this phase, important to consider as influencing factors within which such discourses are situated: the UK vote to leave the European Union in June 2016; the election of Don ald Trump a US President in November 2016 and other UK events such as the attack on London Bridge in June 2017. Participants voice strong concern for the political and economic climate, a strength of feeling not present within the first phase, also suggesting a potential increase of interviewee-interviewer trust.

Such ideas reinforce a broader digitised social and economic landscape. The depiction of disruption in Phase 1 suggests there is room for potential to question and challenge the environment. However, as such ideas of disruption become more normalised and accepted within individual, institutional and societal levels in Phase 2, the professional impact on participants are offered in the discourse "Computers are organising it (my job)" (Nigel in Phase 2 interviews).

What differs between digital disruption and digital determinism in phases 1 and 2 is the shift in focus from technological-non-technological to the type of technology individuals of different age groups are affiliated with, indicators of their skills, generational belonging, exposure (i.e. growing up digital). This begins to hint at the idea that 'being digital' is no longer enough: media articles foreground negative aspects of digital life discussed in Chapter 8 such as fraud, compulsive use of mobile devices. Being digitally skilled shifts to being digitally defined, and is morally-loaded

through constructions of danger. What is particularly strong and variable from the first phase is the beginnings of an implicit moral critique of the digital landscape where online human relationships are sub-optima compared to face to face, where digital skills are less valued than 'human' skills such as maturity, experience and knowing who to trust. As outlined in the analysis of Chapter 8, a sense of nostalgia and romanticism for pre-digital practices is offered. This suggests some positivisation of older people as holding optimal values and we see a reversal of young people now infantilised in the digital domain due to assumed lack of broader human experience. However, this is not universal across all of the media sources: older people continue to be ridiculed and in this phase of analysis this is achieved through interdiscursive ways where technical terminology is used to describe ageing and old age. Yet we begin to see some suggestion of an evolution of how 'digital competence' is to be understood: diverging from purely technical skill in utilising digital platforms and devices but sharpened focus on how such online transactions and interactions are achieved. This provides the groundwork for older identities to become more positivised through the 'digital elder' subject position which participants offer through various subject positions discussed in more detail in Chapter 9 such as Gatekeepers, Curators, Mediators and Experts.

10.4.2.   From old to young as the object of digital ignorance

More notable in this phase of research are a shift in the object of participant struggle: from digitally ignorant and often more senior, older colleagues in Phase 1 Chapter 7:

> " they struggle to understand it (technology)" (Laura)
> "I want to shake the lot of them" (digitally ignorant colleagues)" (Sean)

This shift in Phase 2 can be seen across both media texts and interview accounts. Such as shift moves the focus from (older people as digitally struggling and/or ignorant) to younger people as the object of digital ignorance:

> "last year I got a job at Buzzfeed…to say it was a shock was an

understatement" (The Evening Standard – Phase 1)

"tech-start ups are a young person's game" (The Observer – Phase 1)
"If we are not going to be mown down we must acquire new skills" (The Independent – Phase 1)

"the younger age ranges are more digital" (Nigel – Phase 1)

"I have rarely interviewed people younger than me"(Robin – Phase 1)

By referring to a broader risk landscape and highlighting digital risks depicted within the media accounts around loneliness, addictive behaviour, scams and fraud the media constructs younger people as particularly susceptible to such risks and older people as responsible for understanding and mitigating against the risks

"It's the web savvy digital natives who are increasingly falling for newer more sophisticated scams" (The Independent – phase 2)

Participants utilise this discourse to elevate themselves via their professional identity as of particular value to alleviate such risks via a 'digital elder' discourse as a result of insider knowledge and experience of both life and digital world. This enables them to position themselves outside of older worker norms and stereotypes, thus enabling them to develop a niche outside of the older and ageing worker discourse (evidenced in Chapter 9) to sustain professional credibility and respect. In phase 1, participants enrolled subject positions and social constructs such as 'geek and nerd' or 'John Peel' in Chapter 7 to signal a professional difference to typical understandings of older workers, aligning themselves to age-neutral, ageless symbols and representations which they deem as successful ageing. Furthermore participants position and offer themselves as exceptionally equipped and strategically positioned to deal with social challenges within a wider threat landscape. The implication is of potential social heroes, emphasised through socially conscious and concerned identities which emphasise occasions where they lacked influence, but social forces and conditions resulted in their expertise being necessary and valued. They illustrate how they are equipped and capable of helping institutions,

"We have a huge opportunity to be part of the solution (to world problems)..we are intelligent and open minded people" (Sean – Phase 2)

and broader society navigate the risky landscape which they also emphasis is present and pressing.

10.4.3. Deflection to acceptance of older worker challenges

Here participant work clearly differs between phase 1 and 2: Most of their effort in Phase 1 is focused on convincing the interviewer that older worker threats do not apply to them:

> *"I'm not at all worried about ageing or my career" (Robin)*
> *"Should I be worried?" (Craig)*

Yet their identity performance is contradictory in terms older worker identity work: despite attempts to diminish and neutralise the significance of age as a valid identity dimension in Phase 1 evidenced in Chapter 7, participants recognise the challenges facing them as they age within this sector now more visible in Phase 2. This is offered through discussions of apathy, maintaining the appearance of being interested in new developments, concern about energy levels:

> *"I do think you get more tired and cynical as you get older" (Meg – Phase 2)*

Furthermore, paradoxically while participants argue they would be reticent about hiring people 'over the age of 40' or concerned about other older technology worker's suitability for certain types of role they themselves offer and draw on generational membership and affiliations and connections to computing technologies. Accounts such as "growing up with a Spectrum" evidences their age with a sense of pride. This suggests and offers an identity somewhat removed from and immune to the challenges that they themselves impose on others: they afford themselves the agency, personal attributes, professional qualities, and experience to fully realise the digital (and economic) potential for organisations industry and society. By (unsurprisingly) adopting subject positions of digital experts, participants side-step any age-related issues associated with older worker status. The positive or negative associations with older worker status fluctuates from denial, rejection, resistance, acceptance and deflection depending on context and

whether being older has positive or negative connotations attached and is therefore viewed as enabler or social constraint.

In this section I have presented three important ways in which data differs across phases, from a digitally disruptive to a digitally deterministic landscape, where old is now venerated at the expense of young, and a shift in participants' acceptance of their own older worker status.

10.5.   Concluding Points

In this chapter I have offered the key discursive similarities and differences between data sets and phases in this chapter and discussed the reciprocity of such discourses between data sets and phases (and therefore local and broader contexts). I have offered the ways both young and old are positivised and problematised in connection with digital life at different points and indicated how this can be manipulated for the interests of subjects. I have outlined the ways in which young, old and generational category members are associated with types of social advantage and desirability and how this can evolve across time, depending on broader social, political and economic contexts. This in turn suggests how value is context-conditional within a broader neo-liberal ideology and what is considered desirable at any given time can shift. Our understanding of such dynamics is enhanced by the resource of two phases of research data which has enabled an exploration of the data 'horizontally' within a given point in time, highlighting the interdiscursivity and transference of ideas and language from one social realm to another but also 'vertically' or chronologically, exploring how such discourses evolve (Thomson and Holland, 2003).

In the next chapter, Chapter 11: Discussion I will offer how such findings contribute to extant scholarship discussed in Chapter 2 (Approaching Age) and 3 (Age in a Digital World) and the implications of this study for research, policy and practice.

Chapter 11: Discussion and Conclusion

11.1. Introduction

In this final chapter I discuss my research findings and contribution to scholarship, policy and practice. I begin by briefly recapitulating my justification for this study. I then discuss in more detail my contribution to the literature presented in Chapters 2 and 3 and offer the specific theoretical and methodological contributions of this research. I discuss the strengths and limitations of my study, offering future avenues for research explorations and provide final critical reflections on my experience of this thesis. I conclude this chapter by suggesting future directions for policy and practice to develop fresh conversations and lines of enquiry initiated by this research.

As outlined in Chapter 1, the introductory chapter to this thesis, the main justification for this study was to examine in closer detail the potency of an existing and evolving discourse which synthesises age and technology and its implications for an emerging older professional group. By outlining how digital exclusion and age are discursively connected, I contribute to existing studies exploring the nexus between age, technology and discourse (van Dijk, 2020). I also illuminate the significance of identity in how age and technology are discursively linked, particularly in work contexts (Brown, 2015). I note and offer how research subjects are located within an under-explored, contemporary industrial sector and more broadly situated within an increasingly digitised society. Adopting a critical approach enabled me to further interrogate the tangible real-world outcomes for this ageing professional group such as the potential for their own subordination and the ways they may subordinate others. This study makes an important contribution to current debates linking age and technology in the following ways. I highlight the ways 'digital divides' can be reconceptualised in terms of age rather than economic capability (van Dijk, 2020). This study also suggests a broader repositioning of digital life from disruptive to inevitable, outlining how this can be discursively achieved (Cascio and Montealegre, 2016). I also highlight the risks attached to a persistent age-technology concomitant discourse which may

ultimately influence future debates concerning older worker capability and professional desirability (Ainsworth, 2010; Riach, 2007). I invite reflection on the power attached to certain discourses that attribute certain types of technological skill connected to age (McMullin et al., 2007) and importantly I draw attention to how affordances can change as a result of social context. This research also shows the ways such ideas can be reified by various actors – in this case digital workers themselves - as a result of how digital life, and how it is constituted - is socially constructed and discursively realised. While debates surrounding age, technology and discourse have offered valuable contributions to our understanding of these topics in different formations, the literature to date has not explored how our understanding of the shifting nature of how digital life is constructed through discourse can result in where we view power to reside in connection to age.

Within this study I highlight an enduring, normalised and commoditized discourse which foregrounds age differences, and ultimately age division and discrimination, through the discursive synthesis of technology and age. I do this by firstly examining the ways chronological age and digital technology are discursively linked in online UK news media (research question 1) which responds to Fairclough's Process of Discourse Production within text. I explore the extent to which such discourses are present with the identity accounts of older digital professionals (research question 2) and becomes discursive practice (Fairclough's Process of Interpretation). Finally, by considering the implications for how such discourses sustain and evolve for older digital sector professionals (research question 3), I expose the social and economic risks posed by the continuing problematisation of ageing and of age (Fairclough's Explanation and Sociocultural practice). Fundamentally I offer an insight into how the dimensions of Fairclough's model interrelate through the reproduction of the discourse in a localised setting **and interview as discursive site,** and the impact on social relations within a work context. Within this study I open a new critical line of enquiry of the significance of age-technology discourse, where ageism is currently normalised, pervasive, and casually enacted through discourse (Phelan, 2018).

11.2.   Research Contribution: age and ageing at work

I will now discuss in more detail how this study evolves and expands research of age and ageing in work contexts. This is in relation to digital technology, age discourse and age within the digital technology sector as outlined in Chapter 3 and 4.

11.2.1. Age and ageing through a digital lens

In Chapter 3 I outlined how age, particularly age differences can be sustained and reified through various forms of discourse (Coupland, 2007; Coupland and Coupland, 1993) consisting of homogenised ideas of age groups and stereotypical depictions (Lamont et al., 2021; Lamont et.al., 2015; Fineman, 2011). This research contributes to more sociological understandings of age (Phillipson, 2013) in the way it interrogates how age is socially constructed and the influencing power of social processes on age, in this context the media specifically (Bailey, 2010) and responds to the increasing dissatisfaction with the chronological conceptualisation of age in occupational psychology (Schalk et al., 2010). I explore the more nuanced identity dynamics at play in our understanding of age beyond traditional lifespan/lifecourse and chronological frameworks (Bytheway, 2005) and biological and cultural understandings of ageing as decline (Tretheway, 2001; Gullette, 1997). Within this thesis I develop research that approaches age as social construction (Gergen and Gergen, 2000; Phelan, 2018) to expose the ways technology is discursively enrolled to problematise and or positivise young or old (Coupland, 2007; Butler, 1975) and how this takes place within media discourses (Carrigan & Szmigin, 2000).

This study responds to calls for increased use of digital and online sources as potential routes for rich insights into how certain topics become socially constructed (Whiting and Pritchard, 2020; Hine, 2008). Using media texts to explore of pre-existing discourses can yield important insights into contemporary contexts where the online world is now part of everyday interactions (Evans and Robertson, 2020; Leaver, 2020). Furthermore, via a longitudinal study, this research exposes the contextual and situated nature of such discourse at different historical junctures and cultural contexts (Gullette, 2004). By exploring how such age-

technology discourses are present across different sites over time (in this case 'sites' consist of media and interviews) I contribute to discursive study and longitudinal research in three significant ways. Firstly, I suggest ways discourses can continue to evolve and align across two discursive sites over time, that is, the ways in which they are present in both sites simultaneously rather than in one minus the other. Secondly, this study builds on longitudinal discursive methodological approaches more broadly that may have confined an exploration of change over time to one discursive site only, such as the organisational setting (Calman et al., 2013; Pettigrew, 1990). Thirdly, I offer a contemporary lens enrolling digital technology as the topic under scrutiny within a longitudinal design: previous studies were often confined to topics more closely associated with changes over time such as family life, relationships and of course, age (Vogl et al., 2018).

Approaching age through a critical lens illuminates the interests of various actors, the associated power dynamics and the significance of identity in achieving and resisting social norms (Zotzmann and O'Regan, 2016). This research highlights the contextual nature of discourse and how it is used to author (such as within media texts) and negotiate (such as within the interview setting) preferred identities (Brown and Coupland, 2015) and achieve power relations (Fairclough, 2015). This is particularly relevant to contemporary understandings of age where digital life is (almost) ubiquitous and integral to social processes, exchanges and even our identity (Pemble, 2018).

As outlined in Chapter 3, age has been enrolled as a marker of digital skill, competence and therefore market value in the valuation of older and younger people through stereotypes (Ivan and Cutler, 2020). While my study exposes how both can happen discursively, the longitudinal nature of the research illuminates discursive shifts depending on voices which are given precedence and how power is negotiated. For example, discourses between Phase One and Two move from a more disruptive framing of digital life to one that is digitally deterministic. Participants acknowledge their location within such discourses and construct themselves as positively positioned to navigate the contextual challenges. They do this by constructing their professional power through life experience rather than

pure digital skill, thus devaluing their younger counterparts by amplifying their (assumed) lack of experience. In summary, age and the contextual challenges or opportunities presented by digital determinism are leveraged by this group to achieve or retain status and power. This develops existing and established research on how age discourses contribute to division and discrimination (Phelan, 2018) and provides a fresh insight into the interdiscursivity of discourses between one social realm (media) and another (interview accounts) (Bhatia, 2010). The threat landscape conveyed by a discourse of 'digital dangers' present in media texts discussed in Chapters 8 is leveraged by participants to highlight their unique and niche professional value in tackling such risks, outlined in Chapter 9. This has the potential to develop existing 'digital divide' debates (van Dijk, 2020) and illuminate the ways new stereotypes come into being, rooted in ideas of who is deemed more socially powerful and valuable in an increasingly digital world.

My research also develops previous explorations of how older age and ageing is problematised through a narrative of deficit and decline (Vines, 2015; Tretheway, 2001; Gullette, 1997) and studies are often confined to singular research explorations rather than longitudinal. I develop such research by examining the presence and nature of discourses at different time points which may reveal how they sustain and evolve (or not) over time, and, in consequence, highlight power negotiations at play.   In this study both media texts and participants offer ways in which discourses may exclude or deride certain ages on various grounds. In Chapter 6 and 7, age is problematised in relation to the digital native/digital immigrant dualism (Prensky, 2001). Participants offer such associations in their accounts, claiming their exposure to certain types of technology (or not) is a foundation for how their colleagues should be perceived and treated. This is evident in Chapter 9 where Donald is reluctant to hire a coder over 40, and in Chapter 7 where Bob queries the motivation of job applicants based on their age.   Participants suggest that generational belonging (and therefore age) is an acceptable means by which to determine how their audiences and consumers should be accommodated for in the products and services this occupational group provide. All of which offers a fresh and contemporary critical lens to previous understandings of age problematisation (Tretheway, 2001) and develops debates on generational

research specifically (Twenge, 2010; Woodward, Vongswasdi & More, 2015). I do this by locating such understandings within a fresh, underexplored occupational context.

This study contributes to research which to date has been focused on the visibility, marginalization, and fears of the older worker (Ainsworth and Hardy, 2009; 2008; 2007; Ainsworth, 2001; Riach, 2016; 2015; 2007; McCarthy et al., 2014). By exploring age discourses offered by participants over the age of 35 within this occupational group, I develop previous research that questions ideas of who or what can be considered 'older' or an older worker (Harris et al., 2018; McCarthy et al., 2014). Within my analysis, participants Laura and Meg, both aged 38 would not be considered 'older' by the UK Government who define the older worker as over 50 (UK Government, 2021). Yet they both offer accounts punctuated with concerns previously associated with workers over the age of 50 in connection to professional obsolescence (Pazy, 1990). Such fears are reinforced by self-identified, accepted generational conceptualisations and their connection to technological skill and capability as outlined in Chapter 7. By synthesizing understandings of identity dimensions and identity work (Steele, 1997; Zacher, et al., 2019) and age identities (Warren, 1998) and professional identity (Ibarra, 2003; 1999; Slay and Smith, 2011) I expand the contours of extant research that tends to focus on work-related identities within given occupational contexts. For example, the broader identity dimensions of geek and nerds in Chapter 7 (Mendick and Francis, 2010; Tocci, 2009) are cultural constructions freely offered by participants. I argue their attempt to suppress the significance of age in their identity work and amplify other identity dimensions attempts to achieve the desired identity (or 'successful ageing' as outlined by Calasanti, 2016) of 'agelessness' (Steele, 2020; Andrews, 1999). Similarly, exploring the role of non-work activities in identity work, such as hobbies, interests, family life, non-work group membership and shared characteristics also illustrate the ways identity work more broadly can achieve professional power. However, it does so in ways previously underexplored, such as the means through which age is diminished or amplified as an identity dimension or how it can become incompatible with other aspects of identity.

The unpacking of how alternative identities are enrolled in establishing professional power contributes to extant research of professional identity more broadly, particularly research tackling negotiating professional stigma (Slay and Smith, 2011) and explorations of identity within the IT sector (McMullin and Marshall, 2010; Jovic and McMullin, 2016; de Koning and Gelderblom, 2006).

This research also highlights the age-related dynamics facing an occupational group who are integral to, and required to negotiate, the broader tensions which connect age and technology in society, namely conceptualisations of digital divides. Digital division has been previously researched and understood in terms of digital access and exclusion (ONS, 2019; van Dijk, 2006) located within a historical context which focused on access/exclusion to computing technology (van Dijk, 2020). However new conceptualisations of digital division in contemporary settings, cite the nature of the technology itself and other structural constraints (such as the Covid-19 pandemic) as contemporary barriers to technological skill development (Friemel, 2016; Ramsetty and Adams, 2020). This suggests a knock-on effect to employment potential, productivity and therefore economic opportunity. Considering that explorations of older workers and technology have previously been understood through stereotypical binaries of technologically capable or resistant (Mariano, 2021), this study moves beyond such limited understandings due to interrogating the very professional roles which are enmeshed in technology itself (William, 2019). Through the analysis I highlight the potential for more nuanced understandings of current research dimensions exploring older workers' technological adoption or resistance. This evolves the debate beyond assumptions of 'older' subjects as naturally resistant (Nimrod, 2021; 2018; Klecun, 2008) or as somehow exceptional due to their engagement. By approaching age across two discursive realms (media and professional participants) I explain how age is constructed and established as an indicator of problems and exclusions in broader social and localised context beyond specific singular studies of digital division in education (Selwyn 2013) or work (Thomas et al., 2014; Ainsworth, 2001; Ainsworth and Hardy, 2007). Additionally, whether digital division is attributed to generational membership is a common theme within this research thesis and I will now discuss my contribution to generational scholarship.

11.2.2.   Older workers and age at work: new discursive horizons?

Work contexts have become fertile ground for discourses rooted in ideas of age-related challenges (Thomas et al., 2014) such as intra-generational differences (Iweins et al., 2013). As outlined, technology has frequently been constructed as challenging for older citizens and workers, and discourses suggesting digital struggle can imply this is faced by all older workers (Betts et al., 2019). My research highlights how identity can displace more traditional older worker constructions that often depict technological incompetency or disengagement (Altman, 2015; Cuddy and Fiske, 2002) compounded by wider struggle for training and development (Brown, 2015). Instead, my research contributes to calls for greater and more nuanced interrogation of how older worker identity is discursively configured (Ainsworth, 2001; Ainsworth and Hardy, 2007), suggesting that not all older workers can be homogenised or technologically categorised in certain ways due to age. Through my analysis of this distinct older occupational group I offer the ways participants position older identities within this sector. I contribute to research that challenges narrow victim/perpetuator constructions of older workers (Riach and Kelly, 2016) and how certain types of work are considered unsuitable or problematic for older and ageing workers emphasised through discourse (Ainsworth and Hardy, 2008).

Participants in this study construct themselves as enmeshed and embedded in technology through their professional identity (Ng and Feldman, 2012). For example, within Chapter 7 participants discuss some unique advantages that their personal interest in technology and their professional role affords them, offering the subject position of 'eye-witness' to or 'predictor' of technological trends. Non-work identifications such as hobbies, interests, upbringing and group membership are offered via symbols (Beech, et al., 2008) such as gaming, comics and love of robotics (offered by participants in Chapter 7). This suggests the transfer of self-concepts from non-work into work contexts for identity achievement (Ibarra 1999; Schein, 1978). This builds on research which discuss how identities across work and non-work domains can cross fertilise, coalesce, contradict or conflict (Riach, & Kelly, 2015). Such discursive tactics are used as identity resources to confirm and

legitimise their older worker status as fully meeting the professional criteria required (Zacher et al 2019) and deflect any concerns that being older worker should be a barrier to professional identity achievement. Through their identity work participants attempt to neutralise the 'problematisation' of the older worker through downplaying age as a dominant identity factor. I also illuminate how such cross-fertilisation is more accessible to these workers given that the media presents younger people's technological engagement as non-productive and distracting.

Furthermore, highlighting how such age-technology discourses find their way into professional identity of participants opens the conversation about the potential impact on current and future technological development itself. By affiliating with certain types of technology, they negotiate being an older digital worker through identifications which play to agelessness (Steele, 2020; Andrews, 1999) and youth in Chapter 7 through the talk of geeks and nerds (Tocci, 2009; McArthur, 2009). There are subtle suggestions of self-imposed time limits within the profession (Zhang, et al 2012) particularly if they do not advance into senior positions, which participants express concern over in Chapter 9 but carefully negotiate by positioning themselves as trusted experienced workers. This contributes to extant literature exploring how professional identities of older workers are discursively negotiated (Brown and Coupland, 2015; Slay and Smith, 2011) to avoid professional obsolescence (Pazy, 1990).

Exploring a fresh occupational domain such as older digital sector professionals through their talk illustrates how other dimensions of identity are constituted and negotiated in professional identity realisation (Spedale, 2018). My analysis outlines the ways in which participants use discourse to manage multiple identities (Phillips and Hardy, 1997) foreground and background certain identity dimensions to achieve preferred identities (Bauman, 2000) and in some cases reposition our ideas of who is or can be an older worker (McCarthy, et al., 2014). This research also demonstrates how identity accounts reveal how participants are complicit in stereotyping and othering older worker identities to achieve preferred identities (Brown and Toyoki, 2013; Brown, 2017; Brown and Coupland, 2015) which contributes to the victimisation and othering of fellow older and younger workers.

I illustrate the way technology is weaponised to achieve preferred identities in Chapter 7, where older colleagues, and/or management are derided as 'literal grandfathers', the 'old boys' therefore constructing them as digitally ignorant. Furthermore, instances of age discrimination (Ainsworth and Hardy, 2009) within this professional group based on age-related beliefs about digital skill are evident in Chapter 9, where Donald outlines how he would never hire a coder over the age of 40. This suggests the real-life exclusionary nature of generational identification (Rudolph et al., 2017; Rudolph and Zacher, 2017). Furthermore, the nature of such discourses within identity accounts often utilise exclusivity, insider knowledge and group membership (Gagnon, 2008) outlined in both Chapter 7 and 9 where participants state age suggests technological exposure and skill.

11.3.   Generationalisation

This thesis builds upon previous generational studies (Mannheim, 1952; Smola and Sutton, 2002; Rudolph et al., 2020) by offering a critically discursive interrogation of how generation-as-construct continues in contemporary media discourse. However, my research transcends the presence of generation in media texts by unpacking how generational discourse is recursive and replayed for the purposes of identity achievement by an older occupational group. This research therefore expands studies of how generation is discursively achieved particularly within work contexts (Ainsworth and Hardy, 2007; Foster, 2013; Benson and Brown, 2011) by outlining how technology is enrolled in identity work through discourse. This is achieved by participants in Chapter 7, through nostalgia for historic computing technologies such as Spectrum, or identification as being an early digital technology worker during a time of creative freedom, depicted as the 'Wild West' as described by Margaret in Chapter 9. This develops previous ideas of how technology may act as a 'touchstone' (McMullin, et al., 2007. p. 58) for generational bonds building on such research of IT workers.

My research highlights how 'generation' endures as a **unifying** discourse (White, 2013) through heavy use of generational labels in media texts (Bott, 2011; Robinson & Umphrey, 2006). However, I develop previous studies by illuminating how technology is further enrolled to reify and legitimise generation as construct through discourse and provide examples in Table 5 within Chapter 2. Generational-technology labels such as the Nintendo Generation (Green, Reid and Bigum, 2003) or the Google Generation (Nicholls et al., 2011) are not simply frequently offered in media texts but such generational-technological connections are also recognised and offered by participants. I contribute to extant work which challenges the confusion between ideas connected to age and ageing such as lifecycle, life-stage, period and cohort effects and importantly assumed generational culture wars exacerbated by the media (Bailey, 2010). Through a longitudinal lens I suggest how generation is constantly shifting and evolving (Meisner, 2020; Bott, 2011), for IT workers it is considered a 'moving target' (McMullin et al., 2007, p. 314) and a vivid indicator of technological affiliation and skill. A longitudinal approach also highlights the ways individuals use generational belonging to express nostalgia, affection and ultimately identity (Down and Reveley, 2004). My research sets out how generation is still a galvanising force in explorations of social belonging and membership (Edmunds and Turner, 2005) and through technology continues to be reified with each new digital development; for example 'mobile natives' as outlined in Chapter 6 are only possible because of the existence of a 'digital natives' discourse (Prensky, 2001).

This study also illuminates new social tensions which homogenise all members of certain age groups based on established ideas of generational difference. For example, younger people are often identified as digitally narcissistic (Twenge, 2013; Porter, 2018; Twenge and Campbell, 2018), entitled (Twenge, 2007), contributors to intra-generational difference in attitudes to work behaviour in relation to reward, development, work attitudes and work-life balance (Twenge, 2010; Twenge et al., 2010; Ng et.al., 2010). Such ideas are foregrounded and replayed in this study to achieve preferred identities and therefore power. For example, in Chapter 8 younger people are constructed as addicted to mobile phones within media texts, and in within participant accounts from the same research phase in

Chapter 9 Sean constructs them as equally digitally addicted and obsessed with what is new, hinting at neophilia (Riach and Kelly, 2015). This study thus expands on previous generational research which locates generation as construct within narratives of working life (Foster, 2013) by specifically highlighting how technology is also leveraged to solidify generational belonging and positivise generational membership (Rosales and Svensson, 2021).

In summary, this research evidences the endurance of generationalisation (White, 2013; Ainsworth and Hardy, 2007) and illuminates the potent market forces associated with the generational construct in ways that can be socially and occupationally limiting and divisive. I will now discuss the implications of my research for older workers and our understandings of age at work.

11.4. Locating age within our digital lives

This research outlines the ways our relationship with digital technology comes to be socially constructed. This can implicate specific types of technology, how we associate such technology with ourselves, and others and the value attributed to it in different ways. By offering how such associations and affordances with the digital world are constituted, understood, and defined over time illustrates how we too can be constructed as, and connected to, what is deemed useful, beneficial, harmful, or threatening at different time points. This research illustrates how the constructions of older digital sector worker can therefore change from obsolete to desirable (and potentially back again) expanding existing debates that present concerns connected to perceptions of older technology worker identity, capabilities, and ultimately economic desirability (McMullen and Marshall, 2010; Jovic and McMullin, 2016).

This study also contributes to debates concerning how technology can reify age as a marker of social difference as explored in Chapter 3 through topics such as gerontechnology (Harrington and Harrington, 2000), digital divide (van Dijk, 2000) and the discourse of growing up and being born digital (Prensky, 2001; Tapscott,

1998). This research outlines the ways a 'deficit paradigm' (Coupland et al., 1991, p. 8) of ageing can apply to different ages and/or other identities at different points and how such paradigms can shift. Findings from this study outline how 'youth' is reconstructed from digitally desirable to careless, highlighting ways in which age continues to be configured (Bischoff and Jarke, 2021, p. 197) but also suggests age itself can influence other constructs such as what constitutes technological and social value. I also suggest that the findings from this study show how the construction of digital life more broadly has the potential to contribute to fresh digital divides (van Dijk, 2020), enrolling generation in new ways but also responding to new generational categories, building on previous explorations of generational-technology affiliations (Green, Reid and Bigum, 2003). This develops previous debates concerning where digital desirability and value reside and invites us to consider the power attached to future generational labels in an increasingly digital world (Rauvola, Rudolph and Zacher, 2019).

The social construction of age expands on previous studies of digital divides beyond extant lines of educational enquiry and contexts (Helsper and Enyon, 2010; Selwyn, 2013; 2009) and of research which highlights beliefs about and challenges ideas about age-related technological difference (Bennett et.al., 2010; 2008; Helsper and Enyon, 2010; Bennett and Maton, 2010; Woodward, Vongswasdi & More, 2015; Bott, 2011; Corrin et.al, 2011). Such studies were previously rooted in ideas of wider economic and social challenges associated with limited technological exposure and access (Norris, 2001; Pearce and Rice, 2012). Instead, my research provides more nuanced insights into the subtle and emerging nature of new digital differences in our everyday lives attributed to generational memberships (Van Dijk, 2020) as outlined in Chapter 6 and 7. Furthermore the changing social construction of the digital between phases allowed me to resituate my findings back to the digital literature in three key ways: which exposes the limitations of considering digital life in terms of difference and division based on age, …I contribute to these debates in the following ways:

In terms of theoretical contribution of this thesis, I revitalise Fairclough's model through a fresh approach to interdiscursivity (Bhatia, 2010; Fairclough, 2003) and

show how contemporary discourses find their way into professional older worker identity accounts. By comparing online news discourses with interviews of an emerging professional group I expand upon previously limited, singular, methodological approaches to the study of age (Parry and Urwin, 2021). Using Fairclough's model responds to discussion of the limited theoretical variation in the study of age (Riach, 2011; Tretheway, 2001) and illuminates' sites of contemporary discursive power held within both media sources and a professional group but importantly suggests how such discourses are present across both. Furthermore, adopting a Foucauldian lens within my theoretical framework enabled me to view the specificity of contextual influences on the production of the interview discourse, such as how technology is positioned as central to future innovation in Phase 1, and the wider political dynamics at play in Phase 2. Such positioning suggests the social and political tensions that give rise to a discourse that constructs digital life as requiring careful navigation and management.

It exposes the discursive ways new age stereotypes linked to technology become affirmed and suggests the potential for future differences that risk creating new divisions, exclusions and inequalities. These are connected to assumed differences based on idea of technological exposure and affinity during formative years. This has the potential to reify future ideas of intra-generational conflict and tension as reality and fact (Twenge et.al., 2012; Twenge and Campbell, 2008; Smola & Sutton, 2002; Jurkiewicz, 2000) and supports calls for further studies supporting further interrogation of similar ages experiencing life differently (McCarthy, et al., 2014). My research demonstrates the value of studies that interrogate the varied and complex life experiences of different age groups and highlights that enrolling technology to justify and legitimise age differences is as flawed as previous studies of generational membership.

This research adds a new dimension to our understandings of how discourse contributes to and regulates the creation, maintenance and reproduction of naturalised age differences and ageism in the labour market and organisations more broadly (Ainsworth, 2002; Ainsworth and Hardy, 2008, 2009; McVittie et al., 2007; Riach 2007; Riach and Loretto, 2009). However, this longitudinal study illustrates

how such discourses can shift between two points in time. For example, in the first phase of research young people were positivised as digitally native and skilled within media sources in Chapter 6, where growing up digital (Tapscott, 2009) was offered as socially and economically desirable, a symbol of productivity. However, in the second phase of research, such digital skill was reconstructed as less desirable in an age of digital danger and threat, explored in Chapter 8.   Established stereotypes such as the 'net generation' or 'digital natives' are now displaced within a new threat landscape which paved the way for fresh age-digital stereotypes to emerge based on mobile technologies and their associated behaviours (Twenge, 2010; 2009).

I expose the ways in which an older professional group reject, resist and reposition older worker identity through discourses of technology and generational-technology labelling. This paves the way for future explorations of how other professional groups may offer alternative identity configurations through identity work particularly linked to technology as cultural regulator (Gullette, 2004). These may be connected to positivised age associations associated with youth (Coupland, 2007) or through agelessness (Steele, 2020; Andrews, 2018; Bytheway, 2000). This reminds us that identity is a social phenomenon, where meaning can vary between individuals and identities are fluid, dynamic and evolving (Gergen and Gergen, 2012). Also, by offering themselves as 'digitally native' (Prensky, 2001; Helsper and Enyon, 2010) participants contradict broader social boundaries of age-related digital identities which in turn reaffirms stereotypes of generational differences and digital differences between older and younger people associated with being born digital (Palfrey and Gasser, 2011) and growing up digitally (Tapscott, 2009). This also suggests there is a negative stereotype and subject position of the older worker to be rejected (Riach, 2015). Participants suggest the desirable and non-desirable older worker identity in this field, contributing to our understanding of an older burgeoning digital professional group beyond sensationalist accounts of age discrimination in the digital sector (Henley, 2014). Furthermore, we see how meanings associated with 'older worker' identity begin to shift in the second phase as we see a return to ideas of experience as asset (Roberts, 2006; Geisler, 1999).

This professional group use experience as a power lever to assert their own professional power.

11.5.   Whither older digital technology workers?

This study transcends previous explorations of professional identity of IT workers which were confined to those who worked on more traditional technological fields such as software and hardware design, development and service provision (McMullin and Marshall, 2010; McMullin, 2007; Deuze et al., 2007; Wimmer and Sitnikova, 2011). Instead, I offer a unique insight into older digital technology workers professional identity within what is often considered a highly youth-orientated profession (Fisher, 2018; Hymowitz and Burnson, 2016; Jenkins, 2014). There are similar anxieties of the obstacles to professional identity achievement as outlined in the IT profession connected to rejection and a fear of avoiding professional obsolescence (Pazy, 2005) exclusion from career progression and skill development (Jovic and McMullin, 2016). Such fears are particularly evident within the interdiscursive talk outlined in Chapter 9. Identity talk offered discusses the 'upgrading' of skills, of career precarity in connection to 'younger models', and ambition to achieve 'career 2.0'. Here the professional subject is linked to technological objects, associated with consumption, products, and system lifecycles. While the use of such lexicon draws on established ideas of disposability and obsolescence which can depersonalize and objectify subjects (Zhang et.al., 2012) a more sinister implication is that of downward but not upward compatibility similar to technology. Such terminology suggests that newer (i.e. younger) employees can read older files but not vice versa and therefore implies a limited agency within this professional group if current skills connected to current technology are perceived as incompatible with ageing and regeneration (Riach & Kelly, 2015).

In Chapter 9 discursive power in a bid to convince the interviewer of participant professional capital is offered via constructs of experience, wisdom and trust. This develops previous conceptualisations of 'digital wisdom' (Skiba, 2010; Prensky, 2011; Lester et al. 2012; Wills et al. 2011) where a combination of being older and digital is offered as the optimal professional state. I also illuminate how the broader

social context gives rise to such opportunities and the context of digital danger outlined in Chapter 8 and 9 created the conditions of possibility (Foucault, 1972) for digital wisdom to exist. This results in the older professional offering themselves as the desired identity. Here I also highlight how value (professional or otherwise), as the object of talk, can fluctuate from neophilia or obsession with what is new (Riach and Kelly, 2015) to valuing what is established, understood and can be controlled.

I argue that the longitudinal nature of this study illuminates the potential for new social digital divides based on changing economies, societies and ideologies. New classifications and understandings of older workers may materialise within all age groups as they are increasingly exposed to ever-evolving digital technology. This study highlights potential future concerns about the nature of technological exposure due to institutional boundaries such as education or the workplace (Fairclough and Fairclough, 2012). This may also lead to new definitions and negotiations of professional competence, building on extant studies of how professional competence is and can be achieved for workers of any age (Ibarra, 1999; Slay and Smith, 2011). There is the potential for new exclusions and denial of resources based on age (Benson and Brown, 2011; Pritchard and Whiting, 2014) discussed in more detail in Chapter 8.

Recent studies of this occupational group are contradictory and contrary. At different junctures participants both consider and challenge ideas of being considered professionally irrelevant by the age of 40. They resist but recognize the 'imagined path' (Rosales and Svenson, 2021, p. 86) of career sustainability as seniority and leadership for older digital workers. This echoes evidence of older workers facing obstacles and exclusion from certain types of work (Baltes and Finkelstein, 2011; Baltes et al., 2015; Finkelstein et al., 2015;). In technology professional specific research, it echoes older worker fear of diminishing skills making them less productive than younger colleagues (Rudman and Molke, 2009). This study places a spotlight on the broader derogation of older workers, and their identity work, where desires for different career trajectories, for example to remain specialist and/or practitioner are denied or hidden (Spedale, 2019; Spedale et.al.,

2014; Schwaiger, 2006). Such themes are connected to concerns about age appropriateness in work contexts more broadly, such as the construction of role and career stage suitability with respect to leadership and reporting lines (Spisak, et.al., 2014).

Traditional conceptualisations of what constitutes being an 'older worker' seems incongruent with the desired characteristics (and, I argue, the offered identities) of the digital sector worker (Cook, 2020; Spisak, 2014). While participants deny being disadvantaged as an older digital technology professional, there is a recognition of the sector as heavily youth orientated (Fisher, 2018; Cook, 2020). Yet as discussed in Chapter 7 and 9 participants construct themselves as ready and able to meet the challenges by drawing on other identity dimensions as discursive resources which they use to separate themselves from traditional understandings of the 'older' worker. The older worker institutional order outlined in Chapter 3 (Collins, et.al., 2009; Tsui, et al., 2002; E. L. Perry, Kulik, & Zhou, 1999; Goldberg, Finkelstein, Perry, & Konrad, 2004; Greller, 2000) suggests a recognition for traditional paths in recruitment, retention, promotion, development, organisational departure, and retirement. However, participants in the first phase of research reject the idea they are subject to the same constraints. Instead, they construct themselves at regular intervals as sitting outside of the discourse, such as Meg in Chapter 6 likening herself to John Peel to symbolise career embeddedness and agelessness. Similarly David reproduces the discourse in his account of recruitment decision making in Chapter 9. This hints at studies offering examples of the how older workers are constructed in terms of diminishing returns and wasted resources (Ng and Feldman 2012). However, my analysis suggests older digital workers construct themselves as suitably agentic to displace themselves from challenges and constraints felt by older workers in other professions via the discourse within their identity accounts. Here I have presented the contribution of this research to potential current and future challenges facing the older digital worker. I will now offer an overview of how this study presents fresh understandings of ideological threads connecting age, digital life and work.

3.5.1.   Energy for Enterprise: Ideological threads of age and digital life and work

Within this study the connecting ideological thread across both text and talk is of how power is realised through neo-liberal ideological ideas that construct versions of age (whether younger or older) in association with productivity and potential for growth. The prioritization of enterprise and innovation is particularly prevalent in the news texts I examined more broadly (Rudman and Molke, 2009). I argue such ideals are often central to socialised perceptions of the digital technology sector itself, particularly start-up culture (BBC, 2017). Participants offer identity accounts punctuated by examples of their energy, creativity and in particular curiosity. In Chapter 6 Sean discusses getting 'into the robot scene' and in Chapter 9 Robin discusses the need to 'push for innovation' at work. Earlier accounts by Sean in Chapter 7 outline his desire to 'shake them all', similarly Jill describes digitally ignorant, apathetic colleagues as 'sleepwalking'. The interview accounts are punctuated throughout both phases of interviews with an acknowledgement of the external drive for constant agility, energy, hunger for career advancement. Participants reject the idea that professional apathy is socially acceptable in Chapter 9 as expressed by Meg through the fear of appearing to be 'comfortable'. Yet despite unveiling such vulnerabilities, participants discursively place themselves as the main power holders of 'digital capital' (Ragnedda, et al., 2020; Ragnedda, 2018) as discussed in Chapter 4. This serves to neutralise any stigma attached to being an older worker: participants play to ideas of power-knowledge-discourse (Foucault, 2004) through identity accounts which foreground their digital expertise in a world which demands it by emphasising the need for their skills, older or otherwise.

This research contributes to the rich and evolving work that adopts critical discursive analysis of media texts and how they expose ideas of power, what constitutes power and how it is reproduced in discourse (McDonald, 2003; Machin and Mayr, 2012; Machin and Van Leeuwen, 2007; van Dijk, 2005). Texts analysed in Phase 1 construct younger people as more digitally skilled and therefore economically desirable as offered in Chapter 6, illustrated through the constructs

of 'mobile natives' or 'switched on millennials'. However, such texts a year later reject previously celebrated ideas of 'digital nativism' by constructing it as harmful and obsessive in the texts presented in Chapter 8. By analysing such texts, I offer new material using a contemporary subject matter which expresses the ideological nature of discourse and its power to influence and persuade (Machin and Mayr, 2012). Through the stereotypes offered in the media texts concerning older digitally ignorant citizens or 'luddites' (The Sunday Times, 27 August 2017) participants also offer such ideas about other (often older) colleagues in work contexts, This builds on studies exploring how identity reinforces power relationships and structures of inequality through discourse (Chouliaraki and Fairclough 1999; Fairclough 2001; Fairclough and Wodak, 1997; van Dijk 1997) where discourses that divide can be used to achieve social advantage (Wodak, 1996)

11.6.   Limitations of the Study

This research highlighted some methodological, theoretical and research limitations which I will now discuss in turn.

Like most qualitative research, this study did not set out to be generalisable (Hammersly, 2007) but to interrogate the occurrence, transference and meaning of certain discourses in order to understand their nature and potency. This study provides rich insights which could form the basis of a larger and more representative study of digital technology workers of different ages and/or a wider group of older workers. Alternatively, it could be transferable to another set of media analysis, professional group and/or used to understand the interdiscursivity between media texts and another professional group.

Methodologically, I was concerned that the sample size for this study could not be classified as wholly representative of the digital technology sector population with respect to gender, age, ethnicity (or other protected characteristics). Furthermore, the diversity of roles may also be unrepresentative, and have further diversified/no longer exist since the research took place. This however highlighted the fast-paced nature of the sector, as I became aware of participants gaining new roles and

changes to job titles as the research progressed (and beyond). Such points highlighted broader limitations of time-bound data which also applied to the content of media texts: I was aware that they capture a snapshot in time, which may not be replicated or applicable at another date, a limitation highlighted in the methodological literature (Thomson, 2003; Saldana, 2003). Furthermore, there may be substantial within-role and across role differences of research participants. I noted therefore that I could not generalise about identity aspects applicable to all 'older' programmers, coders, developers, designers, etc. Hence, while the label 'digital tech worker' is used as an umbrella term, this does not mean that a product manager or engineer should be considered having the same discursive influences and interpretations as a computer programmer or coder. Furthermore, the meaning of these titles can vary across contexts, countries, and locations. Titles used were offered as descriptors at the point of participant agreement. However, overall, the evolving nature of both the sector and related literature provided a fascinating context within which to examine identity work.

A further methodological limitation is the constraint of using interview-based study as it relies on reflective accounts from participants (Alvesson and Ashcraft, 2012) rather than interrogating the text and talk of institutional material so often used in organisational critical discourse work (Alvesson and Karreman, 2011). However, I consider this minor as my questions were fundamentally concerned with participant understandings, expectations and experience of age noting how age was offered discursively within their accounts. Finally, methodologically I would have benefitted from more detailed guidance on how to compare the data across two sets of repeat interviews but also how to compare that with another source of discourse data drawn from online sources. While there is rich guidance on how to approach each source of data individually, I found little to guide me in comparing them across data sources and across two points in time however I discuss my data management strategy and data selection criteria in more detail in Chapter 5: Methodology.

As stated in Chapters 7 and 9 (Phase 1 and 2 Interview Data analysis respectively) I decided to focus the analysis of this data set based on the themes derived from the

media analysis in order to directly respond to the second research question "To what extent and in what ways are such discourses offered in the identity accounts of 'older' digital professionals?". I did this in order to understand the extent and nature of interdiscursivity taking place, rather than focus on secondary or peripheral discourses which could deviate from the research question. While this potentially omits other important discourses that may be present in the interview data (and this is discussed in more detail in Chapter 11), this decision responds to the second question set.

I was mindful in this research that my focus was purely on text principally because guidance on conducting critical discourse analysis has tended to focus on language and power used and held by political and institutional protagonists (van Dijk, 1993; Fairclough, 1995). However, I did view a missed opportunity in not exploring images which accompanied media articles in a critical discursive way (Pritchard and Whiting, 2015) or indeed other online ethnographical elements such as message board content which would have provided a potentially richer discursive experience of how and where power is afforded (Hine, 2008). As discussed in Chapter 4, I chose only text due to the focus on text within the critical discourse field and for the purposes of manageability within the time constraints of a PhD thesis.

Here I have presented a summary of what I consider to be the limitations of this study concerning population generalisability, the value of the interview as site of discourse, the interdiscursivity of discourses between media and interviews text and talk and being confident that Fairclough's process of interpretation has taken place.

11.7.   Critical Reflections on a Thesis

I will now provide a critical reflection on the research process interrogating my situated role as researcher within the broader research process.

11.7.1.   No strings attached?

My own identity work has accompanied me from the start of the research study. It has been influential in my choices of theoretical perspective, methodological approach and overall research topics of scholarship to explore. My professional background, status and interest in digital technology both as academic and practitioner had the potential for inherent subjectivity, but I did not consider this a weakness of the research.

Conversely, I recognised the potential for my experience and knowledge (of being older, where language and technology are central to my professional role) to provide a richness and meaning to the research. In terms of benefitting the research process itself, by "crossing the border between the etic (or outsider) and the emic (or insider perspectives) there and back again" (Jönsson and Lukka, 2006, p.3) I could gain the trust and respect of research participants. In terms of interviewee exchange being aware of my own identity that I brought to the interview experience meant I paid particular attention to how participants dialogically performed their identities (Goffman, 1955), how identities are worked in organisational contexts (Brown, 2014) and how my identity impacts the discourse offered through the identity performance. Furthermore, beyond the talk of the interview I was aware how the interview location and activities before and after contributed to thick descriptions of the event (Geertz, 1973) and the discursive process. On two separate occasions for two participants the interview location was their place of work, that is, the offices of a major digital technology institution. Participants openly admitted they were conscious of confidentiality and privacy in the interview setting. This made me aware that the interview was more than speech event: the location was intrinsic to the identity performance the individual would offer, impacting rituals attached such as security procedures (Crawford

et.al., 2020) also offered through regularities of language which would constitute the discourse offered.

I explored my own position and motivations for the research (Clegg and Hardy, 2006) and whether I was seeing, or seeking to see what I wanted to particularly within a critical agenda which could surface a personal antagonistic relationship between age and digital life. I was aware of the risk of potential researcher bias, my own trigger points, and response to the discursive moves of the research participants in the interview setting (Mauws, 2000). I was conscious of the potential for my own subversive nature in the interview (such as answering my own questions on behalf of the interviewee!) and conscious to maintain a dyadic exchange within the research interview. Conversely however I was equally aware of the risk of hyper-reflexivity (Johnson and Duberley, 2003) or indulgence (McLeod and Yates, 1997) and fearful regarding my shaping of the research process, and the analytical process which was both within and between data sources across two points in time. I was concerned this may influence the research outcomes, and risk finding what I simply wanted to discover (Holland, 1999; Dick & Cassell, 2002). This is a recognised potential risk of the interpretive nature of analysing interview data and I was mindful such data cannot be lifted and treated as knowledge or truth 'with no strings attached' (Fontana and Frey, 1998, p. 663).

I tried to counteract such epistemological risks by being mindful of my reflexive stance throughout (Hibbert et.al. 2010). I made notes before, during and after each interview which considered my reaction to the interview process and participants, noting any potential limitations of the event. Such limitations could consist of taking sides in the research process (Antaki, et.al., 2003) or ignoring my own privileged position in understanding the specific technical terminology involved in the exchanges and the nature of rapport I had with participants based sometimes (but not always) on prior relationships (Garton and Copland, 2010). I became conscious of the importance of rapport in eliciting responses. Additionally, at times the repeat nature of the interviews felt like a social event, a reunion (Thomson, 2003) but at other points the sheer volume of data generated posed an organisational and methodological struggle.

11.7.2. Data mountains and analysis paralysis

I discussed in Chapter 5 the notable challenge of data handling in terms of volume and complexity. This continued throughout my thesis and was particularly notable in terms of new research emerging throughout the research process, a recognised challenge with a part-time PhD journey (Churchill and Sanders, 2007). There seemed no clear 'cut off point' to reading about age in connection to technology as the field seemed to increase in scholarly interest with new publications emerging right up to and including the final stages of writing up. This included an academic colleague who invited me to a webinar to launch a seminal work on Generations (Duffy, 2021) three weeks before I submitted this thesis. While I may not have scrutinised Duffy's (2021) contribution as fully as I would have liked, I have provided initial reflections based on insights from the text in Section 8.3 of this Chapter.

I was also mindful of my own identity (political and otherwise) and response as I moved between the analytical stages of description-analysis-interpretation-explanation (Fairclough, 2001) of all data offered. However, questioning what they could be used to convey based on my own personal reaction to the text (and of statements offered in the interview setting) is indicative of the interpretive practice of interviews (Garton and Copeland, 2010) and text interpretation (Denzin, 1994). Kisfalvi (2006) outlines how self-reflection of personal hopes and fears from interview data can be beneficial as a potential data source, arguing there are positive benefits in the analytical process in linking the micro to the macro (Farrall, 2006). Such linkages were useful in considering along the research process of what my research means for policy and practice which I will now discuss.

11.7.3. Gender: Some observations

Earlier within this thesis I suggested that ageism shares the same challenges as racism or sexism (Shore et al., 2009) and this was a fundamental motivating factor in exploring age in a contemporary work context. Gender is a dominant theme within the age literature explored and discussed within Chapter 2, and there are many studies which offer 'gendered ageism' or how ageism is enacted and

experienced as a result of gender dynamics (Spedale, et al., 2014). Within Chapter 2 I note how 'gendered ageism' can exclude and stereotype older female workers in ways that is manifested in organisational discourse (Spedale, Coupland and Tempest, 2014) for example, where care responsibilities of the older worker are attributed to women rather than men (Ainsworth and Hardy, 2007). Furthermore, I also offer the ways in which age is also subject to gender dynamics within media depictions that positivise older male subjects and diminish the older female in popular media (Signorelli, 2004) as outlined through the 'silver' construct (Gonzales, 2017).

As outlined within Table 15 in Chapter 5, I considered whether gender could be a potential influencing dynamic in the discourse present across media data and interviews. I noted the presence of gender dynamics within media accounts across both phases of the discourse e.g., discussions of egg freezing (The Observer, 2014) and a story concerning the vulnerability of older women who engage in online dating at the absence of commentary about men (The Telegraph, 2017). I suggest that while media accounts were punctuated with gender stereotypes, gender was a secondary theme within the stories which tended to focus on the meaning attached to being younger or older in relation to technology. Furthermore, gender was notable by its absence within participant interviews. My focus within the interview analysis was firmly on how age manifested itself within identity accounts more broadly and if this took place in ways similar or different to those discourses present within the media data. Therefore, it is fair to suggest my line of research enquiry was firmly focussed on age discourse and the direction of the interview process itself focussed on age as unifying identity dynamic with less emphasis on explorations of gender. I suggest that unifying explorations of age, technology and gender discursively could be a fruitful line of enquiry for future research. This is partly due to the connections between age and gender within the corpus of literature but also due to the volume of interest in gender dynamics within the digital sector itself (Rosales and Svensson, 2021; Chang, 2019; Wachter-Boettcher, 2017) potentially consolidating debates surrounding age and gender within the digital technology sector.

11.8.   Implications and recommendations for policy and practice

This research offers a range of contributions to policy and practice within the digital technology sector itself (the final research question of this thesis). I also offer recommendations for practitioners, policy makers, and professionals within fields such as HR and the digital technology/IT sector based on the outcomes of this research.

11.8.1. Age, technology, discourse and diversity

This research has highlighted the subtle and insidious ways age and ageism become normalised through technological linkages (van Dijk, 2020). Despite age being a protected characteristic in UK and global legislation, talk and texts which suggest naturalised technological ability and aptitude (positive or negative), and particularly those that link to generational belonging, legitimise, normalise and reify often exaggerated ideas of age difference. Extant literature has shown how this can lead to broader social exclusions based on assumed technological capability throughout the working lifecycle (recruitment, development, departure). Even if discrimination is unintentional, actors may be complicit in ageist practice and new forms of exclusion as they are considered socially innocuous. This highlights the way in which such discourses are considered socially acceptable in ways that other discourses concerning race, gender, sexuality, disability etc. may not be. I call on HR practitioners and policy makers to recognise and address the linguistic potency of age-technology associations and labels and reconsider use of terms such as 'digital native' within their materials.

This research calls for a shift of focus in how institutions classify and treat older professionals, recognising the term is varied, ill-defined and potentially meaningless. I suggest repositioning age as one dimension of identity rather than using it to classify workers of all ages, recognising its potential to homogenise and therefore the potential of society, policy makers, labour markets and institutions to stereotype. As discussed, institutional text and talk often conceal ideological and political interests which may limit and exclude workers of different ages for

different purposes. Openly discussing the paradox faced by older workers, such as the privileges and support provided for them as a result of assumed identities (Ainsworth and Hardy, 2007; Riach, 2016) also illuminates how stereotypical ideas of older worker diminishing capability becomes homogenised (Billett et al., 2011). Similarly, organisational discourse offering targeted support to older workers may exacerbate the barriers they face (Billett et al., 2011). The creation of new narratives and discourses of working life which reproduce ideas of a more diverse workforce can be achieved in two ways. Firstly, by reconsidering the use of 'older' or 'younger' within organisational lexicon and secondly by channelling resources into interventions which challenge how we use age in the text and talk of work contexts in the same way we do so for race, gender and disability, so future workers of all ages, professions and work contexts are less defined in age terms.

11.8.2.   A challenge to generationalisation

Connected to new discourses and narratives of diversity at work, this thesis argues for an end to 'generationalisation' (White, 2013), where generational categories are used as subtle and morally acceptable face of ageism at work. Resources are often channelled to interventions to address perceived differences e.g. generational awareness training (CIPD, 2011). I call for practitioners and policy-makers to challenge their use of 'generation' in policy and practice, and remove generation as a legitimate term within discourse about work within policy and guidance materials. Furthermore, recent exploration of generation as construct cites wider confusion between period and cohort effects which then create generational stereotypes which underpin policy and practice decisions (Duffy, 2021). Accepting that generation can be mobilized to shape workplace identity that both privileges and disadvantages (Zanoni and Janssens, 2015), particularly through technological means, may attune practitioners and policy makers to the subtle and insidious ways generation creates social division. New typologies and taxonomies based on generationally led digital boundaries are constantly evolving with accompanying generational labels. For example, Generation Tik-Tok (Financial Times, 2020) and/or the COVID-generation (Hodder, 2020), suggests new sources of influence, difference, behaviour, distribution of power such as labour market advantages attached (Major and Machin, 2020). In parallel, normalised and

accepted generational characteristics may shape how the labour market perceives future age groups are technologically engaged, privileging some and excluding others in generalised and homogenised ways leading to new social divisions.

11.8.3. Digital diversity can lead to fresh social divisions

The focus of the literature to date concerning digital difference and division has tended to explore binary either/or notions of digital exposure and experience through understandings of what constitutes a digital divide (van Dijk, 2020) often discursively offered through constructs such as born digital, growing up digital and digital natives and immigrants. Sociocultural barriers to organizational or social progress are at risk of reinvention based on the regeneration of new forms of digital difference (Dingli and Seychell, 2015) even though the digital native/immigrant dualism continues to punctuate even recent discourse (McVey, Government Policy, 2019). Unpacking the insidious ways current age-digital divisions and discrimination occur in broader social discursive practice can contribute to securing a more equitable future for all age groups based on improving access and capability to digital technology, not least driven by those working in the digital technology sector.

11.8.4. Age and ageism in the digital technology sector

This study also provides a significant contribution to the study of the digital economy and sector addressing an important research limitation of existing work in the field. This research calls attention to the risks posed by an ageing workforce within this sector, outlining similar challenges faced by digital sector older professionals through their identity accounts of recognising challenges, navigating them in line with agentic and structural boundaries.

Firstly, this group identified potential risk of professional obsolescence earlier than other professional groups if they remain as practitioners, highlighting the traditional ways age is connected to career progression (Pazy, 1990). However, this study also highlights the specific challenges posed by this occupational group due

to the explicit linkages with technology which underpins their skill base (e.g. coding languages) and therefore professional value.

Secondly, any future marginalisation and exclusion based on age threatens the diversity within the digital sector itself which could in turn impact the digital products and services provided for wider society. This research has shown that exacerbated stereotypes can be offered by the very groups we rely on to challenge and dissolve such ideas. New social division has the potential for influencing bias on tech products and services designed and developed by the digital technology sector (Sandvig et al., 2016). This risks a narrowing of product and service offered to citizens of all ages, which may in turn reproduce digital exclusions based on stereotypes connected to the nature of digital estate certain ages grew up with and fail to address broader requirement in their design and development (Carroll et.al., 2012). If our rationale for age differences are not carefully considered, challenged and empirically justified, such sites can foster implicit or explicit ageism impacting not just the professions within it but the products and services produced by it.

Thirdly, older digital professionals who may draw on being older and the ageing process as a resource and as such offer a valuable perspective in how to design, develop, market and deliver digital products and services to older citizens thus developing the gerontechnological field (Bischof and Jarke, 2021). Furthermore, it may begin to shift perceptions among older and younger digital workers that age is one dimension of identity which is brought to bear at work, therefore providing more inclusive policies and practices impacting recruitment, employment and development decisions. Recognising the threat faced by older digital sector workers to respond to wider discourses of age through identities which are overly youth-focussed or deny being older can reproduce a discourse where being older is denigrated. This can deny access to resources, professional entry or career longevity for older workers in this professional sector.

11.8.5. Age-technology concomitance for social good

In this study I argue that one enduring feature throughout both sets of discourse is age-technology concomitance: the continuing and enduring way in which age and technology are discursively linked through associations with time, historical developments and generational connections. A critical lens is often applied to discourse in order to expose (and unseat) the sources of power. However, I suggest using critical theoretical and methodological approaches to identify where there is social and civic opportunity to pursue social good, potentially as a result of the social changes initiated by the COVID-19 pandemic.

Carroll et al., (2012) suggests reframing ageing as a resource benefitting younger age groups and shift to positive technological design rather than deficit driven design. This optimises opportunities associated with ageing such as experience and multiple age groups working together on technological endeavours within organisations. This moves us beyond gerontechnological approaches to consider how technology can serve all ages, among all ages and accompany people as they age. This may also eradicate the potential future threat of older people as digital burden due to assumed exposure of certain types of technology to digital enablement where all ages in workplace, communities and other contexts work on technological endeavours together. This would also contribute to shifting discourses often rooted in generations that all younger people are digitally addicted, or conversely all older people are technologically resistant or only interested, skilled and affiliated with certain technological platforms and/or devices. This would diffuse the disciplining effects of the language used by fractious media often focussed on achieving age-related culture wars. Recognising social realities of increased technological engagement by all groups on similar technologies whether through virtual communication, home schooling or working as a result of COVID-19 (Office of National Statistics, 2020) could provide an opportunity to explore opportunities to identify similarities rather than differences, aiming for social unity rather than conflict. As digital sector professionals age, a fresh lens is also brought to a sector traditionally framed as youth focussed. Furthermore, roles continue to diversify and become more specialist particularly

within a broader social context concerned with digital vulnerabilities and threats connected to privacy, surveillance, user generated content and trust (Leaver, 2017). There is an opportunity to shift from binary ideas of native/non-native digital citizens (Evans and Robertson, 2020) and rethink the ways age is 'configured' (Bischof and Jarke, 2021, p. 197) particularly through discourse.

This research fundamentally highlights how ageist discourse remains less challenged, more legitimised and normalised in ways unthinkable for race or gender (Shore, 2009). I hope this research may contribute to new frameworks, paradigms, and shape theoretical scaffolding from which to view age (Entman, 1993; Reese, 2003) due to the gravity of an age-digital technology concomitance.

11.9. Concluding Points

In my thesis I have outlined the ways we continue to differentiate, divide and exclude others through age discourse which enrols digital technology to reify such differences. I have discussed the potential implications for digital technology professionals now and in future as they negotiate their ageing professional identities within the sector. By exploring how age and technology intersect discursively (Ainsworth & Hardy, 2004) and how such discourses can move between text, social practice and discursive practice (Fairclough, 1992) I have provided ways they are reproduced and reinforced across different social realms, between text and talk. The examination of text and talk in this thesis illustrates how age is offered as an acceptable and normalised form of difference, othering and discrimination. I suggest that this sensitises us to question how such ideas become social norms leading to problematic social practice (Foucault, 1972). I call on academics, policy makers and practitioners to recontextualise age as a dimension of difference and division which is enacted discursively (Wodak, 1996) to being understood as a dimension of similarity and shared experience within a social context of increased citizen longevity and social technologization.

While the neutralising of age discourse may be difficult, I argue it is not impossible to avoid a "third level digital divide" (Ragnedda, 2019, p. 2) creating new age-based

exclusions and divisions. This study seeks to initiate further discussions and open a new line of enquiry into how age and technology perpetuate difference and division. If we make room for further understanding of where discourses of ageism reside (Coupland, 2007). I argue there is further digital and digitally understood work to be done to further mobilise the "small but growing community" of age researchers (Riach, 2016, p261) to reach for new constructions of age which unite rather than divide.

Appendix 1: Ethical Approval Form and Participant Consent Information and

Form : School of Business, Economics and Infomatics

Name(s) of applicant	Christine Brown
Status (e.g. Lecturer, PhD Student)	PhD Student
Supervisor(s)	Dr Katrina Pritchard
Department	Organizational Psychology
Project status (e.g. UG, PG, doctorate, individual staff research, externally funded project)	Doctorate
Funding source	Fees funded
Project Title (working title)	**Discourses of digital difference: The discursive construction of age within the digital professions.**

Attachments:
Indicate the attachments enclosed with this form (please tick):

Information sheet & consent form ✓

Attachments:

Appendix 1: Research interview safety protocols

Appendix 2: Information sheet and consent form for participants

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Description and rationale of proposed project

Rationale:

'Younger' workers, born after the mid 1980s at a before the digital revolution (Clarke, 2012) often classified as 'millennials', attributed with assumed characteristics that differ to other age cohorts, despite vague definitions of what constitutes 'generation'. Millennials and similar generational labels are afforded characteristics, skills and abilities perceived as 'native' and fluent to digital life while in contrast, their older counterparts are stereotyped and marginalised as unsuited and ill-equipped for the modern world due to digital incompetency (Prensky, 2001).

The relationship between 'age' digital ability and attitude is often constructed through generational identity with profound impact on how older workers are perceived, constructed and researched. Despite media interest in ageism within the digital sector a research vacuum exists exploring the significance of *age discourses* to this profession. This research intends to explore the significance of age-technology discourse on older workers within an under-researched digital sector profession.

Using qualitative research via online research and participant interviews I will explore how discourses of age-related 'digital difference' come into being. I will then explore the impact of such discourses on the identity of UK based 'digital' workers over the age of 35 in the year I begin data collection (2014) in line with digital nativism (Prensky, 2001).

I wish to explore if and how discourses impact participant identity as they age throughout the course of my PhD, hence a longitudinal study. I will aim to conduct 2 interviews with each research participant (a total of 15 participants) at least a year apart.

Data collection will form two types and be in a series of three stages.

Type 1: Online Data
Google alerts using keyword combinations via age-technology labels and other terms: e.g. 'silver surfer', 'early adopter' 'digital native'

Data analysis: Discourse analysis used to identify dominant themes prevalent in the discourses and how these themes evolve and change over time.

Type 2: Semi-structured interviews with up to 15 UK based 'older' 'digital workers'.

2 phases over the course of 5/6 years consisting of 2 repeat interviews intending to capture accounts of worker identity as they grow older within the digital discipline. It will use recent newspaper headlines and stimuli to generate

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discussion around mainstream ideas about the relationship between age, ability, professional identity and working in the digital sphere.

Questions will focus on:

- Their views and experiences of being or becoming an 'older worker' within the digital industry and how impacts (or not) on their professional identity
- If and to what extent popular social constructions resonate with them and how they may play out in their working lives if they do
- Gaining an understanding of how their views change over time 1-6 years

Data analysis: Interviews will be recorded and transcribed. Analysis will examine how themes prevalent in the discourse become established, evolve and unfold. Any variation in narrative themes, or common patterns across the sample group will be assessed, to identify key features and a potential typology of the range of transition experiences.

Implications for theory/practice: Offer insights into the relationship between socially constructed discourses, professional identity and ability, age and digital change in a bid to inform academic theory and research. Additionally, influence future work across training, policy and organisational development practices by highlighting the significance of questioning everyday assumptions and stereotypes, particularly with reference to a growing discipline that itself is perceived to be 'in its infancy'.

Ethical issues:

Background:

This research study is classified as 'Routine' in accordance with current ethical guidelines set out by the Department of Organizational Psychology, the School of Business, Economics & Informatics and Birkbeck College.

I have previously undertaken the MSc Occupational Psychology at Birkbeck and have prior experience of undertaking qualitative research and face-to-face interviews with research participants, as well as 17 years in corporate life conducting research via interview and related research methods.

I have discussed ethical issues on a regular basis with my academic supervisor in my first year of study. My intention is to produce a written chapter in my second year exploring the following:
- ethical issues in the context of qualitative research studies
- ethical issues relating specifically to narrative research methods
- ethical issues relating specifically to eResearch methods (samples from tweets, blogs etc)

As a result of this ethical review process, I identified a number of ways of strengthening the ethical frameworks that will underpin my PhD studies.

These are included in the following summary of ethical issues and actions relating to this research project:

1.   Access to participants:

a. The sample group for this study will be accessed potentially through professional networks based inside and outside my current organisation, including social networks available to view by public and closed groups.

b. Participants who are interested in being interviewed will have a private means of always contacting me.

c. Potential research participants will be made aware that they have the right to decline to take part in the study at the outset, or withdraw from the study at any time.

2.   Informed consent:

a. All research participants will be provided with an information sheet outlining the nature and purpose of this research study.

b. At the outset of each research interview, written consent will be obtained from each participant and any questions answered prior to commencing the recorded interview.

c. Consent forms highlight key ethical issues including the voluntary nature of research participants' role in the study, their right to withdraw from the study at any time and the use of anonymous data in reporting and publication.

d. Verbal, recorded consent will also be gained at the end of each research interview - to ensure that research participants are happy with the nature of the information that they have disclosed through the research interview process.

3.   Anonymity and Confidentiality:

a. Consent forms highlight that all individual and organisation names will be changed in any reporting and publications, in order to protect anonymity.

4.   Potential Harm to Participants:

a. At the outset of each research interview, I will clarify my researcher role for the purposes of this study.

b. Research participants will be offered the opportunity to stop recording and/or the interview itself, if discussions cause any emotional distress.

c. Consent forms highlight the voluntary nature of a research participant's involvement with the project and their right to withdraw at any stage of the project.

5.   Potential Harm to Researcher(s):

a. Personal safety issues in relation to fieldwork have been discussed with my PhD supervisor and PhD programme director. Locations: Interviews will be held in an agreed private space (such as a meeting room) within a public building or building known to the researcher. Research interviews will not take place in either researcher or participant homes. Research interview safety protocols have been drawn up and are attached, in accordance with:

- Birkbeck's Health & Safety Guidance at:
http://www.bbk.ac.uk/so/guidance/SOCIALRESEARCH

- the Social Research Association's 'Code of Practice for the safety of social researchers' at: http://the-sra.org.uk/sra_resources/safety-code/

6.   Potential Harm to the College: None

7.   Participants' right to decline to take part: Specified in consent form

8.   Uses of the information (including publication): Specified in consent form

9.   Conflicts of Interest: None

10.   Other relevant ethical concerns (please specify): None

I confirm that the proposed project conforms with College and professional ethical guidelines, as indicated: *(please underline)*

1.   Access to participants: **YES** / NO / DON'T KNOW

2.   Informed consent: **YES** / NO / DON'T KNOW

3.   Anonymity and Confidentiality: **YES** / NO / DON'T KNOW

4. Potential Harm to Participants: **YES** / NO / DON'T KNOW

5. Potential Harm to Researcher(s)   **YES** / NO / DON'T KNOW

6. Potential Harm to the College: **YES** / NO / DON'T KNOW

7. Participants' right to decline to take part: **YES** / NO / DON'T KNOW

8. Uses of the information (including publication):   **YES** / NO / DON'T KNOW

9. Conflicts of Interest: **YES** / NO / DON'T KNOW

10. Other relevant ethical concerns (please specify):   **YES** / NO / DON'T KNOW

Classification of project *(please underline)*: **ROUTINE** / NON-ROUTINE

Signed by:

The applicant: Christine Brown Date: October 2014

Supervisor: (if applicable) ……………Dr Katrina Pritchard ……………….. Date: ………October 2014

Department Research Ethics Officer: ……Dr George Michaelides …. Date: ………October 2014

Appendix 1: Ethical Approval and Participant Information Form

<u>Appendix 1   Research Interviews - Safety Protocols</u>

Christine Brown

20 June 2014

1. Establishing research interview safety protocols:

- Discuss and agree protocols with PhD supervisor prior to commencing fieldwork

- Review protocols on a regular basis at PhD supervision sessions

2. Recruiting research participants:

- Seek referrals for potential research participants via an agreed process:
    - Through advertising my research within my organisation
    - Through advertising my research via my blog, twitter feed and other online social networks with the option for private contact

- Prior to interviewing, ensure that each participant meets the sample criteria (professional, age/date of birth) by speaking to them by email or telephone

3. Interview arrangements:

- Ensure that interviews are held in a safe place to minimise risk:
    - In a public space that is adequate for the purposes of private interview

- Arrange interviews during daylight hours whenever possible

- Park in a safe and accessible location

- Dress appropriately for interview setting

4. Maintaining contact:

- Agree nominated contact and advise PhD Supervisor, Dept of OP accordingly

- Provide monthly schedule of visits to nominated contact including:
    - location of visits
    - times of interviews
    - name of research participants being interviewed

- Telephone/text nominated contact within one hour of completing each research interview

- Advise nominated contact of any changes in interview schedule as they arise

5. Interview resources:

- Carry a mobile phone and charger back-up at all times

- Carry sufficient cash to cover daily expenses and emergency travel costs

6. Notifying personal safety concerns:

- Terminate any interview which raises personal safety concerns

- Log any personal safety issues if they arise

- Notify nominated contact and PhD supervisor of any personal safety concerns as soon as possible

- If necessary, revise safety protocols in the light of any personal safety concerns

7. Debriefing:

- Review research interview safety protocols on completion of all fieldwork

These protocols have been drawn up based on:

Birkbeck Health and Safety Services (2013). *A Code of Practice for Health & Safety in Social Science Research*. Downloaded on 27 May 2013 from: http://www.bbk.ac.uk/so/guidance/SOCIALRESEARCH

Information for participants and consent form

PhD information sheet: Christine Brown, PhD student, Birkbeck, University of London.

Thank you for agreeing to be interviewed as part of my PhD research.

What is the research about?

This interview forms part of the data collection for my research project that will lead to a PhD in occupational psychology.

I am interested in exploring the ways in which age is discursively constructed in relation to the 'digital' industries.

My research will explore how attitudes and ability in relation to age and the 'digital' professions is discussed and expressed across a range of sources drawn predominantly from online research such as online newspaper articles. I am keen to explore whether the themes within the article resonate with participants. I am interested in the popular representations of age as a significant factor in digital professional life and how we talk about age and technology.

I am particularly interested in interviewing people in various digital sector roles over the age of 35 who remember a time before digital technology was mainstream.

This is intended to be a longitudinal study as I am interested in how professional identity within the digital industry change across time as those participants get older.

Confidentiality

Interviews will be recorded by digital recorder and fully transcribed, stored in a secure location with only researcher and research supervisor access. Names and other identifiers will be anonymised in transcripts and the final thesis. Participants should be aware that they might be identifiable through comments that they make.

Participants should be aware that the researcher will stop the recording process at any time at participant request. Participants will be offered a copy of their interview transcript and provided with the opportunity to take out or amend any part of it that they do not wish to be reported in the findings. Participants should also be aware that the researcher has a legal obligation to disclose information relating to unethical or criminal behaviour.

The analysis and extracts of the data may be published in a PhD thesis and academic journal articles, Anonymity will be protected throughout and no identifying information will be used. Some of your words may be quoted by you will be assigned a pseudonym and your real name will never be mentioned.

What would you have to do?

The research involves up to 3 separate interviews with you of between 1- 1 ½ hours about your attitudes and experiences of age in your professional life. This can include your wider perspectives or experiences of how 'age related themes' have impacted directly or indirectly on your working life and any other themes you deem relevant. I am interested in interviewing you on up to three separate occasions at least a year apart.

I would like to thank you for offering to help my research. If you understand and agree to take part please sign the accompanying consent form. You are still free to withdraw at any time without giving a reason.

How will the results be used?

The data from the PhD research will be used for:

1. A PhD thesis
2. Academic research papers/presentations

Please indicate on the consent form below if you would like to receive a summary of the results.

In giving my consent, I confirm that:

1. I have read the Information Sheet and have had the opportunity to ask the researcher any questions I have about the study.

2. I understand that my participation is voluntary and I am free to withdraw from the study at any time.

4. I agree to the interview being recorded and transcribed. I understand that I have the right to ask for the audio tape to be turned off at any time during the interview.

5. I agree to provide information to the researcher on the understanding that all names will be changed and any quotes anonymised. The information will only be used for this research project and any supervision, reporting and publications arising from it.

6. I understand that all data will be stored securely and is covered by the Data Protection Act.

7. I agree to being interviewed on three separate occasions, approximately a year between each interview, and will do my best to accommodate this in the interests of this study.

Name…………………………………………………………….. …

Signature……………………………………………..………………

Date……………………………………………………………………

I would like to receive a summary of the results: YES   NO

Contact: Christine Brown
Email: Christine.brown.02@gmail.com : Telephone: 07590 816695

Appendix 2: Elicitation Tool: Example of Themes from Interview 1st round: presented to participant 'David'

- Coming from the 'old world of IT' is very different from the positive culture at {company]
- Old tech was an environment of IT being 'done to' people
- Theme of 'losing' people as you get older - "sense of mortality creeping up on you"
- Discusses average age of those around him being about 28. Noticeable that everyone is much younger. BUPA Healthcheck reference.
- Similarly, you mentioned 'older' colleagues lacking digital skill and being actively resistant
- Discussed the challenge of 'keeping up with the detail' of changing technology - and a tactic used is to simply 'not ask for it'.
- Discussed how experience counts for a lot in your area of the business (sales)
- Discussed the hunger and desire to learn in the business
- Discussed, (confidentially) real concerns about sending on CVs and judgements made about your 'age' from the CV.
- Described the possibility of being at the end of your 'economic productivity'.
- Discussed your enthusiasm to stay in industry for 'as long as I am welcome'.
- You described that if someone came to you who looked 65 you would make a judgement call about them in terms of experience, motivation, ability - and you fear that others would do the same about you (eventually)

Current newspaper headlines were also provided which have not been reproduced here

Appendix 3 : Conferences and Publications

DATE	CONFERENCE	PROCEEDINGS/WEBSITE
13 July 2016	Paper: *"The Return of the (Digital) Native: an exploration of the return of 'digital nativism' discourses within work-related texts"*	12th International Conference on Organizational Discourse *"Silence, Significance and White Space"* Amsterdam, Wednesday 13th July-Friday 15th July, 2016 Pre-conference Workshop 12th July, 2016
16 Feb 2015	Development Paper: Discourses of Digital Difference	British Academy of Management (BAM)
16-18 August 2017	Time to Upgrade? Reconceptualising professional identity in 'older' digital professionals	Third International Interdisciplinary Conference on Research on Work and Working Life, WORK2017,
January 2022	Presentation: Discourses of Digital Difference:	EAWOP (European Academy of Work Psychology), Glasgow,

Appendix 4: Interview Guide

The following guide outlines both the Phase 1 Media Prompts used use to generate discussion about age, age differences and work - printouts from online stories

Story and Publication Date	Headline
The Observer 19/10/2014	*Yes I froze my eggs but I am a victim of a new fertility racket*
The Guardian 20/11/2014	*Why employers should harness the potential of older workers*
The Telegraph 12/3/2014	*Digital Natives: 25 internet success stories aged 25 and under*

Phase 1 Interviews Questions

- Based on the information sheet and participant form, do you have any questions about this research?

- Can you tell me your name, occupation, and age?

- Can you tell me a bit about the work that you do?

- How long have you been doing x?

- How long have you been working for/at y?

- I'd like to show you a selection of newspaper headlines to prompt our discussion about age and work. What do you think of these headlines and stories? Is there anything here you recognize? [See Media Prompts below]

- Would you consider yourself as 'older' at work? What does 'older' mean to you/look like?

- What are your thoughts about age or 'generational' differences at work?

- Do you want to say any more about differences between you and your colleagues, particularly drawing on the theme of age?

- Have you observed age being a barrier or advantage in your line of work/organization? Is it an issue to you at all?

- What else is important to you in your profession?

- What do you think is important for your line of work in wider society?

- Can you share your views on the technological changes that have taken place since you started working?

- What are your hopes and fears for the future of your work?

- Are you worried, excited or indifferent about ageing at work? Is there anything specific about what you do or where you work that you'd like to expand on?

- Is there anything else you think is important to share before we end the interview? Is there anything you want to discuss that we haven't covered?

Phase 2

Phase 2: Media Prompts

Story and Publication Date	Headline
The Evening Standard 27/1/2016	*Jobs are back – as long as you are one of the new generation of Digital Natives*
The Times 9/11/2015	*The online boss who some might think is barely out of nappies*
The Independent 26/3/2016	*Ageism affects applicants who 'sound older' on their CVs*

Participant is provided with an overview of the themes from last time which acted as an elicitation tool (see Appendix 3). This was presented before the interview commenced and the participant was asked to read through and raise anything they'd like to discuss/expand on further in this interview.

Phase 2: Interview Questions

- Now that you have had a read through the themes which came up last time and some of your responses, is there anything that surprises you? Anything you don't agree with?

- Last time we referred to some media headlines and stories about age, ageing and some of those topics also referred to technology and the world of work. I have three stories here drawn from the last year, so they represent topics that have been written about over the last year. Please take a moment to look at them. Is there anything here you want to raise? Discuss? Anything about these stories that surprises you?

- Reflecting back on the year that has passed, do you want to discuss what has changed for you (if anything) professionally since last time?

- What has the last year been like for you? Describe some of the events – particularly at work.

    - What has changed?

    - What has stayed the same?

    - What have been the highlights?

    - What have been the challenges?

- Is there anything going on in the world at the moment which you feel it's important to reflect upon or discuss in relation to your age, getting older which is relevant to your work?

- Last time we talked about age and ageing, and what that feels and looks like at work for you and for others. We are both now a year older. What does that feel like for you? Is there anything you want to expand on with respect to that?

- What do you think the next year will bring for you personally and professionally?

- Is there anything else you would like to talk about today that we haven't covered?

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