

Exploring the emotional geographies of communication technology use among older adults in contemporary London

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Abstract

Geographies of ageing literature recognises the emotional qualities of ageing. However, an historical tendency to overly medicalise ageing means research often focuses on the emotions associated with specific events such as the emotions involved in living with health-related conditions, being a carer, or being cared for in different settings. There remains a paucity of research that attends to the everyday, mundane emotions of being old. This research attends to this lacuna by drawing on theoretical frames emerging from post-humanism and emotional geographies. Specifically, this research engages with the spatial organisation of emotions as it pertains to an increasingly significant element of ageing: the role of communication technology in older people's ability to create and maintain new modes of (techno)sociability.

Drawing upon 29 qualitative interviews and 13 cultural probe follow up responses with retired Londoners aged 59 to 89 years, this research examines how technology connects bodies to objects, people to people and (re)connects older adults to place in new and unexpected ways. Among this participant group diverse, highly individualised and complex amalgams of communication technologies were used. Each mode of communication technology was deployed using intricate strategies of selection and implementation, based on varying temporalities and spatialities, enhancing the ability of participants to relate emotionally with others. Technology use in this regard enabled the portability and emotional continuity of social networks, as communication was no longer tied to certain physical spaces.

These findings are theoretically significant as emotions are increasingly seen to have a direct impact on the spatial construction of society through shaping human capacities and behaviours, which form the world around us. Work in this domain has been limited with certain emotions and bodies being more readily researched, and affiliated with particular gendered and sexualised bodies, bodily capacities, physical forms and social identities than others. This research is able to offer an understanding not currently present in geographical literatures, and offer new modes of spatial analysis that take into account the pervasive but differentiated use of technology.

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List of Abbreviations

ATHENE Assistive Technologies for Healthy Living in Elders: Needs

Assessment by Ethnography

BBC British Broadcasting Corporation

CFS Chronic Fatigue Syndrome

CMC Computer-Mediated Communication

EU European Union

GLA Greater London Authority

GP General Practitioner

HCI Human-Computer Interaction

HLE Healthy Life Expectancy

ICT Information Communication Technology

LE Life Expectancy

NGO Non-Governmental Organisation

NHS National Health System

NRT Non-Representational Theory

PIS Participant Information Sheet

QMUL Queen Mary University of London

RSI Repetitive Strain Injury

SMS Short Message Service

STS Science and Technology Studies

U3A University of the Third Age

UK United Kingdom

UN United Nations

WHO World Health Organisation

Chapter One: Introduction

Ageing and technology are inarguably the most significant social, cultural, economic and political transformations to affect societies in recent history, notwithstanding the United Kingdom (UK). Their effects are disparate, diverse and as the two interrelate, not always well documented. As widely reported in the British media, the UK is undergoing a demographic shift which in the second half of the twentieth century has seen fertility rates decrease alongside increases in longevity, meaning more people are living for longer. Ageing is not a new concept, people have always aged, but we are now living for longer than at any other point in history. The rapid rate of transition to an ageing population means beyond demographic projections, the cultural implications of a long life are still being fully realised. From a geographical perspective, the discipline has been slow to theorise about the meaning of age(ing). Formative work in the 1970s examined place attachment and the relationship between older adults and their environments, demographic characteristics, and the location, distribution and movement of older adults (G. Andrews, Cutchin, McCracken, Phillips, & Wiles 2007; Rowles, 1978; Vanderbeck, 2007). As will be critiqued, work in geographies of ageing has developed considerably since then, however "the question of whether geographers are missing a crucial opportunity to inform understanding of the processes and outcomes, performances and representations of ageing endures" (Skinner, Cloutier, & G. Andrews, 2015, p.777), particularly at the intersection of ageing and technology.

Since the 1980s, technological innovation and diffusion has proliferated at an unprecedented rate (Warf, 2009). Like ageing, the effects of technology are multiple, fluid and still under debate. Technology has garnered academic attention from virtually every discipline, including geography. However, older adults are often excluded from the purview of technology-related research. This could be on account of the (albeit diminishing) 'digital divide' which shows older adults generally have lower rates of technology adoption (Gilleard, Jones, & Higgs, 2015; Office for National Statistics, 2016d), or is perhaps due to an inherent age bias which perceives younger, able bodied adults as the bodily norm and technology end-user (Joyce & Mamo, 2006). Gerontological work on ageing and technology struggles to dissociate ageing bodies from medical or sick bodies, and thus most often focuses on the perceived physical or

cognitive capabilities required to learn and use technology (see White et al., 1999; Withnall, 2015), with geographic work having a tendency towards healthcare technologies such as the implementation of telecare devices and services, and the surveilling and monitoring of the ageing body as a 'failing body' (Oudshoorn 2012; C. Roberts & Mort, 2009). Of peripheral concern, but debatably of centrality to older adults, is the voluntary integration of commonplace technologies into their everyday lives. As successive cohorts of older adults voluntarily embrace technology in greater numbers, the dynamics of ageing are on the precipice of change; people are reaching later life with stronger technology skills (Blaschke, Freddolino, & Mullen, 2009).

In a progressively technological world where the boundaries between bodies and technology are increasingly permeable, each encroaches on the other. Thus, how are the relational dynamics of age(ing) being affected? In response to a paucity of such research, this thesis attends to an increasingly significant element of 'living' the ageing body in a technologically mediated world: the emotio-spatial dimensions of communication technology use among older adults, in contemporary London. Empirically, this research is aimed at understanding how technology impacts on older Londoners' ability to relate emotionally with others and consequently how technology configures emotional relations and the new spatialities this gives rise to. To open up geographies of ageing literatures beyond current notions of the ageing body, it is hoped the introduction of a 'more-than-human' theoretical perspective and greater intersectionality with emotional geographies will lead to new questions about ageing bodies. Increasingly, the direct impact emotions have on the spatial construction of society through shaping human capacities and behaviours is being recognised. Emotions also then become the buffer between technology (objects) and ageing (bodies). Yet, as stated in Joyce and Mamo's (2006, p.100) critique of feminist approaches to science and technology, the cyborg needs to be "grayed". In reference to medical and cosmetic technologies, "there is an urgency about the importance of technology and science to the meaning, interventions, and lived experiences of aging" (Joyce & Mamo, 2006, p.100). Ten years on, such an understanding remains absent from geographical gerontology literatures. In the time since Joyce and Mamo's (2006) call to action, other non-medical technologies have taken on new forms of signification, interaction and meaning in the lives of older adults.

Research Context

Owing to the vast conceptual and applied scope of 'ageing' and 'technology', it is useful to address how the terms 'ageing' and 'technology' will be employed and to contextualise demographic changes and rates of technological adoption by older adults. The research questions will then be set out and the structure of the thesis outlined.

Ageing Terminology

The terminology of ageing is contested terrain and increasingly political, located within the discourses of biopolitics, demography, labour and health economies on the one hand and cultural norms on the other. All categorisations of age(ing) are inescapably problematic. Academic opinion is divided over whether to refer to ageing in definitive terms using labels such as 'elderly', 'old' and 'aged' or emphasise ageing as a relative process, favouring phrases such as 'ageing' and 'older adult'. This is partly generated by the 'agelessness' movement, positioned as liberating old people from the confines of discriminatory and restrictive age identities, with words such as 'elderly', 'old' and 'aged' argued to be laden with assumptions about bodily states and capabilities that socially organise people into pre-ordained categories (M. Andrews, 1999). Critics of 'agelessness' see it as a shift to extend middle-age values into old age, "depriving the old of one of their most hard-earned resources: their age" (M. Andrews, 1999, p.301). Gibson (2000, p.776) asserts that such prejudice imbued in certain age-related terms can be resolved whereby "either such a word should be tabooed and not used at all, or it should be rehabilitated and used only in its true descriptive sense". Gilleard and Higgs (2000, p.3) offer a more nuanced perspective, citing 'ageing' and 'old age' as distinctly different aspects of life with:

Old age itself is not a site that is seriously contested or challenged. It remains a period of life that is excluded, marginalized or institutionalized. Whilst the changes that accompany ageing are being reframed and revalued.

It is this deeply political marginalisation of old people that compels other academics to acknowledge people as aged or in old age, as reclamation of the terminology. In the same way feminist and bodily geographers have revealed and called for recognition that a body is never simply a body, but always a gendered body, older bodies are never simply a body, they are aged (Calasanti, 2008). Feminist geographers also point to the double marginalisation of old women as responsible for the avoidance of the term 'old'

so as not to draw negative attention to the female body: "they [feminists] often write or say "older" rather than "old" to avoid the negativity of the latter" (Calasanti & Slevin, 2006, p.3). The avoidance of such terms becomes part of a broader set of age relations that perpetuates ageism and the dominance of middle age as 'normal' and its associated hegemony (Calasanti, 2005).

Chapter Two discusses how conceptions of age(ing) have been constructed and operationalised. The purpose of this discussion is to clearly set out how this research is positioned within such debates and the terminology to be used throughout this thesis. Most important is that the terminology used aligns with how participants feel about their experiences of ageing and having an aged body. As stated by Gilleard and Higgs (2000, p.18), there is no longer any clear 'threshold' for when one can be considered to be ageing or old. AgeUK (2017a, p.3) reports that when people were asked to select from a range of choices what stage of life they were in, over half of those surveyed aged 60-64 years old said 'later life or old age' increasing to 75% of people 65-69 years of age. Among the general population, the European Social Survey reports that perceptions of old age in the UK are the second lowest across Europe, with 59 years of age thought to be the start of old age (Government Office for Science, 2016, p.13). Even socio-cultural institutionalised meanings of ageing such as retirement age have become unstable as the universal pension age has been removed and replaced with a staggered retirement age. Currently in the UK, men draw a state pension at 65 years of age and women at 63 years of age, with amendments coming into effect between December 2018 and October 2020 that will raise the pension age to 66 years for both men and women (AgeUK, 2017b).

Resultantly, this research will interchangeably use 'older adults,' 'ageing,' 'retired,' 'aged,' 'old,' and 'old age' based on the perceived relevance to each respondent. This reflects that participants in this research span 58 to 89 years of age with some participants firmly locating themselves as 'old', whilst others prefer to see themselves as ageing but not old. This is to be expected as a 30 year span of life cannot be homogenised into a single word or phrase, in much the same way that infancy, childhood, adolescence and early adulthood could not accurately be encapsulated by a single word or phrase. Some may criticise this approach as not firmly taking a stance on either side of the debate with a decisive intervention required. However, the aim of

this research is not to arrive at a definitive point at which old age is entered into, rather this research hopes to move away from chronological, categorical or absolute classifications of ageing (bodies) towards something that reflects the lived realities of older adults (in London) and the practices by which aged bodies are made.

The Demographic Context of Ageing in the United Kingdom & London

The demographic shifts indicating the transition to an ageing population structure are well documented and widely reported on in the UK. As this research seeks to move away from defining and (socially) organising the ageing body in relation to purely chronological markers, recitation of the demographic changes occurring will be confined to this chapter by way of contextualising the broader study. This is not to diminish the very valuable contributions made by those in such fields or the very real, many and variable consequences an ageing population represents for individuals and society. Rather, it is hoped this research will contribute to a growing body of, and provide further impetus for, research that better reveals the 'hidden' everyday geographies of ageing.

The number of older adults, most commonly defined as those 65 years of age or older, steadily rose throughout the twentieth century. In absolute terms, in 2015 it was reported there were over 15 million people aged 60 years or older and 11.6 million people aged 65 years or older, equating to 23.2% and 17.8% of the population respectively (AgeUK, 2017a, p.3; Office for National Statistics, 2016a). Relatively speaking, HelpAge International (2015) population projections estimate that the 23.2% of the population aged 60 years or older in 2015 is expected to rise to 27.8% by 2030 and 30.7% by 2050. Currently, those aged 65 years or older comprise 17.8% of the UK population and this is expected to increase to 24.2% by 2040 (Office for National Statistics, 2016a; AgeUK, 2017a). This means for the first time in history there are "now more people in the UK aged 60 and above than there are under 18" (AgeUK, 2017a, p.3). Declining fertility rates and the aforementioned increase in longevity have created this ageing population structure. Average Life Expectancy (LE) at age 60 is 24 years, and with a Healthy Life Expectancy (HLE) of 17.7 years, of those 24 years a person can expect to live 17.7 years of them in good health (HelpAge International, 2015). London is comprised of 13.3% of the UK's total population, with 15.5% of London's population aged 60 years or older and 11.5% aged 65 years and older (Office for National Statistics, 2016a). Comparative to the wider UK population, London's population is younger. Interestingly, although in 2015 London saw 38% of international migrants settling in London, (equating to over 130,000 people), it had an overall net loss of inhabitants due to the internal migration of people moving out of London (Office for National Statistics, 2016b). The only age group more likely to remain in London was those aged 21 – 28 years, this in part accounting for the disparity between London's age structure and the rest of the UK (Office for National Statistics, 2016b).

Technology Terminology

The term 'technology', although ubiquitous, is equally ambiguous. For example, "the commonest usage of "technology" is to denote manufactured articles - things made by humans" (Kline, 2003, p.210, emphasis in original). From this perspective the material world in its entirety can be defined as being comprised of 'technologies' of sorts. Yet the word 'technology' brings certain types of manufactured articles to mind. The term 'technology' in its colloquial usage has become a synecdoche for communication technology, also known as Information and Communication Technology (ICT). The technological modes by which communication has been achieved vary but include letters, cards, postcards, telegrams, faxes, landline telephone calls and more recently mobile telephone calls, text messaging, emails, social media platforms such as Facebook and Twitter, and visual media such as Skype and other internet enabled modes (Urry, 2003). Compared with earlier modes of communication technology such as letter writing, modern technologies mark a distinctive break in the evolution of technology for three primary reasons: 1) their disarticulation from modes of transport through the advent of telematics, 2) computational and microelectronic processing innovations and 3) the networking of computers through the internet, the most widespread and readily adopted technology in history (S. Graham, 1993; Hayles, 2005; Urry, 2003; Warf, 2009).

These key phases in the evolution of technology are significant as prior to their invention communication was still articulated with transport; it required a physical 'messenger' (Hillis, 1998). Now, the development of telematics and microelectronics means communication and transport have become disarticulated; communication is no longer tied to physical objects in the way it once was (Hillis, 1998; S. Graham, 1993);

communication remains a material process but with dematerialised geographies. This has led to unprecedented time-space compression with the near instantaneous transfer of information setting in motion the trajectory for, and rapid proliferation of, communication technologies such as computers, the internet and mobile telephones (Adams, 1997, 2007; Kinsley, 2014; S. Graham, 2009; Warf, 2013). However, technology is not simply constituted of physical objects nor is it a neutral tool. All forms of technology are social agents reliant on the formation of symbiotic humanmachine relationships (Mort, C. Roberts & Callén, 2013; Oudshoorn, 2009; Turkle, 1995). Technological objects are part of socio-technical systems of use whereby "combinations of hardware and people (and usually other elements) [come together] to accomplish tasks that humans cannot perform unaided by such systems – to extend human capacities" (Kline, 2003, p.211). Technology has simultaneously a materiality and intangibility; it consists of objects with definitive boundaries but the effects of which cannot be contained and spill over, making it impossible for them to be neatly traced and mapped. This research will pay attention to the emotional landscapes of technology use as much as the objects of technology itself.

The range of possible technologies for scrutiny far exceeds the scope of this research and must be narrowed, but will not be prescriptive. The words 'technology,' 'communication technology' and 'ICT' will be used interchangeably throughout this thesis and can be taken to mean those communication technologies which are powered by microelectronics. Where specific physical technological devices are being referred to, they will be named as such and include landline telephones, mobile telephones (including 'smart phones'), computers, laptop computers and tablets. Communication technology platforms are also counted in this broad definition and although reliant on computational processing, may not be tied to physical technology devices as they are operational on a number of devices namely, emailing, video-calling such as Skype, blogging, internet-enabled messaging platforms such as Viber or WhatsApp, and social media platforms such as Facebook, Twitter or Instagram.

The Technological Context of the United Kingdom & London

The rapid and widespread diffusion of technology means it has become more prevalent in all facets of governmental, economic and social life but rates of distribution and access are not even. One dissection of the 'digital divide' is the evidence of an agerelated gap, with lower rates (although steadily increasing) of technology adoption and usage among those aged 65 years and older. Recent Office for National Statistics (2016c, p.2) measures indicate "the internet was used daily or almost daily by 82% of adults (41.8 million) in Great Britain in 2016, compared with 78% (39.3 million) in 2015 and 35% (16.2 million) in 2006", with mobile and smart phones the most common way of accessing the internet. However, discrepancies emerge when data is transected by age. Examining those who had used the internet in the three months prior, only 58.9% of retired people reported having done so compared with 97.7% of employees, 95.8% of self-employed persons and 99.2% of students (Office for National Statistics, 2016d). When assessed on age-based criteria, 74.1% of people aged 65-74 and 38.7% of people aged 75 years or older, had used the internet in the past three months in contrast to all other age groups (16-64 years) where rates varied from 88.3% to 99.2% (Office for National Statistics, 2016d). The inverse is true among those who have never used the internet with people aged 65 years or older grossly over-represented: 21.5% of 65-74 year olds and 56.5% of 75 year olds and over, while rates among all other adults aged 16-64 years vary between 8.9% and 0.3% (Office for National Statistics, 2016d). In general, London has better household internet access rates with 94% of households having access compared to the rest of Great Britain at an average of 89% (Office for National Statistics, 2016c, p.19).

Of consequence is the broader directional trend *within* age groups. Between 2011 and 2016, people who used the internet aged 65-75 years has steadily increased from 52.0% to 70.6% and similarly for those aged 75 years and over, from 19.9% to 33.0% (Office for National Statistics, 2016d). For retirees between 2011 and 2016, those who had used the internet in the past three months increased from 39.8% to 58.9%. Whilst older adults are engaging more with technology, as evidenced through increased rates of internet use in the past five years, this must be "balanced by the increasingly rapid pace of technological change" (Government Office for Science, 2016, p.94). For those currently middle aged, despite considerably higher rates of technology adoption, "it is less clear whether they too will be able to use future emerging technologies" (Government Office for Science, 2016, p.9). These social processes are the mandate of geographers of age to move beyond questions of *when* and *where* these societal transformations are taking effect, and to critically engage in questions regarding the

means by which they will occur and the resultant spatial outcomes; questions that geographers have often been slow in asking (G. Andrews, Evans, & Wiles, 2013).

Research Questions

This thesis seeks to satisfy the following research questions:

- What role does communication play in the emotional work of doing the ageing body?
- What form of communication technologies do older adults employ and how do these shape emotional geographies?
- How does the use of communication technology impact on the social relations of older adults and what new forms of (techno)sociability does it give rise to?
- What can older adults' use of communication technology tell us about the emotional geographies of ageing?

By examining these questions in the context of older adults in London, the aim is to empirically develop an understanding of the emotional work involved in doing the ageing body as mediated by communication technologies, and the resultant emotional geographies. Theoretically, this research attempts to productively contribute to elucidating new understandings of the emotional work associated with ageing and how the ageing body is done, and to shift perceptions of the ageing body as predominantly medicalised or pathologised. Methodologically, this thesis aims to critically reflect on the utility of a broadly ethnographic, cultural probe approach for becoming knowledgeable about emotions among this particular participant group through practice-based interventions. The aim is to contribute to a growing body of literature centred on developing new methodological tools that address the representation of emotions in research contexts, and in older adults who are often overlooked as a study group.

Thesis Outline

This thesis is comprised of seven chapters. Chapter Two: Situating the Emotional and Spatial Dimensions of Technology Use among Older Adults, outlines the impetus for this research, placing it within the broader academic context and societal debates.

Theoretically informing this research are primarily geographic literatures, but where applicable, other disciplinary contributions will be consulted including gerontology, sociology, psychology, anthropology, linguistics and communication studies. This discussion will demonstrate that extensive gaps remain at the interface of the emotional and spatial aspects of ageing and technology use, where this research is able to make a decisive contribution to existing scholarly literature through an interdisciplinary approach. Chapter Two will firstly consider how conceptualisations of ageing (bodies) have been addressed to date focused around three broad areas: the medicalised ageing body, the (neoliberal) economics of ageing and the gendered ageing body. The second section will bring into closer conversation, geographies of ageing and emotional geography literatures to elucidate how the application of emotional geography concepts such as post-humanism can lead to asking new questions about old bodies. The final section shows that innovative and important research examining the social construction and socialisation of technology, and resultant new socio-technical interactions technology gives rise to, overlooks older adults. The chapter will conclude by considering the implications and aims of what a greater intellectual exchange between geographies of ageing, emotional geographies and technology studies might be able to achieve.

Chapter Three: Researching Emotions, Technology and Ageing, sets out the methodological framework for this research. As emotions are considered unable to be representated by some, researching them can present methodological challenges and calls for methodological innovation to overcome such concerns. Foregrounded will be some of the methodological issues associated with emotions as the empirical unit of analysis, as well as how emotions arise in the research setting. The cultural probe framework will be set out, articulating how it responds to the questions of representation, including detailing the specific methods and research strategies. The chapter will reflect on the methodology originally intended as compared with how the fieldwork unfolded, the empirical material produced, the process of analysing and interpreting the empirical material and conclude by reflecting on the methodological challenges encountered and the broader utility of cultural probe methodology for researching emotions and working with older study participants.

Chapters Four, Five and Six are organised around the empirical material. Chapter Four: The Body, considers participant experiences of ageing, encapsulating both bodily and social experiences, landscaping how participants live their ageing bodies alongside technology. How participants felt about their ageing body and changing social status in part determined certain mobilities, technological capabilities and how technology was assimilated into their lives. Although such narratives may seem peripheral to addressing the research questions, the emotional affects of humanmachine relationships and the socio-technical interactions they give rise to, are not discrete or limited to moments of active engagement. Thus, when seeking to understand how technology alters, if at all, the emotional geographies of older adults, narratives must be positioned more broadly within participants' lives. Participants spoke of their 'ageing body' as distinct from being a 'retired body'. As expected, retirement led to a drastic re-ordering of the temporalities and spatialities of participant's lives, with relationships with technology being (re)configured as a result. Ageism in retirement also played a crucial role in opening up or foreclosing certain vistas in old age. Finally, participant narratives on the relational sense of approaching death will be discussed.

Chapter Five: The Language of Technology and (Ageing) Bodily Communication, interrogates the many interconnections language has to the emotional and spatial dimensions of technology use. Language plays a critical role in the socialisation of technology, influencing participant conceptualisations of, and relationships with, technology. Beyond language as a medium for communication, participants were required to learn an entirely new literacy, that of 'computer speak' to be able to use communication technologies. Once 'literate', highly adept strategies for the selection and use of language were deployed as a means of being able to relate emotionally with family and friends¹. In the latter part of the chapter, the focus narrows to the materialities of technology and communication, and the new intersubjectivities that are formed between the ageing body and technology in this process. This chapter examines primarily dyadic relationships at the bodily level, revealing that technology

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¹ It should be noted that an approach to social networks defined as 'family and friends' draws on, and reinstates, particular normative and neoliberal framings of (techno)sociabilities, however this is consistent with participants' own framing of their emotional worlds.

altered some of the visceral and sensory elements of communication, transformed communication practices to compensate for the changing role of body language in technology mediated interactions and, more significantly, gave rise to entirely new forms of (techno)sociability where feelings of bodily co-presence were technologically achieved.

Chapter Six: Networked Relations, takes an expanded view of the empirical material, drawing together how the emotional, spatial and temporal impacts of technology in participants' lives reformulated social networks. The chapter will begin by examining the role of technology in facilitating relationships within familial networks. Secondly, the role of friendship and interest-based networks had altogether separate emotional geographies and communication technology practices that complemented familial networks. The remainder of the chapter will explore how technology and its new sociabilities altered participants' connections to place, with the experience of ageing in place evolving alongside technology, connecting participants to information, ideas and places in novel and unexpected ways.

Chapter Seven: Conclusion, draws together how this research has responded to the research questions and the original contribution made to a developing emotional geographies of ageing. Technology and its new sociabilities altered not only the emotional work of ageing, but participants' connections to objects, bodies and place. This work opens up current notions of the ageing body, shifting perceptions of the ageing body as predominantly medical or pathologised, leading to other avenues of new research. Methodologically, the cultural probe approach requires further development but offers much needed innovation among older adults who are often overlooked as a study group.

Chapter Two: Situating the Emotional and Spatial Dimensions of Technology Use among Older Adults

Introduction

This research draws on a range of interdisciplinary literatures to examine how the emotional and spatial dimensions of technology use by older adults have been considered to date. There is a paucity of literature examining how technology use affects the emotional lives of older adults. As such, there exists no singular literature on which to draw owing to the simultaneously pervasive and nebulous phenomena that are ageing, emotions and technology. The literatures surveyed here will draw primarily upon geographic work but due to their close association, also social, feminist and environmental gerontological, sociological and psychological research. The literatures engaged with do not undertake to be universalising or essentialist discourses, but originate from particular social, economic and political contexts as framed by certain theoretical and methodological traditions. Nor is it within the scope of this discussion to recount the entire enquiry to date.

From a theoretical perspective, humanism, the adoption of an anthropocentric worldview, whereby agency is located primarily within humans who shape the surrounding world (Whatmore, 2006), is dominant among the research discussed. Humanism gained currency from the 1970s onwards in reaction to positivist, scientific discourses that regarded human action as being biologically predetermined and humans as 'passive agents' (re)acting to the world around them (M. Smith, 2009). There is increasing recognition within human geography, and the academic community generally, that humanism may no longer be appropriate for a diversifying and increasingly technological world (Castree & Nash, 2006). Termed posthumanism, this paradigmatic shift decentres human agency as the starting and focal point for understanding the world, alternatively conceptualising agency as located within, and emergent from, human and non-human materialities or relations. Of consequence in critical strands of a post-human or more-than-human world, is less the creation of a bounded, universal definition of the human figure than the process of 'making the human' of which emotions are a fundamental component, and technology is increasingly enfolded (Braun, 2004a). As the delineation between human and nonhuman becomes less distinct or less relevant for some, and our co-habitation with the more-than-human becomes closer, a new paradigm is required. Hence, the literatures in this chapter will be read and interpreted through a critical post-human lens. This is in anticipation of eliciting new approaches to understanding ageing bodily capacities and spatialities, and with a view to forging transformative connections as to how older adults 'live' their bodies alongside and within technology.

The Geographies of Ageing

Ageing went through an unprecedented demographic and cultural transformation during the twentieth century. Consequently, ageing as a complex milieu of social, cultural, biological, economic and political phenomena has drawn attention from a range of academic disciplines such as medicine, sociology, psychology, gerontology and human geography: yet human geography's relationship with ageing can be characterised as fragmented. In a review article by Skinner et al. (2015) tracing the development of geographies of ageing, the authors reflected on the seminal paper by S. Harper and Laws (1995), which called for recognition of, and an investment in, the development of a geographies of ageing sub-discipline. In conclusion, limited progress has been made in the 20 years since. This is partially attributable to the continued situating of ageing-related geographers in disciplines outside of geography. The intercessions made by said academics are also frequently positioned at audiences and published in external journals. These literatures offer their readership a spatially informed perspective of ageing but could offer a more critical engagement with the key and ever evolving tenets of geographical thought, with the external positioning of these literatures slowing the intellectual advancement within the discipline (G. Andrews et al., 2013).

The difficulty geographies of ageing face in coalescing into a coherent sub-discipline reflects the nebulous and fluid nature of age(ing). How are academics to develop a sense of intellectual cohesion around an idea and experience that is notoriously problematic to define, nor static? What could geographies of ageing offer our ontological and epistemological understanding of ageing that other disciplines cannot? Geographers alone do not face these questions with G. Andrews et al. (2007) suggesting gerontology suffers from a similar predicament as to what disciplines to align itself with and draw from. Consequently geographies of ageing remains a

fragmented intellectual landscape, with key interventions made by select, dedicated scholars. This research contends that the perception and discourses of ageing need to be reframed so it is understood as a cultural, not demographic, shift: not purely in social domains, but in political and economic spheres too. Societal mentality needs to change to the view of a long life rather than old age. Age as a chronological descriptor in many respects denotes little of *individual* life circumstance. Increased longevity has meant that 'old age' for some can span 30 years or more, yet we homogenise no other extended phase of life the way we do ageing (Biggs, 2014). Latent is the risk of categorical thinking that ensnares us to believe that numerical age, specifically older age, conveys something of the intrinsic value and capabilities of a person (Boyle, Wiles, & Kearns, 2015). In actuality "old age is the phase of life in which the range of experience is greatest" (Thane, 2002, p.8), with older adults having lived diverse and fluid lives until reaching this societally defined point and continuing to do so thereafter.

Early geographies of ageing research explored place attachment in old age and the impact of geographic location on wellbeing (Rowles, 1978, 1981, 1983, 1993; Warnes, 1990), extending in the 1980s to include research focused on how ageing populations are distributed within countries and throughout regions, the internal and external migration flows, and the demographic characteristics of these groups (G. Andrews et al., 2007). From a governmental perspective, the economic reforms of the 1980s and widespread deinstitutionalisation of care concomitant with the anticipated needs of a future ageing population, necessitated a reorientation of research agendas towards the logistics and economics of health and social care service provision. New areas of relevance included the embodiment and performativity of ageing-related identities (see G. Andrews et al., 2007; Herron & Skinner, 2013; Mansvelt, 1997; Schwanen, Hardill, & Lucas, 2012); the effects of the deinstitutionalisation of care in favour of the policy phenomenon 'ageing in place' (including the institutionalisation and medicalisation of the home as a site of care) (G. Andrews & Phillips, 2002; Boyle et al., 2015; Cutchin, 2003; Dyck, Kontos, Angus, & McKeever, 2005; Twigg, 1999; Wiles, 2003, 2005; Wiles, Leibing, Guberman, Reeve, & Allen, 2012); issues of social isolation and loneliness (Victor & Bowling, 2012); the gendered nature of formal and informal care work (Milligan, 2003; Milligan & Wiles, 2010; Wiles, 2011); the differential experiences of, and access to, care in rural as compared to urban environments (see Herron & Skinner, 2013; Skinner & Joseph, 2011); the healthful or health damaging elements of home (see Hillcoat-Nallétamby & Ogg, 2014; Means, 2007); most recently the burgeoning fields of telecare and domotics (see Oudshoorn, 2012; Percival & J. Hanson, 2006; Pols & Moser, 2009; C. Roberts, Mort, & Milligan, 2012), and the confluence of mobilities and migration within ageing (see Gunaratnam, 2013; Warnes & Williams, 2006). This is by no means an exhaustive list, but the breadth of research topics encapsulated under the banner of geographies of ageing makes apparent the unique positionality of geographies of ageing and its ability to examine the scalar dimensions from the micro-geographies of the home and body, through to global trends (Skinner et al., 2015).

The Medicalised Ageing Body

The majority of academic exploration into ageing bodies traditionally arises from disciplines external to geography, expressly medicine and of significant influence, sociology (Kontos, 1999; Pain, 2001; Skinner et al., 2015; Twigg, 2004; Vanderbeck, 2007). Medicine acquired primacy of bodily research from the nineteenth century onwards as ageing bodies came to be thought of as scientific, biological entities constructed by nature. Through the appropriation of the body by medicine "the idea was that in the realm of science each logical contradiction [of the body] would be explored and resolved" (Mol & M. Berg, 1998, p.6). Medical sociologists state "the study of old age originally sought to produce a unified text by reducing the complex of meanings and social relations to a strictly biological narrative" (Kontos, 1999, p.678). Twigg (2004, p.65) adds, "it is through such expert systems of power-knowledge that the lives of older people have been regulated, ordered, known, and disciplined". In tandem with the development and circulation of medicalised notions of ageing, political ideologies have arisen that govern and discipline older bodies.

The theorisation of ageing and what it means to be old has been largely co-opted in both academic and political discourse by essentialist bio-medical narratives of bodily decline and senescence. The historical presumption of loss of bodily function and capacity has meant older age also became associated with shrinking physical and social worlds (Nair, 2005). Beyond the medical and scientific utility of conceptualising bodies as having a 'natural' or 'normal' state, there are also deeply engrained theological roots which act to make permissible certain behaviours based on their

normalcy and therefore (age) appropriateness (Jones & Higgs, 2010). The idea of "the normal was both a means of establishing scientific validity and a means of maintaining social order" (Jones & Higgs, 2010, p.1514). This has meant the ageing body has endured a long history of being reduced primarily to a medical one, with parallels able to be drawn between the work done by geographers in the area of (dis)ability studies (Jones & Higgs, 2010; Pain, Mowl, & Talbot, 2000; Twigg 2004; Wiles, & Allen, 2010). Faircloth (2003, p.5) agrees stating "medicine is part of a totalising regime whose purpose is to 'manage' bodies" notwithstanding the management of emotions. Accordingly through allowing disciplinary dominance to flourish, bio-medical discourses of ageing have replaced "the polysemic ones of the past" (Twigg, 2004, p.61). This has been problematic as medicine disaggregates bodies from heterogeneously unified wholes to constituent and isolated parts (Mol & M. Berg, 1998), with the resultant effect being that medicine was ill equipped to theorise about the ageing body beyond its physical manifestations and those involved in researching and becoming knowledgeable about ageing (bodies) have done little more than document empirical measurements (Hendricks & Achenbaum, 1999). This is not to say that biomedical narratives intentionally sought to typecast ageing and older adults in a negative light, rather:

This more negative view of old people and ageing was facilitated by scientific attention to ageing. By focusing almost exclusively on problems of elderly people - their isolation, dependence, role-loss and illness, - researchers reinforced a very negative portrayal of ageing (Baltes & Carstensen, 1996, p.400).

Gerontologists, sociologists and geographers are complicit in this problematisation of the ageing body as by "avoiding the subject of the body, [they have] effectively handed the topic over to medicine" (Twigg, 2004, pp. 60-61) and in many respects failed to offer (viable) alternative theorisations of ageing. As will be elaborated on, this typecasts older people as a medical problem and healthcare burden, affecting both the societal and personal emotions of ageing (Kearns & G. Andrews, 2005; Townsend, 1981).

Restrictive conceptions of ageing were also emblematic of broader disciplinary trends for much of the twentieth century. Not dissimilar to biomedicine, geography's theoretical roots in positivism stymied human geography's intellectual development by being confined to a paradigm grounded in the belief that static, universal, objective truths exist independently of humans, to be discovered and quantified (S. Harper & Laws, 1995). Aligned to the theoretical and methodological paradigms of influence at the time, these works have come to be viewed as "a phase of empirical accumulation that typically precedes the emergence of a dominant perspective or paradigm in any emerging field of research" (G. Andrews et al., 2007, p.152). Whilst these theoretical traditions had in the main been eroded by a burgeoning interest in the geographies of ageing in the 1990s, remnants of positivist underpinnings are discernable in publications from this era; the way in which questions surrounding age focused on neat and discrete ways to describe the social phenomenon and its associated spatial distributions were largely governed by quantifiable methods. Consequently key epistemological questions around the experiential aspects of ageing were deprioritised over questions of where older people were located, demographic shifts and patterns and the associated service provision required (G. Andrews et al., 2007; Hardill, 2009).

In keeping with the broader corporeal turn of the 1990s, social scientists began to put forward more situated theorisations of ageing that moved away from universal narratives in favour of recognising the variety of individuals' experiences (see Gilleard & Higgs, 2000), but the emotional dimensions of ageing continued to be obfuscated by, and misrepresented as, the 'social'. Theories such as the 'ageless self' (Kaufman, 1986) and the 'mask of ageing' (Featherstone & Hepworth, 1989) purport the idea that the physically ageing body 'masks' and 'misrepresents' the true inner self, which remains ageless or it could be suggested, 'youthful' (Bytheway, 2000; Kontos, 1999; McHugh, 2000). Each theory whilst trying to shift perceptions of ageing away from being solely medical, risks inadvertently advocating for ageing as a continuation of middle age and potentially diminishes or deprives older adults of the meaning and experience of ageing (McHugh, 2000). These humanist alternatives are overly deterministic and unable to reconcile the on-going and iterative relationship between the physical and medicalised body and the experiential, social constructivist elements of ageing (Wiles & Allen, 2010). Others have been critical of the idea of a 'mask of ageing' "unhappy at what they see as the revival of Cartesian dualism lying beneath certain accounts of the body in age" (Twigg, 2004, p.63), with such a dualism having important implications for gendered experiences of ageing in particular. Although both theories have the guise of an emancipatory potential for older adults, many contend they only serve to commit older adults to an equally unobtainable regime of bodily disciplining and monitoring as a mechanism for the continuation of a 'middle age'. Older bodies then become complicit in and subjected to the "socialised surveillance of the body" (Gilleard & Higgs, 1998, not paginated) to ensure such continuation is achieved

Ageing is also increasingly shaped by economic and political discourses, with many contemporaneous theorisations sharing a close intellectual relationship with neoliberalism. The introduction of neoliberalism marks a perceptible shift in agerelated government policies in the UK. In order to shape the neoliberal ageing subject, governments rather than devising policies and service strategies that fulfil the needs of older adults are increasingly attempting to define not only what ageing is, but *how* to age (Biggs, 2006). The responsibility for 'good' health, 'normal' ageing and 'care' have shifted from the mandate of the state, to the individual:

The ability to do things oneself rather than having to rely on others to do them is the new gold standard of normal ageing...individualisation whereby the individual takes sole responsibility for functioning within society and where the body and health are central to fulfilling that role (Jones & Higgs, 2010, p.1517).

In societies such as the UK, where the lifecourse has become more fluid and therefore less predictable, government policies make permissible certain age-related bodily states, norms, behaviours and social identities in pursuit of guaranteeing 'predictable' ageing among this demographic group (Biggs, 2006). People do not have to, nor is everyone able to, conform to the social mores in operation but non-compliance on behalf of an unruly body can lead to social, economic or political disenfranchisement (Bytheway & J. Johnson, 1990).

Policies directives such as Active Ageing, premised on making societies more equitable and tolerant through highlighting the reduced opportunities for participation that older adults can face, have also been co-opted in part as a means to legitimise the neoliberal ideals of self-governance and (economic) self-reliance (Jones & Higgs, 2010). For many, the rhetoric of Active Ageing sets the unobtainable goal of biologically defying ageing by suggesting that through the 'hard work' of individuals, ageing does not need to be a time of (inevitable) physical decline, primarily as a means of ensuring continued 'participation' which translates to sustained autonomy, independence and economic contribution (Martin, 2012). To ensure older adults are

compliant, they must "engage with health promotion discourses and are vigilant about their body maintenance regimes a sense of fear associated with ageing, decay and death also needs to be instilled" (Martin, 2012, p.53). Active Ageing and neoliberal concepts of risk are complementary to one another: neo-liberal narratives of risk act as the fear and impetus behind disciplining and monitoring the ageing body in permissible ways, with Active Ageing offering (rational and responsible) solutions to the perceived problem of ageing (Jones & Higgs, 2010). For those who are not able to suitably manage the risks of ageing: "it moves people from a post-working lifestyle into a welfare category of risk" (Gilleard & Higgs, 2000, p.104). However, consistent with neoliberalism more broadly, this fails "to acknowledge the structural conditions and social resources that affect the capacity of individuals to take up idealized activities and practices" (Rudman, 2015, p.19).

As expected, policy drivers in the UK closely observe those set out by international bodies such as the European Union (EU), United Nations (UN) and World Health Organisation (WHO)². A recent report entitled the 'Future of an Ageing Population' (Government Office for Science, 2016) identifies six interrelated key areas that need policy action in order to fully realise the 'opportunities' that an ageing population presents. This includes 'working lives', 'lifelong learning', 'housing and neighbourhoods', 'central role of families', 'health and care systems' and 'physical, social and technological connectivity' (Government Office for Science, 2016, p.2). Whilst it should be applauded that the report adopts a holistic approach to wellbeing in later life and seeks to provide social, educational and economic opportunities in old age, in part by removing the barrier ageism represents, the report suggests that this is best achieved by extending working lives and reducing the 'dependency' on pensions. It is encouraging to see a shift away from the harmful and highly emotive language ageing has been subjected to in earlier policies using phrases such as the 'graph of doom', 'silver tsunami', 'time bomb' or 'avalanche' (Harding & Kane, 2012; Mort et

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² Internationally as a member of the EU, UN and WHO, the UK is legally obligated to adhere to international laws or treaties and is encouraged to adopt non-legally binding policy frameworks. There are many ideological and operational layers to such policies with the most influential international frameworks on ageing the World Health Organisation (2002) 'Active Ageing: A Policy Framework' and Second World Assembly on Ageing (2002) 'Political Declaration and Madrid International Plan of Action of Ageing'. In accordance with the WHO (2002, p.12) definition Active Ageing: "Is the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age".

al., 2013; A. Walker & Foster, 2013). Yet disappointingly, the retention of older adults in the paid workforce remains the perceived 'solution' to the political 'problem' of ageing.

The Neoliberal Economics of Ageing

There has been an ever-increasing conflation and convergence of medicalised and economic models of ageing, each propagating the other and leading to the dissemination of overwhelmingly negative emotions about ageing. As established, official discourses of ageing have been stratified by two strongly recurrent themes: the (ill)health, and the economic contribution or conversely burden, of older adults (Moulaert & Biggs, 2013). Contemporary health care and economic policies evolved from ageing as a structured dependency prior to the Second World War (Townsend, 1981), to the welfare state of the 1950s through to the 1980s' marketisation of care (Gilleard & Higgs, 2000). The 1980s saw the rapid erosion of the collective sentiment and ethics of care underlying previous welfarism regimes, which was transposed as "social dependency" (Biggs, 2001, p.308). The free market politics and welfare reforms of the 1980s, implemented as the corrective action to social dependency, saw the systematic deinstitutionalisation of health and social care structures from government to the community, and acted as the catalyst for the marketisation of care (Gilleard & Higgs, 2000; Joseph & Kearns, 1996; Joseph, Kearns, & Moon, 2009; Lawson, 2007). Through welfare reforms older adults became (ageless) consumers and commodities (Biggs, 2006). Latterly, deinstitutionalisation in relation to older adults became commonly referred to as 'ageing in place', a term which continues to prevail. A loosely defined concept, ageing in place refers to the notion that governments, including successive governments in the UK, are electing to support ageing in the community or home 'place' rather than in residential or institutional settings. Yet the changing demographic towards an ageing population means the shift in policy has done little to quell fiscal related anxiety among the general public, mirrored by the government.

Townsend (1981) presents an account of the close relationship early theories of ageing share with the economic transformations of the late nineteenth and early twentieth centuries. Authored over 35 years ago, Townsend's (1981) argument is as relevant today as it was then; in the same way shifts to a market economy and capitalist modes

of production set in motion the institutionalisation of ageing in economic terms through the introduction of a retirement age, technology can be seen to be transforming productive and economic activities in a similar way. For Townsend (1981) the introduction of a retirement age was an economic mechanism to manage the supply and demand of labour along with changing attitudes about the *type* of employee deemed to be most desirable (S. Harper & Laws, 1995; Loretto, Duncan, & White, 2000). Townsend (1981, p.10) recounts in the 1930s between 40-70% of men aged 65 years and over were still economically active or employed in industrial nations. However by the 1960s this had reduced to an average of 20% for the same demographic. Townsend (1981, p.10) states this:

Change cannot be attributed to changes in the risk of ill-health or disability, or the masking of disability in periods before substitute pensions were available. It is attributable to changes in the organization of work and in the kind of people wanted for work.

Biomedical and economic theories of ageing become mutually reinforcing as the positivist empiricism of medicine has amassed a vast array of statistics and empirical data that can be used to illustrate all manner of bodily decline in older age that means older adults have been systematically considered no longer suitable for the workplace.

Ironically, medical discourses are a potential cause of ill health in old age. Research conducted in China and the United States recorded how older adults' self-reported competency in areas related to thinking, behaviour and functioning was influenced by age-stereotypes and cultures towards ageing (Levy, 2001). Participants were blindly exposed to positive or negative age stereotypes, with those exposed to negative age stereotypes exhibiting poorer memory, self-efficacy, handwriting, and will-to-live (Levy, 2001, p.579). Similarly, a separate study conducted by Levy and colleagues concluded ageing stereotypes can subconsciously and detrimentally affect older adults' cardiovascular function (see Levy, Hausdorff, Hencke, & Wei, 2000). It can be said that (implicit) attitudes towards older adults cause changes to the socio-biology of the ageing body: "a health problem, for instance, might be attributed to an inevitable decline associated with old age, rather than to a response triggered by an age stereotype" (Levy, 2001, p.579). This demonstrates a need for greater consideration of the emotions associated with ageing that is currently lacking. Such health events have then become recorded as statistics, which for example are used to form the basis of economic and age-related policies. Structured dependency approaches to ageing have been widely acknowledged, with S. Harper and Laws (1995, p.201) noting that the concept and enforcement of a 'retirement' "has more to do with labour market structures than any biological process of ageing".

From a political perspective, retirement and age-related "state policies are the outcome of conflicts over the appropriate use of limited resources" (S. Harper & Laws, 1995, p.208); with retirement a boundary that socially produces older adults as a distinct group, potentially pitting their needs against those of younger adults engendering intergenerational conflict. Knapp (2014) rightly asserts that there is only ever a finite amount of resources available to a government to realise its roles and responsibilities therefore policy outcomes are often interpreted as 'value judgments'. Demographic trends signalling a bulge of older adults set to become retirees as the 'baby-boomer' generation begins to retire has incited concern among governments that the looming fiscal and healthcare 'burden' is more than can be sustained (Rudman, 2006, 2015). Ageing related political discourse in the UK is laden with an implicit assumption regarding the volume of social and health care requirements and the associated costs of providing it, with the supposition that there are diminished resources to adequately do so (Biggs & Kimberley, 2013). In order to discursively produce a new (neoliberal) retiree that both reduces the perceived costs of an ageing population and fits the active ageing model, the UK government has begun to attempt to dissociate retirement from a specific chronological age by removing the mandatory retirement age and is in the process of systematically increasing the age at which one can draw a public pension (AgeUK, 2017b).

Now "the onus is shifted upon the individual to *purchase a strategy* to deal with old age" (Gilleard & Higgs, 1998, not paginated, emphasis added) as current politics of practice dictate that it "is only when care within domestic space breaks down that it enters the public or market sphere" (Milligan, 2003, p.457). Those critical of ageing in place community based care also associate it with a "moral authoritarianism" which promotes the positive aspects of family, community and 'traditional' social values" (G. Andrews & Phillips, 2002, pp.67-68). The outcome is a system that makes heteronormative assumptions regarding who is available to care, and their spatial, temporal and economic means to do so. There is the implicit belief that older adults who have worked hard will live in their own home and have a spouse or child who

resides in spatial proximity to provide care, and with the propensity to do so (Pickard, 2015). Although there is a clear preference among old people to remain in their homes and communities, this discussion alerts us to the need for perspective on the issue: "there is a danger of romanticism – of exaggerating the role of familiarity and emotional affiliation with place as a component of residential preference" (Rowles, 1993, p.69), with the negative effects of home and independent living sometimes underestimated and most often insufficiently supported. For some time, the UK government social care debate has been shaped by expectations of familial responsibility, but pleasingly there is a the growing recognition that the fluidity of the post-modern lifecourse and changing family structures, such as increases in single-parent households and divorce, mean there is less homogeneity in familial structures and thus the unpaid care formerly provided by families is no longer certain (Government Office for Science, 2016). One viable alternative being put forward is the burgeoning area of telecare and domotics, to be discussed in subsequent sections.

Retirement has, and largely remains, the psychological, emotional and economic gateway into 'old age' (Rudman, 2006). However the individuation of retirement as part of 'normative' ageing means its experiences and effects are more diverse. A singular or uniform experience of retirement does not exist with older adults increasingly encouraged to select from a number of (permissible) lifestyles including an extended working life, early retirement, part-time or flexible employment arrangements, volunteerism, grand-parenting or even late-parenting (Jones & Higgs, 2010). Outside the purview of governments has been the more recent construction of retirement as a 'marketable lifestyle' (Rudman, 2006). Yet such a lifestyle is for many a marketing ploy known as the 'grey market', "conditional on the possession of sufficient income, cultural capital, and mental and physical health" (Richards, Warren, & Gott, 2012, p.67), which for many older adults is unattainable. For example, whilst the poverty rate among pensioners has steadily decreased over the past decade with a reduction from 1.9 million people aged 65 years or over living in poverty in 2005, to 1.5 million people in 2015 (Joseph Rowntree Foundation, 2016), there remains a further 1.1 million older adults living just above the poverty line (AgeUK, 2014, p.2). For those older adults living in poverty, aside from living in material deprivation and unable to afford basic necessities, those most deprived have a LE 8.1 years and HLE 14.7 years lower than their wealthier counterparts (AgeUK, 2014). This exemplifies that there is a multiplicity of ageing bodies, which vary qualitatively and quantitatively depending on their socio-cultural and economic position, which in turn affects the socio-biology of being old.

The work of Mansvelt (1997) reflects broader political shifts, with many participants reflecting engrained discourses of productivity and self-reliance in old age: continued participation in productive activities in retirement enabled participants to feel enfranchised and like responsible neoliberal citizens. Pain et al. (2000, p.378) extend Mansvelt's (1997) work acknowledging that:

Identities and meanings of old age change as people move through different socially constructed spaces means it is possible to identify with, resist, or otherwise react to those identities through the use of space.

People do not develop coherent, fixed, internal (age-related) identities (Mowl, Pain & Talbot, 2000; Pain, 2001). People and places are co-constitutive and as one's physical body moves through temporally and spatially variable settings, the lived body, "through which one participates in the world and that emerges from the interactions between the physiological body and the people, artefacts and other forms of materiality it encounters" (Schwanen et al., 2012, p.1292), comes to be affected, reflexively and iteratively altered (Antoninetti & Garrett, 2012; Laws, 1995). Pain et al. (2000) elegantly demonstrate this point through their discussion of the leisure activities and perceptions of older men in two nearby locations, one economically marginalised, and the other an affluent professional community. In the economically disenfranchised community older men were socially and physically marginalised as they could no longer afford to participate in previous social activities such as drinking at the local workingmen's club. This resulted in younger patrons physically distancing themselves from the older patrons. In the affluent community older men were regarded with prestige and continued to engage informally with economically productive or intellectual activities such as providing professional advice to previous workplaces or attending academic talks, all of which built their social identities within their community as knowledgeable people to be revered, or seek advice from.

The Gendered Ageing Body

The gendered experiences of ageing and the interrelationship between gender and age have, by the admission of feminist geographers, gerontologists and sociologists, for a

long time been overlooked. Gender has been considered as a 'variable' of ageing, not as fundamentally transforming the experience of it (Ginn & Arber, 1995, p.2). The identity politics and social and cultural movements of the late 1970s and 1980s, which brought to the fore notions of 'other' bodies such as ethnically diverse bodies, female bodies, homosexual bodies and disabled bodies, initially did little to advance the notion of ageing bodies (Johnston, 2009). Bodies became of inherent geographical interest, as bodies are always somewhere, they are never nowhere, or as later termed by Longhurst, bodies are 'the geography closest in' (Longhurst, 1994; 1997; Nast & Pile, 1998). Feminist scholars were "critical of naturalistic explanations of sex and sexuality that assume that the meaning of women's social existence can be derived from some fact of their physiology" (J. Butler, 1988, p.520). It was this feminist questioning of the construction, presentation and use of bodies, the socio-cultural markers of identity and embodiment, and the power relations attached to particular types of bodies such as ill, disabled or gendered bodies, that transformed this domain of scholarly enquiry (Hopkins, 2008; Simonsen, 2000).

Judith Butler's seminal work on the body shaped these debates. Although one of numerous entry points to bodily geographies, J. Butler's notion of performativity has dominated bodily geography texts. It is relevant to this research due to its close intellectual kinship with feminist paradigms that inform emotional geographies. J. Butler worked to dissociate gender from biological sex and to show identity to be relational as opposed to a fixed and stable category (J. Butler, 1993, 2006; McCormack, 2009). For J. Butler, gender was a discursive construct; the body was 'performed' and the world became known through sets of repetitive discursive practices, external to the body (J. Butler, 1993, 2006; McCormack, 2009). But herein lie the limitations of J. Butler's theorisations; her work was critical as it progressed the discipline away from essentialist categorical thinking towards relational interpretations of social identities, but primacy was given to the agentic forces external to the biological body and the material world. It could be suggested both humanistic and feminist bodily geographers failed to adequately address the role of the material body in shaping (gendered) identities. The contrary is true of ageing (bodies); it is the material body that undergoes the most palpable transformation and has thus been the object of research.

Feminist accounts of the body have proven vital to ageing research as ageing is in essence about *bodily* difference and change (Kontos, 1999). However, despite their emancipatory potential and substantial contribution towards infusing human geography with more varied understandings of bodies, feminist and bodily geographies have remained somewhat blind to age. Almost two decades ago, from a critical gerontology perspective, Kontos (1999, p.687) remarked "advances in deconstructions and reconstructions of the body have not yet penetrated gerontological concepts and theories". According to Twigg (2004, p.60), within social gerontology this is because there "has been a long history of misogynistic discourse in which women are denigrated by reducing them to their bodily characteristics" resulting in an avoidance of the topic. Significantly, as those pioneering feminist academics have themselves begun to age, older (female) bodies have begun to take on more personalised meanings made evident by the way in which:

One of the hallmarks of this new feminist gerontology is that it is strongly engaged, drawing on the personal feelings and experiences of authors as they struggle to make sense of their own and other's lives (Twigg, 2004, p.62).

Yet as an awareness of gender has been brought to the fore, Ginn and Arber (1995, p.4) caution against what they term "the 'add and stir' approach" to understanding the interrelationship between age and gender whereby "age and gender are merely treated as separate and additive variables in analysis". As aforementioned, not only have empirical measurements focused on (white) males, female bodies in general and older female bodies more specifically are scrutinised and encountered differently from male bodies. Age and gender each fundamentally alters the other, with older women in particular suffering the double bias of age and gender (Richards et al., 2012). Twigg (2004, p.62) asserts "the older female body is both invisible – in that it is no longer seen – and hypervisible – in that it is all that is seen".

This is not to say that men's bodies are not affected by age-related discourses and stereotypes. For men, a generalised de-sexing of the ageing body as a normative mode of disenfranchisement means that "the perceptual salience of gender recede[s] from foreground to background to become less important in the eyes of others as a man ages" (E. Thompson, 2006, p.633). By Longhurst's (2001, p.26) own admission, elderly bodies are one of a number of bodies that are "likely to be marginalised as illegitimate bearers of geographical knowledge". Yet, Longhurst's (2001)

foundational work in masculinities, through the lens of male bathroom use, noticeably excludes, but could usefully be extended to include, the experiences of older men (Tarrant, 2010). Fleming (1999) and Tarrant (2010, p.1584) note the paradoxical position older men occupy as:

They are positioned in relation to both ageism and sexism in competing ways; benefiting on the one hand from a privileged and powerful position in sexism, but a subordinate and disadvantaged position rooted in ageism on the other.

Older men's bodies become de-sexed as "aging over-shadows gender" (E. Thompson, 2006, p.633). Ageism and society's increasingly somatic culture exposes many long held cultural assumptions about gender and ageing. Although ageing can be said to be emasculating for men through the loss of identity and purpose that can be associated with retirement from paid employment, it is women who are typically subject most pointedly to ageism.

Geriatric psychiatrist Robert Butler invented the neologism 'ageism' in 1969 to describe what he perceived as the prolific and rapid spread of age-based discrimination (R. Butler, 1969). Ageism, or discriminatory social behaviours and attitudes enacted based on a person's chronological age, are largely and perhaps initially, discursively created. However, as noted by Laws (1995, p.117) and her contemporaries (see Mansvelt, 1997; Pain et al., 2000), "urban morphology reflects social organization and changes in the arrangements of our cities are indicative of larger social changes". Laws (1995, p.112) contends ageism primarily occupies five "sites of struggle"; the labour market, the household, popular culture, the state and the built environment, occurring at the micro, meso and macro scale and affecting all stratifications of society (Boyle et al., 2015). As ageism has become historically and socially entrenched, it has also become scripted into our built environment, for example in the form of segregated retirement communities or social housing for older adults. As Laws (1995, p.117) rightly acknowledges, at a governmental and institutional level we do not permit prejudice to be etched into our landscape in the same way as "we condone agediscrimination in the built environment". R. Butler also cautions (1969, pp.245-246), at the time of his observations, that "aging is the great sleeper in American life" and that ageism was going to be "the great issue of the next 20 to 30 years". Throughout the progression of R. Butler's career, and despite his continued cautioning, this indeed is now the case. Ageism arose as a social justice and human rights issue, the latter to a lesser degree at a time of great social flux, when racial, gender, sexuality and class injustices were brought to the fore of public consciousness. Yet whilst great gains have been made toward reaching equality for many marginalised social groups, "much since 1969 remains the same about ageism" (Achenbaum, 2015, not paginated). Researchers dedicated to revealing and refuting ageism (see M. Andrews, 2000; R. Butler, 2009; Loretto et al., 2000) attest that it remains pervasive and most often invisible. Those who are the victims of ageism are a 'variegated group': "their circumstances remain divergent in terms of financial resources and employment opportunities, mental and physical health, educational attainments, cultural diversity, marital status, religion, and region" (Achenbaum, 2015, not paginated).

Women are held to account to different bodily standards of (sexualised) beauty and health that become accentuated with age and "age-based norms, like gender norms, are maintained by ideologies which are resistant to change" (Ginn & Arber, 1995, p.7; Richards et al., 2012). Older women regardless of age must embody a certain physical appearance and attractiveness. The proliferation of entire industries has occurred on this premise, namely the anti-ageing industry (Jones & Higgs, 2010). In an era where anti-ageing treatments, serums, products and procedures are increasingly available and inexpensive, there is a heightened pressure to conform to the tropes of anti-ageing so "there may not yet be a cure for old age, but there are numerous opportunities available for alleviation of many of the symptoms" (Calasanti, 2005, p.10). The authoritative claim that medicine has made on ageing has also become complicit in the anti-ageing industry's rhetoric with preventative medicine an anti-ageing tool and solution: "we face a position where old age is increasingly in retreat, an absence to be warded off by jogging, diet, skincreams, vitamins, fashionable clothes, holidays, personal pension plans and lifestyle magazines" (Gilleard & Higgs, 1998, not paginated). Medical, economic and gendered accounts of ageing become suffused with one another, with those older women who have economic means, able to age 'positively' or said plainly, 'right'. For Calasanti (2005, p.10) this simply affirms the ideals to which the antiageing industry adheres whereby "old age is repugnant and [companies] promising relief to those who can pay enough".

Alongside neoliberalism, technology has increasingly become an aid to neoliberal style ageism aimed at the female body and its emotional vulnerabilities. Twigg (2004, p.61) states:

Technologies for self-monitoring and surveillance, such as photographs, mirrors, or bathrooms where the whole body can be observed naked, allow for a new form of reflexive self-scrutiny in which the body and its changes become the focus for acute attention.

For those older women who choose not to or cannot afford to adhere to the positive ageing ideals of youth and beauty, the language used to refer to such women is highly gendered and unflattering (Calasanti, 2005). Richards et al. (2012, p.65) suggest apart from the vocabulary used to depict old age being overwhelmingly negative:

The abundance of terms used to describe older women – biddy, crone, hag, little old lady, old bat, witch – and the associated imagery which such terms evoke, are absent when describing older men.

Part of the shift in vocabulary associated with older women, similar to the de-sexing of men's ageing bodies, is to reflect the transition of post-menopausal women as symbolically and materially no longer part of reproductive futures. Beyond inciting and spreading ageist discourses and beliefs, the vocabulary used in reference to older adults is emotional and political.

From an economic perspective ageing is gendered. As women have until recently had fewer employment opportunities outside of domestic or unpaid labour, retirement has largely been considered a male issue. Calasanti (2008) reports that even in the 1970s researchers themselves considered employment a "man's experience" even for women who were employed. The ability of women to participate in paid employment drastically altered the trajectory of their lives in old age (R. Butler, 1990). For many women this meant they were not able to earn a pension (Ginn & Arber, 1995). For those women who did participate in paid employment, their wages were notably less. With pensions earned proportional to income, their pensions were lower, demonstrating the institutionalised difference between older women and men that means age and gender cannot simply be added together and "stirred" (Ginn & Arber, 1995). Whilst this will not be the experience of successive generations of (old) women, inequalities persist, for example, through the gendered pay gap. Once retired, men are relieved from the burden of paid employment and life becomes in general terms about 'leisure' and the pursuit of an authentic 'self' free from the temporal and psychological

constraints of work. Conversely, feminist, bodily geographers have paid particular attention to the issue of (older) women's bodies in (un)paid work or as caring bodies, and for many retired women the duty of domestic labour remains constant with perhaps the addition of new caregiving roles for spouses, grandchildren and even friends or neighbours (see G. Andrews & Phillips, 2002; Bowbly, 2012; Dyck et al., 2005; Herron & Skinner, 2013; Wiles, 2005). More recently as it pertains to technology, the opportunities for learning about and using technology have historically been through the workplace, thus women have also been faced with diminished opportunities to learn to use technology. It has been suggested that women have different relationships with technology on this basis and potentially face digital disenfranchisement, adding to ageist images of older women as incompetent (Buse, 2009).

Alternative Conceptualisations of Ageing

It is clear that an historical tendency to medicalise ageing and its close interrelations with the economics of healthcare, means research often focuses on the emotions associated with specific events in the lives of older adults such as the emotions involved in living with health-related conditions, being a carer or cared for in different formal and informal settings, feeling lonely or socially isolated or the experience of ageism. Schwanen et al. (2012, p.1293) caution there has always been the risk and tendency among geographers to privilege one element of ageing over another, whether it be the socio-cultural or the biophysical when in fact "forging further alliances between the biological/physiological and the social/cultural aspects of embodiment is also critically important for understanding the emplacement and relational nature of ageing". The point to note is that research which attempts to conceive of alternative ways to conceptualise and discuss ageing, does so from the perspective of the 'cultural' or 'social' as referred to by Schwanen et al. (2012) but less often, if at all, does such research explicitly focus on the emotional. For example, Sandberg's (2013) Affirmative Old Age concept, discusses 'culture' and the 'social' but does not define what these empty variables are, with the 'emotions' of old age left silenced or to speak for themselves. The emotional experience of being old and the resultant emotional geographies of ageing are consequent upon many complex relations with people, places, objects and the state. In a world that is becoming ever increasingly technologised, it is apparent that the lives of older adults, and their emotions are not only discursively shaped but produced, lived through and alongside a vast array of technical objects. As a consequence of this lacuna, research that attends to the everyday, mundane emotions of ageing in this technological moment is absent from the literature. The next section will examine in greater depth the emotional geographies of ageing that have been produced to date.

The Emotional Geographies of Ageing

Emotions in academic enquiry have a convoluted history, coming under scrutiny as both an object of research and as part of the interactional research process. Yet, emotions still occupy a somewhat liminal space in geographic theory and practice; no model of emotion can be neatly mapped (Bondi, 2005a; Pile, 2010; Sharp, 2009). The marginal status of emotions has predominantly been caused by their gendering, whereby male and female bodily binaries delineated the 'emotional' as feminine and the 'rational' as masculine, but in part by the work of feminist geographers to dispel bodies as belonging to essentialist categories, binary thinking has ebbed, dissociating the emotional as belonging to the female body (Bondi, 2005a; Johnston & Longhurst, 2009; Longhurst 2001). Since the early 2000s, emotional geographies is establishing itself as a sub-discipline in its own right, explicating the centrality of emotions to the social and spatial construction of life. This section will provide in some depth a clearer overview of this history of emotions, touching on key theorisations from disciplines such as psychology and psychoanalysis, as well as considering their treatment within geography, including most recently by post-human theorists. It is also important to differentiate between the concepts of emotion and affect, as they are often conflated and referred to interchangeably in academic literatures. However, emotion and affect represent different theoretical and methodological traditions with a distinctly different empirical emphasis. The final section of this discussion will focus on the emotional lives of older adults, revealing a tendency to either omit altogether the emotionality of old age or focus primarlily on negative emotions.

Despite the primacy of emotions in people's lives there has traditionally been a purposeful silencing, compartmentalisation and gendering of emotions. Consistent with binary thinking and Cartesian mind-body dualisms, emotions and subjectivity have historically been constructed as the antithesis of rationality and objectivity. In academic and public discourses, emotions have a legacy of being relegated to the feminine and irrational, labelled as belonging to female bodies and thus placing them

in the private sphere of the home (K. Anderson & S. Smith, 2001). Johnston and Longhurst (2009, p.11, emphasis in original) state:

The mind has been associated with positive terms such as *reason*, *rationality* and *masculinity* whereas the body has been associated with negative terms such as *irrationality*, *nature*, and *femininity*. Men are thought to be able to transcend their bodies, or at least have their bodily needs met by others, whereas women are thought to be tied to their bodies because of their emotions, menstruation, pregnancy and childbirth.

There has been a purposeful safeguarding of masculine rationality and feminine emotionality; where "emotionality as a claim about a subject or a collective is clearly dependent on relations of power, which endow 'others' with meaning and value" (Ahmed, 2004, p.4). Historically, this has seen women "cautioned for getting 'too emotional'; emotion and affect have been understood to work against rational thought" (Garde-Hansen & Gorton, 2013, p.37). The discrediting and devaluing of the 'emotional' sought to make certain types of knowledge and ways of knowing inherently more credible and thus valuable; emotions were not deemed a suitable or necessary component of public or political life, further stifling theoretical development.

The 'attachment' of emotions to (female) bodies, relates in part to psychological models of human subjectivity and emotion. Psychology largely presumes that emotions are 'internal' and arise from within people, disseminating outwards from the body (Ahmed, 2004; Scherer, 2005). As the preeminent psychologist, Scherer (2005, p.700) argues, emotions need "to be somehow connected to or anchored in a specific event, external or internal, rather than being free-floating". Emotions have an 'interiority' arising from within people but disseminate outwards and circulate between others. Ahmed (2004, p.11, emphasis in original) points to the circulatory nature of emotions noting the etymology of "the word 'emotion' comes from the Latin, *emovere*, referring to 'to move, to move out'". Emotions on a psychological register also operate in the realm of the cognitive and conscious thought. From this perspective, Scherer (2005, p.712) argues for select methodologies as appropriate, specifying "given the definition of feeling as a subjective cognitive representation...there is no access other than asking the individual to report on the nature of the experience". However, some scholars are critical of such approaches. Johansen (2015, p.53) argues:

Even though it has been a current trope in much psychology that we only gain true knowledge about emotions by looking inwards and listening to what the person might dig out from 'in

there', this conception of emotion is misleading because the idea of a psyche that resides within a bounded bodily space fails to acknowledge the extent to which human beings are constituted through social interaction.

Relatedly, Ahmed (2004) condemns the idea that psychological models assume emotions to be pre-existing, leading to the body becoming the "locus of authentication of emotions" (Johansen, 2015, p.53), evolving such that emotions have been able to be affixed to (female) bodies.

Psychoanalytic theory has been similarly influential on the theorisation of emotions within academia; however, where psychology emphasises cognition consciousness, psychoanalysis concentrates on the role of the sub- or un-conscious mind in the registering, and thus the 'feeling', of emotions (Bondi, 2005a; Pile, 1993). Psychoanalytic theory is primarily concerned with emotions as "a process of movement or association" (Ahmed, 2004, p.44), with emotions said to be a manifestation of the subconscious (Thrift, 2004). Freud, the founder of psychoanalysis, presumed that emotions were repressed from conscious thought and occupied the subconscious (Kingsbury, 2009; Pile, 1993). Consequently, Freud posited that "what is repressed from consciousness is not the feeling as such, but the idea to which the feeling may have been first (but provisionally) connected" (Ahmed, 2004, p.44), ultimately affecting the way in which emotions become attached to action. The process of repression is not deemed to be a rational one, "whereby an affective impulse is perceived but misconstrued, and which becomes attached to another idea" (Ahmed, 2004, p.44). Significantly, both psychological and psychoanalytic models of emotion have left an enduring and culturally engrained vocabulary of the self and emotions based on ideas of interiority and bodily attachment, which leaches from popular discourse into the research lexicon (Thrift, 2004).

As the predominant models of emotion, psychological and psychoanalytic theories have inevitably influenced geography's relationship with emotions. This is not to say there is homogeneity in research approaches or thought. Indeed, emotions in geographical research are embroiled in historic gender relations of the discipline (K. Anderson & S. Smith, 2001), with several different distinct delineations or approaches to 'the emotional' (Bondi, 2005a). Further, it is the intention of this research to work towards establishing another perspective, that of a post-human. Within geographic

scholarship, the destabilisation of binary thinking, dismantling perceptions of the world as operating along a series of gendered binaries (e.g. mind vs. body, subject vs. object, emotional vs. rational, nature vs. culture), has its inception in the humanist geographies of the 1970s but was most significantly advanced by feminist geographies (Bondi, 2005a; Sharp, 2009; Simonsen, 2009). Humanism made an attempt to move beyond inherently masculine, positivist ideals of objectivity and rationality by emphasising the subjectivities of human agency. As Pile (1993, p.123) states of humanism's notion of subjectivity: it is "a model of 'man' in which 'he' was centred (as producer and product), self-reflexive and self-conscious, intentional and active". Perhaps somewhat ironically, humanism acted to construct yet another dichotomy between human agency and structural forces (Pile, 1993). A central critique of humanism is that this trajectory defines the 'human' "as separate and liberated from nature and fully in command of the self and non-human others" (Castree & Nash, 2006, p.501); the human body and subjectivity is given a preferential role in the construction of society and certain emotional potentialities as compared to the non-human (Whatmore, 2006). Problematically, humanism's preferential treatment of human agency over the relational flows between humans and the non- and in-human accentuated the bodily and discursive aspects of emotions, ignoring the role of the wider materiality of the world (Bondi, 2005a). Ultimately, humanism failed "to unsettle the alignment of emotion with individualized subjective experience" (Bondi, 2005a, p.436).

The emergence of feminist geographies was particularly influential, not only for its role in disarticulating emotions as mapped onto female bodies, but for the contribution made to dislodging emotions from their anthropomorphic underpinnings through demonstrating that emotions affect the construction and experience of space and place (Bondi, 2005a; Pile, 2010). Valentine's (1989) work on women's feelings of fear is often cited as landmark research in this area as it helped to dispel "assumptions about the irrationality of women's fear, drawing attention to fear-inducing environments" (Bondi, 2005a, p.436) and equally elucidated that emotions originate from, and move between, both people and place (Bondi, 2005a; Pile, 2010). Here begins the very significant explication that emotions in fact do not:

Belong exclusively to any individual – even though they are experienced and expressed this way – but are part of what we might call a psychodynamics connected to space and place.

Emotions, now, lie *between* individuals, and *between* individuals and perceptual environments (Pile, 2010, p.13, emphasis in original).

Emotions can now be recognised as agentic flows and continually transformative agents. Emotions are social and communal, having shared meanings, practices and expressions. Thus, emotions can be shown to influence our experiences and the temporality of space and place, as well as move through and produce clearly emotionally patterned spaces and places, and it should be this which the academy aims to "demonstrate that they [emotions], and their spatialities, are fundamental to the layout of society" (Pain, 2009, p.477), both physically and metaphorically. That is, emotions are intrasubjective and spatialised. Work in this vein has also politicised the nature of emotions, made apparent by virtue of the scale at which emotions occur (from the global through to the micro scale of everyday life), concomitantly necessitating that we "confront the glaringly obvious, yet intractable, silencing of emotion in both social research and public life" (K. Anderson & S. Smith, 2001, p.7) that has occurred until recently (Thrift, 2004).

This is not to say that in contemporary academic enquiry emotions do not remain entrenched within:

Complex debates attracting an array of disciplines deliberating the extent to which emotions are inherent, pre-existing us and deeply biological, or sociocultural constructions emanating from our being in the world, our relations with others and from language (Bennett, 2004, p.415).

The advent of emotional geographies as a sub-discipline in its own right, has meant the continuing advancement of not only theoretical but also methodological concerns regarding the social and spatial qualities of emotion (see Davidson, Bondi, & M. Smith, 2005). As emotions only form one component of our felt lives, alongside feeling and affect, part of the task for emotional geographers has been to distinguish between the ambiguous and often conflated term affect. Problematically, there is often a misattribution of affect as emotion or vice versa, given the increasing prominence of affectual geographies in tandem with the emotional. On this basis it is useful to briefly distinguish here between the two concepts in order to be explicit about how this research defines and uses the concept of emotion.

The most simplistic delineation between emotion and affect is of emotions as social, and affect as biological (Bondi, 2005a; Garde-Hansen & Gorton, 2013; Shouse, 2005).

To elaborate, affect as operationalised in human geography (see Papoulias & Callard, 2010, for a comparative critique of biology and neuroscience theories of affect) is theorised as being in the realm of the non-cognitive and non-psychological, making it notoriously non-representable: affect occurs "prior to intentions, meanings, reasons, and beliefs – because they are nonsignifying, autonomic processes that take place below the threshold of conscious awareness and meaning" (Leys, 2011, p.437; Pile, 2010; B. Anderson, 2006), although this claim is challenged (see Papoulias & Callard, 2010; Leys, 2011). Central to understanding affect is the notion that affect(s) is autonomous, transhuman, and an intensity that precipitates transitory, qualitative changes in capacity and bodily states (B. Anderson, 2006). This contrasts starkly with the characterisation of emotion as located in the sphere of the cognitive and sociolingual. This is not to say that there is no interrelation between emotion and affect, and it is in the working through of the interrelationship that the misattribution of affect and emotion commonly arises. The non-cognitive dimension of affect does not imply a linearity with affect preceding emotion; in this respect there is no "a priori direction or causality" (B. Anderson, 2006, p.737). As such, an affect, or change in bodily capacity, does not necessarily translate into an emotion, or where it does, the affect cannot be said to be the same as the portrayed emotion. However, there are 'permeable' and 'impermeable' boundaries between affect and emotion with emotions being "formed through the *qualification* of affect" (B. Anderson, 2006, p.737, emphasis in original), but the 'representable' emotion is not synonymous with the 'non-representable' affect having preceded it.

This discussion makes apparent that aside from being able to locate the 'emotional' as distinct from the 'affectual', there are fundamental questions associated with the (un)representative dimensions of emotions in the context of research. A fuller discussion on the methodological concerns over the representation of emotions will take place in Chapter 3. Suffice to say, regardless of concerns over representation, incontestable in contemporary inquiry is that emotions are increasingly understood to be relational flows between both humans and the non- and in-human, having a direct impact on the spatial construction of society. Emotions have a social intentionality such that "the 'personalizing' function of emotions should not prompt us to think that emotions are thereby random, private or in any way detached from broader social contexts" (Johansen, 2015, p.50). Emotions exist for an evaluative social purpose or

to generate bodily action (Johansen, 2015). This is not to suggest that emotions are a flat register, as the intensity of cognition, feeling and action will vary not only between bodies but also spatially and temporally within bodies. Nor does the personalising and social function of emotions give weight to the idea of emotions as having an interiority or as being located in bodies. Ahmed (2004, p.10) argues precisely the opposite, suggesting that emotions 'move' and 'stick' and in the process of doing so "produce the very surfaces and boundaries that allow the individual and the social to be delineated as if they are objects". Emotions do not shape people and objects, rather contact with objects and people shape emotions (Ahmed, 2004, p.4).

One 'object' where emotions and people have growing 'contact' is technology. In an increasingly technological society this means emotions can 'stick' and 'move' in relation to in-human devices. In order to advance theories on how technology shapes emotional geographies, many scholars have increasingly moved away from humanist paradigms in favour of post-humanist ideologies. Post-humanism is concerned with the inter- and intra-relationships between the human and non- and in-human, aiming to include these distributed agentic, emotional forces and materiality of the wider world into the human (Badmington, 2003). This current reimagining of the human through the lens of post-humanism can be read in many ways, which for conceptual neatness fit within two broad categories: that of the literal or popular, and that of the figurative and critical (Castree & Nash, 2004). Literal interpretations of posthumanism warn of the endangered human figure. The human figure is perceived as being constituted of an "inviolable human essence" (Simon, 2003, p.1), which is under threat from invasions from biotechnologies such as reproductive technologies, genetic engineering and prosthetics. The human body is set to become a figure no longer purely and solely anthropological, but infiltrated by the biosciences and technology to become a hybrid figure.

For critical post-humanists, to which this research aligns itself, "the core of this critique is the problematic of the humanist subject with its traditional repercussions on questions of agency, identity, power, and resistance" (Simon, 2003, p.2). Critical post-humanists perceive that a post-human world is not about the reformulation of a physical body, so much as the way in which bodies experience and interact with the world:

We are reminded that the posthuman is figured not as a radical break from humanism, in the form of neither transcendence nor rejection, but rather as implicated in the ongoing critique of what it means to be human (Simon, 2003, p.8).

This trajectory problematises "an idealized definition of the human subject as separate and liberated from nature and fully in command of the self and non-human others" (Castree & Nash, 2006, p.501). Where literal post-humanists lament the loss of the human subject, critical post-humanists take it to be a shift in a dynamic set of relations. Hayles (2003, p.134) agrees that the "posthuman should not be depicted as an apocalyptic break with the past". Post-humanism does not need to, nor should it, be seen as a cleaving from the 'human' rather:

The essential point is that humans have used technology since they stood upright and began fashioning tools, an event contemporaneous with the evolution of Homo sapiens. Technology as a strategy of survival and evolutionary fitness cannot be alien to the human (Hayles, 2003, p.134).

Technology is analogous with the human. Of consequence in a post-human world is less the creation of a bounded, universal definition of the human figure than the process of 'making the human' through technological incorporation. Crucially, a more-than-human perspective offers the impetus for a different set of theoretical questions to be asked of the literature, and the infusion of new methodological approaches, which in the context of this research enable a new way of understanding the emotional work involved in 'living' the ageing body.

The Emotional Lives of Older Adults

There has been a burgeoning interest in the emotional lives of older adults at the intersection of health, care and place, but beyond this limited frame the everyday and mundane emotional lives of older adults remain largely unexplored. Although to some the everyday and mundane may seem banal, there have been numerous calls within the discipline to pay attention to it. Longhurst (2001, p.27), speaking in the context of the inclusion of her own bodily positionality as a researcher, states, whilst it may appear "everyday, prosaic and banal" it should not be so easily dismissed as "banal does not necessarily imply boring (that is, intellectually uninteresting and unimportant). The banal ought not to escape attention or be sidelined as domestic, feminine, and Other".

More recently, Non-Representational Theory³ (NRT) by virtue of its concern with different modes of representation, pays greater attention to "everyday events in life, and the everyday places where they occur – realizing life is all the time and everywhere (and that the mundane is, thus, as important as the remarkable)" (Skinner et al., 2015, p.790). G. Andrews et al. (2013, p.1352) suggest a lapse in attention of social practices thought of as 'mundane' and 'everyday' would see them otherwise "lost in theoretically driven interpretative searches for meaning and significance".

To date, as a result of long held medicalised conceptions of ageing, initial contributions to the emotional geographies of ageing, although not explicitly framed as such, have come from geographies of care literatures through examining the manifold ways in which 'care' is provided to older adults, particularly in a climate of neoliberal deinstitutionalisation and relatedly the marketisation of care (Lawson, 2007). In this context, the word 'care' signifies both a feeling or intent (caring about) and an associated set of actions (caring for), segmented by questions of scale and transnational economies of healthcare (Bowlby, 2012; Conradson, 2003; England & Dyck, 2011). The actions of 'caring for' are empirically easier to locate, and early policies of health and social care deinstitutionalisation were seen to exert a greater influence on the lived experiences of older adults, garnering greater scholarly attention. Logically, as most community dwelling older adults reside in their own homes, this is often the site of geographies of care research. Inquiry to date includes the institutionalisation and medicalisation of the home as a site of care (G. Andrews & Phillips, 2002; Dyck et al., 2005); the obligatory spatial and temporal (re)arrangements of homes for providing care (Bowbly, 2012; Yantzi & Skinner, 2009); how familial and non-kin relationships are (re)negotiated in the home (Lapierre & Keating, 2013; Pickard, 2015); the transgression of public and private boundaries (Parr, 2003; Wiles, 2005); differential experiences of, and access to, care in rural as compared to urban environments (Herron & Skinner, 2013; Skinner & Joseph, 2011); and the healthful or health damaging elements of home (Hillcoat-Nallétamby & Ogg, 2014; Means, 2007). This is important work for geographers to do as "at the core of this literature is the emotiospatial

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³ The concept of NRT will be discussed in full in Chapter Three. In brief, NRT is a set of practices and epistemological debates about how we might come to conceptualise and understand the felt qualities of life (see Pile, 2010).

hermeneutic, wherein emotions can only be understood and carry meaning in relation to the contexts in which they occur" (Herron & Skinner, 2013, p.187).

Geographies of care literatures reinforce broader emotional geography theorisations that emotions are felt relationally to both people and places and elucidates some of the 'people' and 'place' relationships that are pertinent to shaping the emotional lives of older adults. Care is relational and contextual, "the nature, extent and form of these [care] relationships are affected by where they take place. For geographers, then, care involves not just interpersonal relations but also people-place relationships" (Milligan & Wiles, 2010, p.738). This body of academic work attunes one to the fact that "caring relations and practices are experienced both physically and emotionally, and imposed, on the bodies of caregivers and care recipients" (Yantzi & Skinner, 2009, p.406) and significantly extends humanist frames of care and emotion by acknowledging that emotions too are mediated by the more-than-human. Concomitantly, this segmentation of the purpose and effects of care also affirmed the centrality of emotions to social life. Said in the context of conducting research, it is "emotions [that] affect the ways in which we perceive and react to people and places" (Longhurst, Ho & Johnston, 2008, p.215), with care work similarly necessitating and precipitating particular emotions and emotio-spatial outcomes both through physical action and intent, but is not the only realm of the emotional lives of older adults.

As health geography generally was expanded to encapsulate notions of wellbeing (see Fleuret & Atkinson, 2007), the purview of the emotional lives of older adults enlarged concomitantly. Emotional geographies have also proven critical in facilitating emotions to enter the research lexicon. It was noted that geographers of ageing share "a growing interest in engaging with older individuals at the level of their day-to-day realities, under the umbrella of the embodied and emotional geographies of older persons" (Skinner et al., 2015, p.782). Skinner et al. (2015) refer to this as one aspect of the 'hidden geographies of ageing' that needs to be more clearly explicated. Yet, rather ironically, a core criticism of emotional geographies in general has been if emotions pervade all elements of life, then do they deserve academic enquiry? Thein (2005) is contradictory on this topic; she suggests that emotions are worthy of separate and distinct enquiry, as in the sub-discipline of emotional geography, yet also posits that no element of human life is devoid of emotion. B. Anderson and Harrison (2006)

contend that if this is as she states, emotions become a secondary concern and thus not worthy of their own enquiry which "is all well and good, but is this an *emotional* geography or rather a *social* geography which uses emotions as its empirical moment?" (B. Anderson & Harrison, 2006, p.334, emphasis in original). Are emotions the focus or are they the measurement for social geographies? If we, as geographers, do not work to articulate these relations, "we are left with an amorphous object called 'the emotional', which risks obscuring exactly what it purports to reveal" (B. Anderson & Harrison, 2006, p.334).

It could be contended that the (tangible) emotional geographies of ageing as currently presented in geographic literatures overly focus on the negative qualities of being old, attributable to the fact that ageing is never entirely dissociated from contexts of health and care. For example, Skinner et al. (2015, p.783) point to possible points of intersection between emotional geographies and geographies of ageing research highlighting experiences of end of life, therapeutic touch, care work within families, friends in late life, and ageing and the arts. The first several suggestions are emblematic of the implicit emphasis on negative emotions. Although not explicitly framed as pertaining to emotional geographies, Skinner et al. (2015, p.785) do also call for a greater focus on the "broad contributions" older adults make to society, stipulating they are numerous in the "the arts, literature, politics, religion, science, economics, social movements, or other important fields of human agency". Areas such as this could prove crucial in expanding the emotional lives of older adults research agenda and act to correct the imbalance between concentrating attention on 'negative' over 'positive' emotions.

However, the framing of such contributions being dependent on, and arising from, human agency is problematic since it relies on humanist frames of subjectivity and emotions which have already been critiqued as inadequate for grasping the emotional qualities of contemporary society. Again, this brings to the fore the heavy reliance on psychological and psychoanalytic models and vocabularies of emotion that this research argues stymies the advancement of the discipline, as it places in the centre of interactional processes between people, place and emotion, the person, privileging and overly determining their role in the emotional. For instance, emotional geographies scholar Joyce Davidson and geographies of ageing researcher Christine Milligan

(2004, p.524) continue to emphasise, "emotions, then, might be seen as a form of connective tissue that links experiential geographies of the human psyche and physique with(in) broader social geographies of place". This serves to shift both the theoretical and empirical emphasis of research in favour of the personal and once again away from the materiality of the wider world.

Although the emotions of ageing may seem amorphous or irrelevant, the emotions involved in ageing are tangible. Illustrative of the palpability of emotions is the experience of social isolation and feelings of loneliness (Blaschke et al., 2009; Victor & Bowling, 2012). Loneliness is an emotion that simultaneously embeds itself within the ageing body and momentarily passes through it. Feelings of loneliness can be felt continuously or they can be fleeting and transitory, felt only in certain places or at certain times. For instance if an older person loses a spouse, there may be particular times of the day, routines or activities where loneliness is felt more acutely, such as eating an evening meal alone. Therefore, emotions can be said to inhabit and have an impact on the subjective body, affect how an older adult may conceive of themselves and alter how they 'do' that body; an older adult may alter the meals they eat or when and where they eat them in light of the loss of a spouse. Here the outcome of a feeling of loneliness is the potential reordering of their body across time and space at meal times. The emotion of loneliness can also be seen to leach from the subjective lonely ageing body to affect their objective body or physical surroundings such as the home which may be rearranged, for example, to accommodate the now absent body of a spouse at the dinner table. Conversely, the perpetually embedded feelings of social isolation can have a constant or longer term effect on the biological composition of the 'fleshy' body, with loneliness known to lead to a deteriorating health status. Milligan (2014, p.64) states, "indeed, among older adults, the effect of social isolation and loneliness on mortality has been compared to that of cigarette smoking". Thus, it can be said that emotions have a physical manifestation and a sociobiological reality.

The issue of social isolation and loneliness also demonstrates the communality and sociability of emotions. Although loneliness is felt at an individual level, if there are multiple bodies feeling the same emotions, this can impact society at expanded geographic scales. For example, if large proportions of older adults are experiencing social isolation caused by a lack of mobility and are confined to their homes, this may

determine their levels of participation in society and the lack of their physical presence in public spaces may affect the feelings of other individuals within society. The impact of loneliness on the physical health of older adults could also require a reordering of health and social care services in order to meet the associated health needs of those individuals. This illustrates the permeability of emotions and their ability to order space and time and thus, their centrality in people's lives and society. However, loneliness is but a single emotion. Everyone is simultaneously feeling multiple emotions all of which layer and pattern space and place in much the same way as has been demonstrated here. This elucidates the complexity of emotions and suggests ways in which the mundane and everyday nature of emotions are inherently political with the collective emotions of sectors of society competing to exert hegemony over the spatial organisation of society.

It can be said that many emotions, like feelings of loneliness and social isolation, are not unique to older adults. Whilst this is true, it can equally be argued that the same emotions are expressed and felt differently by older adults as compared with their younger counterparts. As Ahmed (2004, p.4) claims, "emotions shape the very surfaces of bodies, which take shape through repetition of actions over time, as well as through orientations towards and away from others". As the 'contact' with, and 'surfaces' of, ageing bodies are subject to much longer emotional histories, they are not the same as younger bodies. This could possibly mean a greater intensification of emotion for older adults as:

How the feelings feel in the first place may be tied to past history of readings, in the sense that the process of *recognition* (of this feeling, or that feeling) is bound up with what we *already know* (Ahmed, 2004, p.25, emphasis in original).

Ahmed (2004) gives the example of pain and remembering (medical) trauma, stating that some of what we already know about pain is socialised and sedimented in the histories of particular emotions. The feelings of such emotions also have personalised histories, with older adults having longer emotional histories and more 'contacts' with such emotions. This changes both the surfaces of ageing bodies and speculatively causes a different intensification of emotion. The bodily difference ageing represents means old bodies feel, wear and express emotions differently to young bodies. The iterative and reflexive process of having and living a sociobiological body makes "the body an 'unfinished' entity, continuously renegotiated in terms of meaning and

materiality" (Hall, 2000, p.26). Bodies also then become political and the "site of particular regimes of knowledge and power relations" (Craddock & Brown, 2009, p.302). The ageing body is particularly susceptible to critique and categorisation as it is the manifestation and embodiment of an accumulation of lifestyle choices and bodily assaults (Krieger, 2014). By this it is meant that beyond individual choices, (biological) bodies are affected by and carry with them, economic and social impositions (for example, variations in access to health care), and whilst some of these may be positive attributions, for others, this amounts to both institutional and personal "embodied harm" and "the accumulated insults arising from everyday and at times violent experiences" of life (Krieger, 2014, p.645). The ageing body was also once the young child, adolescent and middle aged body which now bears the biological and socio-cultural signifiers of the effects of lifestyle diseases, illness, work, economic status, childbearing or raising, mental wellbeing and disability or physical impairment, all of which represent adherence, or lack thereof, to health and political discourses (Craddock & Brown, 2009; Parr, 2002a). Here too needs to be recognition of the immense variation in the emotional lives of older adults, which the homogenising categories of 'old' or 'retired' often obfuscate.

The difference in emotional expression with age is attributable to a multitude of complex socio-biological interactions, not only within and between individuals, but also the more-than-human. For instance, our emotional lives are regulated by cultural norms: "emotions are closely intertwined with social norms and shared meanings and, as such, they are (also) something that we learn and do as part of our socialization into our respective community" (Johansen, 2015, p.49; Köhl & Götzenbrucker, 2014). For contemporary older adults, the social mores in operation in the early twentieth century dictated life courses, took a gendered, linear path with defined "life course transitions [between family and employment] and the tendency was towards a relatively stable ordering of key life events" (Budgeon, 2006, not paginated), centred around generally speaking, heteronormative familial obligations. This structuration of life created frames of reference about the (in)appropriateness of feeling and expressing emotions, with the exhibiting of particular emotions eliciting specific outcomes. In contemporary, post-modern society many such normative expectations have been superseded by "pure relationships" which are "entered into for their own sake in the pursuit of happiness, and are sustained only as long as they are fulfilling" (Valentine, 2006, p.366), giving greater visibility to a range of different sexual and gendered relations. This has the potential to foster a generational disjuncture between people of different ages, highlighting the need for greater dialogue between geographies of ageing and emotional geographies.

Equally defining in the emotional lives of older adults are emotions which circulate at a societal level. Some psychological research suggests societal attitudes influence the way people interact with older adults, shaping the language used or emotional dynamics of exchanges, with much of the language attached to older adults' derogatory (Richards et al., 2012; Williams & Giles, 1991). More generally, the emotionally laden discourses of "ageism and the worship of youthfulness are both pervasive" (Skinner et al., 2015) with suggestions that a cultural imperialism of youth dominates. A. Walker and Foster (2013) suggest that the rapidity of demographic shifts has created a 'structural lag' with cultural attitudes lagging up to 20 years behind social changes. Gilleard and Higgs (2000, p.7) point to the fact that "the ageing of populations has coincided with the working through of the modernist project, which has brought these issues [of competing cultures of ageing] to the fore". Biggs (2014) suggests there is an inevitability to the apparent cultural lag associated with ageing and that all other major societal transformations that have occurred in the twentieth century, such as feminism and the transition to multicultural societies, experienced similar transitory phases. The cultural shift is also partly decelerated by the overwhelmingly middle-aged nature of economic and political institutions (A. Walker & Foster, 2013).

Apart from the primarily discursive means discussed by which the emotional lives of older adults are shaped, there are other non-human (f)actors exerting an increasing influence in the lives of older adults, namely technology. As foregrounded in Chapter One, "technologies are no longer simply seen as objects, but are increasingly understood as relationships, flows, or mobilities that persist across and through endless translations" (Adams, 2007, p.2), making their origins and effects more difficult to trace. As ICTs have become progressively more intertwined in all facets of contemporary life, it is apparent that irrespective of an individual's own capabilities or interactions with technology, it pervades life. It is the contention of many (see Barry, 2001; Selwyn, Gorard, Furlong, & Madden, 2003) that ICTs are now an organising principle for developed societies, thus it is imperative for all older adults to have access

to and use ICTs to ensure they are able to participate fully in society. Barry (2001, p.4) states, "technological innovation forms new artefacts. The government of a technological society implies the formation of new human capacities and attributes" of which older adults are a part, but less clearly defined as being so, potentially putting them in a precarious or liminal position in the governance of technological societies.

M. Crang, P. Crang & May (1999, p.1), state technology can be "seen as facilitating, if not producing, a qualitatively different human experience of dwelling in the world: new articulations of near and far, present and absent, body and technology, self and environment". The close interrelationship humans and technologies have come to share means "new technology alters existing relationships between humans and environments, and the technology then becomes part of the environment influencing subsequent human actions" (Hillis, 1998, p.552). Technology is becoming more pervasive in all facets of social life as well as being incorporated into governmental modes of health and social care service delivery (Godfrey & O. Johnson, 2009; Neves, Amaro, & Fonseca, 2013). Whilst human kinship with technologies is not new in and of itself, it can be claimed that the networked, diffuse and pervasive nature of them sees an increasing intensification of human socio-technical interactions and their associated emotional geographies. Thus even for those older adults who do not engage with technology directly, through a recursive relationship technology permeates social life and public places, with urban environments being reordered to accommodate and adopt ICTs and people's use of them in public spaces (Kinsley, 2014). From this perspective, technology has the potential to be both an inclusionary as well as exclusionary modality. These social processes are the mandate for geographers of age to move beyond questions of when and where these societal transformations are taking effect, and to critically engage in questions regarding the means by which they will occur and the resultant spatial outcomes; questions that geographers have been slow in asking, but which this research seeks to address (G. Andrews et al., 2013).

Technology Use and Ageing

Technology contributes to how people encounter the world and 'live' their bodies, thus affecting how emotions are felt, mediated and expressed. The dissemination and social implications of technology are inescapable, multiple and uncertain. However, conversations within both academia and wider public discourses about the

relationships between technology and older adults are limited, and limiting, *for* older adults. Despite the transformative affect of technology on geographical "thought, scholarship, and practice" (Ash, Kitchin, & Leszczynski, 2016, p.1), the contributions made to this vast and rapidly growing body of literature remain blind to age. Consequently, an interdisciplinary approach is useful here, drawing from human geography, communication studies, Human-Computer Interaction (HCI) studies, psychology, sociology, gerontology, engineering, design and economics. Each discipline also adheres to historical and disciplinary perspectives, language and methodologies, which often diminishes the intellectual exchange between one another.

Even *within* geography, there often lacks a meaningful exchange of ideas across key sub-disciplines such as geographies of ageing and digital geographies. As mentioned in Chapter One, Skinner et al. (2015), in tracing the development of geographies of ageing over the past 20 years and mapping its future trajectories, fail to produce a single mention of technology. Similarly, Ash et al. (2016) focus on the implications of the 'digital turn' for geography and do not consider age in the way that gender, ethnicity and socio-economic status continue to garner attention. The final section of the chapter will, beyond the scope of geographical literatures, elucidate what is already known about how technology shapes the emotional qualities of life and draw inference about what this might mean more specifically for older adults. Firstly, the limited geographic literatures that do exist at the intersection of geographies of ageing and technology will be examined. Attention will then be given to how technology has been socialised and the new (techno)sociabilities this facilitates.

The Social Construction and Socialisation of Technology

Academic inquiry concerned with older adult technology adoption and usage, often starts with the supposition that the majority of older adults would want to assimilate technology into their lives and engage with virtual worlds were it not for financial or practical barriers that prohibit adoption, and once equipped with the necessary skills and equipment, would use technology. As such, there is an array of literature which examines the intrinsic and extrinsic motivators for older adults to 'get online', attempts to evaluate the ICT needs and capabilities of older adult internet users, and the learning process of becoming technology literate relating to tasks such as memorising functions or reaction times (Barnard, Bradley, Hodgson, & Lloyd, 2013; Dickinson & R. Hill,

2007; Lindley, R. Harper, & Sellen, 2009; Selwyn et al., 2003; Vroman, Arthanat, & Lysack, 2015). Emotions other than perhaps to explore ideas of 'user experience', barely enter the frame. Troublingly, research in this vein also often positions older adults as less able to learn to use ICTs, feeding into inadvertently ageist narratives about ageing.

Again, it has been through geographies of care and health, namely telecare and telehealth literatures, that research into the emotions of technology use among older adults has been instigated. Telecare, the provision of social care services (as differentiated from health care services) via ICTs, has been introduced as the next generation of social care policy in England⁴. As one of the largest investors in telecare programmes globally, this will also likely transform the experiences and expectations of societal ageing in England (Oudshoorn, 2009; Percival & J. Hanson, 2006; Turner & McGee-Lennon, 2013). Telecare supported extitutionalism is now firmly embedded in older adult carescapes (Oudshoorn, 2012). This body of literature "makes clear that users of healthcare systems require not only effective but also affective dimensions to their care" (Atkinson, Lawson, & Wiles, 2011, p.565); older adults' expectation of care is that more than the bare necessities will be provided, with the social, emotionally driven elements of care not to be underestimated. New "care technologies reconfigure rather than reduce the challenges of caring" for older adults (C. Roberts et al., 2012, p.491), with telecare merely reconstituting the social and physical intercorporealities of ageing for older adults (Percival & J. Hanson, 2006; Pols & Moser 2009).

However, telecare literatures fail to fully recognise the social and emotions dimensions of technology beyond a health context, which is where this research is able to make a decisive contribution. Early virtual geographies literatures similarly attempted to consider these questions but could be characterised as fetishising the 'virtual' and in overly simplistic terms, abandoning its connections with the 'real' and falling into the trap of binary thinking that has pervaded much of geographical thought. Virtual

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⁴ Telecare technologies and services include domotics, mobility sensors, voice monitoring and personal alarms such as fall monitors, gas detectors, pendant alarms, flood detectors, movement detectors, occupancy sensors, door switches, seizure monitors, medication dispensers, and gas shut-off valves (Magnusson, E. Hanson, & Nolan, 2005; Turner & McGee-Lennon, 2013). The aim of telecare is for older adults to maintain independence and self-determination, to facilitate greater flexibility in caregiving and to reduce ill-health, accidents and hospitalisations (Department of Health, Older People and Disability Division, 2005; Mort & C. Roberts, 2014).

geographies were ineffectually making the links between online and offline worlds. Valentine and Holloway (2002, p.305) remark:

Despite the growing unease with the way on-line and off-line spaces are often dichotomized, research has so far failed to map the complex ways in which on-line activities are embedded within 'real-world' lives.

Shaw and Warf (2009, p.1334) extend this contention, for them the online is not embedded in the real, they have fused: "the interfacing of everyday life and virtual worlds has rewired material landscapes, giving birth to complex sociotechnical relations across space and time". These links are arguably critical to forge as "the emerging technologies do more than just electronically simulate traditional forms of communication – they also provide new means of interaction" (Kitchin, 1998, p.2), thus inevitably affecting the spaces and places of ageing.

The initial premise and optimism of virtual geographers was that people would be liberated from 'real world' social identities as the anonymity of the internet would allow them to subvert what they felt were restrictive identities, or equally assume preferential social identities of their choice; there was to be "the emergence of a distinction between the embodied self, and disembodied, multiple cyberselves" (Hardey, 2002, p. 581; Chan, 2008; Kitchin, 1998; M. Crang et al., 1999). People would be able to self select their gender, ethnicity and occupation, and would not be confined to the physical appearance of their material bodies. Although it became evident that the internet did enable people to experiment with, and actively construct identities, it occurs within the context of a co-mingling of the 'real' and 'virtual'. Consequently, "these ideas of the transcendental and liberating effects of cyberspace have recently been contested" (Madge & O'Connor, 2005, p.85). Hillis (1998, p.544) adeptly states:

I note that humanists and social constructionists may forget that technologies are also arrangements of practices, human and machine bodies included. Such arrangements issue from, operate within and influence historical processes that are fluid, polyvalent and often barely stable. Humans set technology in motion, but it too, in fulfilling expectations, also has the potential to introduce unforeseen changes to social relations and practices.

Indeed, the centrality of emotions is a defining and organising rubric in human lives, and with the greater infusion of technologies into all lives, and the observable digital divide affecting older adults, academic inquiry that makes the articulations between all three phenomena greater is highly germane.

Debates concerning the interrelation of bodies and technology precede this modern technological moment and critique in general the role and construction of nature and science, of which there is a great diversity of perspectives. Much of this work came from critical science studies and out of a feminist commitment to disrupting normative and priveleged framings of technology. Notable theorisations in the field include Donna Haraway's (1991) seminal essay 'A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century' which through the metaphor of the cyborg – the not quite human, not quite machine – examines the intersections of nature, science, culture and technology. Of her cyborg creation, Haraway (1991, p.150) espouses:

In the traditions of 'Western' science and politics – the tradition of racist, male-dominant capitalism; the tradition of progress; the tradition of the appropriation of nature as resource for the productions of culture; the tradition of reproduction of the self from the reflections of the other – the relation between organism and machine has been a border war.

For Haraway (1991) the cyborg is as much about precipitating an ontological shift within academia as it is about depicting how the human and the non-human co-exist and co-produce one another. The figure of the human is not inviolable and has been purposefully (re)made over time. Speaking in conversation about her work and the distributed agency the cyborg represents, Haraway states not all actors possess language "and so that presents a contradiction in terms because our notions of agency, action and subjectivity are all about language" (Penley, Ross & Haraway, 1990, p.9). The primary means through which the historically rigid and guarded categories of nature, science, politics and gender that constitute the human are opened up is through a shift in language. The language used by Haraway (1991) and the drastic shift in discourse advocated for, signalled the beginning of a paradigmatic shift away from humanist modes of critique, in favour of an emergent post-humanist paradigm.

A second and much later manifesto by Haraway (2003), 'The Companion Species Manifesto: Dogs, People, and Significant Otherness' continues in pursuit of the idea of how we live with or relate to the non-human, our companions, through the allegory of human relationships with dogs. At their core:

Cyborgs and companion species each bring together the human and non-human, the organic and technological, carbon and silicon, freedom and structure, history and myth, the rich and the poor, the state and the subject, diversity and depletion, modernity and postmodernity, and nature and culture in unexpected ways. Besides, neither a cyborg nor a companion animal

pleases the pure of heart who long for better protected species boundaries and sterilization of category deviants (Haraway, 2003, p.4).

Of course, in the space between manifestos there have been many interpretations of, and associated writings on, the idea of living with the non-human, and the development of the relevant theoretical frame, post-humanism. Key authors include Sarah Whatmore (2003, 2004, 2006) who adopts a geographic perspective of Haraway's (1991) work with her 'more-than-human world' distributed agency among the 'bio' (life) and 'geo' (earth). N. Katherine Hayles (1999, 2003, 2004, 2005; Hayles & Pulizzi, 2010) has a literary studies background and advances the topic from an historically contingent, cybernetics perspective in which humans and technology coproduce one another. Hayles is neither anti-human nor apocalyptic in her outlook for the 'human' and views the progressive intermingling of the human and technological as part of a process which has been on-going for thousands of years, whereby "distributed cognition environments" (Hayles, 1999, p.290) are constructed in which as machines get smarter so do humans, with "thinking" becoming shared. Andrew Barry (2001, p.127; Barry & Slater, 2002) offers a more applied political geography approach to elucidate the role of technology in developing, implementing and managing governmental and social processes, which "have come to be seen as a key resource in the making up of citizen".

Whilst debate on the nature of, and interrelations between, the human and technological may seem wholly abstract, it forms part of the critical base on which technology has been invented, developed and socialised. Alongside the feminist critical science studies being discussed, technology development accelerated, with its edges getting closer and closer to (breaching) the physical human body (Garde-Hansen & Gorton, 2013; Hayles, 2004). Technologies became objects and artefacts worn on the body, heightening (or contravening) the sense of being 'human'. Machines were seen to distance humans from one another, and "as having the effect of isolating the individual and surrounding them by a cocoon of gadgets" (Schroeder & Ling, 2013, p.790). Technology also became closer to the 'human' through anthropomorphisation and personification of humanistic qualities (Turkle, 1995). For instance, the 1982 Time Magazine 'Man of the Year' was named as 'The Computer' (Badmington, 2003). For some, this calls for a need to safeguard the human figure, for

others this is part of a constant process of evolution; that we need, desire and assimilate inanimate objects or 'technologies' as appendages and tools.

Sociologist and psychologist Sherry Turkle (1995, 2011) has written extensively since the 1980s on the topic of human relations with technology, approaching the subject from a sociological, Science and Technology Studies (STS) perspective. When personal computers became available in the 1970s, these were largely dyadic relationships between an individual and the computer, "a person alone with a machine" (Turkle, 1995, p.9). The (perceived) rigid borders between human and machine persisted beyond the 1980s but with the advent of networked and portable technologies, it was questioned "to what extent we ourselves have become cyborgs, transgressive mixtures of biology, technology, and code. The traditional distance between people and machines has become harder to maintain" (Turkle, 1995, p.21). Moreover, as it has always been, "although users can experience emotion in response to social cues online, computers have limited ways to extend and return this emotion" (Garde-Hansen & Gorton, 2013, p.73). What has changed as computers have become networked to one another is the computer's capacity to transmit and transmute the emotions of users, with emotions for which computers act as a conduit, sometimes being misattributed as their own.

Until the 1990s, there has also been a degree of technological determinism in sociological thought whereby people saw themselves as independent of the social and scientific milieu that precipitated such inventions:

Rather than view technical change as an external force that had an impact on society and the economy, sociologists of technology sought to demonstrate the ways in which technology was socially shaped or socially constructed (Barry & Slater, 2002, pp.176-177).

Humans made technologies such as the computer, and we do things to and with a computer, but increasingly the computer came to be viewed as doing things to *us* (Turkle, 1995). It must be acknowledged that the encroachment of the machine on the human extends beyond the personal relations that are the concern of this research. There is a:

Wider context of corporeality and technology, whereby pervasive computing translates bodies, affects, and emotions into measurable codes, images and maps: from computed tomography (CT) scans, magnetic resonance images (MRIs), three-dimensional (3D) ultrasound, airport

security imaging and polygraphs to intelligently tagged clothing (Garde-Hansen, & Gorton, 2013, pp.75-76).

Although machines, such as the medical technologies mentioned here do not breach the physical borders of the body, through the distributed agency achieved between such machines and bodies, their effects do. Sandelowski (2002) questions the corporeal necessity of the physical body in nursing practice, as the body's edges are increasingly permeable and dislocated, spilling onto computer screens in the form of x-rays, scans and test results. Similarly, Parr (2002b) discusses how technology facilities the consumption of medical information through the internet which has a direct impact on the physicality of the body. Lupton (2013) comments on the idea of a distributed self where across (wearable) body-technology configurations the body is 'quantified' in health terms for the users to track and monitor. These are emotionally complex configurations due to the fact that, as established, machines are perceived as possessing an objective, scientific, rationality thus the data generated through such technologies appears to provide a "degree of certainty that one's own perceptions cannot and a greater degree of control over the messiness and unpredictability of the fleshly body" (Lupton, 2013, p.28). In essence, people defer to the 'machine', choosing to abandon and externalise emotions that might have otherwise been 'felt' or registered 'in' the body which now become co-produced, distributed and registered in and by technological devices. Lupton (2013) also highlights the effect of neoliberal ideologies on technological discourses. Quite literally, such technology becomes a neoliberal 'technology' of the self, designed to enable the 'responsible citizen' to better manage not just their health, but productivity and efficiency across any number of domains (Buse, 2009). Garde-Hansen and Gorton (2013, p.50) reflect that to be successful in (neoliberal) capitalist societies, beyond being technically competent, "one has to be competent in emotions in new and digitally literate ways".

Thus, the feeling of being human changes with age but is also increasingly formed by what some term a cyborgian subjectivity (Barad, 2003; Haraway, 1991). According to Halberstam and Livingston (1995), post-humanist literatures seek to reconcile scientific and cultural modes of subjectivity. Science favours pre-ordained, fixed subjectivity and objectivity that in some academic spheres has been transposed onto technology. Whereas, earlier notions of subjectivity in the humanities were tied to the politics of identity formation premised on a desire to "domesticate and hierarchize"

difference within the human (whether according to race, class, gender) and to absolutize difference between the human and the nonhuman" (Halberstam & Livingston, 1995, p.10), a move away from post-structural and Foucauldian notions of discursive subjectivity supposing that only those actors with language have agency, has seen a move towards post-humanist subjectivities (Penley et al., 1990). The relevance of cyborgian subjectivity is also attributable to the intensification of the cyborg as technology has become more prolific: "technology that has become so entwined with the production of identity that it can no longer meaningfully be separated from the human subject" (Hayles, 1999, p.xiii). For example, L. Thompson and Cupples (2008, p.100) discuss "the facility of the phone to send text messages that cannot be seen or heard requires a particular functioning of human and machine that strategically deploys a cyborgian subjectivity". There is a symbiosis or a fusing between technology and animal to form a cyborg; a hybrid which synthesises a new form of subjectivity.

This being such, although technology is considered by some as an aberration of the human, it has equally become naturalised, routinised and assimilated with the body. For example, the mobile phone "also becomes a completely mundane artefact" (L. Thompson & Cupples, 2008, p.102). The language and terminology affixed to technology is instrumental in this:

Implicit positioning of communications and its technologies by geographers as passive, value-neutral 'conduits' or 'tools' participates in an unproblematized use of metaphor that minimizes consideration of the social contexts within which new technologies originate (Hillis, 1998, p.544).

Turkle (1995, p.18) suggests that early on in some spheres there was a purposeful move towards a normative, monolithic technology culture; for instance, at the inception of computers there were numerous ways in which they could be programmed, but as computers continued to evolve, those at university were taught "programming was a technical skill that could be done a right way or a wrong way". This reflects Haraway (1991) and Hayles's (1999, p.288) prior contention that technology arises from broader, historical, scientific contexts, and for Haraway and Hayles reductionist technological narratives cannot easily be dissociated from humanism's (gendered and male dominated) pursuit and "desire for mastery, an objectivist account of science, and the imperialist project of subduing nature".

Joyce and Mamo (2006) posit that reductionist technological narratives have also precluded the 'greying' of the cyborg. They suggest, if you were to imagine the 'cyborg' in your mind, it is not old and nor does it have grey hair, such are the deeply ingrained biases about age in general, and age as it intersects with science and technology more specifically (Joyce & Mamo, 2006). This is at odds with the "many ways, aging people disproportionately rely on and negotiate technologies inside and outside of their bodies" (Joyce & Mamo, 2006, p.100) through the biomedicalisation of ageing and its affiliation with medical technologies. To recount at length:

Old men and women routinely use technologies and scientific interventions in their daily life. Despite their experience as technocitizens, older people in general and older women in particular are commonly represented as lacking the skills and comprehension needed to use and assess the risks and benefits of new technologies. By taking the perspectives and situations of older users seriously, we can bring together the skills and perceptions of older people and the capabilities of new technologies in positive ways (Joyce & Mamo, 2006, p.115).

This research seeks to directly address the concerns expressed by Joyce and Mamo (2006) by examining the skills and capabilities of older adults as they pertain to ICTs and how the new techno-sociabilities afforded older adults may expand their (emotional) geographies in old age.

The Emotional Interactions enabled by New Techno-sociabilities

It is evident that the socialisation of technology is complicated terrain with many contested meanings. Although not necessarily entirely novel, the significance of ICTs is the altered time-space continuum made possible and the emotional intensity of the bonds formed with, and mediated by, technological devices. Valentine (2006, p.370) suggests, "the Internet expands the opportunities for daily meaningful contact between family members locked in different time-space routines". Whilst Valentine (2006) refers to transnational families, this too can be applied to other networked social relations. Here, the significance of technology is the cumulative effect of ICT enabled exchanges which amounts to what has been termed connected presence, telepresence or co-presence⁵ (Felton, 2014; Licoppe, 2004). A relationship is the sum of each individual exchange and:

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⁵ The idea of connected presence encompasses usually short and frequent exchanges, across multiple technological devices (i.e. mobile phones, computers and tablets) and platforms such as text messaging, email, Facebook or other social media and telephone calls. People will also usually use multiple devices and platforms for the same relationship. The premise of achieving technology mediated co-presence is

As it develops it is distributed in a multiplicity of contexts and situations, so that its permanence cannot be ascribed to any specific action...each of these mediated interactions reactivates, reaffirms, and reconfigures the relationship (Licoppe, 2004, p.138).

Technology allows connections to occur more frequently in time and from almost any space and thus it could be supposed, strengthening people's ability to relate emotionally with one another. Academics such as Bar-Lev (2008) and Felton (2014, p.13) agree that new articulations of presence make social networks portable and the notion of intimacy becomes renegotiated, "whereby relationships mediated via technology [can] retain their levels of intimacy and affect despite geographic distance".

Accordingly, as the use of technology has become commonplace for personal use, the internet has become less "a space for information and commerce and toward an online emotional space of interaction and collectivity" (Garde-Hansen & Gorton, 2013, p.87). Now "people explicitly turn to computers for experiences that they hope will change their ways of thinking or will affect their social and emotional lives" (Turkle, 1995, p.26). The normative culture of emotional sharing has moved away from emotions being confined to the private spaces of the home and towards a "society of increased self-disclosure and online self-presentation" (Leder Mackley & Karpovich, 2012, p.132). This, in conjunction with broader socio-cultural shifts such as the role of friendship in post-modern society (see Budgeon, 2006), has precipitated a turn away from a mass media society, towards a "personal communication society" (Campbell & Park, 2008). Post-humanism too, narrates that in a world of distributed agency and in the age of the personal communication society, "places are given new meaning as they become regarded and used for their ability to support the flow of networked interaction" (Campbell & Park, 2008, p.375). Crucially, the notion of 'public' and 'private' space is no longer delineated along geographic lines with traditionally 'private' spaces like the home becoming exposed to the wider world (inadvertently) through (public) visual technologies like social media or Skype, or by background noise contamination (Adams, 2011; Licoppe, 2004).

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that communications are often phatic, or simply about being in touch as opposed to conveying information (Licoppe & Smoreda, 2005; Lindley et al., 2009).

These new techo-sociabilities are transformative for social relations as technology is not necessarily seeking to replicate face-to-face, bodily encounters (Licoppe & Smoreda, 2005). Instead, technology attempts to capture and sustain at different times and across a range of spatial locations, people's attention in what would otherwise be moments of inattentiveness. The job of the individual becomes to manage their 'attentiveness' across a range of dispersed online and 'offline' landscapes and "creatively connect our emotional attention across them" (Garde-Hansen & Gorton, 2013, p.53). People become simultaneously enmeshed in virtual and physical space and must across dispersed scales, become adept at ensuring they reciprocate in kind their attention whilst concurrently policing the attention of others (Felton, 2014). This can also alter the very architecture of people's emotions as ones' access to information and opportunities for social contact become relentless and constant (Kuntsman, 2012).

However, it could be said that the transformative nature of these new techosociabilities remains a potentiality and the actuality of negotiating technological and social relations is of course much more complex. An often-cited criticism of technosociabilities is that the absence of a physical body means that the lack of "status and non-verbal cues, personalization, and social norms" (Tan, Swee, Lim, Detenber, & Alsagoff, 2007, p.78) can result in a diminished ability to interpret the emotions of others. The debate is not as simple as the virtues of physical presence or absence, or even as clear as the divide between being a user or non-user as there are a number of people who have a 'disconnected presence' (Gilleard, Jones, & Higgs, 2015); more opaque are the nuances of the social mores that have been renegotiated, or the relative state of 'normlessness' that still prevails with regard to ICTs. In the absence of clearly defined social protocols, people tend to map existing social expectations onto new technology usage and behaviours (Licoppe, 2004). Furthermore among technology users, once the expectation has been established that one is contactable via technological channels, lapses in attention or co-presence become problematic as "calls unanswered, or texts ignored, can prompt emotional dis-connections" (Longhurst, 2016, p.129) ultimately acting to "undermine the emotional frame of the relationship" (Licoppe, 2004, p.143). Moments of silence are trails of 'mutual commitment' (Licoppe & Smoreda, 2005) and when failure occurs, must be justified by those who may be policing one's attentiveness so that although technology can

positively enhance people's ability to relate emotionally with one another, it can equally engender negative emotional experiences.

Email and text messaging are some of the most enduring due to low cost, their non-invasive nature and the ability to be sent frequently from virtually any location at any time. Although a text message may have a limited 'emotional range' due to its brevity and lack of associated visual cues (Longhurst, 2016), it does enable social contacts to share the same "electronic communicative space" (L. Thompson & Cupples, 2008). As aforementioned, this is important as increasingly people's social connections span greater geographic distance meaning when the same physical space cannot be shared, technology offers alternative modes of relating emotionally. As technology has evolved the range of devices by which this can be achieved has expanded and often, the stronger the social tie, the greater the number of devices or platforms employed to maintain it (Garde-Hansen & Gorton, 2013). Beyond email and text messaging, social media and networking sites have become a foundational part of communication and emotional infrastructures, the most dominant platform being Facebook.

The social networking website Facebook⁶ also reflects the broader shift from a mass media to personal communication society creating a hybrid sociality that is part mass media, broadcast communication and part personal message (Garde-Hansen & Gorton, 2013). This feeds into Facebook founder Mark Zuckerberg's vision of a:

Discursive revolution around the 'social' as a concept: social by design, social by intent, social through impact, and social in ethics, [and] shows Zuckerberg's world as driven to be connected through a technological infrastructure that is built upon sharing feelings (Garde-Hansen & Gorton, 2013, p.78).

Feelings are constantly accessible and simultaneously archived for individuals and others to access at any given time. This archiving of emotions online "resonates strongly with the ways emotional intensities operate in today's digital cultures, obsessed with preservation, saving, recording and storing" (Kuntsman, 2012, p.6). However, some academics argue there is an emotional selectivity regarding *which* emotions are appropriate for sharing in the arena of social media. Garde-Hansen and

⁶ Launched in 2004, Facebook is an open access, members only, online community allows its members to create a 'profile' of themselves through which they are able to upload content such as pictures and information about themselves, as well as connect with others users, both known and unknown to them, so that their profiles can be viewed and also to view others (Papacharissi, 2009).

Gorton (2013, p.180) suggest that people seek out social media "in pursuit of community, togetherness, belonging, reassurance, comfort, and/or emotional support from others". Once part of such online communities, there is an emphasis on sharing positive emotions, such as sharing news of engagements, weddings, pregnancies, holidays or job promotions, and until recently, only the option of a 'like' button to react to such posts on Facebook. Those people 'connected' with on Facebook instantly become classified as 'friends', a term, which carries with it certain connotations about the emotional dynamic that will ensue between one another. Facebook "creates a mobilizing belief in intimacy's imminence" (Gregg, 2012, p.150). The feeling of intimacy endowed by social media sites like Facebook moves with the user owing to the portability of technology and accessibility of Facebook from many devices so that it "combines the need for a set of contacts to negotiate the city with the psychologically reassuring function of a safety blanket: friends and family can be brought along" (Gregg, 2012, p.149).

The new emotional infrastructures and forms of sociability that platforms such as Facebook create cannot be seen as separate from broader questions about the modes of distributed agency and type of companions that the human and non-human form together. Technology and online culture has "developed alongside our need to touch and hold objects that make us feel secure and loved, but it has mobilized our desire to find connections and share ideas and things that 'move' us with others" (Garde-Hansen & Gorton, 2013, p.82). Technologies such as Facebook also have associated with them a promissory dimension of being able to immanently mobilise social relations and making available emotional infrastructures in more immediate ways. As predicted by Turkle (1995, p.49) at the inception of this technological moment, "computers would not be the culturally powerful objects they are turning out to be if people were not falling in love with their machines and the ideas that the machines carry". Problematically and as evidenced here, many literatures that critique and engage with these ideas do so from extreme perspectives; their concern is either with metanarratives of technological change or exploring such ideas in relation to socially, culturally and spatially specific groups, or examining individual technologies in isolation, with some groups noticeably absent from the discussion.

Older adults remain disproportionately underrepresented in technology related academic literatures. For instance, much of the research that has been cited adheres to the implicit assumption that technology users are both physically mobile and locked into time-space routines that revolve around being employed whereas for older adults, being retired means that the time-space continuum of their lives varies greatly from both younger people as well as from one another owing to the fact there is greater heterogeneity in the relationships between space, time, work and leisure in retirement (Raun, 2012; Buse, 2009). Similarly, postmodern ideals of friendship and the notion that there is a move towards heightened levels of emotional disclosure do not necessarily resonate with older adults; a generational gap exists due to the fact their emotions were socialised in a different (more gendered) way, but that older adults also remain a heterogeneous group in this regard. Interestingly, emotions and technology both have socialised meanings that have changed throughout history, and the implications of this transition to a personal communication society potentially differentially affects older adults; more so when it is considered that those who were middle aged in the 1970s, 1980s and 1990s, were part of the culturally dominant paradigm that produced the social conditions for technological invention and its subsequent socialisation. Yet as these people have aged, the perceived relevance of technology in their lives becomes diminished and remains unexplored by the academy. This research works to elucidate older adult perspectives on new techno-sociabilities that have arisen, in order to include their narratives within the research lexicon.

Conclusion

This chapter has traced a broad range of interdisciplinary literatures to elucidate how older adults' emotional and spatial dimensions of technology use are currently positioned within predominantly academic discourses. As illustrated, there has been an ever-increasing conflation and convergence of medicalised and economic models of ageing, each propagating the other, leading to a tendency to either omit altogether the emotionality of old age or focus on primarily negative emotions. Those emotional geographies of ageing that have been produced can be characterised as having a heavy reliance of anthropomorphic and discursive interpretations of emotions. In a world that is becoming ever increasingly technologised, it is apparent that the lives of older adults and their emotions are not only discursively shaped but produced, lived through and alongside a vast array of technical objects. This research seeks to directly address these

notable absences in geographies of ageing scholarship, by examining how the new techno-sociabilities afforded older adults may expand their (emotional) geographies in old age.

Chapter Three: Researching Emotions, Technology and Ageing

Introduction

The aim of this research is to understand the emotional and spatial dimensions of technology use among retired Londoners. Comparative research questions have previously been satisfied by both quantitative and qualitative methods. The methods most aligned to the research questions being explored here are qualitative, as they provide scope to explore the multiplicities and depth of experience and acknowledge the role of the researcher in the co-creation of knowledge (Bondi, 2005a, 2005b; Jaffe & Miller, 1994; Longhurst, 2010; Longhurst et al., 2008). This chapter presents the cultural probe methodology as well as illustrates how the adoption of this methodology informed the selection of particular qualitative methods and analytical tools. By cultural probes I am referring to participant-led tasks that narrate and elicit the emotional lives of respondents (see Gaver, Dunne, & Pacenti, 1999; Wherton et al., 2012). The purpose of the cultural probes was to generate mixed method interactions with older adults as a mechanism to overcome questions of representation and in acknowledgement of emotions being situated, contextual and temporal. The transient nature of emotions made it important to try to capture technology mediated emotional experiences on multiple occasions to elicit a more holistic understanding. In this respect, the methodology can also be loosely classified as ethnographic in nature. The specificities and practicalities of conducting this research such as the sampling, recruitment, interviewing and analysis of findings, are examined.

Researching Emotions: Non-Representational Theory and Language

Research that seeks to understand the emotional qualities of participant lives has become plagued by a fundamental question of representation. As discussed in Chapter Two, emotions go beyond the verbal; they occupy the cognitive, visceral, proprioceptive facets of being human. Hence, questions have arisen over how to adequately capture the multiplicity of emotions within qualitative research settings. Non-Representational Theory (NRT), not actually a theory but a set of practices and epistemological debates about how we might come to conceptualise and understand the felt qualities of life: it primarily advocates for developing research methodologies that do not rely on language for representing the 'affectual' and relatedly the

'emotional'. The "unenviable undertaking of non-representational theory is to affirm life in an intelligible manner" (Dewsbury, 2010, p.148), with NRT practitioners yet to reach a consensus as to what form these relational research practices may take (B. Anderson & Harrison, 2010; Cresswell, 2013). This is not to say NRT does not acknowledge representation, instead "arguing that the emphasis on representation has been pervasive and that it is time to recognize the world beyond (or before) representation" (Cresswell, 2013, p.233). Some non-representational theorists reason that to conduct research restricted to language means "our findings are then bound by the parameters given to them and that this in turn forecloses certain vistas" (Dewsbury, 2010, pp.148-149). Epistemologically, NRT is a relational way of thinking about the world. Ontologically, NRT does not seek to necessarily divorce itself from oral or textual forms of language: NRT questions the role and ability of language to represent the relational becoming of the world and seeks new forms of understanding and knowing that complement language as a representative, knowable entity (Dewsbury, 2010).

Thus, NRT in its many manifestations looks to go beyond language and beyond the human:

To arbitrarily stop relational understandings of phenomena at the boundary of the human is to re-inscribe precisely the divides between the inside and the outside, meaning and world, subject and site, which were first in question (B. Anderson & Harrison, 2010, p.12).

Not only is language an incomplete means of understanding how the world comes to be but "rather than simply reflecting the world, or our thoughts, language is riddled with social power, cultural norms, political imperatives, duplicity, and non sequiturs" (Aylett & Barnes, 2009, p.153). We cannot wholly represent our experience of the world but we can do more than just speak of it. Further, "the emotional qualities of social life have rarely been made apparent within the lexicon of social research" (K. Anderson & S. Smith, 2001, p.9) due to the supposed inadequacy of verbal and textual depictions. Methodologically, this means there has yet to be an appropriate vocabulary developed to talk about emotions in research. Ironically, researchers are left grappling with an inability to "talk about either affect (as the non-representational) or emotions (because they are unrepresentative)" (Pile, 2010, p.9).

Yet it must be cautioned that NRT methodological approaches are not necessarily any more representative. Thrift's (1997) contention that non-verbal bodily practices (for example, dance) are more authentic performances of the self as they are not mediated by, or restricted to, language and our subjective knowing of ourselves, seems problematic (Bondi, 2005a, 2005b). Nash (2000, p.657) critiques the example of dance, warning that whilst NRT offers methodological innovation, there exists a latent risk that a preoccupation with "this idea of noncognitive embodied practice[s] are somewhat at odds with the deeply social character of coded performances of identity in theories of performativity". Here, Judith Butler's (1993, 2006) notion of performativity, although overly discursive in its approach, is noteworthy for the way in which it emphasises the repetitive, habitual and stylised aspects of bodily performance, demonstrating how language shapes the presentation, comportment and movement of bodies. The social persona of emotions is such that one is able to use language (and silence) to 'shape' and 'manage' the social expression of one's (bodily) feelings, including in a research setting (Colls, 2004). This management of emotions is refined throughout life, becoming habitual and practiced as people form personal frames of reference for socially appropriate modes of emotional expression to fit their intentionality (Garde-Hansen & Gorton, 2013; Goldie, 2002; Scheer, 2012). Put simply, bodily practices such as dance are like language, heavily mediated by gender, ethnicity, class and other socialised norms and taught behaviours, which NRT risks universalising, homogenising or de-sexing bodies and ironically (re)constructing bodily dualisms (Bondi, 2005a; Skinner, et al., 2015).

Emotions are also interactive, they are not limited to a particular person or place. Any insights gained in the context of this research will be as a result of "a collaborative enterprise between observer and observed" (Croghan, Griffin, Hunter, & Phoenix, 2008, p.346), between people and place. Briggs (2013, p.1, emphasis in original) affirms that "emotions are part of *interactional processes;* that is, how people shape their emotional conduct in relation to the readings and responses given to their emotions by others". These interactional processes occur not only within the confines of the research setting, but are also a modality of the emotional dimensions of everyday life. Emotions within the research setting are further complicated, as for participants "emotions are both *situationally responsive* and *situationally transcendent narrative* projects" (Briggs, 2013, p.1, emphasis in original); they are felt and expressed in the

context of the immediate research interaction (situationally responsive) as well as in the broader context of the respondent's life (situationally transcendent narrative). Notions of the co-production of knowledge are thus of centrality to this research, as elucidating the emotional dimensions of technology-mediated ageing is the core concern of this research and the interactional processes that the research is engaged in will occur on different planes that must be acknowledged. The cultural probe methodology (to be elaborated on) of in-depth interviewing and self-guided participant activities attempts to understand the emotional interactional processes between older participants and the felt and material world. However, there will also be interactional processes occurring between me, the researcher, and participants that will influence the research dynamic.

With regard to geographies of ageing specifically, Skinner et al., (2015) highlight NRT approaches as having been largely ignored but with much to offer the discipline, outlining nine possible theoretical and methodological contributions. Those most pertinent to this research include a focus on the 'active world' and 'life's immediacy' achieved by attending to bodily "practices and performances [that] might be habitual or non-habitual, scripted or unscripted, remarkable or unremarkable, yet they underlie and make much of our lives" (Skinner et al., 2015, p.789). NRT pays particular attention to the 'everyday' and 'mundane' aspects of life, experiences largely missing from geographies of ageing research, where instead there has been a focus on emotionally heightened encounters such as health events (Skinner et al., 2015, p.790). Skinner et al. (2015, p.790) comment that a lack of NRT approaches in ageing research is:

A regrettable absence as older people are no different from any other social group. They are as involved with immediacies in life, and life's little moments happen to them as they do to anyone else.

Logically, by engaging with NRT, geographers of ageing would need to diversify their tool kit of methods, with Skinner et al. (2015, p.791) envisaging this could usefully include visual methodologies (such as photography or film), ethnographic approaches, or art-based methods.

The discussion to date makes evident the role of language in research contexts that explore particularly the 'emotional', but increasingly experiences of ageing, as

problematic. In acknowledgement of the potential limitations of language within research contexts, the broadly ethnographic cultural probe methodology employed in this research is a means of diversifying the methods used to include stakeholder interviews, attending community centres, participant interviews and follow up cultural probe activities. Whilst this method is still strongly reliant on language, it creates an opportunity to elucidate the non-representative qualities of emotions through different modes of language-based representation such as verbal and written elicitations of emotion, both with the researcher co-present and absent. This was deemed the most ethical approach: rather than me as the researcher viewing, registering and interpreting participant emotions, as filtered through my own subjectivities, participants should speak for, and (re)present themselves, whilst I remain cognisant of such limitations.

Cultural Probe Methodology

Cultural probes were pioneered by William Gaver (Gaver, Boucher, Pennington, & B. Walker, 2004; Garver, Dunne, & Pacenti, 1999) for the purposes of co-designing new technology. It was hoped that the technological origins of cultural probes would accord well with the study aims. Practically, the aim of cultural probes was to provide "openended and evocative activities for participants to pursue in their own time to help narrate and depict their lives to researchers and technology designers" (Wherton et al., 2012, p.189). Cultural probes used elsewhere include map drawing, diary keeping, scrap-booking, photo taking and/or photo album creating, writing wish lists, drawing 'body outlines' to indicate symptoms or impairments and 'dream recording' by memo taking on a dictaphone (see Gaver, et al., 1999; Gaver et al., 2004; C. Graham & Rouncefield, 2008; C. Graham, Rouncefield, Gibbs, Vetere, & Cheverst, 2007; Pedell, Vetere, Kulik, Ozanne, & Gruner, 2010; Wherton, et al., 2012). Conceptually, a cultural probe:

[A]pproach is not merely, or necessarily, a moral stance on the democratisation of the research process but a reflection on and commitment to the fundamental (methodological) view that people are 'experts' in their own lives (C. Graham et al., 2007, p.31).

Cultural probes are a participatory exercise that redistributes the power differential from researcher to participant, attempting to enable greater co-production in research. Probes are completed at a time, pace and place that suits the participant, including with others or by working alone, in-situ or when on the move. Further, they are also often open-ended exercises, designed to have a degree of ambiguity and uncertainty as to

how to complete them, to foster participant creativity. Probes create a "subversion of understood researcher-researchee relations" (C. Graham & Rouncefield, 2008, p.196).

Cultural probes aid emotional geographies research by acting as both memory aids and simultaneously capturing in-the-moment action, accessing different emotional worlds. Probes "are collections of evocative tasks meant to elicit [an] inspirational response from people – not comprehensive information about them, but fragmentary clues about their lives and thoughts" (Gaver et al., 2004, p.53) that the researcher may not otherwise have access to. The concern of cultural probes is for each activity to "make[s] different forms of action and interaction visible and in different ways" (C. Graham & Rouncefield, 2008, p.196). Importantly, said 'action and interaction' takes into account shared-intersubjectivities between not only participant and researcher but also with the material and more-than-human world. The subjective experience of conducting research is acknowledged and encouraged, at odds with "most research techniques [that] seek to minimize or disguise the subjectivity of this process through controlled procedures or the appearance of impersonality" (Gaver et al., 2004, p.55).

This is not to say that cultural probe methodologies entirely ameliorate issues associated with the representation of emotion or are without procedural complications. Completing the activities can involve a lot of time and effort on behalf of participants; disrupt the everyday practices of participants in a detrimental way such as by bringing negative, and perhaps previously unnoticed, actions or feelings to the fore; and are not always modified to take into account participant capabilities (i.e. eyesight, dexterity, hearing, memory, mobility). Project ATHENE (Assistive Technologies for Healthy Living in Elders: Needs Assessment by Ethnography) trialled a cultural probe methodology with older adults, receiving a mixed response with some participants completing none of the tasks, others a few and a smaller group completed all (Wherton et al., 2012). For those who did not complete any, this was usually due to bodily limitations such as fatigue, dexterity, eyesight or literacy related concerns or the feeling that the time needed or demands of the activities would have been beyond their personal capabilities (Wherton et al., 2012). Once produced, the results of cultural probes are also not easily interpretable or analysable, as interpreting or analysing responses between different participants is not straightforward. From an ethnographic perspective, this research does not employ a prescriptive framework. This research aligns with the notion of ethnography seeking to elicit the "non-discursive everyday practices" (Macnaghten & Myers, 2004, p.65) that constitute the creation of knowledge, but diverges in the methods by which this is achieved owing to the use of cultural probes in preference to participant observation. It is this replacement of prolonged, in-person, participant observation with cultural probes that is the primary cleaving from the traditional epistemological tenets of ethnography.

Research Methods

The following discussion will outline the practicalities of conducting this research including fieldwork preparation, London as the fieldwork site, ethical considerations, the process of producing, analysing and interpreting the empirical material, and will conclude by reflecting on the methodological challenges and utility of this methodology.

Fieldwork Preparation

The Fieldwork Site: London

London poses an interesting site in which to conduct fieldwork. A cornerstone of the UK's age-related policy is ageing-in-place, the idea that people will remain in their homes (or 'in place') as they age (A. Sixsmith & J. Sixsmith, 2008). As detailed in Chapter One, with 15.5% of London's population aged 60 years or older and 11.5% aged 65 years and older (Office for National Statistics, 2016a), London is a place where many people are going to retire and grow old. An urban context is also highly pertinent as an Office for National Statistics publication reports (see Bayliss & Sly, 2010) that in England, 76% of people aged 50 years of age and over live in an urban area with a population over 10,000 people. Traditionally, there has been a tendency among older Londoners to retire to rural or coastal locations, premised upon ideas of the rural idyll, historically moving to Essex or Kent (Bonvalet & Ogg, 2007). However, increasingly, notions of rural life in old age have been problematised both from within the academy (see Wenger, 2001) and in popular discourse (see Grey, 2015; A. Hill, 2012). Even as long as a decade ago, "preliminary evidence suggests that out-migration patterns may be slowing" (Bonvalet & Ogg, 2007, p.70). As part of a growing discourse, Action with Communities in Rural England (ACRE) and Age UK (funded by the Nationwide Foundation's Investor Programme) ran a campaign

from 2012 – 2015 cautioning against a move to the country in retirement, claiming many "city rats" were not prepared for the "challenges" of rural life (A. Hill, 2012).

The characteristics of those older adults who do live in London are often at odds with national trends (see Bayliss & Sly, 2010), meaning that London needs to be examined in isolation from elsewhere in the UK. In general terms, older Londoners have higher proportions of people aged 65 years or older who have never married (11% of men and 9% of women as compared with the UK average of 6% and 5% respectively), higher rates of poverty, at 69% the lowest rates of outright home ownership for those aged 65 years and over, but conversely the highest LE rates for those aged 65 years are within London Boroughs and 87% of Londoners aged over 60 years have utilised concessionary travel passes such as the Freedom Pass (see Bayliss & Sly, 2010; Transport for London, 2016). It is apparent that London is home to a diverse older population that cannot and should not be homogenised and requires research that attends to the daily lived realities of older Londoners, as this research does.

The Greater London Authority (GLA) takes an active role in fostering an 'age friendly' city through opportunities for participation in London life across a number of domains, including: political life – in the form of the Older People's Advisory Forum or the Mayor's advisory group, London Older People's Strategies Group (LOPSG) creating employment and volunteer opportunities, and the safeguarding of community centres and libraries that provide older adults with vital social spaces (Tinker & Ginn, 2015; Greater London Authority, 2017a). Yet, it has been suggested that more could be done to ensure adequate, fit for purpose and affordable housing is provided for older Londoners. Moreover, there have been calls to improve access to public transport through greater 'step-free' access to Underground stations, increased seating at bus stops and reduced pollution through traffic minimisation making environments more walkable (Tinker & Ginn, 2015). With regard to technology, as stated in Chapter One, older Londoners have higher rates of technology use and household internet access. The Greater London Authority (2015) also has a 'Digital Inclusion Strategy for London' that aims to get, not just older Londoners, but all digitally disenfranchised residents, online, with a recent announcement that between April 2017 – March 2018 a 'Mi Wifi' pilot study will take place which will enable, among others, older adults to borrow wifi enabled devices from libraries and community centres (see Greater London Authority, 2017b).

Ethical Considerations

Institutional ethics approval was gained from the Queen Mary University of London (QMUL) Ethics of Research Committee on the 9th of September 2014 (Reference: QMERC2014/59). The ethics committee approval process focused on participant recruitment and participation to ensure this research accorded with best practice. As such, no participants were contacted directly and requested to participate; information about the research was disseminated via recruitment flyers and a Participant Information Sheet (PIS) (see Appendix A), leaving it to potential participants to contact me, the researcher. Direct requests to participate may exert undue pressure on people or make them feel obligated; this would be at odds with the value of voluntary participation and an abuse of my position as a researcher. Those who did want to participate were provided with a PIS and consent form (see Appendix B), in advance of participating so that they were able to consider in full their involvement. Outlined in these documents was the right to withdraw participation at any time before, during or after the interview (up until the 23rd of June, 2016). It made explicit that the interviews, with consent, would be voice recorded and transcribed. All data recordings, transcribed interviews and cultural probe materials produced were stored in a password encoded folder or locked cabinet. All transcripts and cultural probe materials were anonymised. After seven years from the time of participation, all information will be securely destroyed. Individual transcripts and cultural probe materials were sent to those participants that requested copies for the purposes of participant checking, making transparent between the participants and myself what information had been co-produced. Participants were free to amend or remove, all or part of the transcript and cultural probe materials as they saw fit.

I, the researcher, am also aware that whilst participation in this research was not expected to be physically demanding or emotionally distressing, the emphasis on emotional geographies might have caused participants to reflect on negative emotions for example, being physically dislocated from family or friends, which may have caused participants to feel lonely. To mitigate putting participants at risk of undue emotional distress, I did not directly explore negative, overly personal or sensitive

issues in the context of interviews. As the cultural probes were participant led with no direct participant observation or covert data collection being undertaken, these activities were not expected to be emotionally distressing as it was left to the discretion of participants to divulge what emotions they felt comfortable discussing. A letter outlining where local ICT support could be obtained was prepared in case participants sought assistance from me throughout the interview, and which I would not necessarily have been able to provide (see Appendix C).

Older adults are not inherently vulnerable, but can potentially fall under the classification of 'vulnerable' adults in accordance with the QMUL Ethics Committee guidelines, for instance people may be suffering from dementia. Potential participants were to determine for themselves if they were fit and able to participate. The provision of a PIS and consent form in advance of participation outlined the time commitment and tasks involved. On this basis participants were able to make an informed choice and self-identify if they were physically and mentally capable of doing so. Participants were encouraged to discuss with family and friends their decision to participate and if concerned about their physical or mental capabilities, to seek their doctor's advice. For people who might have been identified as possibly having dementia specifically, there are screening tools available to assess the competency of such participants to provide informed consent. It was deemed ethically unsound in cases where someone's mental state was unclear to utilise such screening tools because if they were unaware of any such condition, it might have been harmful to their wellbeing to overtly conduct such a test, and unethical to do so covertly. It was decided in advance that these people would be excluded altogether, however no such instances occurred. If it were to emerge during fieldwork that participants were experiencing difficulties relating to their mental or physical health, interviewing was to cease if appropriate or requested, or the data produced from these interactions was to be excluded from the results. For any participant, if concerns arose regarding the suitability of their participation or their welfare, I would have consulted with my supervisors and the ethics committee to determine what the most appropriate course of action (if any) was, before soliciting advice or assistance from the relevant social services agency to ensure the personal health and wellbeing of the participant.

In regards to my personal safety, it was acknowledged that there was a small risk associated with conducting research as a sole researcher. However, I adhered to all QMUL, lone working policies and procedures at all times. To identify any specific hazards or threats to my personal safety, a School of Geography Fieldwork Risk Assessment was completed outlining any risks and how these were mitigated or the risk minimised. The overall decision was made that the potential threats to my personal safety were minimal and no higher than those encountered in my day-to-day life, such as when commuting to university each day. Were a colleague or other appropriate person to attend interviews with me to overcome concerns associated with conducting interviews by myself, this would have affected the development of a rapport between myself and participants, making participants less likely to divulge certain information. For all interviews held at participants' homes, I enquired in advance of visiting if there was a dog or other animal in the home. If so, it was requested that the animal be kept in another room for the duration of the interview. I informed a colleague or friend at the time interviews when I was departing and when to expect my return. If I had not made contact or returned safely from the interview by a certain time, a contingency plan was put in place to ensure my safety.

Producing the Empirical Material

Stakeholder Interviews

The decision was made to conduct a small number of stakeholder interviews prior to commencing fieldwork with retired participants. This decision was largely taken as I had moved to the UK for the purposes of completing this research and thus, had only been living in London for a year at the time fieldwork began. It was felt that to enliven the research, rather than simply reading about the social and political contexts of being in London, it would be beneficial to meet with a select number of stakeholders working in a diverse range of organisations broadly relating to the study (see Appendix D for the stakeholder interview schedule). From October 2014 to February 2015, six stakeholder interviews were held with; an academic, a centre manager at a charity that works with older Londoners and runs a series of technology related education programmes; an advocate for internet accessibility; the owner of a small start-up technology company that has developed a photo sharing device for older adults and their family members; a board member and founder of an ageing in London advocacy group; and a policy expert in the sphere of loneliness and social isolation research. It

was felt this purposeful group of informants gave sufficient depth and breadth of insight into the topics of ageing and technology use in London, from which to proceed to interviewing older adults. The information gathered in the context of these interviews was also used to adapt the older adult interview schedule.

Sampling and Participant Criteria

Purposive, not representative, sampling was employed as the research questions are aimed at understanding experience over gathering generalisable data (R. Johnson & Waterfield, 2004). Older adults in London were eligible to participate on the basis of self-identification as 'retired'. Socially, retirement is aligned with the age at which people are obliged to stop participating in paid employment and are able to draw a state pension which in the UK now ranges from 65 years of age for men and 63 years of age for women, rising to 66 years for both by 2020 (AgeUK, 2017b). Arguably this is an ideologically and practically problematic categorisation of ageing as there is not necessarily any qualitative difference between for example, people aged 64 and 66 years of age. The process of self-selection also meant that people were more likely to identify with the terms 'ageing' or 'old' as opposed to me, the researcher, categorising them as such based on a chronological variable. Some may view that retirement from the paid workforce was itself an arbitrary delineation of ageing however it is debatably of greater significance as there were likely to be qualitative changes in a person's life associated with retirement (Salovaara, Lehmuskallio, Hedman, Valkonen, & Näsänen, 2010). For example, there could be changes in how a person uses their time, their living arrangements, financial status and social relationships (Salovaara et al., 2010).

Participants had to be living in an independent, non-institutional setting. Compared with independent living environments (such as the home), institutional care settings (for example hospitals or long-term care homes), tend to pre-determine and remove much individual autonomy from daily routines and rhythms, social interaction, and access to technology, and thus act to structure the experiences of ageing. The selection of independent dwelling older adults also aligns with the English government's ageing in place philosophy, and therefore emulates the living and care contexts that future generations of older adults are likely to find themselves in.

Finally, older adult participants had to *voluntarily* use communication technologies. This was crucial as previous research has attempted to introduce technology to nonusers and this has proven to be problematic (Richardson, Weaver, & Zorn Jr., 2005; Garattini, Wherton, & Prendergast, 2012). As reinforced by Loe (2010, p.319, emphasis in original) the majority of research concerned with technology use by older adults "emphasises what is done *for* elders: how elders are cared for, how assistive technology and universal design products are made to assist elders, and caregivers, etc." but each of these perspectives imposes an expectation as to how, why, when or what technological devices are used. Voluntary engagement with communication technologies also reflected the increasing ubiquity of, and access to, technology. Hence this research focused on how technology was utilised by older adults, not as imposed on them by others but from the perspective of self-determination and without bias as to how, why, when or what technologies were employed.

The type of technological devices or means of use was not prescriptive. Participants could use any communication technologies with physical devices taking the form of a mobile phone, smart phone, laptop, desktop computer or tablet. Nor was the means of communication across such devices predetermined and included text messaging, email, Skype, blogging, messaging applications such as Viber or WhatsApp, and social media, for example, Facebook, Twitter or Instagram. To be prescriptive during recruitment as to the types of communication technologies used would have misled people to think that only those who exclusively used such mediums were eligible for participation. Those older adults who used other types of technologies (for example, telecare devices) were not to be excluded so long as they were used in conjunction with an aforementioned mode. Personal ownership or site of access was not enforced as a prerequisite: for instance, older adults who accessed computers at public sites such as libraries, were still eligible to participate. There were no criteria with regard to the number of devices or modes of technology used, the frequency of use, or an individual's competency in using technology, in order to gather a diverse range of experiences and participants.

Participant Recruitment

Recruitment for this research was protracted and at times challenging. Setting out, the initial aim was to recruit 20 retired people living within the Great London Area (see

Figure 3.1: Map of the Greater London Authority showing London Boroughs where Participants Reside, next page), through community organisations with the (usually email) request that I attend and meet with their members in person to introduce myself and discuss the project or if that was not possible, to post the recruitment flyer (see Appendix E) on their community noticeboard and leave PISs with staff to disseminate. During the period March to October 2015, over 60 community centres, church or charitable organisations (e.g. AgeUK or the Salvation Army), clubs and societies, online community forums, older adult interest groups or day centres (such as the University of the Third Age (U3A)), lunch clubs, libraries and a city farm, were contacted for assistance with recruitment. In total, 34 never responded, 13 responded but for varying reasons assistance was not feasible, seven replied that they would display flyers in their centres or circulate it among their members, two flyers were displayed in shops, and six organisations responded that they were happy for me to attend in person and speak with their members. Subsequently, 15 visits were made to the participating centres over the seven-month recruitment period, through which 10 of the overall 29 participants were recruited. Of the remaining 19 participants, five were recruited from flyers distributed through community organisations, five were recruited through notices placed on online local community forums, five were recruited through personal networks and four were recruited via snowballing. In September 2015, the decision was made to try to specifically recruit those who may have restricted mobility, or who don't see family and friends face-to-face very often, or those who aren't online, in an attempt to see if their experiences varied from those already spoken with. Therefore, of the 29 participants recruited overall, five did not use communication technologies and were classified as 'offline'.

During the recruitment process some organisations were difficult to establish relationships with due to gatekeeping, as they had their own research agendas and sometimes affiliated research partners, such as pre-existing or exclusive relationships with other London-based universities or charities. For those organisations that did respond but where gatekeeping was experienced, the most often reason cited for being unable to assist was that I was one of several such PhD students or university researchers to contact them within as many weeks, thus they needed to safeguard their members, suggesting older adults in London are perhaps an over researched group.

Other organisations proved useful for 'screening' if their members were not suitable participants due to health or dementia concerns.

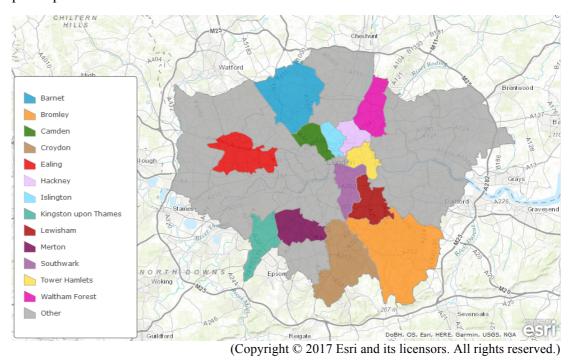


Figure 3.1: Map of the Greater London Authority showing London Boroughs where Participants Reside.

Recruitment was also gradual and incremental due to an ethics committee requirement to ensure that no more volunteers than needed were recruited so as to "ensure that elderly people are not disappointed". Aside from ensuring that all those who met the criteria and were interested could take part, this meant staggering the recruitment process. After contacting community organisations through which to potentially recruit, it was necessary to wait several days to ensure they had adequate time to respond, after which one follow up email was sent. If no response was received, the next community organisation was approached. For those who did reply, further delays in contacting the next potential community organisation were experienced whilst it was determined, what, if any, assistance would be possible and if anyone would volunteer. With respect to online community forums, notices typically received approximately 200 views and several responses but usually only eventuated in one person participating. Among people who indicated interest in the project but did not participate, this was often based on the lack of financial incentive or reward for their time, having had a previous experience of being a paid respondent, people asked questions such as "did you bring vouchers?". This again points to the significant interest among researchers in this demographic group and speculatively, of the large concentration of universities in London. A second commonly stated reason for declining participation was potential volunteers not seeing their opinions as 'interesting' with people making statements such as "I just talk on the phone and that's it" or "what do you want to talk to me for, I just do the same as you". Other community centre members were 'hard to reach' as they were too busy engaged in their regular community centre and other interest- or group-based commitments to take part. As the sampling strategy was purposive, once a point of saturation and relative convergence was reached in the data whereby the inclusion of additional participants did not elicit significantly new or different information, recruitment ceased.

Older Adult Participants

It was intended that each participant would take part in an in-depth semi-structured interview, at the conclusion of which they would take home a cultural probe activity kit to complete. This was to be returned and analysed after a two week period after which a final interview was carried out. As will be elaborated on in the following discussion, the research methods were iteratively refined throughout with many of the cultural probes not eventuating as anticipated. To reiterate, recruitment was not straightforward. For those 29 participants that did take part, there was one group interview with four participants at a community centre, two interviews with couples (one at their home and one at QMUL), there was one 'postcard' only participant (completed at a local community centre), and the remaining 20 participants were individual interviews with eight conducted at participants' homes, five in cafes, five at the local community centres through which they were recruited and two at QMUL in departmental meeting rooms (see Appendix F Table of Participant Demographic Information, for further details). Interviews were conducted face-to-face at a location of the participant's choice. The interview location was a significant factor because, as knowledge does not pre-exist, the interview location would have had a bearing on the dynamic and co-construction of situated knowledge between me and the participants (B. Berg, 2009; Denzin & Lincoln, 2005). Whilst it would have been preferable that the interviews were conducted at participants' homes, it would be unethical for me to insist on a particular location. Enabling participants to determine the interview setting may also have meant it was a convenient location and likely to make them feel more comfortable and at ease. Those participants who had interviews conducted at home were usually recruited through personal networks, snowballing or I had met them previously at community centres whilst recruiting. This perhaps speaks about participant perception of me, and my role as researcher, and people's preparedness or comfort in inviting me into their homes. There are of course many social conventions at play regarding who one should invite home, and in what capacity. For instance, one widowed older man who lived alone made a flippant and perhaps deflecting comment about what his neighbours might think if I, a young woman, were to go to his home, preferring instead we meet at the community centre. Given the size of London, some participants did not wish to inconvenience me by making me travel to their homes and were happy to travel to the university using their 'Freedom Passes' entitling them to free travel (Transport for London, 2016) and conversely, others had limited mobility and were not easily able to travel beyond their homes. Participants were not financially compensated for their time but there were no costs incurred by participating.

When meeting with participants, I tried to keep the tone conversational and up-beat (Kaufman, 1994). The formalities of the consent form were dealt with first so that people understood what they were participating in, had the opportunity to ask questions and so that I was able to confirm consent for audio-recording. Four participants declined to have their interviews recorded. Inevitably, once the audiorecorder was turned on, the inter-personal dynamic altered somewhat as participants felt a certain awareness about being recorded and conscientious about answering the questions 'correctly'. Participants were told that the interview was conversational in style and I tended not to make the interview schedule visible to participants to make the engagement feel more 'natural', whilst needing to adopt the position of "creative listener" (Wolcott, 2005). The interview schedule prepared was not restrictive (see Appendix G), consisting of three components; a set of introductory questions, a list of themes generated from the literature review and a list of prompts that could be used to probe participants further on a topic. Where interviews were audio-recorded, I refrained from making written notes during the interview so that I was able to attentively listen and focus my attention on the in-the-moment interaction, aware of how my own emotions would shape the engagement and of the effect distractions and lapses of attention may cause. Note taking also created 'breaks' in the conversation and flow of the interview with people often pausing if I wrote. For those interviews that were not audio-recorded, notes needed to be made throughout the interview to capture what was said. The conversational nature of interviews also meant to a large degree I let participants guide the topic of conversation. The concern with the banal, mundane and everyday meant that I did not want to (pre)judge what was of relevance or importance to participants or overlook information that, to return to G. Andrews et al. (2013, p.1352), would see those social practices thought of as 'mundane' and 'everyday' "lost in theoretically driven interpretative searches for meaning and significance".

At the conclusion of interviews, participants were offered a cultural probe 'activity kit' to take home and complete over a two-week period. The six cultural probes adopted and adapted for this research were selected from a broader range of probes used elsewhere (see Gaver, et al., 1999; Gaver et al., 2004; C. Graham & Rouncefield, 2008; C. Graham et al., 2007; Pedell et al., 2010; Wherton, et al., 2012), and included: photograph taking with a Polaroid camera, postcard writing, writing (prompted) wish lists; keeping a diary (with cued phrases); drawing a home plan or maps, and keeping a media log (see Appendix H for a detailed outline of the each cultural probe). Suffice to say, it was exceptionally challenging to generate interest in these activities. Perhaps because of the focus on the 'everyday' participants did not see the relevance in, or what additional information would be generated from, completing the tasks. Early participants who were offered the kits made comments such as "I haven't filled out a diary since I was a child" or "that just opens you up to criticism". Both statements reflect highly emotive responses to the types of tasks the kit would necessitate, pointing to their very purpose and success at being evocative and probing tasks. However, the associated discomfort was also clear and in my position as researcher, my ability to persuade people to try and complete some of the activities was limited without transgressing into pressuring. Another participant declined on the basis that he did not think it would "add any value" to our interview as he had already told me about his technology use in our interview, feeling there was nothing left to be told. Although he enthusiastically said he was happy to help in other ways such as being re-contacted for further information which was further reiterated in an email the following week. Thus perhaps another risk associated with the 'everyday' in the context of research, is the concealment of feelings and behaviours through habit and certain bodily attunements, to participants themselves becoming automated "modes of selforganization" (Grosz, 2013, p.218). It is also acknowledged that the completion of the cultural probes was reliant on participants having certain capabilities such as being literate (one participant had very limited literacy) and there may also have been issues related to sight or motor skills.

As prior agreement to complete the activity kit was not part of the recruitment criteria, from initial recruitment in March, 2015 until August 2015, the activity kit continued to be offered to participants, but I refined how I positioned it to each participant. In the first interview conducted, the group interview, the participants declined to take the activity kits home but were happy to browse the postcards and each completed one. One participant agreed to try the cultural probes but declined to take the Polaroid camera as she did not think she was likely to take any photographs. It is difficult to know what to attribute her preparedness or interest in the cultural probes compared with other participants. For this particular participant, I explained that the rationale behind the activity kit was to help me understand what a 'typical' week was like for her and to help document some of the everyday behaviours that we do without thinking as well as helping to record things it might be hard to remember in the interview. A further participant during a visit to the community centre did not wish to partake in an interview but wanted to complete some of the postcards I had brought with me to generate interest in the project.

On the strength of the interest in the postcard writing activity, in August 2015 the decision was made to cease offering the activity kit to participants and to instead recontact participants enquiring if they would be interested in completing some follow up questions. The statements to respond to were broadly focused on asking what may be perceived as tangential questions aimed at trying to build up a 'picture' of the individual, asking questions that related to interview questions as a means of trying to 'get at' the emotions of technology use in a different way through producing both verbal and written accounts, or used as an opportunity to ask follow up questions to earlier interviewees in light of themes that had emerged throughout the fieldwork process. Excluding those who already completed the activity, a further 12 completed the questions either in postcard format or several asked to do so electronically. The remaining participants either could not be contacted, did not respond to the request or declined to take part. Those who responded and agreed were sent the postcard writing activity in the mail to complete and return. As the imagery on the postcard would

inevitably have an effect on the emotional response it engendered among participants, the decision was made to use postcards with either images of art from London's Tate Modern gallery or tourist postcards of historic and contemporary London, as London was the site of the research and participants' homes. Each postcard had a statement or question to respond to printed at the top, with the selection of statements drawn from a set list but tailored to individual participants (see below Figure 3.2: Example Postcard Images and Appendix I for an extended selection). Each participant received a maximum of 10 postcards and returned them in a pre-paid self-addressed envelope.

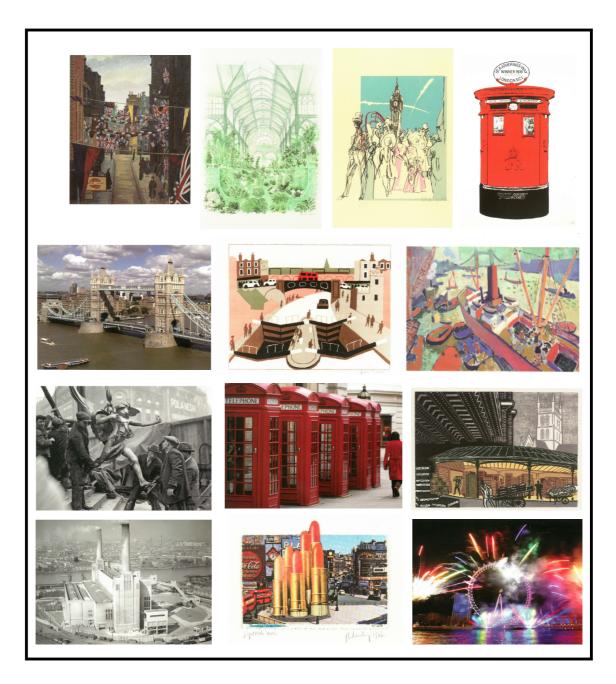


Figure 3.2: Example Postcard Images

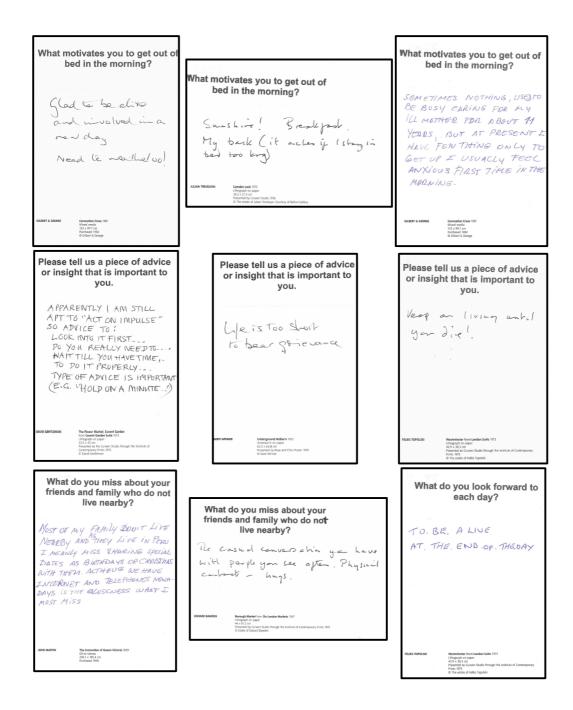


Figure 3.3: Selection of Participant Postcard Responses

Unlike other activities offered in the kit, postcards have a long and safe, cultural and emotional history. Most people have sent or received a postcard and would be familiar with the social etiquette, format and style of writing it necessitates. Linguist Diekmannshenke (2009, p.136) in their extensive investigation into the history of postcards defines them as an "act of friendship". Not dissimilar to text messages in the contemporary communications landscape, the majority of postcards when analysed are associated with 'social acts' rather than 'speech acts' (Diekmannshenke, 2009). In

other words, postcards are not about communicating information necessarily but about maintaining social ties. Interestingly, the language itself has comparisons with a text message where "often, the writer does not care about logical connections, strict cohesion, and stylistic standards" (Diekmannshenke, 2009, p.151). Diekmannshenke (2009, p.135) directs us to consider the materiality of the postcard itself suggesting "its very handwrittenness constitutes a major binding element of communicative action". In addition, where many participants lamented the decline of greeting cards and letter writing, although they did not always take the time or have an interest in continuing to do so themselves, perhaps the novelty, tactility and materiality of receiving the postcards in the mail also provided added impetus to complete them (see Figure 3.3: Selection of Participant Postcard Responses on previous page and Appendix J: for an expended selection).

Researcher Diary

Consistent with the broad ethnographic framework of this research I, the researcher, also completed a fieldwork diary. As a researcher, I do not stand discrete from the research process or information produced. Emotions are not just the subject of this research but part of the research process and outcomes. Bondi (2005b, p.237) has paid particular attention to the role of a researcher's emotions and states that the "mutability, fluidity and multiplicity of feeling" strongly guide interview interactions. For example, the researcher may arrive at an interview feeling nervous or uncertain, or throughout the interview be feeling anxious or conversely become progressively more relaxed and happy about how the interaction is developing, with these diverse and evolving emotions emanating from, and circulating within, the research setting and thus may come to affect the participant, altering the research dynamic (Bondi, 2005b). The keeping of a researcher diary throughout the fieldwork process as well as after each interaction with participants (such as points of recruitment, interviewing and follow up) provides another means of data triangulation with those emotions of, and reported by, participants.

Analysis & Interpreting the Empirical Material

Analysis of the research questions, knowledge produced and empirical data collected extend beyond the formalities and procedures that are done to or with transcripts and cultural probe materials. From the inception of this research to its completion,

processes of deconstruction and reconstruction of the research questions, methods and constituent parts are iteratively, inductively and reflexively engaged in (Pink, 2012). However, whilst these intuitive and unstructured perceptions should be usefully employed they should not be solely relied on. To ensure the rigour of the research analysis and findings, it is necessary that this is done in a systematic way. The process of data analysis must result in credible, transferable, dependable and confirmable findings (Baxter & Eyles, 1997).

Each audio-taped interview was transcribed verbatim and entered into computer based coding software NVivo (Dunn, 2010). All transcripts were anonymised and pseudonyms assigned and all identifying features removed from transcripts such as people, workplace or place names, for the preservation of confidentiality (see Appendix K for examples of interview transcription). Interviews were initially analysed for first level content and thematic analysis to search for key and recurrent words to get a sense from the data emergent and important themes in order to adapt the recruitment and interview approach throughout. Due to the size of the data set and limited amount of time between interviews, content analysis enabled rudimentary yet rigorous analysis to occur so the interview schedule could be iteratively adapted prior to the next interview. Negative coding was also employed to determine what was not being said, or written about or recorded by participants.

At the conclusion of fieldwork, participant transcripts were returned for member checking and to afford those who wanted it, the opportunity to make any desired amendments or deletions. This was deemed an important methodological step as it provides a means of triangulation between me as the researcher, participants and the empirical data produced so as not to privilege one form of data or mode of data collection over another, and to mitigate the methodological limitations of any singular data source (Pratt 2009). It also helped to uphold ethical standards and confidentiality by allowing participants to review and comment on transcripts. At the conclusion of all data collection, textual analysis was performed on each source.

Participants are to be sent a results 'newsletter' giving an overview of the results as well as offered copies of any academic publications that arose from this study. Within the context of this thesis, the question of how to represent empirical material is never

straightforward, particularly given historical crises of representation that have plagued the humanities (see Alcoff, 1991) and more contemporary concern over the representative qualities of emotion and their complex relationship with language. Alcoff (1991) focuses attention on data representation relating to the differentiation between the researcher as speaking either for or about participants, but trepidation of both leaves the researcher unable to speak at all. This research makes a conscious decision to speak about, but not for participants, thus my own positionality and part in the interaction process of research has been acknowledged in this chapter. Where practically possible, I have attempted to 'let' participants speak for themselves and substantial participant transcript excerpts are included throughout the empirical chapters.

Reflecting on Methodological Encounters of Ageism

Reflecting on the process of obtaining ethical approval, it could be suggested that implicit and socialised ideas of ageism were made apparent. Simply by virtue of being retired and therefore it was assumed older (as this project did not specify a chronological age), I was advised this classified respondents as potentially belonging to a 'vulnerable' group. This meant certain criteria had to be met, mitigated or have restrictions in place (primarily on recruitment) to ensure such 'vulnerable' people would be 'protected'. The notion of vulnerability was predicated on mental competency and it is agreed that identifying those who suffer from dementia is a very valid and important concern. Beyond this, the homogenising and condescending question (for participants) of how I would "ensure that elderly people are not disappointed" if they could not participate suggests that retired people are not only synonymous with being elderly, but also emotionally vulnerable. At the ethics committee hearing I had the question put to me, and as a condition of my provisional approval was required to put in place, actions I would take "in the event of any of her participants dying during the time of the research project". For example, if someone were to die after the interview, would I still proceed with inclusion of the material? Once again, this seems to imply a relative nearness to death or bodily fragility based on a presumption of participant age, regardless of the fact age was not specified as a requirement for participation. Whilst I do not believe that the members of the ethics committee were necessarily ageist and had nothing other than the best interests of prospective participants in mind, I believe this speaks volumes about how age (bias) comes to be embedded in social, institutional and physical structures in society (Laws, 1995).

Methodological Contributions and Limitations

Methodologically, although this research encountered challenges through the introduction of a cultural probe methodology to geographies of ageing, it still makes a contribution towards developing new methodological tools that address concerns over the representation of emotions in research contexts, and among older adults who are often overlooked as a study group. Given the scale of this research, there were inevitable financial constraints which limited both the range of probes that could be devised and the degree of professionalism with which they could be produced. Significant attempts were made early on in the project to contact external organisations to secure additional funding for this purpose, however ultimately this proved unsuccessful. Additional funding may have enabled the production of more exciting and enticing probes trialled elsewhere, such as scrapbooking (see Gaver et al., 1999; 2004) or different types of photography or audio-visual equipment for recording (Pedell et al., 2010), or the provision of suitcases for collecting meaningful objects (Wherton et al., 2012). As part of a cultural probe methodology, given the focus on the materiality of technology, visual methodologies could have been used such as Pink's (2004, 2008, 2012) idea of 'go along' interviews whereby participants take the interviewer on a tour of their home or potentially other locations, and discuss experiential aspects of the home, for example, the spatialities of technology use throughout the home.

Conclusion

This chapter has documented the process of producing the empirical material as situated within a cultural probe methodological framework and informed by NRT epistemologies on the interrelationship between language and emotions. A cultural probe methodology was trialled in anticipation that the shared technological origins and emphasis on tasks that solicit access to different emotional worlds would act to mitigate concerns that can arise over the representation of emotions in research contexts. Cultural probes were met with reticence by participants; except for the postcard writing exercise, which generated relative interest among participants, it is suggested due to its 'safe' and familiar cultural and emotional heritage. Consequently,

semi-structured in-depth interviews with 28 participants (and one 'postcard only' participant) form the empirical basis of this research, complemented by 14 postcard responses. An introduction to the participant group follows which provides an overview of participant characteristics and approaches to technology. The subsequent chapters present the empirical material produced, the first of which, Chapter Four: The Body, discusses the discursive shaping of ageing bodies revealing the ways in which discourses of ageing can alter the socio-biology and bodily practices of ageing, and thus (re)configures technology use across differing temporal and spatial scales.

Introduction to the Participant Group

A total of 29 retired Londoners took part in this research: 16 were female and 13 male. Ages ranged from 58 to 89 with an average age of 72.5 years and median of 70 years. As there was no age-based criteria for participation, the only prerequisite was that participants were retired, four people did not wish to disclose their age as they felt it was not pertinent to the study aims or participation criteria. The pre-retirement occupations of participants included teachers, social workers, lawyers, a computer programmer, an engineer, a photographer, an office manager, an accounts assistant, self-employment, a shop assistant, a housewife, and Non-Governmental Organisation (NGO) sector employees, plus three participants who had been long-term unemployed or unwell but now classified themselves as retired. The length of time retired varied from five months to 25 years. As expected younger participants had been retired for a shorter period than older participants. People were not asked to disclose their ethnicity although some voluntarily did so. Of the 20 who did, 13 were English, and the remaining seven were Scottish, American, Sri Lankan, Chinese Malaysian, Mauritian, Peruvian and Italian. There was diversity of marital status among the participant group: 13 participants were married, eight were widowed or widowers, five were divorced or single, one had a partner with whom they did not live and two did not disclose their relationship status. There were 20 participants with children of whom nine had all their children living in London, eight had at least one child residing in London and three had none of their children living in London. The participant group was geographically dispersed across London. Almost half of participants had moved to London from overseas or elsewhere in the UK, either as children or in adulthood, including some who had relocated multiple times. This meant that most participants were communicating with people across spatially dispersed networks.

Among the participant group, five participants were not considered to be 'online' as they did not use communication technologies other than the landline telephone. These participants have been included in the study as a point of comparison to understand if the emotio-spatial dimensions of doing the ageing body are in fact altered by technology use. Interestingly, it was the five oldest participants (Norma (83), Richard (85), Rita (89), Roy (89) and Violet (84)) who were not online. In this instance, what

were referred to as 'traditional' or 'old-fashioned' means of communication were utilised, primarily seeing people in-person, making landline telephone calls and selective letter or greeting card writing. Their narratives are reported on throughout the empirical chapters to highlight where experiences may differ, or conversely, are the same as those using communication technologies. Of those 24 participants who used communication technologies, people reported being first introduced and learning to use technology in the workplace (12 participants), self-taught prior to the introduction of technology in the workplace (two participants), in retirement and/or through family and friends (seven participants) and three participants did not disclose their initial introduction. Although not necessarily an accurate reflection of the socioeconomic status of participants, people were asked if cost was a determining factor or barrier with regards to technology use or being able to communicate with people, to which 14 indicated it was and 15 indicated it was not. There was a range of technical abilities with seven participants confident users (Edward (74), Jeff (64), Irene (60), Mark (68), Nigel (70), Sam (61), Terence (64)), the majority who felt they had sufficient skills for being able to do what they wanted or needed to online (Carl (58), Deborah (age not given), Dennis (69), Frances (58), Helen (75), Henry (65), Keith (age not given), Marion (59), Ruth (80), Susan (age not given)), six participants who felt unconfident using technology (Barry (69), Carol (74), Hazel ('70+'), Joan (85), June (82), Mavis (87)) and Veronica (62) did not specify. Of note, women or those who were more economically constrained reported feeling less confident online as compared with those more confident tending to be male and/or able to afford to use technology.

Technology users almost uniformly reported it increased the frequency of contact they had with existing family and friends, along with the overall amount of time spent 'in touch'. Technology was not necessarily seen as a replacement for socialising inperson, with face-to-face interactions usually seen as preferential to technology-mediated interactions. Participants exhibited an awareness that technology was complementing rather than replacing pre-existing modes of communication, providing people with an "additional channel" (Jeff) for keeping in touch with family and friends, with participants appreciative of the opportunity to have more contact than otherwise might have been possible. In between periods where people would not have normally

seen one another the affordances technology offered meant, "more contact in a different way" (Deborah).

The type of technology and communication platforms used by participants varied significantly. In general, those who felt confident in their technological skills or had a readily accessible support network, such as a partner, child or friend they could call on for assistance, or could afford to buy technology, were heavier users, used a greater range of devices and tended to use portable technologies. This included smart or mobile phones, tablets such as iPads, Kindles, Google Chromecast, Internet-enabled televisions, Skype, FaceTime, Facebook, Instagram, or third-party messaging applications WhatsApp or Viber. Those participants who were less confident online or experienced greater financial barriers to accessing technology were more likely to use second-hand technology or non-portable technology (such as a desktop computer). Within this group 21 participants had a mobile phone, of which 15 people had smart phones, and a similar number had access to a computer at home (either a desktop computer, laptop or both). With the exception of one, all participants who were online had access to the Internet at home (i.e. a Wi-Fi, Dongle or Broadband connection). For all participants, social media platforms, particularly Facebook, were the least popular means of keeping in touch with family and friends. Those who were not active on social media chose not to be based on ideological opposition to the perceived public and egotistical forms of sociability it engendered, with Violet calling it 'Bragbook'. Only 11 participants had a Facebook account with varying levels of engagement. Indicative of this was Keith who comments, "I've got nine Facebook friends and one of them is dead". Similarly, although Nigel has a Facebook account, he uses it very infrequently and it is his wife who accesses his account almost daily to see what his 'friends' have posted.

Technology use had a significant impact on the temporal rhythms and spatial organisation of people's daily lives, not simply for the way it afforded greater connectivity with family and friends but also for the way in which activities such as reading newspapers or shopping developed different spatial and temporal rhythms. For communication purposes, email and text messaging were the most preferred modes of technology use, with all 21 participants who had access to a computer using email. Those who owned a mobile phone were more selective in their use of texting. Text

messaging was perceived to be for practical purposes only, such as when people were running late to meet with others, when a specific question needed to be asked (e.g. "How did you get on at the doctor's today?"), as a convenient and unobtrusive tool for making practical arrangements or for keeping in touch with younger family and friends who may be at work and not able to answer their mobile phone. People liked text messaging or email as it enabled discrete, momentary points of emotional connection for "just knowing what's going on, some reassurance" (Edward) or for when "you just want to check in with people" (Carl). Despite this, text messaging was not seen as a proficient means of communicating beyond a superficial level due to its brevity. Several participants also found text messaging difficult due to physical limitations such as osteoarthritis affecting the dexterity required to use the small buttons or keyboards, and visual loss reducing the ability to view small screens. As a communication platform, email was hugely popular and easily accessible among participants given that many were required to use it in the workplace, thus were familiar with both email messaging systems and typing and keyboards. Nor was email dependent on being able to use any specific or single type of technological device and could be accessed via mobile phones, desktop or laptop computers and tablets. Email was cheaper than making a telephone call or sending a letter. Email was also advantageous, as like a letter, it was a longer communication format with the option of including attachments such as photographs or links to websites. Email was convenient as it could be composed, sent and responded to at the leisure of the sender and thus not constrained by social conventions regarding the temporalities of when it was appropriate to contact someone. Illustrative of this sentiment, Mark states "the advantage of a text or email over any other form of communication is that you choose the time you're gonna send it, you compose it so you say exactly what you want to say, send it, and forget about it, you get an answer or you don't".

Participants did not use technology to find new friends or social contacts per se. There was a clearly articulated acknowledgement by a number of participants that they sought structure, routine and purpose in retirement. Consequently, many pursued volunteer or recreational activities that would afford chances to meet others and often the internet was used to find common interest groups, local community groups or to reconnect with friends with whom they had lost touch. Many felt these opportunities would not have otherwise been granted without access to technology, but did not wish

to use the internet to make friends with strangers through platforms such as Facebook or chat rooms. This supports UK based research, which found a "strong association between the measure of Internet use and organisation, group and club membership. Conversely there was also a strong relationship between Internet use and not being a member of any organisation, club or society" (Mason, Sinclair, & Berry, 2012, p.7). Once these connections had been established offline, these relationships often then shifted to being 'online' connections. This was for the practical reason of enabling social arrangements to be made with ease, especially where group activities were concerned such as book groups or group outings to the theatre. As will be elaborated on in the subsequent empirical sections, these types of connections are now becoming commonplace for retirees, creating a distinctly different emotio-spatial experience of retirement and ageing in London.

Chapter Four: The Body

There is a corporeality to ageing which is in part constituted by the socio-biology of the body, however there is also the social and emotional labour involved in doing the ageing body that is similarly affected by the material relations between bodies and objects. In a culture that is increasingly somatic (Jones & Higgs, 2010), discourses of ageing based upon the materiality of the body have become more prominent (Rudman, 2015). In relation to older bodies particularly as portrayed in mainstream media and stereotypes, there is the perception of chronological age having a lessening effect on the body; older bodies are often assumed to be less physically and mentally agile than younger bodies. Debates on ageing may seem peripheral to this research, yet the implications of the enacting of ageing (bodies) are manifold and have deep significance for individuals, notwithstanding the participants of this research. This chapter will first establish how participants felt about their older and ageing bodies, from the chronologically or 'objectively' ageing body to the subjective feelings of social ageing. The differentiation between an ageing and retired body will be made including a brief discussion of how the imminent hazard of the 'future' or older body looms with the finality of death edging closer. A recurrent theme through several participant narratives was bodily critiques that reflect the culturally and socially acceptable nature of ageism, with some differentiation of such bodily norms made between men and women. Ageism led some participants to actively resist such discourses by trying to infuse ageist rhetoric with alternative realities, for others the internalisation of ageist discourses manifested in the form of self-deprecation.

The Chronologically Ageing Body

Undeniably, physical changes did occur to participants' bodies as they grew older but bodily ageing took on a multiplicity of forms beyond the simply biological. Participants spoke about not only the feelings of 'ageing' or being 'old' but also feelings of the quotidian, mundane and ordinary that persist throughout life. New, unexpected or unknown bodily states prompted unexpected emotional geographies in retirement, often facilitated by the affordance of having more unstructured time. Nigel astutely speaks of how he distinguishes between the socio-biological experiences of ageing:

Ageing is an interesting process. For me there are two aspects of it, the changing physical body and the changing cognitive ability. My body now has various defects that it didn't have when I was 20 but it is still in better condition than the bodies that some people are born with. So I try to reduce the chance of more defects by living healthily and accept the changes that do occur and try to find strategies to deal with them. The changes in my brain are equally as interesting. And again I try to maintain a healthy brain but recognise that it is different from 20 years ago and different strategies are needed. Overall, my main concern about ageing is that the knowledge in my brain will disappear and will no longer be available to help my friends and family.

Nigel's narrative draws out the distinction between bodily and cognitive or 'mental' ageing, with the two happening in tandem and interrelated but not necessarily happening synchronously. At face value Nigel's excerpt is sympathetic with the idea of a 'mask of ageing' whereby his body is ageing with his constant sense of self 'masked' by his age (Featherstone & Hepworth, 1989). A more nuanced interpretation suggests the practices and emotions associated with *doing* Nigel's body are *both* done differently as he becomes older; neither remains constant or unaffected by the other. Ageing for Nigel is also not only a deeply personal experience with the bodily changes he experiences not accessible for others to know or understand, but also a communal and relational process. Affirming this notion in reference to their research on hypoglycaemic bodies, Mol and Law (2004, p.45) argue:

On the one hand there is an objective, public and scientific way of knowing the body from the outside. On the other hand there is the subjective, private and personal way of knowing the body from the inside.

Nigel's passage illustrates the emotional labour and struggle involved in reconciling the two. This was not uncommon for participants and as will be elaborated on, many of the external processes of ageing involved participants being socially organised into the category of old. This meant, contrary to the notion of ageing as a time of older adults' withdrawing from society, society in social and economic terms, had begun its 'withdrawal' from Nigel. The (invisible) emotional labour involved in negotiating Nigel's perception of his own ageing body consists of both how he experiences it as well as how he thinks other people feel about or encounter it. Importantly, Nigel's narrative emphasises the centrality of emotions to bodily experiences of ageing.

As Nigel perceptively asserts not all bodies are born the same or progress through life along a 'normal' trajectory. Some participants encountered bodily change prior to becoming 'old' or 'aged' as defined by socially institutionalised, arbitrary conceptions of the lifecourse such as retirement. Dennis stopped working at the age of 55 after

developing Chronic Fatigue Syndrome (CFS), a condition unrelated to age. In addition Dennis has sciatica, Repetitive Strain Injury (RSI) and has gone on to develop osteoarthritis. The manifestation of his CFS, osteoarthritis and other mobility limiting conditions however are gradually being (re)framed and (re)interpreted in light of his materially ageing body to take on new meanings. Dennis does feel that his "decline" started early and therefore as he increases in chronological age he has a heightened awareness of his mortality but only as it relates to his physical body, not his mental capacity:

I don't believe in an afterlife, so am coming to terms with my collapsing body and trying to live life to the full [...] so I can continue having a meaningful life, trying to ignore the possibility of death and hoping it's fast and not preceded by dementia...growing older has meant my disabilities, sciatica, RSI, arthritis etc. are slowly getting worse, my feelings and brain are still intact...I have vaguely looked at funeral plans, a Will, and considered donating my body to science, but haven't done anything about these, life is too full...I would certainly challenge anyone who assumed I was less able to do something, other than purely physical things, because of my age or appearance.

Dennis' narrative emphasises the latent risk that people categorise him as old and incapable solely on the basis of his physical appearance or mobility limitations, and concomitantly perceive his chronological age as having relevance to his medical conditions. Dennis' mobility limiting conditions affect how he perceives people interpret and interact with his body and thus becomes part of how he also embodies the feeling of ageing. Dennis alludes to a sense of being socially organised into the homogenising category of 'old', a process that both adopts an ontological violence and has material practices associated with it (Krieger, 2014). Dennis fights against this, articulating "I would certainly challenge anyone who assumed I was less able to do something, other than purely physical things, because of my age or appearance". Evident here is Krieger's notion (2014, p.645) of "embodied harm" and of the body as accumulating not only individual choices but as carrying their economic and social (im)positions, with Dennis and Nigel having to navigate complex bodily accumulations that become have become more manifest with age (Krieger & Davey Smith, 2004).

Consequently, the labour involved in doing Dennis' body is complex. Firstly, he must adopt strategies for coping with his mobility limitations from the micro-scale of using his hands through to his ability to continue to be mobile within his home and beyond. Secondly, there is the social labour of resisting, negotiating and manipulating how

society perceives his (ageing) body. Finally, there is the deeply personal emotional labour associated with "coming to terms with my collapsing body and trying to live life to the full". The emotional labour of doing his body is just as significant to Dennis as the physical labour. Part of managing his "collapsing" physical body is the emotional labour of keeping his mind active and engaged in "meaningful" activities as a way of distracting himself from the inevitability of death and remaining hopeful that the process of dying will not be prolonged. More broadly, this demonstrates where emotions have a complex legacy of being typecast as feminine, irrational and devalued; in this case Dennis' emotions are a productive tool that he utilises to his own socio-biological benefit to live a "full" life (K. Anderson & S. Smith, 2001).

Rita identified herself as having a life-long mental illness which like that of Dennis, is a bodily state that predated retirement. For the past 40 years Rita had independently sought self-directed treatment, however it was only as she got older that she had what she felt was more (unstructured) time, critical to the experience of retirement, to explore treatment and seek support from her General Practitioner (GP). Improvements in the management of her mental illness meant Rita felt she was able to participate more fully socially including belonging to a choir, becoming an active member in a number of organisations such as the U3A, a book group and an older women's network. Rita speaks of her membership in such groups as related to her mental illness:

[I'm able to] now I'm that much better as far as my mental illness is concerned because one of the most defining I think, symptoms was alienation you know? I just withdrew from everybody and I still find it difficult because the one symptom that I have, not one I have several, but one, which is overriding is the loss of spontaneity and I don't have that, at all [...] I have the psyche of a six-year-old child in the body of an old woman [..] because as I've said these are the things that I'm still learning and you can go on learning until you die because there are always new experiences and new things and for me, with my disability each time I'm able to cross off some symptom [laughs] and say 'I've got over this one now' you know? [...] I said to someone 'I'll never be normal but at least until I die I can go on getting better'. That's more important [...] I think that the incentive in my case is my mental illness, because that is the incentive, that is the goal that is goading me on and on. Most other people who are normal, they think in different ways in terms of 'oh I've lived my life, I've brought up children, I've ah seen them grow up, they're on their feet and alright' and so on and, and one of my friends said 'just waiting to die' you know? Which is ah not a good thing because you can always learn and change.

Rita's story has strong parallels with Dennis', as it demonstrates the relationship between emotions and bodily states throughout life, particularly in old age. Rita goes on to quote a psychiatrist she once saw in New York who said "'you can't start working on the mind without working on the body" and enlisted Rita to do frozen muscle

exercises every day to loosen the body and the mind. The experience of Rita advocates that not all bodily change throughout life should necessarily be interpreted from a negative or pathological standpoint. From Rita's perspective, she continues to "get better" as she ages, not only socially but biologically. When Rita first approached her GP for a referral to psychotherapy treatment the GP refused stating they thought her need for it was "difficult to believe". Rita attributes this to not only the "false façade" she presented for many years by concealing her illness from others, but also that her mental illness manifests in a more youthful appearance:

Somebody told me I look very young for my age and that's a symptom of mental illness. She almost choked, she said 'what?' I said 'it's called Peter Pan syndrome' and the medical people of course have the medical term for it, they call it the Puer Aeternus, the eternal boy, the boy who couldn't grow up.

Rita believes her psyche of a six-year-old child makes her look younger. This also affected how Rita felt about ageing and she suggests her mental illness has given her a different outlook to ageing and a drive to remain mentally and physically active that her 'normal' peers may lack.

Some participants experienced 'age-related' physical change. Violet states "it's very boring when bits of you start wearing out" but the physicality of ageing was perhaps easier for some participants to cope with and mitigate than the social ramifications. For instance Helen's hearing loss is almost imperceptible to others and easily managed through wearing hearing aids to correct it which means she is able to use the telephone and continue to participate in social engagements such as her choir. In the case of June, the physical symptoms of what is simply referred to as her "awful backache" are harder to manage. June anticipates her painful, stooped condition will worsen and further restricting her mobility. Already it prevents her from travelling outside of London to visit her sons or friends and even within London she resists using the tube: "cos I have this back trouble and I trip on the tube now and the trains so I'm a bit scared of that unless I'm with somebody". In order to manage her condition she is able to adopt strategies such as travelling on the train or tube with others or only using the bus to visit those friends who live locally. However, the psychological effect on her confidence as well as reduced face-to-face social contact, is harder to mitigate. The psychological impacts go beyond reduced social interactions with those within people's personal networks with Green, Jones and H. Roberts (2014, p.488) noting using public transport is about more than "getting from a to b' and [we need to] begin to unpack the various ways in which moving through space are tied to wellbeing through the lifecourse".

Rita has recently made the transition from using the tube to only using buses to compensate for her ageing body. Rita discusses below her frustrations and rationale for making the transition:

I've made a transition from the Underground which I always, always, always used but now I use the buses because there are so many steps on the Underground and I find it difficult to climb up and down and the buses are easier. I never got into a bus because it was such a slow journey. They stop at every stop and then they stop at traffic lights, that doesn't happen on the Underground which whizzed through only two minutes in each station, see? So again that's a big change in my life that now I use the buses.

Although Rita is still able to reach the same destinations using the bus, it has had a mental impact as it signals a particular bodily state or directional trend towards decreasing mobility and agility. The use of public transport, whilst being a London-centric concern with most literature citing the importance of driving for independence in old age (see Nordbakke & Schwanen, 2014; Schwanen & Páez, 2010), was also highly symbolic for many as having reached a certain point of irreversible ageing. Research conducted in London suggests that independent mobility and being able to use public transport sees "psycho-social benefits accrue from the ability to make trips for discretionary as well as instrumental purposes" (Green et al., 2014, p.473). This affirms the deep association between the physicality of ageing and the emotional experience of it.

Deborah also cited mobility related concerns and bodily negotations, having recently had back surgery. Although Deborah remained able to drive and was mobile on her feet, she was unable to play tennis, which formed the cornerstone of her social life. For example, Deborah visited the tennis club several times a week where she made friends and participated in social events such as coffee mornings and tournaments. However despite her inability to play, the social links remained with Deborah still regularly visiting the club, which had continued to lead to other opportunities beyond the physical and social space of the tennis club. For example, Deborah was part of the forming of a local charitable group that hand-made donations for a women's charity in Africa. Once a social contact had been established in-person, Deborah often shifted

contact online using the messaging application WhatsApp to make logistical arrangements. Mavis too, having suffered two falls, breaking her wrist and subsequently a knee within nine days of each other, had faced a long period of immobility and rehabilitation. Mavis' mobility and confidence improved but never regained their pre-fall status. As result, Mavis had to forgo one of her main volunteering activities, helping to run the Mothers and Toddlers group at her church, as it required long periods of standing which she found too arduous. Mavis was not confident driving beyond her local area or catching the train to her adult children and grandchildren living beyond London. Unlike Deborah who had a mobile phone and was a confident technology user, Mavis' use of the computer was limited to receiving emails. This meant Mavis experienced great disruption to her social network compared to Deborah, when faced with changing (physical) mobilities.

Changing mobilities was pertinent to a number of participants. In early retirement, Ruth had moved to the country with her partner and like Deborah, it was through the enacting of particular mobilities and physical activities that she had built up friendships and a social network in her new community: Ruth joined the tennis club, shooting club and Pilates, among other hobbies. After the death of her partner, Ruth returned to London and she feels affirmed in her decision to relocate. Ruth felt once she ceased to drive, life in the country would become untenable as she would be "stranded". Now, Ruth has "trouble" with her legs meaning she did not feel confident to drive beyond her local area and it made walking difficult, thus public transport was problematic as it required walking within and between public transport stations. Ruth recalls a recent instance in Euston station where there is a lot of walking required and she had to do it with a suitcase which was challenging. Since retirement, it is apparent that Ruth has experienced many shifting mobilities across expanded geographic scales, accompanied by dynamic emotional geographies. Ruth's experiences were in contrast to Roy's, who had reduced mobility coupled with a severe lack of eyesight meaning he stopped driving two years on the advice of his doctor who said he was likely to run someone down and he "wouldn't be able to handle that". Roy who did not use any communication technologies apart from his landline telephone, had become very lonely and socially isolated since the death of his wife five years ago, to the extent that he would go days without seeing or speaking to anyone. Roy's GP insisted on referring him to a local day centre which he attends weekly on Mondays. Roy dislikes going to the day centre as all of the other attendees have dementia and he is unable to have "proper conversations" with people.

The participant narratives surrounding mobility reflect a deep association between the embodiment of a physically ageing body, the forging and maintenance of social links and the materiality of enacting different forms of mobility. This supports recent perspectives in the literature that favour a move away from transport geographies which focus on the logistics of making discrete trips, to an expanded mobilities of ageing perspective demonstrating movement in old age is not simply a matter of aged bodies journeying through space but rather "systems of movement and travel involve the physical movement of bodies, inanimate objects and images and the virtual movement of ideas, information, bodies and capital" (Burnett & Lucas, 2010, p.597, emphasis added). This advances the notion that rather than participants such as June, Rita, Deborah, Mavis, and Ruth becoming entirely less mobile or immobile as they age, the practices and social relations that constitute their mobilities are shifting. Often, ageing is seen as antithetical to movement (Burnett & Lucas, 2010) with an overemphasis on "how chronological old age shapes mobility [rather] than how mobility shapes age" (Schwanen & Páez, 2010, p.592). As will continue to be developed throughout subsequent chapters, technology can be seen as assisting some participants to 'move' in novel ways.

In relation to the direct physical and healthful impacts of technological devices among this participant group, Dennis' narrative of his multiple mobility limiting conditions illustrates the subtle way in which technology, or the in-human, encroached on his autonomous sense of being human. This altered how Dennis lived his ageing body, impacting different parts of his body in different ways dependent on the sociotemporality of where he was and what functional activity he was trying to carry out. At home, Dennis uses a landline telephone headset to speak into and has programmed into the speed dial function of his phone about 20 contacts because "my hand's messed up" and it saves him having to use it to make telephone calls. Dennis does not have a mobile for this reason and on his recently purchased tablet he is still coming to terms with the voice activated functions but uses predictive, word-recognition software which over time becomes personalised to the user and anticipates what will be typed next. Dennis is also teaching himself to type left-handed so that he could still type if

his right-hand deteriorates and his left hand is required in the future. At home Dennis also has provided for him on the basis of being disabled, some sockets and light switches that are remote control operated to save him the pain and difficulty of doing such tasks manually. Dennis is appreciative of the technological assistance he receives and does not perceive that it reduces his autonomy, quite the opposite: "you know if I can afford something which is gonna make life easier or give me more control over what I do, then I'd do it if I could afford it". Dennis feels he may develop a greater need for technologies of this kind over time, however most other technologies of this nature are beyond affordability, despite his middle-class position.

Like Dennis, most participants saw the use and integration of technology into their lives for health purposes as having more relevance in the future. At the other end of the socio-economic spectrum is Nigel who, as part of the renovation of his home, was having a kitchen installed with storage cupboards that barcode check in and out food so that when supplies become low a list of items to be purchased will automatically be generated, or it will automatically process an online shopping order. When asked how Nigel saw this fitting into is life as he grew older, his response was as follows:

Interviewer: Do you see this sort of thing fitting in to a particular way of living or enabling

you to live in a particular way as you get older? In terms of if you in time, may not be able to get out to the supermarket, factoring technology use into

your life in that way or is it more just about the convenience of now?

Nigel: Yeah no it's about the convenience of it but you're right I guess that [pau

Yeah no it's about the convenience of it but you're right I guess that [pause] yeah I mean I'm not, I'm not typical in that my body's likely to carry on functioning until it stops functioning, I'm gonna be healthy until I die um so I don't even see a situation where I'm not gonna be able to go out and get my shopping but I would imagine for a lot of people who have physical

issues isn't that great that they can have their shopping delivered.

Nigel's feelings about bodily ageing are inconsistent. As stated above Nigel does not anticipate that the material and cognitive changes happening to his body as he gets older will affect his functional ability or autonomy so that assistive technologies will be required as he continues to age. Nigel did however recognise that domotic or telecare type technologies could be an approach usefully adopted by others. Nigel's belief that his body will continue to "carry on functioning until it stops functioning" is also interesting as it contradicts his earlier cited concern that as he ages his brain "will no longer be available to help my friends and family". It is not unexpected that Nigel expresses contradictory feelings about ageing as "in relation to embodied identity, numerous studies have highlighted the discrepancy and tensions aging subjects

experience between a felt youthful identity, chronological age and aging appearances" (Rudman, 2015, p.11; Mansvelt, 1997). In Nigel's case perhaps these inconsistent feelings about his ageing body are borne out of the fact this his wife is 20 years younger than him and he is fearful about the impact his ageing and death may have on her.

With the exception of Rita who has a personal medical alarm, and Carol who would like one, no other participants made reference to domotics (home automation devices) or telecare technologies (devices that provide health care and social support services). However, several participants saw everyday technologies as having a 'caring' potential through assisting in either self-care or connecting them to caring others such as family and friends (Magnusson et al., 2005). The capacity of technology for self-care was primarily articulated as enabling participants to keep mentally agile and thus preventing cognitive decline:

Terence: So in some ways it's a silly thing but if you wanna learn you know,

something, if you ask the question

Irene: [overlapping] gives you a lot of knowledge

Terence: Yeah the knowledge, to expand your mind is great and I think with, with

older people one of the things they say is if you don't keep your mind active

Irene: [overlapping] yip, yip

Terence: Then you're gonna suffer from sort of Alzheimer's

Irene: [overlapping] dementia

Terence: And dementia, that sort of thing whereas

Interviewer: [overlapping] mmm so it's quite important in that sense?

Terence: So technology in that sense I mean just sitting in front of a laptop or a tablet

or whatever and just asking a question about something might interest you

or whatever is quite interesting for me

Irene: Yeah instead of just watching television or whatever in a sense. I learn a lot,

every time I'm free I'm learning something in a sense from technology

Terence and Irene demonstrate an awareness of the potential impact of changes in cognitive functioning on their ageing bodies and feel it is important to remain mentally agile, with technology providing an easy and convenient means. This discussion highlights how neoliberalism is reforming retirement from a time of leisure and permissible idleness for those who have worked hard and "earned a rest" (Townsend, 1981, p.10), into a time where the body must be continually 'worked upon' to maintain independence and health (Jones & Higgs, 2010). Terence in particular seems to have an embedded neoliberal sense of his obligation to remain in good health evidenced by the statement "with older people one of the things they say is that you need to keep your mind active". Terence does not define "they" but one interpretation of this statement is that such health messages are disseminated through official discourses of

ageing or public health messages. Technology becomes one mode through which this 'will to health' is naturalised or imposed upon Terence and Irene as a means of bodily regulation and self-governance, so they are able to discipline their autonomous selves in accordance with societal mores (Higgs, Leontowitsch, Stevenson, & Jones, 2009). In this respect, 'technologies of the self' literally mean those technological apparatuses which people utilise for self-care.

Similarly, Henry compares himself to his mother-in-law who is not online and envisages that technology could usefully assist him with the daily tasks of living that she struggles with:

Well I mean obviously just comparing myself with my 95 year old mother-in-law, which is a long way away [laughs] she's 30 years older than me and I'm sure I won't live that long but I mean having sort of kind of grown up with computers that would be something that would be really useful to keep going if I became less mobile like she is, you know? She has a frame which she uses to walk around, so that would be really useful as we were saying for online shopping and of course ordering groceries and getting them delivered or takeaways or all that so that's going to be really useful I'm sure and keeping in contact with people too. You know she finds it difficult to write so again sort of comparing oneself with that situation it would be great, I can see technology you know, being a great advantage for people like that as they get older.

Like Terence and Irene, Henry does not perceive there will be a need for the use of specific telecare devices to enable him to continue living in his home as he ages. Rather, the maintenance of current technology use and habits will begin to subtly increase over time to reflect Henry's changing body. For example, Henry currently does online shopping for items like bike parts and theatre tickets, which may expand to include grocery shopping. This picks up on research conducted in Sweden by Petersson, Lilja and Borell (2012) who examined how safe older adults who received telecare interventions felt in their homes. Petersson et al. (2012, p.799) identified that there were three prerequisites to feeling safe in the home which were "feeling healthy, having someone to rely on, and feeling at home" and that unless these were being met, assistive technologies had minimal impact on enhancing feelings of safety and wellbeing. For participants, it was not the material outcomes that technology can achieve that is of consequence, it is how technology alters how they feel about their chronologically ageing bodies.

The Feeling of the Ageing Body

Bodily change cannot be dissociated from the emotional experience of ageing. Mol and Law (2004) conceptualise the body as being comprised of a woven tapestry of not always coherent practices and parts, through processes of bodily incorporation and excorporation that are not always conscious, rational or deliberate. This is because bodies are open systems susceptible to among many things, emotions. For participants of this research, bodily ageing was to some extent an internally driven and a largely individual process. However, for some participants the feeling of ageing seemed to be to a degree *imposed* on them: it was how *others* encountered, read, commented on and interacted with their ageing body, which often signified to them they were 'old' or 'ageing'. Participants did not always 'feel' any different from when they were a younger chronological age. Affirming the often liminal social position of older adults in mainstream discourses is Veronica's poignant statement about how getting older makes her feel:

As I cared for my mother during her last worse years getting older makes me feel anxiety and worry about what the future brings. Almost very few moments forget I am getting older and also society do not help at all, getting older alone is like the worst disease.

The culturally engrained ageist treatment of older adults and their bodies as embedded in all facets of society is apparent in this statement made by Veronica. Ageing for Veronica embodies the relentless nature of the emotions of fear and anxiety, with "very few moments" when she can forget she is ageing. Although some may argue that it is Veronica's emotions or experiences about ageing that make her feel this way (given the impact on her of her mother's illness and death), Johansen (2015, p.49) reminds us that "emotions are closely intertwined with social norms and shared meanings and, as such, they are (also) something that we learn and do as part of our socialization into our respective community". For Levy (2001, p.578) "every socialized individual who has internalized the age stereotypes of their culture is likely to engage in implicit ageism". This is connecetd to Carstensen and Fried's (2012, p.15), contention that because demographic ageing has occurred so rapidly we are still unsure what it means for society: problematically "we are still immersed in cultures designed for lives half as long as the ones we are living". Thus ageism and the attachment of negative emotions to ageing is not only confined to younger adults, but older adults like Veroncia demonstrate "buy-in" about "the intrinsic devaluation of old age by society at large" (Cohen, 2001, p.576). Veronica's narrative forms part of a broader story about how older adults are perceived and encountered by others in society. Veronica's account of the feeling of ageing also begins to elucidate that age-related social identities are temporal, relational, internally inconsistent and transitory. People do not develop coherent, fixed, internal age identities and as Veronica suggests there are moments when she "forgets" she is ageing and other times when she does not (Mowl et al., 2000; Pain, 2001).

Participants also had the experience of being older than most others in society so had an understanding of having been the culturally dominant 'youth' or 'middle age' generations as well as slipping into the increasingly liminal space of being 'old'. Participants lived relationally to their historic, present and anticipated future body. This did not mean participants disliked their ageing bodies or felt a sense of dissociation from their 'younger' bodies. Part of what Jeff enjoyed about his family and friends was that they "keep[s] me in touch with my past, present and future". Participants remembered their younger bodies and liked connections and touchstones back to them. However, for Richard the sense of the marginal social space of ageing seemed an inevitable and dominant aspect of growing older:

There is the fact that each generation they make their own rules. My generation it was a different way of life to what there is for this generation today. Now either I like it or I dislike it, but it don't make no difference I've gotta live with it so that's that.

Richard did not agree with contemporary social mores, but predicated on his (old) age he felt that he had no recourse for complaint or contribution. Richard's comment could also be interpreted as an open acknowledgement of the way emotions have histories that are learnt, socialised and evolve over time. Richard's chronological age externally imposed on him a feeling that he was 'ageing' which to a degree determined his sense of social position. This fits with Jones and Higgs' (2010, p.1514) contention that ageing bodies have an historical tendency to be embroiled in social relations that set older adults apart "as a residual social category". Vanderbeck (2007, p.206) too remarks that this "discursive emplacement of age-based identities has important implications for intergenerational relationships and contributes to the re(production) of patterns and processes of age differentiation and segregation". It is evident that Richard feels a sense of age-based segregation in society and this creates a sense of tension and dislocation between himself and others of younger ages.

Closely associated feelings of social marginalisation were those of ageing being a societal burden, particularly in relation to care needs. The sense of being a 'burden' also originates from the neoliberal 'individualisation agenda' and allied discourses and emotions of ageing that are socialised to have varied and powerful personal impacts. Joan confronts the notion of older adults being a burden head on. As someone who has become politically active and involved in her retirement, with women's issues at the forefront of her networking and community organising, Joan is dedicated to:

Breaking the stereotypes of older people being burdens or being useless or a waste of time and either just seeking to find a man or nothing else [...] we're not a burden, we're giving back to society in all sorts of ways!

Joan's notion of "giving back" speaks to her presumption that there exists a system of reciprocity between herself and society, a sentiment Lawson (2007) states is being severely undermined by neoliberal ideologies which favour self-reliance. For Lawson (2007, p.5) the "marginalization of care is deeply political. Marginalizing care furthers the myth that our successes are achieved as autonomous individuals". Our ability and desire to care about others fosters "our sense of connection and empathetic engagement with unfamiliar others [which] is a significant determinant of the quality of collective social life" (Conradson, 2003, p.452). Care is not unidirectional; we are all cared for and care for others throughout our lives.

Although Joan resisted neoliberal discourses of ageing, other participants enacted clearly much more self-reliant ideologies. Rita is single, does not have children and the only family members she has living in London are her adult nieces and nephews and their spouses. Rita was unwell with bronchitis in 2015 and briefly hospitalised. Whilst in hospital her neighbour had alerted a family member and after she was discharged, two nieces took it in turns to visit her daily for a short period. However Rita states that due to their work commitments:

That's not something that I would expect them to do very frequently [...] you know professional people are so busy I don't expect them to see me on a regular basis or frequently or anything, they are there for an emergency only.

An alternative reading of Rita's reluctance to call upon her family for assistance is that it is not that she does not *want or need* this care and support, but rather she does not wish to burden them and feels uncomfortable claiming what she perceives as their scarce time. Rita's reluctance to 'burden' her family is suggestive of one of the many

effects of the neoliberal 'individualisation agenda' on the emotional lives of older adults. Ideas of reciprocity and care have been edged out by discourses of self-reliance and independence in a political and economic context of health and social care resources becoming increasingly scant.

Interestingly, Rita does not mention if any care or assistance was offered to her by the hospital or relevant health and social care services. As a result of Rita's illness she did decide to join what she calls the "Red Button Service", a medical personal alarm service involving a pendant that the user wears and activates if they require medical assistance. Pendants should be worn at all times and kept by the bed at night. The personal alarm service can itself be interpreted as enabling certain neoliberal subjectivities as it is designed to afford individuals a greater level of bodily control in order to achieve desired social care cost savings, which can of course have direct benefits for individuals themselves. However Rita no longer wears her alarm pendant as shortly after joining:

One day I made the mistake of having it around my neck in bed and I must of pressed on it at 2 o'clock in the morning [and] they came here. I was so ashamed of myself. I wrote and apologised.

Again, Rita can be seen to shy away from claiming the time and resources of others, even if accidently. Such is the potential socio-biological impact on her ageing body, this sense of being of lesser worth than economically productive bodies and the residual shame she feels from accidentally setting off the alarm, Rita may not be able to alert the relevant emergency services should a genuine incident arise where she requires medical assistance.

Even within familial and informal networks of care, the emotions of ageing can be constructed as problematic and not always expressed to others. June actively conceals her emotions from her adult sons:

Since my husband died I was a bit worried that they [my sons] would think 'oh dear we've gotta look after Mum' although I was only 66ish when it happened so I felt young and alright [...] but when they phone and say 'are you alright' I say 'yes' so's not to bother them and I think a lot of men are similar, well my sons anyway, if they can't deal with a problem what's the point in telling them you know? They don't mind if you say 'can you do this?' 'I want this done, that done', that sort of thing they could do something, otherwise if you just say 'oh I'm not feeling very good things are going wrong', 'well what do you want me to do?' You know? So I just tell them 'yeah, fine, I'm fine' unless I'm ill or can't go on I'll tell somebody and they would know".

Imbued in June's comments is the recurrent notion of being an emotional burden through sharing and affecting her sons' emotions negatively. June states that her sons "don't mind if you say 'can you do this?' 'I want this done, that done', that sort of thing they could do something", suggesting there is nothing to be done about the emotions associated with ageing, that they must be endured. June also seems to imply that she has previously shared such emotions with her son(s) and was met with the response "well what do you want me to do?". Consequently, June worries her sons will feel obligated to look after her which will in itself become a burden for her, or that by sharing her emotions with them, they will similarly become burdened.

Geographies of care literatures have extensively researched 'care' as both a sentiment and action exactly as June dissects it above (see Bowlby, 2012; Conradson, 2003; Milligan & Wiles, 2010). Whilst June feels able to ask for assistance to complete the physical 'caring for' tasks (such as moving house, reviewing legal documents etc.) the emotional overlay and feeling of 'caring about' someone requires "complex negotiations of trust, disclosure and vulnerability that are central to giving and receiving care" (Conradson, 2003, p.453). Moreover, the "emotional labour and management of caring tend to be less visible than physical labour and operate on both a conscious and less-conscious plane" (Williams, 2002, p.147). It is not possible to define exactly the socio-biological impact on June of not sharing her emotions with her sons but it is probable that her body will be 'impacted' if even on a micro-scale. This is because emotions that are registered on a conscious level are assessed for their desirability and in turn precipitate bodily action in reaction to the desirability (or lack thereof) of the emotion (Johansen, 2015 p.50).

The socio-biological reality of emotions as experienced by June is not unique to older adults. Nor are all emotions that seem to be more closely related to older adults necessarily negative emotions. A few participants said they felt a sense of gratitude towards their ageing body. One participant when asked what they looked forward to each day responded "to be alive at the end of the day" (Barry). Joan said she felt "gratitude to still be alive but fearful of leaving my family, unable to see their futures". Although framed in terms of the 'other' being worse, being an older body still gave participants a sense of fulfilment. Henry took a longer term approach by recognising

and feeling grateful for the body he has now and 'saving' other activities for such a time when his bodily capacities may be different. Henry enjoys cycling and "I'd rather be doing stuff like that while I still can" and choosing not to engage in online gaming which he also enjoys but "again that would be something you can do when you were stuck in a chair or something, confined to your house". June's notion of what she considers a form of 'gratitude' is what motivates her to get out of bed in the morning. From the 'inside' of her home is herself or her body, and the things 'outside' of the house that motivate her are "everywhere, life" to be experienced "while I still have it". Helen was motivated to get out of bed in the morning by "sunshine! Breakfast. My back (it aches if I stay in bed too long)". June and Helen take pleasure in the daily and sometimes mundane activities of simply getting out of bed to eat breakfast and being in the world to experience the surrounding life and sunshine. Action was also a strategy to alleviate some of the more negative emotions or bodily sensations of ageing such as back pain. This illustrates that feelings associated with having an ageing body are spatially and temporally variable; once Helen gets out of bed her back pain eases and when she goes outside the feeling of the sun gives her a sense of pleasure independent of being older. Helen and June know that staying in bed or at home will have a detrimental physical or emotional impact on their ageing bodies so they engage in bodily practices they perceive as enhancing their bodily state.

Carol too reflects on managing age-related bodily changes and the benefits or challenges this may present. In keeping with the notion of bodies as 'open systems' and never as fixed entities, Carol helps to satisfy this question:

It's hard to judge, it seems largely internal. It seems to relate to my personality and the fact is that I'm not involved in the same way. I'm involved in my church alright, I'm no longer as involved with my housing co-operative, I'm just about ready to resume attending meetings but I can find them hard to hear although they've gotten better recently about that [pause] I just am very conscious of my limits really, of getting tired at the end of the day and physically not being vigorous, I don't think I ever was vigorous but if I am active physically I certainly feel it at the end of the day more so [...] I do still cycle and that's important to me for a sense of mobility locally, for local errands particularly but I also did, a couple of years ago, get knocked off quite gently and I thought I was in the clear but ever since I've had a stiffening of the neck and whether it's directly related or not, I won't know because it didn't happen immediately, it emerged later. I just feel what with the strokes, I feel more vulnerable than I ever did before. You're very aware of increasing mortality, you know? It's, that you don't feel as a younger person, I wouldn't want a younger person to feel that way [pause] it's different, it's a change. It is a change of self-perception and it has its benefits and everybody's different, some people are more vigorous in older age, I have friends who are...so I'm conscious that it's me, I would hesitate to generalise.

There is much that can be said about Carol's emotio-spatial experience of ageing. Carol, unlike Veronica, describes her perception of herself as 'ageing' as something inherent to her: it is a bodily or psychological change she is experiencing within herself. Yet, although Carol consciously identifies ageing as something personal to her, there are references to the external that demonstrate how Carol weaves together the tapestry that is her ageing body. Whilst there has been a continual shift in her bodily capacity accelerated by the stroke she suffered, the emotions related to these health events have changed her involvement with, and sense of relevance in, the world which permeate her interactions with the world. Carol's tiredness determines how many social commitments she has each day. Carol's decline in hearing determines whether and how fully she participates in her housing co-operative meetings. Carol's sense of physical vulnerability after her bike accident and stroke determine how far afield she is prepared to cycle. These are the bodily signifiers that evoke emotions of vulnerability and mortality. However, Carol does not feel all of these emotions at the same time or in the same social and physical spaces. People and places are coconstitutive and as one's physical body moves through temporally and spatially variable settings, the emotions of ageing are altered.

Participant Bodies in Retirement

Retired bodies should be considered distinct from ageing bodies. There is an interrelationship between the two with retirement generally entered into as people get older, but not always. Nor is a person's retirement from paid employment necessarily indicative of particular bodily or social experiences of ageing. Retirement is a means of economically organising ageing bodies. In general, for this participant group, retirement was most significant in that it afforded participants flexibility in how they arranged their lives across time and space. When working, the majority of participants were engaged in employment patterns of the '40-hour working week', structuring the time available for other activities and the bodily routines of their daily lives, but as Rita captures in her description of the time she has to pursue interests in her retirement:

These are the things that I'm doing for the first time as I said to a friend 'being old is a new ball game'. You have so much free time and you have so much opportunity for the first time, my time belongs to me, not my employer.

Rita's notion of the constrictions of work, and retirement as a time of liberation, is particularly interesting when examined through a neoliberal lens where the

'withdrawal' from the labour market reflects both a material change in a person's life through the loss of income and what Laws (1995) would argue is a corresponding erosion of enfranchisement. From a neoliberal perspective, the "responsibility to work has become the hallmark of legitimate citizenship across a wide number of policy domains" (Biggs & Kimberley, 2013, p.292), particularly ageing. Increasingly, being engaged in full time employment entitles one to enjoy full citizenship rights and social integration compared with the disempowerment that can come with retirement on reaching a seemingly arbitrary chronological age (Mansvelt, 1997; Pain et al., 2000). It could be argued that disempowerment extends beyond individual circumstances, for example, recent welfare reforms to increase the pension age result in the disenfranchisement of the aged collectively. Rita, who has been retired for 25 years, does not report a sense of increasing social liminality based on her status as retired.

Although recently retired, Frances (five months retired at the time of interview) and Mark (six months retired) also speak of their ability to pursue personal interests in retirement:

Mark: Yes, it's always been, yes quite interesting but yeah I've got more time to do

it now absolutely.

Frances: Yes, same for me it's, it's having the time to do it. I mean when you're

working there's that seven, eight hours of the day, well nine with travel where you don't have the opportunity to do anything other than what's

immediately relevant to your work, it's fantastic.

Work dictated the time participants awoke, travelled, where they travelled to and the amount of time left over for other leisure or social activities. Not only did work constrict bodily tasks and routines but it determined the time and head space taken up by work and associated routines. Common to both Mark and Frances was a feeling of being intellectually restricted by paid employment. Retirement for Mark consisted primarily of many hours a day spent using his iPad to read and anonymously comment on online newspapers, and delving into topics of interest. Mark states "an iPad is wonderful, you can live on an iPad". Checking emails and the newspapers was the first thing Mark did every morning and regularly throughout the day. Of his newspaper reading:

I'm perusing it at some depth and then picking out the ones that you wouldn't necessarily see perhaps [...] but you get involved in particular issues and a great advantage is you can go deeper and deeper on any particular issue and you might email something you come across to people to try and influence them [laughs]. It's almost like a job really [laughs].

From this perspective, Mark is an example of traditional notions of retirement as a time of leisure. This being said, Mark quips that he applies the same diligence and amount of time to reading and participating in online newspaper forums that he would towards a job. Of his own volition Mark's physical geographies are shrinking but his virtual and imaginative mobility has greatly expanded through the use of his iPad, reinforcing the earlier cited notion that comtemporary theorisations of mobilities of ageing should encompass "the virtual movement of ideas, information [and] bodies" (Burnett & Lucas, 2010, p.597).

By gendered comparison, Frances similarly reports that she relishes the temporal freedom of retirement but participates much more in activities outside of the home, such as belonging to a running group, volunteering for a charitable organisation and valuing seeing people face-to-face. One reading of Frances' (emotional) geographies in retirement is the neoliberal embodiment of working to maintain her health and a feeling of productively participating in society through volunteering. A gendered reading of this difference between Mark and Frances could be that retirement is a relatively new experience for women. As previously noted Calasanti (2008) reports even in the 1970s researchers themselves considered employment a "man's experience" even for women who were employed, thus Frances has a different relationship with the concept of retirement. Alternatively, it could be speculated that Frances remains by inclination much more engaged in the world as unlike her male counterparts, she is still required to undertake the duties of domestic or unpaid labour, such as caregiving.

The freedom and time that retirement can represent for people such as Mark and Frances was initially daunting for Joan who had been retired for over 25 years and recalls:

Well I remember back, I retired at 60 and I was very scared of being on my own and not having structure and various enquiries came forward, would I do this, would I go do that um I was very mobile then and my friend said to me 'the only way you're going to slow down is to go back to work' [laughs] have that sort of structure because I was just saying yes to everything and within two years I'd learnt to thin it down.

Joan's position as a widowed and single, older woman was critical to her enactment and embodiment of retirement. Joan found she was inundated with social, charitable and political opportunities, and with the obligations of paid employment removed and the autonomy as a widow to decide for herself how to spend her time, there was a period of flux whilst she established how she wanted to dedicate her time in retirement. For the past 17 years Joan has settled upon spending the majority of her time founding a co-housing project which offers an alternative housing option through the construction of purpose built, independent housing for herself and 24 other older women in London. Joan also founded an older women's network based on the philosophy of empowering older women to age positively and lead full and enriching lives. Joan co-wrote a book in 1988 that led to the establishment of the network in 1991 that now operates throughout the UK. Of the workshop that led to the idea to write a book Joan reminisces: "it was such a lot of fun thinking about how we were going to spend the rest of our lives". Far from feeling like retirement was the psychological, emotional and economic gateway into old age (Rudman, 2006), Joan felt excited about the fun and creative possibilities that lay ahead of her.

Joan very purposefully chose to engage in feminist and women only activities, often receiving criticism from men for being exclusionary. Joan's motives were personal: "women have been oppressed and men come in to meet you and men tend to dominate." They...dominate...but that's our experience of life and so we're breaking, trying to break stereotypes too". Joan has worked to demonstrate that older women are capable, independent, and have endurance, and to give them control of their lives where their husbands may have previously assumed positions of power over them. Joan expresses concern that women of her generation "had been driven by their husbands". Intimately tied to issues of ageism to be explored in depth later in the chapter, Joan works to actively resist stereotypes that have historically been affixed to women such as "biddy, crone, hag, little old lady, old bat, witch" (Richards et al., 2012, p.65). Joan's activism is particularly meaningful as it articulates the embodied difference of ageing for men and women. Yet again, this returns us to Krieger's (2014, p.645) notion of embodiment as "the accumulated insults arising from every day and at times violent experiences" of life. Beyond issues of social injustice and inequity bound up in embodiment, old female bodies bear different biological and socio-cultural signifiers compared with their male counterparts; for example, those associated with pregnancy, childbirth and menopause. Women's bodies are thus impacted differentially by age. Joan also recognises this may be generationally specific: "I look at my daughters-in-law, it's not going to be the same for them". In the meantime, technology has become an increasingly important mechanism by which Joan is more easily able to socially and politically organise allowing the distribution of information and arranging events within her two core networks.

Marion at 59 years of age embodies many of the generational differences Joan hopes for, tempered by the entrenchment of neoliberalism. Marion who is single and childless, left her job voluntarily three years ago at the relatively young age of 56 with a vision of how she wanted to live her life differently:

I used to work for politicians and I'd done that for 10 years and basically our jobs were moving and I decided to be very cheeky and propose a business plan that they would let me go, which they resisted at first and eventually came round, and a little restructure cos you know, their jobs had all changed, and I think it was the best thing I ever did so although I'm like living on like a third of what I used to earn. It's just the best decision and I'm really tempted to write a book on um 'how to have quality of life on a budget' [...] I really put a lot of thought into how I was gonna live after they did agree to let me go at work.

Although somewhat economically constrained, Marion felt that she would rather live on limited means but have more time to explore personal interests, which for her included volunteering at a theatre, attending regular yoga classes, belonging to a book group and cooking. Similarly to Joan, Marion found the potential expanse of time daunting due to its fluidity and the removal of (albeit forced) social interactions that the workplace provided. This was partly on account of an awareness of the latent risk of social isolation or loneliness that can ensue if social networks are not maintained. To quote Marion at length:

[I'm] really interested in really, how people, cos if you're at work you're kind of forced into the social thing anyway, social situations [...] it's part of routine and it's really interesting to me how, cos I'm somebody who really structures their time and I love doing lots of different things and it's really important to have the structure there but also to be spontaneous so that if that changes you can do something else and I just think you can just pack so much in and it's, for me it was about [pause] trying to eliminate all the things I don't like doing and doing the things that I do like doing which is sometimes quite difficult but it's communication within that is quite interesting because when you talk to some people about how you fill your time away from work, sometimes they let communications lapse [...] and I often find that quite sad whereas for me I kind of put in extra effort [...] and I, you know, do know people who like I say they're either not planners or they, I dunno what it is, if they're not at work they've kind of lost interest in a lot of things [...] and then as a consequence that then means they perhaps lose contact with colleagues, friends, and then don't make new friends and I think that can be a recipe for sort of loneliness or being a bit anti-social really I spose.

Buse (2009) alerts us to the fact that work and retirement (or leisure) are constructed as the antithesis of one another, with leisure typically denoting time away from (paid) labour. Historically "retirement is a time that highlights boundaries, traditionally marking the transition from the public sphere and the world of work to a period of

leisure" (Buse, 2009, p.1151). However participant narratives such as Marion's illustrate how indistinct the boundary has become. Marion frames her decision to leave work to engage more in volunteer and interest based pursuits as "trying to eliminate all the things I don't like doing and doing the things that I do like doing". Is it work or leisure that Marion is pursuing?

Illustrative of the dynamism of retirement and the inaptness of trying to homogenise it as a phase of life associated with particular types of social activities or relations, is the experience of Mavis. Mavis considers herself as having two 'lives' post-retirement. Mavis has been retired for 16 years, the first nine years of which were spent with her husband. For part of this period they were both well and travelled together taking annual trips to France or visited their adult children who live outside of London. However, Mavis' husband became unwell with Alzheimer's disease and she spent time nursing him until his death. After her husband became ill the decision was made to move house after living in the same home for 41 years. Mavis' husband's illness had reached a stage where:

He got so bad that I couldn't nurse him in the house. It was one of those old houses with a central staircase and rooms off and so on and it became dangerous and difficult so my son who lives with me, and I, decided we'd move. It was a great wrench as you can imagine, after that length of time but with enormous difficulty we did move.

Shifting houses and the death of her husband seven years ago, marked the transition to Mavis' second and distinctly different phase of retirement, what she calls her "new life". Since then "life has been completely changed in every sort of aspect really" (Mavis).

Like other participants, as a means to give structure to her "new life" and meet new people, Mavis subsequently began volunteering at a local gallery two days a week, became re-engaged with the church community which she had let lapse for the duration of her marriage on account of her husband being a "non-believer", and until recently had assisted in running the Mothers & Toddlers group there. Mavis continues to have to adjust to her own bodily capabilities, and to that of those around her. For a period after the passing of her husband, Mavis and her older sister who outside of London (aged 90) would travel together overseas or she would come and visit Mavis in London for a week at a time. However, her sister is no longer mobile having recently fractured

her osteoporotic spine, and holidays together are "all finished now" (Mavis). Mavis particularly lamented the loss of a holiday companion in both her husband and sister:

Holidays are a problem because I don't really feel confident enough to go on my own and also it's so expensive to have a single accommodation [...] [but] I've never been with other friends so I've not got the experience of going away with friends so I'm beginning to think perhaps holidays are just a thing of the past you know?

Mavis belongs to a fortunate social class where she has been able to afford to go on holidays but perhaps Mavis is entering a third stage of retirement reflected in the changing materiality of her ageing body and of those around her. With respect to her own body, Mavis felt she was left dealing with new bodily limits and confronting mortality. Mavis articulates:

Inevitably you know, at this time in one's life the group has grown smaller and smaller and smaller and they're mostly in the same sort of position as me with things wrong with them and difficulties and so on, so I don't see as much of them as I would like, no, which is sad but I suppose probably inevitable.

Mavis had stable elements to her life, constants such as her friends and family, but she and others she knows perpetually had to compensate for the socio-biological changes that occur in retirement and with ageing.

Similar to Mark who sought intellectual freedom and spent large parts of his day sitting at home accessing it through his iPad, Terence appreciated the value of being able to expand his general knowledge and devote time to learning about current affairs or topics of interest. Terence's morning routine consisted of having coffee and a croissant and trawling news websites like the BBC (British Broadcasting Corporation), stock market or Yahoo news. This also provided him with a connection to the outside world and the opportunity to be selective about what he read. Where some might interpret this as a narrowing of interests or a shrinking social world, Terence felt quite the opposite:

Terence: You can actually hone down to what you want to read straight away rather

than go through the newscaster's list of how they want to present things and you know sort of who's having a baby or whatever. It's not interesting to me, I want to get straight down to you know the Syrian crisis or whatever and get down to some of the background. Well what's interesting I think is the sense that you know because you've got more time, you can take more interest in world affairs so you can actually look at and, and see how did

ISIL come around?

Interviewer: [overlapping] mmm so you can delve a bit deeper?

Terence: Yeah and you can delve a bit deeper, find out more about it and become, I

think it makes you a more rounded person because when you're at work I

mean it's like 'what happened to Deirdre in Coronation Street last night' and 'are you going to go for a beer at lunchtime?' etc. It's a different level of social interaction at work and probably you don't have that same social interaction at home you know when you're not meeting people but you have a much broader understanding of the world I think. So I think in some ways it's more educational because if you want to keep in touch and you want to be aware of what's going on in the world I think it's much easier with the technology presumably than when you were at work because you just you know, you just get condensed views. You get a quick look at the Metro in the morning on the train in I suppose and then during the day you have different conversations but you don't have any, everything's a sort of skim and it's probably not until you get home at night and watch the 10 o'clock news and then you get fed what they want to feed you.

For Terence, retirement was a trade-off between fewer face-to-face engagements with people and being able to engage critically and in more depth with ideas of interest or educational value to become "a more rounded person". There is the implication that the time-restricted routinisation of paid employment constricts the amount of time available for personal development beyond the parameters of work, with the male participants of this research by comparison with the female, more often choosing to remain at home, sitting and participating in the world at a distance through the vector of technology, rather than out of the home 'doing'.

Terence's narrative also begins to tease out the intersection between the multiple age identities participants had and their association with the concept of 'retirement'. Although Terence was 'retired' he and his wife did not identify with the term 'pensioner'. Irene and Terence quip:

Irene: We don't call ourselves pensioners

Terence: No

Irene: Except that we have free travel [laughs]

Retirement was not a fixed state and people like Terence and Irene continually felt an evolving sense of self with different terms befitting different stages of retirement, which did not necessarily discretely map on to people's objective bodily sense of self and their internal, subjective way of knowing their body. Theoretically this parallels Mol's (2002) idea of the body multiple: through her examination of how atherosclerosis is 'done' at a particular hospital but enacted differently across departments and by individuals. Mol (2002) demonstrates how objects and people become related through practices. Of this 'multiplier' effect Mol (2002, p.5) states in the hospital where she conducts her research:

Objects come into being – and disappear – with the practices in which they are manipulated.

And since the object of manipulation tends to differ from one practice to another, reality multiplies. The body, the patient, the disease, the doctor, the technician, the technology: all of these are more than one. More than singular. This begs the question of how they are related. For even if objects differ from one practice to another, there are relations between these practices. Thus, far from necessarily falling into fragments, multiple objects tend to hang together somehow.

The same can be said for Terence and Irene where through certain practices and in different spaces, their enactment of the object of ageing, their bodies, was practiced and interpreted differently, becoming multiple: when on the bus and using public transport for free, as they are entitled to in London after the age of 60 years, this was a socially imposed notion of 'old' and 'ageing' they felt a willingness to accept. This was enacted through the possession and display of a 'Freedom Pass', an object identifying them as belonging to this category, both to themselves and the bus driver (see Transport for London, 2016).

In the context of their extended families and their perception of how they socially organised themselves in society, they did not fit the category of 'old'. Multiple references were made to 'older people' and the 'older generation' by Terence and Irene throughout the interview but neither ever directly associated themselves with this category. This could perhaps be attributed to the fact that Irene's mother was still alive and thus, she saw herself as generationally apart from those people in her life she considered to be 'old' or 'older'. Terence and Irene both avoided using or having imposed on them the term pensioner. Perhaps the neoliberal and economic connotations of a pensioner as not being economically self-supporting dissuaded them from identifying with it, as both Terence and Irene still earnt income through rental properties and active, daily investment management online. Terence and Irene were retired and ageing but not old or pensioners. The object of manipulation, their ageing bodies, were as Mol (2002, p.5) observed atherosclerosis being 'done' at a particular hospital, came "into being – and disappear[ed] – with the practices in which they are manipulated". Other research confirms this notion whereby:

Identities and meanings of old age change as people move through different socially constructed spaces means it is possible to identify with, resist, or otherwise react to those identities through the use of space (Pain et al., 2000, p.378).

This illustrates that ageing and the retired body can be seen as undergoing a relational ageing process with markers of 'age' scattered throughout the lifecourse necessitating a perpetual re-working of the socio-biologically ageing body.

Future Bodies and Death

Ageing and retirement cannot be spoken of independently of death. Death is inevitable for all of us but as a linear lifecourse presupposes, increasing chronological age brings one closer to death. Death was an unknown entity for some participants, and thought to be a nothingness by others. However, perhaps what concerned participants more than their own mortality was the uncertainty of time remaining; what might happen to their ageing bodies between now and death? Those participants who spoke of anticipating or having experienced the death of others believed there would be a time when their bodies deteriorated. Participant feelings about the expanse of time between the present and death was largely informed by the experiences of those who had already passed away; if they had been ill, in pain or discomfort, how prolonged their illness was and how it had affected those who were left behind.

For instance Violet met her partner in retirement. She moved to the country as he was a farmer, but a few years later he became ill and subsequently died from Parkinson's disease. The initial move to the country was difficult for Violet as she felt it was harder to make friends later in life but she managed this by joining the Women's Institute, a book group, a Pilates group and, after her partner's diagnosis, the Parkinson's Society for which she regularly held fundraisers. After his passing, Violet had to make the difficult decision of whether to stay in the country where she had managed to foster a good social network or return to London where her adult children live. Part of the difficulty after his death was the disruption and dismantling of her social network (due to her return to London). It is this, the loss of friends or family members due to death which "has implications for the maintenance of the stable social relationships that are often highly valued by older people and which can protect against the risks of isolation and loneliness" (Scharf & de Jong Gierveld, 2008, p.104). To avoid this feeling of alienation Violet tried hard to keep in contact with her deceased partner's family and friends to remain connected to "those who knew and remember him". However despite this and the return to living in London, Violet felt there was "a lot of death" in her life having been to two funerals that year at the time of speaking in October 2015, and she was saddened by a sense of a diminishing group of friends.

A number of participants made reference to dwindling social networks. For Rita, when speaking about her music group I asked if it had retained the same members throughout the eight years she had been part of it and she remarks:

Quite a few of them have died. Well I say quite a few, one, two, three people so that's quite a large number proportionately to a small group see? But then it's to be expected because we are all elderly people you see? And so I've been there longest.

Here Rita expresses a normative expectation that predicated on age alone members of her social network or community groups will die. Whilst getting older is a prelude to death, death occurs at any stage of life and yet in few other social contexts would there be the normative expectation that such a high proportion of social contacts might die. Other participants made similar remarks. Joan joked "I mean I'm one of the oldest people I know [laughs]". Terence's use of Facebook was primarily:

Almost a question of old photographs that come to light that sort of thing [or] people unfortunately who you knew from school who've died which is unfortunate but you know that's a fact of life sort of thing.

Participants perceived themselves as having a certain "awareness of proximity to death" (Howarth, 1998, p.674).

Fear was a pervasive sentiment associated with death in a number of different guises. For Mavis who nursed her husband through a long and difficult illness that radically transformed all aspects of her life, as she got closer to the "other end" of life death took on a new meaning:

It's not very nice being at the other end of it though I find [pause] I'm not afraid of the future I don't think but it's the sort of finite feeling always there that never used to be there which is um not wonderful [laughs] I think it's the fear of what comes between one and the other and having seen so much of the distress of near the end of life, mmm. I think one feels very sort of [pause] very sort of frightened and insecure especially with ah you know the older population growing and the feeling that there's no going to be enough provision for them and so on.

Mavis's apprehension about death was instilled in part through the highly personal micro-scale experience of a spouse being ill, needing care and passing away but also through the internalisation of macro-level discourses of ageing. In an era of increasing individualisation and neoliberal self-governance that has prompted a desire for greater financial autonomy in retirement and a redirection of financial resources away from pensions and older adult health and social care, discourses about the scarcity of resources are ever more pertinent and pervasive (Rudman, 2015). Mavis's sense of insecurity, that she might be the one who misses out on having what she needs

provided for her, is interesting from the perspective that at the age of 87, Mavis is old enough to have lived through the introduction of both the National Health System (NHS) which provides universal health care free of cost and the subsequent rationalisation of healthcare costs. Knapp (2014) rightly asserts that there is only ever a finite amount of resources available to a government to realise its roles and responsibilities therefore policy outcomes can be interpreted as 'value judgements'. What might be considered subjective cost-benefit analysis and political decision-making by government which determines health and social care policies and budgetary allocation, takes on a very palpable form for Mavis: it *feels* like there are literally fewer resources available and that she might personally miss out.

As participants' sense of death edged closer, their ageing bodies felt like increasingly risky spaces to occupy. Notwithstanding fears such as Mavis' around socio-political access to resources or social marginalisation, the body itself became a hazard that with some management could hasten or delay death. This sense of danger meant that participants often felt anxiety about both death and their future body, in tandem with fear. To a degree, participants felt that the ageing body could be future proofed; steps could be taken to minimise the risk. This was largely expressed as self-management as opposed to for example, participants being managed by adult children. However, modes of governmentality in operation are not mutually exclusive with the desires of older adults. To illustrate, for Ruth and her husband managing the risk of becoming older would mean leaving their family home of almost 40 years to move outside London to live closer to two of their four adult children. Their current family home was too large for them to manage and the fear of being away from family was growing as it was anticipated their care needs would increase in the coming years:

Interviewer: Is it a good place to be as you grow older?

Ruth: Oh it's great I mean, I love it here but [pause] the house is too big, we're not

near family, we're just starting to make plans. I'd love to stay here because well communication's good, transport is good, we're near our doctors but life's beginning to get more difficult as we get older, physically, so we're going to live nearer our, two of our children near [town]. We've just, we've only made that decision in the last few weeks and now we've got to, it's a

very big decision to adjust to.

Interviewer: Yeah?

Ruth: I don't like to think about it because it's also very emotional but anyway

Ruth did not disclose the ways in which the house was unmanageable or mention any specific health issues that affected their ability to live there. The decision seemed to

be based on the idea that it would inevitably become so based on the inherent riskiness of ageing. Ruth was unsure "what it would be like if we were physically isolated and we couldn't move around and see people".

The actions of Ruth and her husband can be interpreted as them "purchas[ing] a strategy to deal with old age" (Gilleard & Higgs, 1998, not paginated) that fits within government policies of ageing in place. Here, the modes of governmentality are such that they articulate an often subtle and covert power dynamic between individuals (management of the self) and others (government by the state and society). Governmentality as it pertains to the state sees government in the UK enact changes and policies that could be seen to afford greater freedoms to individuals in society but paradoxically can lead to greater restrictions (Brown & Watson, 2009). For instance, ageing in place policies are seen to be aligned to the wishes of older adults to remain in their own homes and as enabling greater choice as to where people age, which in many instances holds true. Conversely, it achieves the desired social care cost savings the government seeks through reduced obligation to provide social care to individuals and those critical of ageing in place community based care also proclaim it to be associated with a "moral authoritarianism' which promotes the positive aspects of family, community and 'traditional' social values" (G. Andrews & Phillips, 2002, pp.67-68) in lieu of government support.

Being close to family, or not as was the case for some, took on greater meaning as participants reflected on death. Carol spoke about the importance of being able to keep in touch with her closest family and friends who remained in the United States, where she had emigrated from many years ago, nearer to the end of life:

It's always been important and it always will be important [pause] I mean I've passed the point of no return, I'm going to be here, I'm not going to be there so as my life comes to an end I think there will be poignancy in not being closer to my closest family. But I don't think that can be helped and I wanted to be prepared, I want to be able to cope with that and I want them to be able to cope with that too. So one just hopes for the best I guess in that respect.

Carol feared being spatially distant from her family both emotionally and practically as a single older woman. For Carol, her 'preparation' was largely mental and emotional; accepting that she would not be closer to her sisters as "my life comes to an end". Not only was Carol coping with her own emotions about death, but was

having others identify and categorise her ageing body in particular ways, such that like Ruth, Carol's body became an uncertain space to occupy:

I guess what I'm most conscious of is a kind of narrowing on my part of interest and ability and energy you know it's a lessening effect that is pervasive. I had some strokes about eight months ago which I are being treated in the usual way with anticoagulant tablets which will probably save me from having other strokes. It's not clear how or why they came about, I wasn't badly affected, in fact the worst effect was it became very difficult to get travel insurance because of my age [...] because of the my recent medical history and because of my destination being the States where medical is so exorbitantly expensive and difficult to afford [...] [so] I'm not going to be able to go as often, it's getting more expensive to go, I did get some insurance but it was very expensive and I was being quoted twice that or refused just flat out and AgeUK refused me, Saga [an insurance company] which are the best known organisations devoted to older people, they refused me outright and I felt a bit outraged by that.

Carol's strokes meant that her body was both a risk to herself with the possibility of having more strokes, as well as a financial risk to travel insurance companies such that no company would insure her. There is also an element of surveillance in Carol's narrative through the sharing of her medical records with the travel insurance company, despite this being standard practice. This can be seen as belonging to a broader discourse of ageing in which "the bodywork promoted through positive ageing discourses enlists aging citizens in practices of body monitoring or surveillance, outlining means to calculate the risks of the aging body and continuously monitor changes" (Rudman, 2015, p.16).

Death for Nigel meant a sense of missing out, of not having a future body:

The saddest thing about my body being as old as it is, is that I'd like to be around in 50 years to see what the world's like and I'm not gonna be, it's really sad but you know that's how it is. I mean I have seen amazing changes in technology, amazing changes in society you know? I was around when the calculator was invented. Can you imagine life without a calculator? You know you have one on your phone and you can just use it. I used to use slide rules. I mean the first part of my working life I was using slide rules somebody would come and say you know what's 256 by 712, you'd go [hand gesture] it was horrible and that's just in my lifetime so it's quite amazing the transformation in technology.

Nigel's fear of his not being able to see technological advances or be with his family rejects the long-standing notion that older adults "have had time to resign themselves to their own mortality and so satisfactorily complete life projects" (Howarth, 1998, p.687). The normative expectation that older adults will be ready to die seems increasingly misplaced at a time when contemporary discourses of retirement are in a state of flux and neoliberal discourses of ageing encourage older adults to remain social and physically engaged in their communities (Howarth, 1998). Nigel also employs technology in a novel way to challenge the notion of (bodily) presence and

absence after death. Nigel documents his life in a journal online using the application Evernote. The application stores the data in The Cloud and the founders of Evernote give assurance that the information will always be retained and accessible. Nigel documents many aspects of his life such as the evolution of his home renovation and even remarking that he would upload a copy of the interview transcript. Nigel envisages that "I just keep notes in there so that when I die in like 20 years I s'pose there will be a record of my life that whoever's around can access and pick up and see what I did". Nigel's record keeping in this manner becomes a new form of autobiography or online obituary as a form of biography (Bytheway & J. Johnson, 1996). Of importance to Nigel is the universal accessibility of both being able to upload notes from any location and for others to have ready access to the journal in its electronic format. The use of technology in this manner challenges the notion of the social implications of death. It could be argued that Nigel is attempting to utilise technology is such a way that he is able to circumvent the "an absolute loss of embodiment, reciprocal bonds and agency" (McCarthy & Prokhovni, 2014, p.24) of death, to evoke an emotional agency with his family after death.

The Experience of Ageism

Although ageism can operate against anyone of any age, it is most pointed towards older adults. At a personal level ageism, detected by and directed at participants, was usually based on the way the ageing body was 'read' for markers of chronological age and oldness. It was through verbal articulations that such ageism was most commonly inflicted or made apparent to participants. Commonly, ageism as experienced by participants was articulated through "trivial" or "amusing" comments, usually by strangers or colleagues. For example, Frances who is recently retired states:

Before I retired younger colleagues very regularly made 'amusing' comments about their age, getting older etc. and it's irritating and offensive. There is also a general assumption that you lead a sedentary lifestyle, until you put them straight. You have to work to evolve their prejudices.

Even though ex-colleagues knew Frances personally, their preconceived ideas about people of particular ages embodying particular lifestyles or as having certain physical capabilities led to comments being made about Frances personally, who was for instance a keen runner and part of a running group. This also had a broader emotional

implication for Frances causing her to feel infuriated and offended and led to Frances 'working' to dispel her colleagues' prejudice, a position she should not have to justify.

This type of insidious ageism was recurrent among participants. June felt that she had not been the victim of any "serious experiences just trivial incidents like a patronising 'well done' regarding an ordinary task". June was subject to the opinion of others that she was not competently able to complete simple tasks predicated on how her body looked and a presumption of her age on this basis. Nigel when asked about experiences or the impact of ageism, did not feel that he had been subject to ageism in any particular way, "although the first time I was called 'dear' at a checkout was strange", with ageing said to be emasculating for men. Seemingly insignificant, the way in which this man was addressed at the supermarket by the checkout operator, *could* signify a term of endearment or as experienced by Nigel is colloquially a condescending or patronising salutation. Interactions with shop assistances were also cited by Rita as a common site of ageism:

Yes, I have experienced ageism. I noticed a change in the way trades people related to me about 20 years ago. I was in my 70s then. They were patronising and intended to talk down to me. A post office worker once held back £11 of my change. When a shopkeeper did the same, I was able to go back immediately. I said to him, "When you live on a pension you take great care to check your change". I still deal with him from time to time. But now that I'm 90 years old I notice that people go out of their way to be kind to me. I think it is because I know the trade people I deal with. We are all part of our local community.

Rita's distinction that she knows the tradespeople she generally deals with and thus, this is no longer such an issue is interesting as it suggests that it is most often strangers that feel it is socially acceptable to make comments of this nature. Similarly to Nigel and June where on face value comments made by others may not in of themselves be ageist, for Rita tone and context were equally important for the way in which ageism was communicated to participants. These experiences also further support the primacy of language in shaping the emotio-spatial experiences of ageing for participants.

A second impact of ageism among this participant group was being either manoeuvred into early retirement or being made redundant and subsequently unable to re-gain employment on account of their age. This had affected Terence most acutely and blatantly. Terence discussed his experience of early exit from his job and failure to find a new job. In this process, Terence came across ageist attitudes as discussed below:

Terence: The problem is you get the job offer because they read the specifications,

they read all your recommendations and your skills etc. and then when you turn around and say 'well I'm 64 in October' it's like 'oh right well we'll get back to you' [laughs] and of course it's like 'don't call us, we'll call you' sort of thing. So it's interesting they don't look at the age thing so I've started putting notes on saying you know, 'I am sort of, approaching 64' so you know, and then that's cut the level of recruiters down because obviously they

were just looking for skill sets and then as soon as you say age

Interviewer: That's really interesting

Irene: You went for interview and they said 'I can't believe you're so old'

Terence: Yeah I mean I went you know, I mean it was obvious, I mean the chap who

Yeah I mean I went you know, I mean it was obvious, I mean the chap who was interviewing was sort of, was probably younger than my son and at the end of the day I said to him 'look you know, the' and then he turned round and said to me 'my father's the same age as you and he spends his time in the garage doing wood turning and making models' and I thought 'so what you're saying is really I should be doing you know, wood turning and making models'. That was the inference from his conversation so in the end I just said to him 'look let's not waste any more time, I'll go get a train and I'll go home' sort of thing and a couple of other job interviews I did go for just thinking 'oh well that seems interesting'. It's pretty obvious when you get there it's like you sort of get the comments about 'oh well we're a very young dynamic team' and so on and so forth and you know you're not gonna get a call back or you're gonna get a 'Dear John' letter saying you know 'sorry but we've found somebody else' so I've given up with all of that.

This experience of Terence's revealed many interesting systemic and culturally acceptable guises that ageism takes within contemporary society. Similar to other participants, the veiled use of language meant although potential employers did not make explicit statements regarding Terence's age he could 'read between the lines' to understand that on the basis of his age they did not wish to progress his job application any further. More explicit comments once again demonstrated that ageism exists in culturally acceptable forms whereby the younger interviewer who had a father of a similar age who enjoyed woodworking, saw no impropriety in making remarks about what activities and behaviours were appropriate for someone of Terence's age.

It is difficult to ascertain the premise on which people were discriminating against Terence. The motives of potential employers could range from a concern that he may retire soon and the company would have to recruit a new employee through to more damaging beliefs that Terence on the basis of his age may have difficulty learning the role, using technology or fitting in with team. As aligned with Terence's experience, research on the relationship between ageism, employment and young people's perceptions in the UK concluded that employers' perceptions of older workers are of them being "less productive, have less relevant skills, are resistant to change and new technology, are less trainable, leave employment sooner so that training them has a

lower rate of return, and are more prone to absenteeism and ill health" (Loretto et al., 2000, p.283). Interestingly, although Terence had now ceased to look for full-time paid employment, he occasionally did paid work for a luxury car brand, test driving and delivering vehicles to owners as they wanted someone "mature" and "responsible" the inference being that as an older man, he possessed these qualities. Although in this instance the assumptions being made are of 'positive' personality traits or beneficial to Terence, this is simply ageism in a different guise.

Other participants were also faced with the early exit from employment either through voluntary redundancy (Edward, Nigel), compulsory redundancy (Keith, Roy & Terence), retired on the grounds of ill health (Dennis), or early retirement (Carol, Deborah, Frances, Jeff, Mark & Marion). Participants were in the main enthused and grateful for the opportunities that retirement represented but for some, even those who elected to take 'early retirement', the exit out of employment was a troubled path. It should also be noted that a number of other participants voluntarily elected to work until retirement age (Helen & Rita) but no one worked beyond it. Take Edward who at age 74 has been retired for 20 years and took voluntary redundancy on the basis that his company:

Decided they wanted to get rid of 25,000 people so they made an offer I couldn't refuse and somebody said 'the offer can never get better', if they improve the offers over time nobody would ever go.

Edward felt it was his best option or he would otherwise face compulsory redundancy. Although not an overt form of ageism, participants such as Edward were strongly facilitated into early retirement. For Nigel who once developed in-house databases for a large company on a contract basis, a change in the technological applications meant that in the early 2000s "slowly the applications and the small contracts that I had begun to disappear and at that stage my wife was beginning to do reasonably well in her career and we kind of went 'well ok I'll stay at home and look after the house and you get on with your career' [laughs]".

Technological rate of change was also a contributing factor in Carol's early retirement. Carol states that:

One reason that I retired at 60 was I was holding things back, they were having to hire someone else part-time to do what I should've been able to do in my job as admin assistant so no I didn't learn it at work as I wish I could've done.

Although it was of her own volition to retire, this was in part attributable to the lack of training and up-skilling provided to Carol by her employer. Carol conveyed an internalisation and personal responsibility for her technological skills (or lack thereof) despite the lack of training provided to her when computers were introduced to the workplace. Marion too felt that the ageism she experienced in the workplace was predicated on her technological abilities. Although not impacted in a "huge way" Marion believed once colleagues learnt her age, it altered their perception of her, "for example unnecessarily explaining things and at a slower rate! I took the view that this was more an issue for them and showed a stereotypical attitude rather than treating people as individuals".

The overall trend among participants towards early retirement irrespective of the circumstances, marks an important transitional phase in the labour market. Loretto et al. (2000, p.281) report that a marked increase in early retirement has occurred from the 1970s onwards with spikes during recessionary periods. This form of structured ageism was for a time supported by governments who felt concerned that older adults were depriving younger people of jobs with the overall impact of higher unemployment rates. More recently, neoliberalism and the 'economics' of retirement are being reworked in relation to "increases in longevity, rising dependency ratios, and pending pension 'crises', [which] pervades policy, academic and media texts" (Rudman, 2015, p.12). A tension exists between ageism which sees people retire early from the workplace limiting their ability to earn, set against a desire that older adults remain in work beyond retirement age to ensure sufficient funds in retirement (Loretto et al., 2000). Now, politically, retention of older adults in the paid workforce, with plans to increase the retirement age, is perceived as the 'solution' to the 'problem' of ageing. At a broader level, overt and covert, structured and unstructured ageism impinges upon social patterns and processes that occur at the micro, meso and macro scale affecting all stratifications of society notwithstanding the labour market, the household, popular culture, the state and the built environment (Laws, 1995; Vanderbeck, 2007).

Outside of the workplace, ageism seemed more pointed at women's bodies. The standards of 'age' to which men and women are held to account seemed to differ with women having age tied to beauty and appearance. Female participants commented more on the 'patronising' or 'condescending' way in which they were spoken to, whilst the majority of men reported not having experienced or been impacted by ageism beyond matters relating to employment. As has been discussed, much of the ageism experienced by the women was on the micro scale of their daily interactions with others and seemed to be incipient and laden in the language that people used to communicate with them, rather than overt, conscious acts. Perhaps male participants reported these incidents differently. Dennis acknowledged that "ageism is rife but I personally can't think of any serious ways in which I have been treated differently because of my age". Affirming this is Jeff who said that he was unable to recall any instances of ageism directed at him specifically "other than the occasional trivial comments made by very young people so, so far no impact on me". Mark also felt there had been no personal impact of ageism on him and "on the contrary I find people more supportive". However as we have already heard from Frances, Rita, Carol and Marion, ageism seemed to be felt more acutely by female participants, if not in a way directly targeted at their own bodies, then certainly through popular discourses. June found "hearing of abuse through friends and media, the reports are hurtful and linger in your mind". The overrepresentation of women in ageist stereotypes and attitudes is well documented in the literature (see McHugh, 2003; Richards et al., 2012).

Joan, the most vocal and proactive against ageism, felt that women were more affected by ageism and picked up on what has been referred to as "the 'double standard' of ageing" (Richards et al., 2012, p.66) where women are held accountable to age and beauty; older women should not look old but maintain the standards of beauty and youth set for them by popular culture and the media. From this perspective women, by virtue of being female, already occupy a more liminal space than men as they enter old age. Joan, more attuned to such issues than many given her extensive involvement in establishing and participating in an older women's network aimed at empowering older women, states "ageist attitudes can be patronising. As an old woman I have to fight it to avoid being ignored personally and politically". Joan, as we have previously heard, spoke of the criticism she personally had come under for her co-housing

initiative being exclusively for women and the means by which she sought to empower women of her generation.

Joan spoke at length about the complex and compounding interrelationship she observed between gender and age noting the responsibility media should assume for disseminating ageist discourses about older women in particular:

Joan: As you get older you tend to be ignored and stereotyped [pause] the

alternative is that you're go into residential care where you can come down and go and join in the communal activities and that sort of thing but women have not been historically, very many women, the majority, lots of women have not had any control over their lives and this is, we are deciding, we are not going into sheltered housing we're going to, we want, we want to make decisions, we want to live together, we want to run it ourselves, someone asked who is going to change the light bulbs? It's such a load of nonsense,

what rubbish!

Interviwer: Yeah [laughs].

Joan: It's such nonsense and we've got a gardening group and whether we've got

to get a gardener...so it's us showing women can do it and older women can

do it.

Interviwer: It's like you said as well, I mean there are historic issues associated with

women having control over their own lives but it's compounded even more with age because for older people generally there's that issue so older women

have that double kind of marginalisation.

Joan: Yes, less and less authority over their selves and going into residential care

it's pathetic, it's sad you know might as well give up and we're not giving up we intend to live every minute of our lives until we inevitably die.

Interviwer: How do you think you've seen stereotypes or attitudes towards ageing

change over the past few years, I mean past few decades?

Joan: Well people, older people are still considered in the main, eccentric, and the

media has a lot to answer for. They are either dancing or going bungee jumping or they're a victim, you know? That's the terrible generalisation. But that is what the media think and people take it on board...So yes I think there is still ageism and you know people say to me 'are you really 84? Really?' and I think 'how come?' Only because I'm doing things and I'm keeping busy and I've got genetics and good luck as well obviously you have to work at it and you could very easily become victim, very easily so I think

things are changing.

Joan made ostensible the way in which some of the 'trivial' or 'patronising' ageist comments made towards older people can become entrenched in discourses of ageing in such a way that they denote the activities permissible to older adults. As Joan perceptively stated, at one end of the spectrum older women do not have the capability to live independently or to perform home maintenance tasks and at the other end they should be engaging in physically vigorous and 'youthful' activities such as dancing and bungee jumping. This is emblematic of the equally repressive regime of neoliberal 'normal' ageing whereby "it doesn't eradicate ageism, but instead prompts people to expend increasing amounts of time, money and efforts into not being 'old'" (Rudman,

2015, p.19; Twigg, 2007). Older adults are encouraged through discourses of ageing to conceal bodily signs of ageing as they "both capture and constrain our imagination, giving a forecast of what we can expect as well as prescription for how we ought to live in later life" (Richards et al., 2012, p.66).

However participants' relationship with age and ageism was not as simplistic as being older and therefore subject to ageism, nor were all participants actively engaged in combating ageist discourses in the way Joan was. Participants each had a unique and personal relationship with the chronological descriptor that is age due to the fact that our perceptions and experiences of age(ism) transform throughout our lives as we embody different and multiple age identities. It is generally assumed that it is difficult for people to teleologically look forward and imagine that they will become that 'other' category in the future: "as we age we move from playing the role of the oppressor to being oppressed" (Laws, 1995, p.113). However this was not necessarily the case among this participant group with technology use bringing to the fore a tendency to either internalise ageist discourses around their preferences for using technology and ability to learn, or exhibit ageist discourses towards the ways in which younger people have adopted technology.

Those participants who had in part internalised ageist discourses made self-deprecating comments to rationalise what might otherwise be understood as personal or communicative preferences. For example, Frances felt that sending condolences when a death occurred via text message or Facebook was "shallow" but prefaces her comment on the basis of her being "old fashioned". Likewise, Henry would never let technology entirely replace personal contact with people "which might be old fashioned [laughs]". Jeff was a proponent of technology but like other participants selectively used particular technologies and in general did not like those with real-time face-to-face capabilities such as Skype or video calling. Jeff comments "I don't feel a need for the face-to-face bit, is that a generational thing or not?" and he continues on to state he disapproves of the way in which younger people Facebook but dismisses his remark by stating "maybe this is an older person's gripe". Frances and Mark mention that their son who is currently study at university can be difficult to get hold of as he is averse to using technology, believing people should speak to one another. When probed as to why their son felt that way, the response was "he's an old fogy",

the insinuation being that older adults too do not like using technology and prefer 'traditional' methods of communication. Participants here can be observed in subtle ways as attributing what they perceive to be negative or unusual behaviours, to their older age. It can be argued that this in turn perpetuates the social acceptability of ageism. This is of consequence for the way in which adherence to these types of "agebased identities ha[ve] important implications for intergenerational relationships and contributes to the re(production) of patterns and processes of age differentiation and segregation" (Vanderbeck, 2007, p.206).

Intriguingly, imbued in some of the same participant narratives were ageist interpretations about younger people's ability to make informed, effective or 'good' decisions regarding their technology use. There was a pervasive opinion that younger people used technology in a 'dangerous' way through either overuse or inadvisable use, most often directed towards younger people's use of social media platforms such as Facebook. Jeff thought "some younger people don't really fully appreciate the broadcast notion of what's put on Facebook" either putting too much or inappropriate material on Facebook. Marion relied heavily on her iPad to keep in touch with family and friends but felt that she maintained a suitable level of use and that unrestricted use of such technologies was to people's detriment:

I get really quite irritated with because well all the youngies love their mobiles don't they? And you see people like that all the time constantly on their mobiles, it's the first thing they do, it's the last thing they do.

Joan who had been most vocal about the damaging effects of ageism on herself and peers makes equally ageist remarks about younger people's relationship with the internet. Joan believes the internet is important for older adults but less so for younger adults:

Joan: I think for younger people it is dangerous but for older people who just use

it like I do for information, looking up Wikipedia or communication it's

fantastic!

Interviewer: Yeah and in what ways do you think it's dangerous for younger people? Just

not being able to filter through the information they're receiving or-?

Joan: [overlapping] I think they use it too much and they're losing human contact

and I don't know about mobile phones but it's reducing communication, not reducing, well it is reducing, but deteriorating relationships within families

and within communities.

The unrestricted use of technology was a recurrent theme among those who disagreed with what they perceived to be the poor usage habits and social skills of younger

people. Older adults thought they had better preserved interpersonal social skills, which for younger generations had never been fostered or were eroded through overuse of technology. This tendency among participants is difficult to account for, especially in those who had been victim to ageism but were equally ageist towards younger generations.

There are two possible rationales for this seemingly contradictory behaviour by participants. The first interpretation could be a methodological point and simply that "in age terms, as in other regards, the narrativised self is therefore not necessarily uniform, and we have to accept that such coherence as does exist is a construction of the acts of telling" (Coupland, 2009, p.852). A second rationale may be that as Vanderbeck (2007) posits, contemporary societies are age segregated, with interactions with people of different ages being limited beyond family networks. The impact of this being an "emotional, cultural and spatial distance that can separate members of older and younger generations" (Vanderbeck, 2007, p.200). Said differently, perhaps the participants of this research lacked opportunities for intersectionality with people of different generations and by bringing different generations into contact with one another the production of ageism may be deconstructed (Vanderbeck, 2007; Hopkins & Pain, 2007). Relationships with technology are highly personalised with "retirees hav[ing] different relations to work, leisure and space, which may shape the meanings of their technology use" (Buse, 2009) p.1147) creating differential expectations and experiences between people of different age groups.

Conclusion

Chapter Four has concentrated primarily on the discursive shaping of ageing bodies revealing the ways in which discourses of ageing can alter the socio-biology and bodily practices of ageing, and thus (re)configures technology use across differing temporal and spatial scales. There was particular emphasis on the health enabling aspects of technology, which are perceived as being pertinent to facilitating independence and wellbeing in older age, as this is where academics have tended to focus their attention. For example, the experience of Dennis, who suffers from multiple and compounding mobility limiting conditions, demonstrated how 'worlding together' strategically with various different technologies facilitated his taking on new bodily practices. Teaching

himself to write with his non-dominant hand and using remote or voice activated controls affected how Dennis was able to relate emotionally with family and friends. For Dennis, these technological (agentic) relations were not incoherent, discrete practices but formed part of the tapestry of doing his particular ageing body. Crucially, Dennis' narrative also invites us to consider the role of the materialities of technology and communication, and the new intersubjectivities that are formed between ageing body and technology in this process. For participants like Dennis, the emotional geographies that arise at the intersection of ageing and technology are heavily influenced not only by the socio-biology of the ageing body but by many of the external processes of ageing involved participants being socially organised into the category of old, such as the experiences of retirement of death, each of which have been addressed in this chapter. The next chapter will examine in greater detail, the many interconnections language has to the emotional and spatial dimensions of technology use before narrowing the focus to the materialities of technology and communication, and the new intersubjectivities that are formed between the ageing body and technology in this process.

Chapter Five: The Language of Technology & (Ageing) Bodily Communication

Language is not an 'empty' medium through which to communicate: language "does not simply reflect or label the world" (Johnston & Longhurst, 2009, p.9). The use of the term 'language' throughout the empirical chapters has two intended meanings, one being a linguistics approach focusing on the constituent components and (re)construction of written and verbal communication acts as mediated by technology. This fulfils an important function in the socialisation of emotions and technology over time with shared meanings (re)established and (re)negotiated. The second interpretation of language is that of language as discourse, with discourse referring to "ways of structuring knowledge and social practice" (Johnston & Longhurst, 2009, p.15). Discourse governs "linguistic and communicative processes in how we understand ageing, particularly when ageing is viewed as a set of socially embedded processes and experiences" (Coupland, 2009, p.850). For example, discourses of ageing permeate society with ideas about how bodies should grow old, extending to older adults' emotional lives and technological capabilities.

This chapter will begin by delving deeper into the relationship between language and technology. Illustrative of the relationship between the two were participant conceptualisations of, and relationships with, technologies that pre-dated explicit ownership or use. Once participants came to engage with technology, it was apparent that they must become 'computer literate'. Technology had a distinct language and associated jargon of its own (e.g. scroll down, tab across etc.) that was to be learnt. It was considered a barrier to accessing technology, and thus stifled the ability of some participants to relate emotionally with others when it was not understood or could not be remembered. Following on, the use of language in different modes of communication including written, verbal or face-to-face formats will be landscaped. The role and meaning of words varied with communication format such as between an email or text; variations in and the contradictory use of language, the palimpsestual residue left by older modes of communication, and the appropriate language to be used with new modes varying between participants. The example of social media, namely Facebook, will be discussed.

The latter part of the chapter will elaborate on how post-humanism can enable us to move beyond discursive understandings of ageing and technology to take into account how shared subjectivities between the human and the in- or non-human, result in different experiences of ageing for participants. The premise is that that technology is sensed, used and encountered differently by older adults due to having 'different' (but not necessarily lesser) bodies as compared with younger counterparts, and on account of having an altered *relationship with their own body*; a changing sense of the temporality of their lives, feelings of bodily limitation or vulnerability, and physical and emotional nearness to death all catalyse the reinterpretation of the role of family and friends. As will be considered this came to affect; the visceral and sensory experience of technology use for some participants; how people used, moderated and interpreted body language through technological objects; and the requirement, desire or feasibility for bodily co-presence both in person and in virtual spaces.

Conceptualisations of and Relationships with Technology

For participants, relationships with technology began in advance of interacting with or owning a physical device. Conceptualisations of, and relationships with, technology have evolved alongside technological innovations since the early 1980s, and include technologies such as the computer, mobile telephones, tablets, the internet and email, all of which have been invented within the lifetime of participants. This participant group's experiences capture a unique transitioning point in many workplaces that saw the introduction of computers and email, with relatively equal numbers of male and female participants being introduced to technology in this way. Of course there was variation within the group: related to the type of job, participants had varying levels of dependence on, and exposure to, technology. Nevertheless this participant group mark a shift in the level of technological integration in society, with it being much more difficult to dissociate from technology in the way that previous generations may have been able to. Demonstrative of the shift between participants and their parents' generation is Edward. He reflects:

I suppose in a way we do quite a lot not as much as, my kids keep showing me things, cos I mean in my career I've been involved in computing from the 60s with published cards and those sorts of things so I've always been fairly computer literate as possible I think. Whereas for instance my mother-in-law who's still alive, my wife's brother bought her a laptop at one

time but she had no feel for it at all. But I'm a bit younger as I say, I've always been involved in these things so it's also quite easy for us (Edward).

This unique transition is apparent to participants themselves, some of whom had parents still alive and in distant locations and who they were trying to keep in touch with and provide care for. Joyce and Mamo (2006, p.99) speak broadly of the generational shift stating the current generation as "a group socialized to work with and consume scientific knowledges and technologies," in much the way Edward refers to above.

Despite technology's pervasiveness, conceptual relationships with technology were still largely driven by personal interest. Research suggests that for older adults, technology use is "intrinsically motivated" (Vroman et al., 2015, p.162). Jeff, a selfproclaimed and self-taught "tech savvy" person, has a scientific approach to technology. Jeff describes a lifelong innate desire to adapt and invent new ways to utilise and integrate technologies into his life, continued into retirement. Jeff recounts that as a teenager whilst his friends were trying to tape music from the radio by holding a microphone to the speaker, he would wire the speaker up to get direct recordings of a higher quality. More recently, while booking accommodation for an overseas holiday, he received from the owner via email a poorly translated information sheet. He politely offered to assist with correcting some translational errors and email it back to her, and in the process of doing so he was struck by the ability to have such encounters with another despite being thousands of miles apart in different countries. This is interesting in and of itself as it indicates how the linguistic form of communication acts affect Jeff's feelings about not only specific communicative acts, but social acts too. Of the technology that allows Jeff to make such amendments, he states it is an:

Everyday occurrence that we've been living with for how long? Decades now. But it does sometimes strike me as how fantastic it is to be able to do that you know? Electrons in the air as it were [laughs] and she's getting it in the countryside overseas.

Even when Jeff first had a fax machine and despite the fact it could take minutes to send and receive items "I was shocked by how wondrous it was". An amazement that has only become amplified and intensified by the rapid proliferation of new technologies allowing the number of such possible engagements to exponentially multiply: "It's like some neural pathways you know of fact and emotion [...] and a

relationship has been forged [with the owner of the accommodation] where 25 years ago that probably wouldn't have been possible" (Jeff). This is not to say Jeff adopted technology indiscriminately:

It's not necessarily about just maxing out on what the technology can do but harnessing it for the subtlety of what it can do, the cleverness, the refinement, it's not just about you know amplification.

It is the idea of both, what technology as an object can do constructed through the strong visual imagery of "neural pathways", as well as technology as a set of social practices and relations, which matters to Jeff.

For other participants the science of technology was daunting. This was not necessarily at the expense of being able to relate emotionally with family and friends through such mediums. For Marion:

I've got the basics to communicate but I'm not, when I was learning to drive I was never interested in what goes on under the bonnet, or this, that and the other, I want it to be able to get from A to B [and with technology] I'm not interested in the technical bit.

Yet a lack of scientific or technical knowledge did not prevent Marion, a single and childless older adult, from forming strong emotional bonds with her iPad. Marion felt it was "almost my partner in life, you know I couldn't live without it now [...] I like my iPad because it fits in to the way that I've chosen to change my life". The language used to depict the emotional significance of her relationship with her iPad, the word "partner", has strong emotive, if not also polarising connotations. This common usage as implied here, is the positive depiction of inter-personal relationships often reflecting exclusivity, a level of spatial and temporal synchronicity and emotional intimacy. Yet, alternative phrases like 'partner in crime' reflect the potential for more devious connotations. Marion also reflects on the idea that this is a partnership that is also likely to have longevity suggesting she would not be able to live life without technology.

In contrast, June's lack of conceptual engagement with technology impeded her ability to communicate with distant others. June knew an email could be sent overseas but did not understand if, or how, a text message could be sent internationally and thus she refrained from attempting to do so. This resulted in both a reduction in frequency of social contact as well as a reduction in the number and type of technology-mediated communication channels available to June. Equally, Helen feels a generalised

"resistance in me" to using technology based on her "real worries about the effect that's going to have on human relationships". It is also worthwhile noting June and Helen, unlike Marion who was provided with technology and a learning support network in the workplace, never used a computer in their respective capacities as teacher and social worker, instead learning to use technology in retirement with the ad hoc assistance of family. Helen's resistance and concern about the effect of technology on human relationships suggests that for her such intimacy is either not achievable or should not be shared with technology and from this ideological basis she tries to limit her use in specific ways to minimise the impact on herself and others. Manovich (2001, p.96) states of the 'screen' constructed by new media that "rather than being a neutral medium of presenting information, the screen is aggressive. It functions to filter, to screen out, to take over, rendering nonexistent whatever is outside its frame". Helen resists her attention being captured by technology as she often feels 'screened out' by many of those around her who are less resistant to technology.

Helen's ideological impediment to embracing technology prevented her from engaging not only with existing social ties but stifled new social interactions with strangers and potential social contacts. The physical device became a physical and mental barrier to social exchanges:

I begin to hate technology sometimes because it's such a barrier. It's because people use it so much of the time. You know when I'm staying with my daughter and son-in-law and they both have their phones there um they respond to them all the time. They, they cannot switch them off and people just walking along the street, everything. It becomes a barrier between me and them (Helen).

Helen's resistance could easily be attributed to the presence of physical devices, but from a post-human perspective, agency as distributed between people and technological objects means each is shaping the other: it is simply that the human effects on technology are more opaque than the technological effects on the human. Hayles (2005) suggests that computer or machine computation is in theory entirely transparent (to all those who know how to code or programme at least) and in actuality it is 'human computation' which is obfuscated, as much about 'human computational' processes remains unknown and unknowable. Hence, perhaps the issue becomes one of incompatibility between the human (language) and computer (code), with Helen feeling like she is unable to communicate with, or via, technological objects. A philosophical standpoint on the value, role and use of technology creates a sense of

physical and emotional distance between this participant and others, both strangers and those Helen has personal relationships with.

From a post-human perspective Jeff, Marion, June and Helen represent a spectrum of conceptual and emotional approaches to technology that are as equally important as the interactions they facilitate. Although human relationships have always been fashioned by technology (even the technology of letter writing), the nature of the relationships, connections and entanglements with the human and more-than-human are qualitatively different (Hayles, 2004). The extent to which participants allowed themselves to become integrated with communication technologies was determined in part by how they conceptualised such machines, and thus the sorts of entanglements and relationships participants were prepared to have with, and through, technology. More broadly, there was a tendency to speak about technology in 'un-emotive', practical terms but slippages in language suggest this was not necessarily reflective of how participants always felt about devices or the symbolism of being able to use technology. Several participants used the word "tool" to describe their relationship with, and use of, technology. On the surface, technology use was a perfunctory task to be carried out to enable a meaningful interaction or social event to occur. As stated in Chapter Two, Hillis (1998) considers the construction of technology as a tool to be a purposeful manoeuvre as it emphasises human action over that of technological agency in an attempt to conceal the social contexts from which technology arises and the means by which it is socialised (see also Turkle, 1995). In this vein, Terence and Irene do not consider the physical device to have much personal significance for them; devices are "just tools or enablers, a means to an end". Ruth echoes their view that technology is "just a very useful tool". Even Marion, despite her earlier proclamation of her iPad being her "partner", lapses into this notion, stating "a tool to support interaction, proper interactions really" whereby proper is taken to mean in-person. Buse (2009) in her reporting on perceptions of computers for the purpose of work and leisure in retirement, also remarks on the tendency among her participant group to refer to technology as a tool. However, Buse (2009) attributes this to age and gender classifying older users as 'utilitarian' in their approach to technology compared to younger cohorts, a claim that runs counter to this research.

Dennis recognises amongst his friends the types of post-social relations⁷ that can be formed with technological objects, but does not personally equate the same status to such epistemic objects:

I see them as tools. I have friends who label their phones, tablets and walking sticks with names. I have a PC, phones, tablet, recording devices etc. and I use them and only think of them or have a relationship [with them] if they don't work properly.

Dennis' relationship with such devices is not always straightforward. Dennis' acknowledgement that such 'tools' are not always able to perform or be made to perform the necessary tasks, illustrates that there are agentic flows distributed between the two, oscillating about a dynamic emotional equilibrium. This is not to say that participants did not value such tools. By its very nature a tool is a necessity and Carol, who immigrated to the UK 49 years ago, acknowledged that technology is "a wonderful tool to communication and my sisters and I also enjoy that it's, it's really a vital link". People entered technology-based modes of communication with an expectation or desire that it would lead to other social interactions except in circumstances where people were geographically constrained or distant to one another. In these instances, people were accepting that technology allowed them to socially participate and maintain connections in ways that would not have been otherwise possible.

Mavis, perhaps for the purposes of the interview and as a means of communicating with me in my capacity as researcher, anthropomorphises her relationship with her computer to express the nature of the bond she has with it: "I've got a computer um the computer and I are not exactly [laughs] the best of friends [laughs]". Describing her relationship with the computer as antithetical to that of 'best friends' trades on culturally understood notions of the characteristics a best friend may fulfil such as loyalty, trust, support and longevity. Mavis' statement gives recognition to the fact that there is the possibility or expectation for a certain set of relations to be enacted between body and technology, but for her an emotional uncertainty pervades her relationship with her computer. Mavis enjoyed using the internet as a source of information to learn about things of interest but felt reluctant (although like she had a familial obligation)

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⁷ By post-social relations it is meant that communication technologies become our interaction partners, with humans developing "intimate and enduring relations with [such] objects" (Lowe, 2004, p.338), with people becoming increasingly emotionally attached to such epistemic objects (see Lowe, 2004).

to use email or other internet mediated modes of communication to keep in touch with people. Mavis received and read some emails but did not send any of her own. The boundary between Mavis and her computer remains clearly delineated with Mavis describing email as a dehumanising experience: "I feel that the sort of machinery of emails comes between them and me and it's just not so personal and I don't feel that the person's at the other end somehow". Technology became a barrier between routine everyday interactions for Mavis, in both a literal and metaphorical sense. To borrow from Haraway (2008), Mavis and her computer occupy different 'contact zones'. Although Haraway's (2008) work on companion species (in Haraway's instance, dogs), focused on human-animal relations, the idea of 'becoming with' a broader range of companions through 'contact zones', which sees different intensities moving between materialities, can be applied here. In order for 'human' and 'technology' to become together they need to be in the same 'contact zone', a space of being able to communicate with one another despite their belonging to a different 'species'.

Not all technology was interpreted as having the same emotional effects. There was a differentiation between (mobile and landline) telephones, and computers. The (landline) telephone is a well-established method of communication and suffers from the oft-made assumption that its familiarity and the ability to hear another's voice means it is a preferred and more personal communication for many. However among this participant group, several people expressed a difficulty using the telephone. This ranged from not being able to hear well therefore making phone conversations strained (Helen), a lack of dexterity caused by osteoarthritis (Dennis), to a dislike of the distortion and compression of people's voices (Nigel). Nigel experiences a flattening of emotion using mobile phones, attributable to the mechanics of the device:

One used to be able to hear the nuances of people's voices in the days of landline but because of the compression that occurs over a mobile phone, you can't actually hear so much of the nuances and the variations in tone of people's voices [...] which means that I find communication on mobile phones just doesn't do it for me because things are happening, you can't hear how they react so and it's compression of the technology.

Similarly for Mavis, she too felt ill at ease speaking on it:

I've always been against the telephone [...] I have absolutely no idea why but all through my life when I hear the phone ring I'd hope that my husband would answer it [laughs] I find it sort of difficult, stultifying.

The experiences of Nigel and Mavis demonstrate that technology is not merely a conduit for emotion. Ahmed's (2004, p.8) notion of contact with objects as being generative of emotion seems applicable here in that "emotions are relational: they involve (re)actions or relations of 'towardness' or 'awayness' in relation to such objects", with the landline telephone being one such object where Nigel and Mavis clearly feel a sense of 'awayness'.

For Carol, her discomfort using the landline telephone was associated with the cost of making telephone calls in the UK where she is charged for each individual telephone call. The cost of making telephone calls not only constrains how often (if at all) and to whom Carol makes calls, it also means when landline telephone calls are made she is consciousness of the cost and therefore feels temporally and emotionally constrained to keeping interactions brief. Carol recounts:

I'm not really comfortable on the phone anymore partly on account of the cost I do have one friend in America though who has an account that gives her free calls to Britain and we have had one or two conversations and I do feel very free in those circumstances to just talk as long as we want to.

Even though the telephone itself is not expensive, the device has became emblematic of expense, creating a hesitation in Carol to use it. Illustrative of the heterogeneous relationships participants formed with different technological devices, Carol's experience of using the telephone is in stark contrast to the relationship she has formed with her computer. As her internet is charged at a fixed per month price, Carol readily and willingly uses her computer.

Carol comments her dependence on her computer, on the ritual of intermittently checking it, of hearing the pings and alerts it makes to signify a new email, is part of a broader emotional dependence she has on having contact with her distant family and friends:

I listen out for those pings and they get my attention and I do see who's written me. There's some way in which I crave being wanted, being needed, you know being communicated with and I will go if necessary to satisfy that craving, maybe read The Guardian website or in particular the New York Times website [...] because that way I'm learning about the world at least, if not my friends and family.

Compared with Mavis and her landline telephone, Carol has a distinct sense of 'towardness' with her computer and although emotions do not reside in objects or

subjects, Carol's contact with her computer is generative of new personal, emotional geographies (Ahmed, 2004). Carol's computer is set up in her living room which flows into an open plan dining room and kitchen so that even when not using her computer, her time and space in the home becomes organised around being within earshot of it. Even when interaction with her family is not possible, the emotional bond Carol has formed with her computer and the connection it provides to the wider world is of crucial importance. Accessing newspapers online is "a touching down in some way. It's what's out there? What's been happening? I don't know why" (Carol). It is likely this provides Carol with a new sense of social inclusion or 'techno-sociality', expanding Carol's virtual geographies greatly and her sense of participation and mobility (Köhl & Götzenbrucker, 2014, p.509). Demonstrably, where computers were once seen as dyadic relationships between person and machine with potentially socially isolating effects, now "it can put you in the center of things and people – in the center of literature, politics, art, music, communication and the stock market" (Turkle, 1995, p.61). Although Carol may be spatially distant from family and friends, an emotional void is fulfilled by having a sense of connectivity to the wider world through the portal of her computer. This reflects recent research that found older adults who frequently used the internet felt less lonely or socially isolated than those who did not (Köhl & Götzenbrucker, 2014; Mason et al., 2012).

However, the manner in which Carol speaks about her technological entanglements is at times contradictory, as it is for other participants. Despite the strong emotional ties Carol has with her computer, it is also a fragile relationship. Carol spoke previously of wanting "to break my dependence" and of a need to police boundaries between herself and her computer by limiting the amount of time, and time of day, that she accesses it. Carol further elaborates that:

Although I use the computer with confidence I'm easily made anxious if something were to go wrong [...] there are certain things I know how to do, quite a lot I don't [...] I have quite a phobic response, anxious phobic response, more than you might think from hearing me speak.

This statement is poignant: Carol alludes to the role of language when communicating about emotions in the context of our interview, suggesting that language can be an imperfect means of representation. Whilst Carol maintains her earlier statement that she does use her computer with confidence, she is keen to ensure it is made known that this is not the only emotional dynamic at play and does not want her earlier

proclamation of confidence to mislead me in to thinking otherwise. The language chosen by Carol to speak about her feelings towards her relationship with her computer reveals that whilst her computer use sustains her emotional dependence and is a substitute for her yearning for human interaction, there are also times when this relationship becomes destabilised and induces very negative, fearful emotions about how to cope with situations that may arise outside of her capabilities. This emphasises the issue of computer literacy that a number of participants felt; beyond learning how to physically navigate technological devices people expressed a need to know how to 'communicate' with them by becoming 'computer literate' as it were.

Computer Literacy

Computer literacy was one of the greatest barriers to technology use. As highlighted by Barry (2001, p.127), this is an issue that extends beyond the personal as technology has "come to be seen as a key resource in the making up of citizen". In an age of networked technologies, learning has become lifelong and "societies and individuals must be prepared to re-tool, adapt, and update" (Barry, 2001, p.1). In response to such discourses, some respondents said technology had a language of its own necessitating computer literacy in order to use it, and often required having a teacher available. Some participants held the idea that one might have a predisposition or an innate ability (usually predicated on age) to learn about or use technology through a pre-existing knowledge of the language of computers. For example, computer literacy was thought to be idiomatic to the 'digital natives' who had grown up and socialised differently with technology. Upon closer inspection, 'old' language is (re)formulated in new media technologies. As Hayles (2005, p.39) suggests, "in the progression from speech to writing to code, each successor regime reinterprets the system(s) that came before, inscribing prior values into its own dynamics". This section will consider how (re)formulations of language impacted upon the ability of respondents to relate emotionally with technological devices and people.

Helen, even though her husband had worked in computers and was able to help her learn and become familiar with the language of computers, still found becoming literate difficult. Helen states of being taught by her husband:

I don't like him teaching me because he starts at a very high level and he can't understand why I can be so stupid about, I don't understand the language, I find the language you know the

first stumbling block and when I wanted to start it up and in fact you had to click on shut down, I can't remember exactly but it was something that was completely, I find the whole language counter intuitive, it doesn't mean anything to me so I don't, I can't remember it and he gets very irritated 'I've told you that' [laughs].

It is apparent from Helen's statement that she has few reference points for the language. Each word may have associated with it set meanings, but out of context, or used in conjunction with each other, the overall 'language' of computers holds no relevance. Perhaps too, there is an implicit gendering of the language of computers that makes it difficult for Helen to grasp or retain it. Turkle (1995, p.56) informs us that the early, foundational development of computers arose from an almost exclusively male culture, particularly with respect to computer programming and "although this bias hurt both male and female computer users, it fell disproportionately on women"; this made apparent by the fact it was almost exclusively female participants who spoke of issues associated with literacy. This is significant as the etymology of 'computer speak' has origins in the language of computer programming. Moreover, as most new innovations are 'legacy' technologies, such that each new technology is premised on previous iterations, in conjunction with the fact that early programming arose from a male-dominated culture, any gender bias inherent to learning the language of technology continues to be perpetuated (Dickinson & R. Hill, 2007; Hillis, 1998).

Family assistance was a crucial learning network for many participants. Mavis had access to consistent and readily available help to learn the language, but it proved equally troubling:

I don't really understand computer speak I think and my grandchildren are very good to me and very patient and so on but you know they'll say 'and you do this and this and this and press that and then switch over to to-dah and click on something' and I don't know where I am and I'm afraid I don't retain any of this information.

Helen and Mavis's experiences make apparent that although language holds socialised or shared meanings, it can also be highly personalised and carry variable meanings between people resulting in differential learning outcomes. Not all participant teachers were equally effective or trustworthy. Helen's husband may have been technologically proficient but his teaching skills proved deficient and ineffective. Similarly, June had also made several attempts to become more computer literate but found the learning sources available to her of variable quality and trustworthiness. She sought to strike a

balance between ease of understanding, learning format and gaining a necessary proficiency:

The little mobile is so easy. My granddaughter said 'you just do this and this, show me how you do it' and I did it in front of her and I did a few things wrong and she just wrote down about five things and when you look in the paper shops and magazines on how to help old people, there are pages and pages and you think 'I don't think I could take it in' but this was one, then two, three [...] [and] people like my younger friend tells me 'now you can move on, why don't you get this and this?' and as I say I'm afraid of the cost or else the need for somebody there to keep answering my questions [laughs] [...] but again I wouldn't like to go in a shop and ask that in case they were 'oh we can sell you this' [...] and I looked in the news rack a long while ago and I thought 'I don't need to keep asking people I'm a bother to them' and the magazines like 'Which' is supposed to tell you, pages and pages to go through and then you think 'is a business behind that?' saying 'we're the best' or is that the only few they've tested? So I think 'oh I can't make sense of all this' and I only want one page about it...so the magazines I don't think help but I spose I should try again, I don't know.

The learning process June depicts to become computer literate is clearly emotionally charged. Some technologies are pleasingly much easier to learn than others, particularly when her granddaughter is present to teach her. June feels satisfaction at acquiring this new skill and ability to text message people. Other forms of self-help however are overwhelming due to the sheer volume of information making her fearful and doubtful of her ability to learn. June feels anxious about the expense of acquiring new technologies, sceptical about the trustworthiness of information, obligated to make renewed attempts to learn and unsure about where to go to progress. June's experience also reaffirms the need for intrinsic motivations (Vroman, et al., 2015) to want to become technologically adept which Poynton (2005, p.868) identifies as "computer interest – a precursor to computer literacy".

As an interested user, June had managed to accomplish a baseline level of computer literacy but found the de- or re-contextualisation of certain words led to emotional breakdowns in her relationship with technology. June could not afford an internet connection in her home so accessed it through computers at the public library which was troubling in itself as:

Sometimes the computers are working, sometimes all young people like you are on it and it's all full up and you think 'oh' and sometimes when you go on it, it's all 'cookies' and you can't get through to it. I'm with Yahoo at the moment and you can't get through the cookies and then when you go to the desk they say 'oh yeah, it happens we can't do anything about it' and I think 'can somebody tell me please how to squash these cookies'.

For June, the word 'cookie' and the concept of it was familiar to her however the context was completely foreign. The idea of a 'cookie' could not be thought of

independently of its biscuit form and when trying to conceptualise how she might get rid of such cookies, images of what you might do to an actual biscuit like squashing it came to mind. Therefore at the same time such language has no meaning at all, the meanings of particular words and phrases could not be dissociated from their original context, becoming muddled across dialects. However, 'old' language has not been entirely abandoned in favour of a new technological dialect. Manovich (2001) discusses the term 'web page' and how one might 'scroll' through it. The word 'page' carries with it deep cultural associations with the principles of textual organisation: a page is "a rectangular surface containing a limited amount of information, designed to be accessed in some order, and having a particular relationship to other pages", rather like the pages of a book (Manovich, 2001, p.74). The action too of 'scrolling' through web pages is also "a return to earlier forms such as the papyrus roll of ancient Egypt, Greece and Rome" (Manovich, 2001, p.75). A palimpsestual residue of 'old' communication technologies remains present in the new.

For people who did not necessarily have consistent, reliable and trustworthy help, learning to become computer literate was daunting. Marion who had recently retired felt this problem was specific to older adults, as being employed frequently offered easily accessible, free assistance. Marion had purposefully purchased an iPad for use in retirement before she left her job so that her younger colleagues could teach her:

You can just say to someone 'here how do you do this?' or 'when you do that what does that' you know? [...] I could just shout and say 'look when you do this what happens?'

Without such access, as Marion acquired new technologies she has struggled to become well versed in them. She had recently purchased a watch that monitors the number of steps you take each day, which connects to your computer but she could not set up her profile:

Because my computer at home is so old, I cannot set it up and can't connect it and I was almost crying the other day because I don't know what it means so now I'm gonna have to wait for somebody, the next person that comes around who is in any way happy to set it up for me so that's the disadvantage. I don't have the instant-ness and the brain technology to work it out, and I don't have the patience so I need somebody else to show me how to do that. So I like using it, I'm just not interested in understanding it I spose that's terrible then though because it means you're reliant on other people or have to pay, occasionally I have paid other people to come and do things so that's not good I guess.

Marion's inability to adequately use certain technologies was troubling to her. It created emotional frustrations caused by financial constraints that prevented her from

being able to purchase a new computer which was further compounded by her need to occasionally pay technicians to come to her house to install or demonstrate such software. Alternatively, as Marion lived alone she was left dependent on managing to co-opt the skills and goodwill of those who came to visit her and was left waiting in the interim. Marion's experience also demonstrates that within the notion of becoming computer literate, there are in fact multiple technologies to learn. Whilst there are commonalities across each hardware device or software platform, being literate in one (such as Marion is with her iPad) did not necessarily ensure or aid in proficiency with others (such as her desktop computer or watch).

Other participants were sympathetic to the plight of older friends and family members who may be struggling to grasp the basics of computer literacy. Ruth recalls:

Interviewer: I don't know how well you know those people [who aren't online] but you

do think they miss out by not being online in terms of either access to information or by making it easier to be in touch with people or not

necessarily?

Ruth: Well I think they do, yes

Interviewer: Yeah?

Ruth: But I also think that it is very hard to learn to use the internet, its not easy

and straightforward, particularly if you're older, it takes a long time to adjust [...] there are people I wouldn't expect them to, it's just too demanding,

learning new tricks as you get older is really hard.

Interviewer: It can be quite daunting if you haven't sort of encountered it before in your

working life to just have this thing and think 'goodness where do I push? Or

what do I do? Or what does this mean?'

Ruth: Yes. We've had computers in the house since the very first ones came out

which was BBC1 way back when? And of course with young children

growing up [...] we're computer literate basically

Recurrent in Ruth's narrative is the belief that older people through their lack of exposure to technology or simply based on age, have a differential capacity for learning 'computer speak'. Although Ruth reports herself to be computer literate, it is difficult to discern if she bases the notion of it being difficult to learn on personal experience or the experiences of others as reported to her. Counter to this, Jeff believed that not dissimilar to being a tourist in a foreign country where you might learn select phrases or purchase a phrasebook, the simple, specific skill of being able to Google would provide other older adults with access to a wealth of knowledge or self-help:

I think there are lots of people who would be amazed to realise how little you need to know to be able to access so much, to find out so much. If you can imagine not knowing about Google and then someone just said 'well here's this thing you do, you think about it, you put it in' and it will tell you, you know? (Jeff).

Views consistent with Jeff's were primarily shared by those who already had a high level of proficiency and perhaps, like Helen's husband who having attained the status of being 'literate', had forgotten or could not understand the difficulties for some trying to learn the basics.

Troublingly, knowledge of the language of technology was not a stable, fixed entity. Like reading a book or a street sign, some aspects of the language were fixed such as buttons on a computer, routine commands like signing into email, the notion of 'scrolling down' or 'tabbing across'. However in tandem with this, the dialect was constantly evolving alongside the evolution of new technologies. New developments in, or acquisitions of, new hardware (e.g. a new mobile telephone, computer or tablet) occurred relatively infrequently for most participants; however, software or programme updates occurred as often as weekly for some applications, meaning they were perpetually in a state of flux. As aforementioned, such technological developments are termed legacy technologies, which assumes a prior level of knowledge on behalf of the user, not always present among older adults (Dickinson & R. Hill, 2007). R. Hill, Betts and Gardner (2015, p.415) found that "the ever evolving nature of technology means that individuals need ever increasing levels of digital literacy to maintain their sense of inclusion". Yet, whilst it has become apparent that "catch up' does occur as cohorts who have experience of using particular technologies, such as the internet, enter older age groups, this is balanced by the increasingly rapid pace of technological change" (Government Office for Science, 2016, p.94). Helen, has on more than one occasion found after software updates, "something I thought I could do, I can't do anymore. It is use it or lose it". Others seemed less anxious about the rate of change but acknowledged that there was a requirement to constantly keep learning: "I find that you need to do it quite slowly you know? You might learn one thing and you think 'yeah that's enough for that week'...there's no rush [laughs]" (Mark). The technologisation of society meant "a pervasive and persuasive discourse has developed around computer technology and literacy" (Duffelmeyer, 2000, p.289), and participants felt it imperative to obtain at least basic computer literacy.

Participant Preferences for Written, Verbal or Face-to-Face Communication

Once computer literacy had been obtained, the language used for communication also ceased to be a stable entity. There has been considerable debate as to whether networked technologies and new media practices are changing the linguistic structure of written and verbal communication or indeed, precipitating new literacies (see Rowe & Wyss, 2009). For instance, lexical shortenings are not uncommon due to the space constraints of a text message, resulting in the use of abbreviations, contractions of words, acronyms and emoticons (Quan-Haase, 2009). Thus, depending upon the adeptness of individual participants at learning, integrating or subverting new media literacies, preferences emerged for written, verbal or face-to-face communication, helping to operationalise new emotional architectures.

The evolution of technology has been such that there is less and less differentiation between different types of hardware such as mobile phones, tablets and laptops; most are portable, Internet-enabled and have QWERTY keyboard functionality⁸. Emblematically, Nigel uses texting and email primarily to contact his wife and adult daughter:

Of course with smart phones you don't tend to distinguish between text and email really but it tends to be SMS [Short Message Service] message if we're on a train somewhere, probably email if we're sitting at home and really that's keeping up to date with what's going on in each other's lives [...] [and] cos we both have Google phones so it's just as easy to do that as text and there's no boundaries and you sometimes find you've sent a text message when you meant to send an email.

Here, the distinguishability between different physical devices or software applications is not necessarily apparent; the physical device may determine it for Nigel, interchangeably between email or text messaging. Reinforcing the idea of indeterminability, Jeff comments for him "the medium is less important than the content". It is of lesser concern whether something is written as a text or email or if it is produced using a computer or phone, it is *what* is said that is of consequence, and whether it is 'said' via written, verbal or face-to-face modes of communication.

There persists a culturally engrained assumption that most people have a preference for verbal or face-to-face interactions due to the aural or visual communication cues

⁸ A common keyboard formation where the letters Q, W, E, R, T, Y appear in sequence at the top of the keyboard.

made available. Verbal or face-to-face interactions are characterised by authenticity, whereas "technology that utilizes voice or text only, has a greater capacity for concealment and ambiguity" (Felton, 2014, p.13). Not unexpectedly, many participants shared sentiments to this effect. Authenticity for Frances meant face-to-face contact is "more spontaneous. I mean if you write an email you might change what you're saying, you might read it back and then change it". Carol eloquently considers:

Yes I don't think email is as personal as speaking by phone. I really accept there is a qualitative difference [between the two] you're hearing, you may not be seeing the person, but you're hearing their voice there's a more real exchange taking place because you're listening to one another instead of just receiving.

Carol's understanding can be interpreted as focused on reciprocity with the social acts of *listening* and *being heard* of equal importance to the content of communicative acts. Correspondingly, Nigel states "I have to see people's faces in order to talk to them [...] I have a problem with phones in that I don't know how they are receiving what I'm saying because I can't see how they're reacting to me".

In pursuit of genuine engagement, many new technologies have become concerned with approximating the experience or attributes of verbal face-to-face communications, but many respondents liked the differentiation to the extent that they could consciously choose a medium that was appropriate for the person or purpose of the interaction (Hertlein, 2012). Jeff states:

I guess most people might find it better to have a face-to-face or on the telephone where I can use consciously or unconsciously a whole range of strategies to try, and I don't mean this in a manipulative way, but you know it's a more natural process of how you learn to communicate, how you influence, how you raise your voice, lower your voice, how you will joke or not joke, how you will put yourself in someone's position. So yeah if I was analysing I would say well I kind of do a lot of that if I'm speaking to someone or if it's a telephone conversation but I guess I'm trying to do that when I communicate in writing as well.

As Jeff reveals here different modes of communication can be adopted or indeed adapted depending on the circumstances. Participants worked to utilise a range of communication practices feeding into the idea of 'personalisation' in specific communication acts, indicative of emotional intimacy. Although a person's body may not be physically present, the personalisation of communications gave a sense of the 'personal' engendering authenticity for the recipient.

Deborah comments that she feels the thoughtfulness of email means it allows for personalisation and makes it an emotionally more expressive medium:

I think when something is written you can be more thoughtful. People can say things in a written form that they wouldn't say out loud. Some people find it very difficult to say emotionally, highly emotionally charged things whereas they would be able to write them down so yeah you can express a lot more in a written form. Not in a text maybe but certainly in an email.

Deborah touches on a crucial point of differentiation being that not all written communications hold the same emotional value or capacity for personalisation (Lindley et al., 2009). However, whereas email allowed for a longer format of communication and perhaps therefore greater depth of reflection and emotion, text messaging compensated for this in frequency of contact. Tillema, Dijst, & Schwanen (2010, p.977) report that text messages were sent to the "most intimate" of social contacts and used as a mechanism "to stay in contact almost constantly with people who are close with no other purpose than to stay in touch" an idea termed 'connected presence'. The frequency of communication with family members via text message certainly prompted Nigel to feel it was 'enhancing' a lifetime of poor communication skills:

Technology's changed my life in making me, I communicate more now. I was a fairly typical programmer, if you can call me that. I mean I was fairly 'shut myself in a room' and I could be in there all day and if someone didn't phone me, if the phone didn't ring, I didn't phone anyone but I have become much more communicative now with other people.

To the extent that "I think most of my casual chat conversation is done electronically" Nigel communicates with immediate family members such as his wife or adult daughter in this way. Speaking of his extended family:

Weeks or months would go by without me meeting up with them but now, of course, I am in touch with nieces and nephews on a much more regular basis even if it's only a text 'how are you' or 'what's happening?' (Nigel).

In the absence of a bodily co-presence, text messaging fostered emotional (re)connection with weaker ties in Nigel's social network, engendering a sense of virtual co-presence or 'telepresence' (Felton, 2014).

These new socio-technical sociabilites are reflective of broader shifts in normative emotion culture which have evolved alongside technology, creating at times a visible generational rupture. For Marion the transition is apparent in watershed moments such as speaking to her neighbour about property related matters:

I'll say 'oh have you decided about X' and she'll say 'oh no I've sent that to him' her partner, 'but he hasn't come back to me yet' you think well actually you're living in the same house? Those kinds of things I think it's a real eye-opener in how people live and work.

Marion found it unusual for people physically in the same house to email one another but felt there was a certain inevitability about it: "I think that is the way we're all headed". There was a sense of the inevitability of the ever greater technologisation of society and that communications, emotions and bodies would come to share greater kinship with technological devices. Jeff felt that the decisive societal shift in communication strategies was caused by younger generations:

[My] generalisation is that younger people like my son, like my daughter-in-law and others, and the sons and daughters of friends ours, they tend, I believe to have a preference, a default preference towards written communication rather than telephone communication.

Jeff interpreted that the default preference for written communications was borne out of a need to have a "buffer zone or a few skirmishes over text or instant messages" before young(er) adults were felt comfortable enough to engage in a verbal or face-to-face interaction. This suggests the idea that different technologies have associated with them different emotional intensities. For some such shifts had been gradual and almost imperceptible: "I mean I almost don't know how we communicated before email...I almost can't remember before [pause] phone was always too expensive" (Carol).

Although working hard to become computer literate and adopt new language skills, discernable were fragments of old communication practices put to use in hybridised ways. The amalgam of both technology-mediated communication and 'old-fashioned' habits and preferences meant that some participants felt they were in a state of "normlessness" (Dickinson & R. Hill, 2007). For example, although for participants an email may bear many of the hallmarks of letter writing, for many others "whatever letter-writing norms exist have been consciously abandoned by many users of e-mail" (Dickinson & R. Hill, 2007, p.621). Conversely, for younger users of email the norms of letter writing might never have been learnt and thus have no cultural resonance. Helen explains:

It's interesting actually because when I'm sending emails I don't put 'Dear So and So' and I got into trouble with one or two people about email etiquette. They actually ticked off at me for not starting off with something, which includes their name and I don't know what normal way of doing it is. I still don't do it because I think it's unnecessary, you've already put their name in the address book. But I mean do you?

Helen interprets that when you send an email and enter in the email address, this approximates to when you would write their name at the top of a letter but has led to *miscommunications* and general uncertainty about what the socially accepted practice is, even turning to the interviewer for guidance. It has been acknowledged that despite the proliferation and popularity of email "many users still complain of some sociological discomfort with this relatively new medium" (Rowe, 2009, p.80). Conversely, where Helen struggles to adapt to the conventions of email, the 'free-play' of language that email creates due to linguistic and social convention ambiguities, means it can be just as equally a creative outlet for some (Rowe, 2009).

Normlessness prevailed beyond structural communication issues. June being a relatively recent mobile telephone owner had "only just discovered, people must be pleased! That um, how to put a full stop and then a capital letter and things like that [laughs]" when writing text messages. Although punctuation is not required and often not included in a text message due to the aforementioned size limitations, for June it was an important mechanism for structuring and presenting her emotions to others, clearly anxious that her prior inability may have been irritating to others. Affirming this, Bergs (2009, p.60) in his comparison of text messaging with older modes of communication such as telegrams and postcards, found that signifiers of emotional intensity or importance in a text message were often conveyed through bold, underline and italic typeface or capital letters. For Carol, while the process of constructing an email was relatively straightforward in its resemblance to that of a letter, its social delivery proved much more fraught. Carol perceived that for email, much like a written letter, it was the prerogative of the receiver when and where they were to read it and reply, if at all. Yet Carol provides an example where once again 'normlessness' prevails:

To give another example of the queerness, the oddness of email correspondence, a woman who I have to have a conversation with this afternoon about my work on communicating something on behalf of the meeting we work together as clerks of, I was sending her last night some information and I did so in a number of separate emails and she was responding 'I can deal with this tomorrow'. Well that's fine and we're going to deal with it today but when I sent to her the last communication, she sounded exasperated as if I'd interrupted her. But there's a curious etiquette involved with email communications especially with the people who have smart phones. One other person once upon a time seemed to accuse me of interrupting his lecture because I sent him an email. He interrupted his damn lecture!

Carol's narrative reinforces the important point that that technology is reliant on human-machine relationships that are socialised in particular ways: technological devices are not 'tools' or 'conduits'.

Silence(s) in communication was of equal significance and equally communicative. When speaking to her children, Joan said, "I can tell immediately on the telephone what mood they are in what, what's happening whether they are, whether things are ok" irrespective of what is being said or how it is being said. June employed silence herself as a strategy of concealment so that her sons, all of whom live outside of London, did not become emotionally distressed or agitated by a potential inability to help. As stated in Chapter Four, after the death of her husband, June worried about emotionally burdening her sons, so when speaking on the phone and they ask "are you alright' I say 'yes' so's not to bother them" (June). What June does not feel able to tell her children is of as much if not more emotional significance than what she is prepared to say. June operationalised silence in a second way. For major life events or when something of consequence happens, she would opt to write letters to her sons over an email: "I write letters when something big has happened like telling them about relatives or me moving or something, I would write a letter". When June is silent via email and text messaging this could be a cue for her sons that something emotionally significant has occurred in her life.

As for June, letter writing for this participant group remained largely the preserve of significant happenings or culturally engrained rituals such as deaths, birthdays or Christmas cards, when participants were not prepared to enlist communication technologies for these purposes. Frances, who uses out of preference technology-mediated communication on a daily basis, considers "maybe I'm old fashioned I think you should send a birthday card not send a text...I think that's got more meaning". Similarly Marion found "I was shocked at Christmas because I think a lot of young people don't send Christmas or birthday cards, it is going [...] so I'm sure that will eventually die out". Mavis acknowledges she does not write letters as often as she once did partly because of the associated cost:

I don't write the sort of chatty letters that I used to write except you know, once a year Christmas time when I do try and write to everybody who's sort of on my list as it were um so as not to lose touch completely...I like writing letters. Yes [pause] I find it easy and it flows and yeah there's no problems there.

Letter writing is the palimpsest of 'old fashioned' modes of communication that has been succeeded by technology in everyday life, but the 'value' of which is yet to be eroded for reserved life events. Perhaps with a tendency for emails and text messages to be brief and orientated towards practical arrangements, the value of written communications such as these is the not their physicality, but rather their reflexive nature and the demonstration of a social skill that is perceived as being relegated to new, unrecognisable forms of techno-sociality such as Facebook.

The Language of Social Media

Social media was a topic touched upon by all participants, with Facebook a synecdoche for all social media. Facebook was the most polarising form of socio-technical interaction, soliciting the most outwardly emotive responses. Only 11 participants had a Facebook account with some of those having a very selective online presence. Facebook was often used for the purposes of (re)connecting with weaker social ties or thought to be better suited to acquaintances or spatially distant family members. A majority of respondents elected not to be on Facebook on the basis of ideological and privacy concerns over the nature, value and spread of information across a broadcast medium. For some, Facebook content was deemed to be inane and irrelevant. Although Helen, had regular contact with her daughters both in person and through email or the telephone, Facebook meant she could readily see photographs of her grandchildren. Helen had only recently joined and recalls:

I was very reluctant to get into Facebook partly cos I didn't want to feel I was spying on them so I resisted it for a long time and then I asked them if they minded and they didn't mind so I'm now on Facebook. I have very few friends by design [laughs] but I quite enjoy it because we can share pictures and things like that so I know more what's going on you know? I know what they're up to without having to cross question them and say 'what did you do today?'

Counterintuitively, Helen finds Facebook an intensely public and diffuse medium but one which affords her daughters greater privacy as they are able to selectively share photographs without her having to request to see them. This highlights an interesting tension with Facebook: feelings of social participation and inclusion are enabled contrasting with the novel notion that a direct one-to-one 'interrogation' is less private than publicly accessed photos.

By comparison, Helen feels her sister who does not use Facebook suffers emotionally as a result. Helen's nephew was at the time travelling through India but her sister was not online and unable to view his photographs and 'status updates':

I think that being online is totally an advantage and I think my sister is really left behind [...] he's got a Facebook page which she can see when she goes to see her friend who's on Facebook but otherwise she can't see so she can't communicate with him and you know, she and I could have daily communication if she was on there.

Intriguingly, Helen's adoption of Facebook has been relatively recent, and despite the recognition that her sister is at risk of being 'left behind' she has not offered an alternative method for their own communication. It is difficult to determine why this may be. Perhaps it is personal to the relationship she has with her sister, or indicative of the significance of Facebook as a socio-cultural phenomenon that supercedes historical means of communication. In keeping with Helen's experience, Lindley et al. (2009, p.1698) in their study of older adults' attitudes to keeping in touch with others found that the new technologies gave people "the ability to gain insights that might not otherwise be easily obtained". The insights Helen obtained from Facebook were deemed otherwise unobtainable as social networking had no "analogous form of communication" (Lindley et al., 2009, p.1699).

Henry joined Facebook almost a decade ago (prior to retirement) but found few of his peers were also users at that time, but as people joined and with more time in retirement, he became a daily user accessing Facebook multiple times a day through his mobile phone and home computer: Facebook was his primary means of contacting people over and above email, texting or telephone calls. Henry's initial interest in Facebook was spawned by an overseas trip where he made a post about his location and consequently a former student he taught in the 1970s invited him to dinner at his home with his family. It was a unique social and touristic interaction that Henry felt would not have been possible without Facebook, as it incorporates people on the periphery of social networks in a more direct way. Speaking of the interaction Henry explains:

That's encouraged me to do that obviously every time I go somewhere [laughs] although that hasn't been repeated [laughs] that particular experience but that was very interesting so I thought 'oh there's something in this' [...] I mean if I was a friend, a proper friend then I'd obviously have his contact details and know that he lived there [laughs].

In his statement, Henry recognises the limitations or tenuousness of some Facebook connections. They are not considered 'proper' friends but he still derives a sense of social engagement from such interactions: "There are some people who I'm only on Facebook with, sort of this so called 'friends' you know that are really acquaintances of course, people you only vaguely know or whatever" but through the direct messaging application on Facebook there is the limited potential "that can then lead to chatting and then interaction". This is very important to Henry who expressed pleasure and value in being able to reconnect with past colleagues and acquaintances and the diversity of people now broadly included within his social network as a result.

Facebook also led to other ritualistic behaviours for Henry. Every Wednesday he goes to the cinema and out for lunch with his "Wednesday friend" and after each movie he puts a film review on Facebook and "lots of people seem to like that", serving as a self-affirming behaviour and opening up new spaces for further engagement with those in his network or as a regular link to sustain weak social contacts. Clearly evident in the experiences of Henry are new forms of sociability that have only been made possible through the advent of social media, this includes a greater number of social connections across a more geographically dispersed network. Although not all such 'friends' on Facebook were strong social ties, it provided a sense of social connectivity and perhaps even more importantly, a sense of being able to foster tighter social connections and develop existing loose ties further. Facebook provided a link to the world beyond his home and immediate friends and family. Although not specific to Facebook, R. Hill et al. (2015, p.416) found, as was the case for Henry, "those older adults who spent more time using the internet often had a larger computer mediated social network and, this in turn, promoted feelings of connectiveness".

Connections to the past were also a reason in common for Terrence and Irene to become involved with Facebook, proving useful for locating old school friends, organising school reunions, sharing old photographs or for sharing information about the death of acquaintances or former friends. Interestingly, although Irene enjoys Facebook in this capacity, she constructs herself as an audience member, standing distinct from those with whom she is 'friends'. Irene's experience is worth recounting at length and she states:

I refuse to put anything on Facebook, what I'm doing and I don't want anybody to track me, 'oh I saw that you're now on holiday' and things like that because with Facebook I think there's a lot of jealousy we find especially [...] Facebook only brings those people that are successful together. Those that are not successful will not join Facebook [...] so Facebook is only you really think of it, it's only for successful people [...] and if you put a lot on there then people tend to think 'oh my they're just showing off' or 'oh another holiday' or anything like that so in a sense you find almost the same people putting the same things [up], the rest of us are just keep quiet, are not doing anything [laughs] [...] and I try not to have my children as my friends...when they were, I say 'I don't want to know what you are doing, you do what you want to do' and that's it and I don't know what you're doing and you don't know what I'm doing and that's fine [laughs].

The statement by Irene reveals many complex and often competing emotio-spatial outcomes arising from Facebook. Emotions discernable in Irene's narrative include feelings of defiance, jealousy, competition, monotony, distrust, an invasion of privacy, exclusivity and empathy for the 'unsuccessful'. Not all of these emotions are felt directly by Irene (some are recounted on behalf of others), nor are they felt simultaneously. Nevertheless, Irene is representative of the transmission and transmuting of emotions through the platform of social media felt differently in different spaces and places. For instance, when Irene travels on holiday, she feels conscious of a desire not to post anything on Facebook due to how her being at those particular destinations might be perceived by others.

Yet despite Irene's perceived benefit or enjoyment of Facebook evidenced by her continued participation on it, Irene actively constructs her position as a passive, distant viewer by stating that "I refuse to put anything on Facebook" and "the rest of us are just keeping quiet, are not doing anything". For Irene, the position of audience member seems to be less problematic or emotionally troubling than one of active contributor (for example, through the publishing of status updates or uploading of photographs), assisting her to safely navigate the emotionally difficult online terrain and absolve her from the perceived bad behaviour of others. Some participants have suggested that due to the spatial dislocation, technology facilitates this type of emotional avoidance by not having to directly confront those with whom you are (inadvertently) communicating. Is it this voyeuristic detachment that means Irene remains engaged, as she can look away and disengage at any time to avoid any potential emotional discomfort? Her contradictory behaviours could otherwise be explained by the fact the strategy of 'audiencing' is adopted as a means to protect her spatial privacy by limiting the ability of Facebook and its users to trace her (often global) movements.

Irene's experience also reveals broader emotio-spatial complexities and feelings of ambivalence that participants felt in general. The notion of Facebook as a 'broadcast medium' and a 'scattergun' approach to communication was central to their ideological opposition for some. Relatedly, privacy was also a concern, with Facebook non-users most concerned about the spread of information, even on behalf of unknown others such as teenagers whose use was often thought to be inappropriate. This created a clear intergenerational divide between older participants and younger (strangers). Mark has:

Never understood Facebook, Twitter, or any social media and I don't want to so I've resisted it, I've never even looked at it and it sounds dangerous as far as I'm concerned...so I just don't find any of that attractive [...] and I don't feel it's secure [...] I mean when kids are on it [Facebook] and they say things when they're 13 years old that can really cause problems 20 years later because it's all there, stored away.

This was a repeated sentiment, that as older adults they did not 'value' such modes of communication and correspondingly, the value younger people did place on them was deemed misguided. Echoing this, Nigel states:

It's broadcast which I don't know what value it has [...] it has value to some people but it has no value at all to me[...] you know maybe if you're younger it's not quite so foreign but I don't like broadcast.

The implication was that individualised communications are of more worth coupled with a generalised concern about the inability of younger people to conceptualise the geographic, temporal and social vastness across which social media posts could travel, be stored and available to view at any time, by anyone.

This reaction against social media was on the basis of being broadcast mediums. The exchange of emotions pervades all social relationships, but within the sphere of (public) social media "practices of sharing intimate thoughts and emotions within networked publics appear to contradict the feeling rule of secrecy and exclusiveness in intimate relationships" (Köhl & Götzenbrucker, 2014, p.516). Established and socialised normative cultures are in the process of being renegotiated and redefined relative to the new forms of techno-sociality that are arising. The manifestation of such a flux was met by a concern about the effect on human relationships. This for Jeff and Marion was somewhat troubling reconciled against their own positive experiences of using Facebook. Jeff initially aligns himself to that of other participants speaking about the "broadcast" notion:

Obviously you can alter controls and put limits on but essentially that is a new technology whereby and again not just a younger cohort but a range of people use that to communicate a photo or an issue or a bit of news or a message or whatever but it's a scattergun approach you know? Subject to the limits you put, it's broadcast and every other channel of communication unless you do something to make it otherwise is one-to-one and I often think that you know some people, and maybe it's just an old persons kind of gripe, some younger people, don't really fully appreciate the broadcast notion of what's put on Facebook completely, you know? I can see it's got advantages in that you don't have to use, now what's looked on often as boring old email individually or to group people into a message you just put it all up there and if your friends see it and they want to do something about it and join in or whatever, they will and if they don't, they won't. So I can see that that economy of communication is quite useful. I spose the point that I was making there was just about that, the notion of the broadcast communication versus the more individualised communication...I've got a Facebook presence but I personally I can see the value for a lot of people there's just so much sort of chatter that I don't particularly want to use it too much. But interestingly I had to reconsider my views on it a few months ago I used the Facebook page of a Spanish care hire company to bring to bear a bit of leverage on how their pricing policy was operating and I was quite pleased about.

Facebook went beyond having a social value to having a direct economic value for Jeff. Whilst Jeff had only ever had positive outcomes and interactions using Facebook, the *perception* of how other, namely younger, people used it created an adverse reaction and resistance in him to engage. Vroman et al., (2015, p.157) attribute this to "the strong general mistrust of ICT and high levels of concern that ICT social networking will diminish or even replace their valued face-to-face human interactions" but also found similarly to Jeff, that positive personal outcomes on social media led to diminishing concerns and corresponding feelings of connectedness.

Marion similarly speaks at length about an antagonism between older and younger members:

I find Facebook a bit inane sometimes but again I fully accept that's just generational thing. It worries me that mainly younger people are prepared to put so much of their life out there and I do think that's gonna come back to haunt some of them but because they all do it they don't see any issue or anything wrong with it [...] but lots of things like putting pictures out there and maybe when you go for a job in a few years' time, all employers look on Facebook now or most of them do don't they? And a lot of bullying can go on but equally I have found it useful recently for example, for one of the deaths in our family it was really useful to manage to contact people and we set up site so that everybody could feed into that one thing and that was a definite brilliant use of it because it was all in one place for everyone to put all their memories or find out about arrangements or information for speeches and things. So that was a really good use so I do dip in and out.

Evident is that Marion like Jeff, is undergoing a process of reconciling populist interpretations of the intrinsic value of Facebook which were strongly segregated by age, against her own beneficial personal experiences. Latent in both the narratives of Jeff and Marion is the idea of a lack of 'emotional' appropriateness as to what becomes public knowledge or shared on Facebook. Facebook proved inappropriate for Frances

and Mark when experiencing the bereavement of a friend, though it had been shared on Facebook with others making comments, sharing memories or expressing sadness surrounding such an event:

I think there are some things that are, it's not an appropriate medium to use for example, expressing your feelings on learning that somebody has died you know [...] I just don't think it's an appropriate way of responding to a situation like that [...] I think it's a bit shallow...[it is like] I think you should send a birthday card not send a text. I think that's got more meaning (Frances).

Frances refers here to the 'shallowness' of Facebook and thus the absence of the personal or emotional intimacy, but the act of expressing highly personal feelings seems equally disconcerting for her. Implicit in both of the narratives recounted here and much like Irene, is the emotionally uncomfortable position one adopts as a 'viewer' on Facebook. When is one simply a passive viewer and when is one an active participant? What should be shared on Facebook and when does it transgress the boundaries of appropriateness? This ambiguity and the sense of complicity that is felt in simply viewing a post, which they may or may not agree with, creates a discomfort or simply a disinterest for many participants.

This raises a particularly interesting question about the role of Facebook generally, the state of flux that cultures of emotion are undergoing and the role or experiences of retirees as part of this. It is supposed that online or third places "provide a context for sociality, spontaneity and emotional expressiveness" not always possible within the material places in people's lives such as at home, work or in public (Köhl & Götzenbrucker, 2014, p.514). For many this is viewed as a positive development as it is seen as the opening up of a new space for emotional expressiveness regarded as imperative for the formation of emotional intimacy and friendship, thus facilitating social connectedness. For those who do not directly, or only partially engage with social networking sites such as Facebook, they too felt they were being entrenched within the process. This has significant implications for the emotional lives of older adults who are entangled in these new cultures, with the emotional and communicative experiences of older adults having a mutually constitutive relationship on how participants live their ageing bodies.

The Visceral and Sensory Aspects of Technology Use among Participants

This section will explore the visceral and sensory aspects of technology use as it relates to ageing and being old. As has been established, the socio-biological processes of ageing had highly individualised meanings for participants, which were overlain by a multitude of visceral sensations related to language and communication in complex and ambiguous ways. As previously outlined it is methodologically difficult to try to identify specific feelings and sensations as induced by using communication technologies, however some participants did use certain words and expressions, or depict physical actions that have socially and commonly accepted meanings and values; for example the act of a hug or the word 'anger' are in their most simplistic form accepted as being positive or negative expressions of emotion and potentially bodily actions (for example a hug requires physical contact, usually in the form of an embrace with the arms). The following demonstrates for some participants, namely those who used portable or wearbable technologies or were more frequent users, that the boundary sensing of body or 'human' and other or 'in-human' was re-drawn accordingly.

As a means of eliciting some of the bodily sensations associated with or formed by shared intersubjectivities with technology, participants were asked about the types of words and images associated with friends and family and the types of emotions they feel when they see people in person or what they miss about those who do not live close by. Responses suggest it was not *communicating* per se but what might be considered the associated *bodily expressions* that were of consequence. Participants reported missing "laughter" and "affection" (Joan, Mark), the "physical contact hugs" (Helen), that seeing people in person made them "generally appreciate human contact" (Joan), that it would be "difficult to live without human contact in some form" (June), that "although we have internet and telephones nowadays is the closeness what I miss most" (Veronica) and that without human contact "life would be isolation and depression" (Joan). Felton (2014, p.14) draws on Massumi to suggest that it is the notion of human contact in a visceral form, the "the sense of touch that forms part of the intensity of emotional engagement", whereas technology-based communications are generally considered to be dehumanisng and less satisfying by comparison with face-to-face interactions due the lack of (human) touch. Terence and Irene agree citing for them the difference between seeing people face-to-face as opposed to using technology was the feelings of "happiness" and "touch" "obviously being better in real life". From this, it is possible to suggest that the defining characteristic of seeing people face-to-face is the visceral sensation of touch: it is not the absence of a sense of presence that is lamented, with presence able to be fostered in a myriad of ways, but the absence of touch. As will be elaborated on, this is not to say that electronic communication technologies do not have a tactility and materiality of their own.

As Maclaren (2014, p.95) emphasises, we have all tried to imagine what it would be like to be without the sense of sight or hearing and "often enough we do try to imagine it, and sometimes we can effect a temporary shutting down of all sight or hearing. A lack of touch, however, seems almost unimaginable". How is it possible to encounter a world without being able to be touched or touch? Maclaren (2014) suggests the value of touch is not the assumed emotional connection it engenders between bodies, but rather touch is the means by which one's bodily boundaries are sensed. Nor does this require a particular type of 'touch', but the multiple and quotidian acts of "touch, in any human situation, can help incarnate us, draw us into our bodies to realize our intertwinement with and differentiation from others" (Maclaren, 2014, p.101, emphasis in original). Touch is context specific too for it matters who is enacting what kind of touch as to the sensation and emotional or bodily impact it has (Maclaren, 2014). It is not that touch is absent from technology use rather a different type of touch is enacted. The use of technology replaces human touch with the touch of a technological device. From a cyborgian perspective, the integration of technology and new forms of touch, and potentially the loss of old forms in the lives of participants, precipitates the destabilisation and restabilisation of the boundaries of self such that technological objects become part of the bodily limits and sensing. To return to Carol's earlier made point about listening out for the 'ping' her computer makes to signify the arrival of a new email, she states:

I cannot exaggerate what an important element of daily life it is. It's to the point where I do make a daily practice of turning it off at night because I want to break my dependence through the night.

The 'ping' of the computer exerts an agency in Carol's (emotional) life. The computer has been positioned in the centre of the lounge so she is able to listen out for the 'pings' and when she hears one it captures her attention and draws her to the computer so she

is able to read and respond. However, Carol exerts an agency of her own when she mutes the sounds of the computer at night choosing not to be disturbed by the 'pings'.

The sensations and emotions felt during the individual encounters depicted by participants are part of a broader network and interaction of emotions across temporally and spatially variable scales. Those emotions felt by participants 'in the moment' were relational to past happenings or future concerns: single emotions were not felt as a constant. Joan said she felt love and affection when she thought about family and friends but also "anxiety about their future in a developing world that frightens me". Joan does not make mention of what specifically frightens her in the context of her family although did make a range of comments during the interview about the socio-political issues she feels society and younger generations are going to be confronted with. At the time of our interview in April 2015, there was an impending UK General Election to be held in May of the same year. As an openly Labour supporter, Joan expressed great fear about the incumbent Conservative party colloquially known as 'the Tories', being re-elected into power. She remarked "I've never been so scared about that". Joan feared the ideological direction the successful re-election of the Tories would result in, both for herself, her peers and her grandchildren's generation. Joan's fears were predicated on looming social care cuts and how this would impact on the ability of older adults to receive the care they require and to remain in their homes.

Because people talk about the immediate cuts, they don't think about the long term implications of keeping people in their home or whatever they're, this whole thing about old people being a burden, old people being [inaudible] people are like me, we're not a burden, we're giving back to society in all sorts of ways!

For Joan there was a sense of a breach in the social contract between self and society, reflected in a shifting politics and a (neoliberal) policy approach to ageing populations that has been steadily gaining traction since the 1980s, aimed at eradicating 'social dependency' (Biggs, 2001, p.308) and supplanting it with self-reliance. Joan carried the feelings of fear, anger and the sense of being a burden, very personally. The opposite concern was true for her grandchildren; whilst worrying about how to keep herself and peers *in* their homes, Joan worried about her grandchildren *not* being able to *leave* home. A London-centric concern but relevant nonetheless as the site of this research, Joan was anxious about the affordability of housing and the prospect that her

granddaughters may not be able to afford to leave home resulting in them "living very closely, almost exclusively, with their parents and they're going to find it hard to separate", potentially affecting their longer term ability to form relationships outside of the family, gain independence and develop emotional resilience.

Assuming these are the types of societal trends that 'frighten' Joan, the dynamic interplay of such emotions at any given point and their expression becomes infinitely more complex to disentangle. How does a pervasive long-term ideological concern manifest itself consciously or subconsciously in a moment with her family when she is feeling 'love' and 'affection'? Or are each felt separately for example, as the conversation ranges from different topics, or when Joan meets with her family in a range of different spatial settings, does this bring to her consciousness different ideas and concerns? Furthermore, technology added yet another complicating dimension for Joan who said that the emotions she feels when using technology are "apprehension and feeling a Luddite!". For example, how might personalised feelings about her own (bodily) technological capabilities prevent or inhibit other emotions, such as those she feels about her family and friends, when she is writing or receiving an email from them?

Joan was one of several participants who acknowledged that inter-personal relationships often evoke an array of emotions, including those more negative or confronting. Marion when *thinking* about friends and family listed the words "supportive, love, laughing, fun, kind, hugs, noisy, argumentative, sulky, divide and rule". By comparison, Marion felt the difference between seeing people face-to-face as opposed to using technology to communicate with them were feelings of the "real or non-artificial, excitement, loving, upset, anger and attraction". Touch again resurfaces for Marion with 'hugs' a key component of the importance of friends and family. Viscerally, the words and images Marion connotes with friends and family also conjure certain sensory impacts of not only touch (hugs, supportive, love) but also noise (noisy, argumentative, laughing, fun) and of silence (sulky). These are emotions which as depicted by Marion, become more intense or essentialised when mediated by technology: love remains (and becomes coupled with attraction) but "laughing" and "fun" become translated as "excitement" and "argumentative, sulky, divide and rule" correspond to "upset, anger".

Frances and Mark also related some negative sentiments with family and friends. For Frances what came to mind were "images of their faces and a huge array of words especially warmth, energy, enthusiasm but negative words too reflecting the complexity of our lives" and her husband Mark, also thought of "concern" as associated with family and friends. Rita adds one of her least favourite aspects of keeping in touch with friends and family is "having to negotiate 'a middle way' when faced with conflicting political or religious beliefs" which she felt was "emotionally and naturally taxing, now in my 90th year" thus representing the physicality of emotions and how they are experienced at the bodily level. Although such insights do not necessarily contribute anything novel to our academic understanding of emotions, the views expressed by participants such as Joan, Marion, Frances and Mark, reaffirm the multiple ways in which emotions and be transmitted and transmuted, between bodies and as mediated by technology. Many of the emotions described by participants have a visceral or bodily *feel* to them, emotions become personalised to participants through the way in which they are interpreted and felt, but they are not necessarily personal to participants; many of the emotions labelled as having a palpable form are also shared by, and circulate between (not always present) others.

The historical specificities of Mavis' relationship with the materiality of different modes of communication and technology are of relevance here. Garde-Hansen and Gorton (2013) contend that people are used to sharing their emotions with technology, citing television viewing as a long-held shared intimacy. Each mode of communication or technological interaction leaves a palimpsestual residue, with each new technology requiring a renegotiation of the terms for sharing both body and emotions. For most participants of this research communication technologies have been in existence for proportionally less of their lives than their younger peers who they perceive as more ready adopters of such technologies. Their experience of being human, of experiencing touch, and of having and enacting certain bodily capacities is different. In Mavis' case, her relationship with technology has always been uneasy; when her husband was alive this was exemplified by her general physical avoidance of the telephone, which she described as "stultifying". As Mavis has aged and new technologies have become available, her sense of relationality to both objects and time has changed, such that it could be said she and computers do not share the same contact zone. Mavis attributes her troubling relationship with 'objects' and 'things' to two factors. Firstly, Mavis lives with her adult son who by her account refuses to throw items out and she feels her house has become overrun with his possessions, leading to general desire to declutter and not accumulate 'things'. Secondly, as Mavis' sense of time is running out and she feels she is nearing death, it is people and experiences (expressly not objects) that matter most to her:

I think it's because they're [people] are the only sort of constant [pause] um yes you weigh thing up towards, towards the end of your life and you, you find that it's people always that are by far the most important, especially family.

Perhaps the implication of Mavis' statement is that objects and technology are by comparison in a relative state of flux, and that the materiality of 'things', including technology, encumbers her relations with people. Her advice for life at the conclusion of our interview was "don't waste a second of it", emphasising the critical relationship to time Mavis has as an older woman.

However, it must be noted that Mavis' remarks do not by default imply the materiality or visceral sense of communicating was unimportant to her. Mavis was increasingly faced with the reality of not being able to disregard certain shared, technological intersubjectivities in order to keep living daily life and manage professional and service relationships:

Mavis: Wherever you go, whatever you do you know it's all, it's all online now. I

mean I have a financial advisor organisation and they send out once a month a sort of newsletter and, about how things are going, and only the last one that I got last week they said they're not going to do this anymore you're going to have to be online and they're going to do it online, for obvious reasons um and I, I thought well, oh they asked for my email address and I

thought 'well do I really want this?' [laughs]

Interviewer: Another one in the inbox

Mavis: Yes [laughs] and I haven't done anything about it since and then I thought

you know, every organisation's asking you to be online whether it's shopping or information or legal stuff or whatever, insurance. It's online,

online, online.

Mavis is undergoing a process of having to decide the value of certain communications versus having to learn, use and become constrained or encumbered by her desktop computer, representing a new form of shared intersubjectivty between herself and her computer. It is clear that for Mavis this is not a straightforward re-negotiation or process of re-stabilising the boundaries. Mavis feels uncomfortable using the computer but risks losing some personal and business connections if she does not become a more competent and adept user.

Braun (2004b, p.271) muses that the image of the post-human figure conjures for some the idea of 'free play' that since "the body is no longer 'itself' perhaps any and all experimentation is acceptable", meaning some participants are more at ease with the idea of shared intersubjectivities between self and technology. Conversely for others like Mavis, it can engender a desire to safeguard what is perceived as 'human' and a more cautious approach to using technology. Booth (2010, p.23, as cited in Garde-Hansen & Gorton, 2013, p.69) adds to this that the internet is a 'mind-set' which "represents a substantive alteration in how we conceive of the socialization of information", a shift that Mavis notes makes her feel vulnerable. Jeff also remarks on the temporal and spatial encroachment of technology on people's lives and bodies through the advent of potentially being contactable anywhere, anytime. Moreover, he notes that although "the facility's there [...] unless you want to be a 100%, 24 hour man or woman available to all then you've got to impose limits [...] consciously or unconsciously applied".

The spatial context of Mavis' home patterns her technology use. She has an old, second-hand desktop computer that sits in her office, so to be forced to have most of her communications email-based would confine her to that room. Whereas in her lounge there is a landline telephone, her comfortable chair in which she can read, the fireplace and a sentimental picture of two cats who have a striking resemblance to her own "two boys". Mavis tells me she acquired the picture through a friend who was house and cat sitting for her at the time when she: "was driving past one of the charity shops and she saw this in the window and she jumped [laughs] off the bus [laughs] went it and got it. She thought 'that's just, those are the two boys'". As I went to leave her home at the conclusion of our interview, Mavis collected that day's mail which included a lovely pink envelope with a hand written card. Mavis' face lit up with sheer delight as she inspected the card to assess the handwriting to see who and where it was from telling me she didn't "get many of these anymore". The contrasting experiences of Mavis and the emotions attached to receiving emails as compared with a physical, colourful, handwritten card emphasised the emotive tactility and materialities attached to certain forms of communication. It could be that the rarity of receiving a card affords it a certain emotional significance or it could be its physical differentiation from other mail (that it was colourful and handwritten as opposed to typed black text on a white envelope). However, a general inference can be drawn from this participant group that certain emotions are seen as needing particular materialities.

Sending greeting cards were cited by many as being the only form of communication that would be a sufficient response to certain emotionally heightened events such as birthdays, bereavements, at Christmas and as a means of saying thank you. It was felt by some that sending an email in such circumstances did not carry the emotional gravitas warranted for such occasions, and yet this is a contact zone that was seen as becoming almost exclusively occupied by older adults and would in time 'die out'. Ruth offers "I think letter writing has more or less gone by the board" for herself and others, apart from maintaining some shared rituals of sending postcards on holiday to a select few friends. Edward said, apart from Christmas cards, "I don't think there's very much letter writing going on, not from our end". Helen wrote selected letters to older friends who were not online and was both sending and receiving fewer and fewer letters on which she reflects:

I used to love getting letters but now, I remember people writing to us. I mean I write to you know some older friends [...] But mostly, not unless someone's died or something. I wouldn't send an email about it, I would write a personal letter but in other circumstances no, no. I mean it's quite sad actually that letters are going out of fashion.

Oddly enough, although Helen likes to receive letters and feels sad that the art of letter writing is dying out, she attests that letter writing is problematic for her as she has "terrible writing and people have trouble reading it". Computers and the ability to touch type offers Helen an alternative more legible medium through which to communicate.

Marion and Carol both spoke of their habit of storing old letters, emphasising the changing materiality that a shift from letter writing to email can represent as Marion reflects:

I spose the art of letter writing has gone really hasn't it? Which is a shame I think, I've always kept my old love letters but I spose [...] on the whole people don't write letters they'll use email and everything's short and concise, maybe because people don't have the attention span.

The notion of cyborgian subjectivity arises again with Marion commenting that "people don't have the attention span" required to write long emails as they once might have a letter. Marion's comment is suggestive of the idea that computers change something of the psychology or physiology of the brain, such that "computers don't

just do things for us, they *do things to us*" (Turkle, 1995, p.26, emphasis added). Not only does a person's attention become distributed across different windows allowing "a computer to place you in several contexts at the same time" (Turkle, 1995, p.13), this can occur simultaneously across multiple technologies. Similarly, Carol reflects on the way she stores both written and email correspondence and although she does not 'do' anything with it clearly 'does' something to both her and her interlocutors:

Carol: My nephew when I met him this summer says that he really values what I

write, he thinks I should save it. Well I don't, I recognise that it's an important channel of self-expression and sharing and the showing that I care and staying in touch with people but I don't think it's worth saving it up, I rarely look back at our email correspondence. On the other hand I know what he's talking about because I'm really loathed to delete any correspondence from them, even if it's trivial it means the most to me, those relationships

mean the most to me.

Interviewer: I guess it's like letters in times gone by where people would always keep

letters wouldn't they? Or correspondence? Written correspondence often got

kept in families.

Carol: It's the same, it's the same and if I showed you under my bed you know and

some bags here and there, it's hard for me to, I actually have correspondence going back virtually to all the years I've lived here, It's very hard for me emotionally to discard correspondence and, and in effect the same is true [of

email] even though the feeling is completely different of the medium.

Carol's phrase "the feeling of the medium" highlights intersubjectivies that change across technologies, including the technology of pen and paper, as people move through different contact zones. Such contact zones are both temporally and spatially contingent with Carol occupying different contact zones throughout the course of both her life as she has shifted her communications from letter writing to emailing, and as she moved from the United States to London and became geographically distant from family. Both Marion and Carol lament the lessening of a certain tactility through the loss of tangible, material communications that they have collected and stored over the years, but which has now almost ceased as technology has come to prominence.

Historically a range of communication technologies have been available and utilised at any given point, dependent on a person's position in time and space, for the purpose of effecting a sense of emotional closeness and bodily presence. Contemporary communication technologies allow this to occur across a more fragmented communication landscape and condensed time-space continuum. It is worth noting that epistolary correspondence, one of the more enduring modes of communication that preceded communication technologies, despite having a tactility and materiality also did not enable human touch, nor was it able to approximate the aural or visual senses

in the way technologies such as the telephone or internet do. Yet letter writing remains embedded as a hallmark of authentic and attentive communication for many participants (Licoppe & Smoreda, 2005). Although not a letter writer himself, Jeff says:

I guess I take the general point that a lot of people make that there's something very personal about writing a letter, that you've had to take more time and care and you've had to post it in a box and [pause] you've invested arguably, more of yourself into that communication.

Jeff perceives that "what an email lacks in terms of the personal care and attention and trouble" it could be compensated for by way of frequency — more regular communication being a substitute for the less frequent hand written letter. There are different movements and mobilities involved in letter writing, from sourcing the necessary materials and producing it, through to posting it and the letter itself making its way through the postal system. Ironically, although technology-based communications like email are perceived as having 'sped up' correspondence, it has concomitantly 'slowed down' others such as postal mail:

Sam: The cost of post now is you know, ridiculous

Barry: When you pay First Class which is supposed to be if you took the, if you

drop your letter in by 11 o'clock on that day it's guaranteed the First Class delivery the next day. Sometimes it won't turn up for about three weeks later

Interviewer: Yeah

Sam: Victorians in London had deliveries four times a day!

Richard: Yeah

Interviewer: That's pretty extreme!

Sam: Only one day of the year did they not have any post.

Not only was postal mail faster and more frequent relative to other modes of communication that pre-dated it, it was in actually a much faster and more frequent service than that which is provided now.

More recently telephony, both landline and mobile, has been readily assimilated into socio-technical communication infrastructures and "its enhanced connectivity erodes the advantages of physical proximity" (Warf, 2013, p.224), and as aforementioned by Jeff with regard to email, the frequency of contact enabled by the telephone gives rise to increased social cohesion. Of the technologies available to participants, alongside email, mobile and landline telephone communication was the preferred mode of keeping in touch with friends and family. This was because participants used complex technology selection processes for any given interaction predicated on, for instance, where they were, where they thought their interlocutor would be, the associated cost

of an interaction, time of day, day of the week and what it was that was being communicated. The ubiquitous nature of telephones meant that even if it was not the preferred mode of interaction for participants themselves, they still used the telephone (landline or mobile), because it was a probable way they would be able to contact friends or family. Thus the telephone remained part of their communication repertoire. This ready assimilation of telephony over electronic communication technologies is suggestive of the importance of the socialisation of technology. To return to Hillis (1998, p.544), "humans set technology in motion, but it too, in fulfilling expectations, also has the potential to introduce unforeseen changes to social relations and practices". Said differently, the purposes and effects of any given technology are not pre-defined, but rather contingent, contextual and multiple. New electronic communication technologies must become part of a broader repertoire of communication tools and practices that is perpetually being reworked in relation to both the self (human) and all other technologies (objects) in an individual's repertoire to maintain the cyborgian subjectivity. As reported by participants, each new device or communication platform is not added exclusively nor is its full functional capability necessarily utilised, and over time, in tandem with other communication modalities and strategies, a new communication practice becomes integrated in to an individual's communication infrastructure (see Licoppe, 2004).

Body Language (Spoken and Unspoken Communications)

Closely associated with the visceral and bodily sensations of socio-technical interactions is body language. Body language represents a fundamental intersection between the socio-biological construction and experience of bodies and language. Licoppe (2004) posits that when humans interact the words or content is in the 'communication', and the expression or non-verbal bodily cues form the *context* of such communication. These contextualising systems of expression have over time come to be understood as constituting a 'language' or dialect of their own called body language. Body language when communicating with others transfers "information about their emotional states through multiple nonverbal cues such as facial expressions, body postures, touch and voice" (Lima, Alves, Scott, & Castro, 2014, p.145), which has embedded within body movements, gestures and noises, many of which are involuntary and occur on both cognitive and subconscious planes (Licoppe, 2004, p.136).

A long held criticism of technology is that it decontextualises and removes this complex system of body language, diminishing people's ability to accurately and authentically interpret verbal or spoken language and concomitantly reduces the enjoyment derived from communicating with others (see Felton, 2014; Garde-Hansen & Gorton, 2013). Participant opinion was divided on the significance of being able to at least see, if not be co-present, with another's physical body. At one end of the spectrum June felt that being able to see someone's face meant it was "easy to 'read' the mood expressed facially or in their body so [the] satisfaction is stronger than IT" although technology-based communication did not make such socio-technical interactions devoid of delight. Frances maintained a high level of both seeing people in person as well as using technology to keep in touch. Frances felt that although the two could be used to complement one another, technology would never act as a replacement:

Interviewer: Is there any particular reason? Is there something that's different about the

face-to-face for you than just the email or just the WhatsApp? Is there a

different kind of quality or enjoyment to it?

Frances: Well I think you can have a more, well the nature of the conversation is I

mean, if it is a face to face communication ordinarily it's more, I would say it's just more fulfilling. You can have a more detailed, and you can see somebody's responses, which is very important when you're communicating with somebody and it's more spontaneous. If you write an email you might change what you're saying, you might read it back and then change it, so it's

very different I think.

Frances used many descriptors to reveal what it is about face-to-face interactions that she appreciates: the naturalness that it is more "fulfilling" and "detailed" and interactions are more "spontaneous". This reveals that much of the importance of body language is the sense of *dialogue* it establishes between two people. Frances is not simply 'reading' her interlocutor's body for discrete gestures or expressions, rather each verbal utterance within the *context* of *multiple* expressions of body language form a cohesive subconscious conversation between interlocutors. Coupland (2009, p.852) affirms, "communicative acts are only partially determined by their linguistic forms". Taken in isolation, singular words and phrases can be meaningless; it is through the sense of *dialogue* established that meaning is inferred. The detail and spontaneity that Frances refers to arises from a continual and subconscious exchange that arises between proximate bodies, albeit if such bodies are not in close physical proximity, they may share the same virtual communicative space.

Moving towards the other end of the spectrum, Susan found body language more circumstantial and in her capacity as a volunteer for an advocacy service, using the telephone was harder than being in person with someone as you lost a whole lot of visual cues that might be relied upon more heavily when interacting with strangers. Jeff by comparison thought most people, including himself:

Find it better to have a face-to-face or on the telephone where I can use consciously or unconsciously a whole range of strategies to try to, and I don't mean this in a manipulative way, but you know it's a more natural process of how you learn to communicate, how you influence, how you raise your voice, lower your voice, how you will joke or not joke, [or] how you will put yourself in someone's position.

Jeff graded different technologies, as having hierarchical purposes and outcomes and his selection was contingent upon whom he was contacting and for what reason, and varied across different temporal and socio-spatial settings. While Jeff preferred seeing people face-to-face or speaking with them on the telephone, interestingly he did not like using video-calling technologies such as Skype of FaceTime, technological interactions many others found more natural and satisfying. Jeff states, despite understanding the:

Jeff: Enhanced involvement that that brings it's just not something that I tend to

use myself so much you know? I'd be more likely to speak to someone over Viber for free you know? That's what I'd be more likely to do but that's maybe because I know so well a lot of the people, they may be family or even in the case of my brother or my son, I don't invade, I don't feel a need for that face-to-face bit. Is that a generational thing or not? I don't know.

Interviewer: Maybe it's something to do with the relationship you have with them as in

they are very longstanding relationships and presumably quite close so,

Jeff: [overlapping] yes ah, I think that

Interviewer: [overlapping] perhaps you know them well enough to interpret-?

Jeff: [overlapping] I think that sounds a more compelling comment for me more

than anything else. I think because I've got the intimacy, even with friends that I've known since school, they're the sort of friends, I'm fortunate to say,

the ones who I can just pick up like that you know? And just call and meet them or whatever so yes maybe but you see there's a danger that I'm saying well just because I don't need the face-to-face confirmation or affirmation and animation that, that would bring to it doesn't mean to say that those are not bonus features that would add to the richness of the exchange, I don't

know, I don't know.

Jeff seems uncertain about how to interpret his own emotions, his reluctance or disinterest in using the video-calling features. Jeff almost goes so far to say that the use of such features 'invades' the space of others, acting as a portal protruding into the homes and lives of the recipient. This is an interesting remark coming from someone who is self-proclaimed, "tech savvy", and it could therefore be presumed he is aware

of the many different functionalities that applications such as Skype have, and thus can control their degree of invasiveness. More importantly, this shows the delineation between 'public' and 'private' space has become blurred by technology with private spaces, like the home, at risk of exposure to the 'public' world through visual technologies like Skype (Adams, 2011; Licoppe, 2004). Carol in fact refers to her Skyping as 'visiting' remarking "I do Skype visit" and that she and her cousin "we like visiting with one another", emphasising the feeling of Skype as allowing people to virtually enter one another's homes.

Jeff also stimulates us to consider the idea of sustained intimacy, that over time Jeff has built up a feeling of intimacy with long-term friends from his childhood and with family that are not always reliant on fully contextualised socio-technical or interpersonal interactions. This is aligned to Tan et al. (2007, p.78), who found in the context of their research examining the role of language in Singaporeans' participation in online political discussion boards:

When a situation involving patterns similar to past events occurs, existing schemas are activated. Consequently, there is a higher tendency for a person to evaluate a message or its speaker heuristically based on past events, instead of using high-level cognitive processing to make attributions about the current subject of consideration.

In other words, participants such as Jeff are able to draw on emotional memory and past experience of how people within his social network have previously reacted in certain social situations without needing to see them or be co-present with them, and is able to adjust his own emotions and responses accordingly. This also reaffirms why it is that participants such as Susan found it less satisfactory communicating with strangers via technology where body language cues may be diminished, as there is no emotional memory to draw on.

Implicit in Jeff's experience is the idea that people accrue person specific knowledge about body language. For people with whom there is a longstanding or intimate connection, Jeff agrees that even with reduced body language cues he is still able to contextualise what is being said by drawing on his emotional and embodied memory. This is consistent with Joan's experience who simply by speaking on the phone with her adult children is able to determine much more about their state of being:

Joan: If I speak to my children I can tell immediately on the telephone what mood

they are in what, what's happening, whether things are ok.

Interviewer: From their voices?

Joan: And with other people but particularly with my children I'm much more

aware of it. I may well ask a question and they stay silent. You can judge the mood by voice so much more...so you know it's very interesting really, the

use of adjusting.

Joan demonstrates intricate person-specific knowledge based on voice alone and will alter how she interacts and responds accordingly. Further compounding the efficacy of technology use within the context of close friends and family is Hertlein's (2012) concept of cumulative intimacy wherein not only do particular modes of technological interaction approximate face-to-face interactions but also the frequency of interaction cumulatively creates a greater sense of intimacy, as reported here by participants. Scholars such as Licoppe and Smoreda (2005) and Healey, White, Eshghi, Reeves, & Light (2008) also highlight that technology use can often be determined not by geographic distance, but by how emotionally or intimately close one is to a given friend or family member.

At the opposite end of the continuum, Dennis shared a deep concern that reduced face-to-face contact may have long-term implications for society as a whole. Whereas Joan and Jeff, over an extended period of time, had attuned themselves to the body language and specificities of the communication practices of those in their familial and social networks, Dennis feared this could be gradually eroded from familial and societal structures. As a teacher who had been involved in education extensively throughout his life and again now as an adult student:

I find non-verbal communication key. Social psychologists argue 70-80% of communication is non-verbal, obviously sounds, tones as well as body shape and looks etc. matter. I remember having someone shadow me who was going blind who wanted to teach, he realised the students didn't put their hands up or ask to speak, I just looked at whoever non-verbally had communicated to me that they wanted to say something and I find we miss out a lot by communicating on social media. Young people will chat to each other on their mobiles even when physically together. I think we may have a generation of children who lose the bonding of parent and child as parents chat to their phones rather than their kids.

Dennis was one of several participants who had noted and cited the reduced interactions between parents (primarily mothers) and children when in public and on public transport, again highlighting what is often termed the 'dehumanising' elements of technology. Dennis' opinion reflects a commonly held view that "CMC [Computer-Mediated Communication] is seen to lack regulating feedback, status and non-verbal cues, personalization, and social norms" (Tan et al., 2007, p.78). Dennis perceives

there are limited equivalent or effective communicative practices associated with technology as compared to face-to-face interactions, yet has a heavy reliance on technology himself owing to his limited mobility. Such views are consistent with what Vroman et al. (2015, p.157) suggest, is a "strong general mistrust of ICT and high levels of concern that ICT social networking will diminish or even replace their valued face-to-face human interactions". However, it should be noted that fears decreased with people's increased personal use of technologies for social networking sites. This once again invokes notions of the human as needing to be safeguarded against encroachment by the non-human.

Helen worried about the deliberate bodily and emotional obfuscation that the concealment of body (language) might enable people to enact. Where the maintenance of privacy is concerned this is usually a positive attribution of technology, but as highlighted by Dennis above, there can be unintended consequences, the impacts of which are not immediately apparent. Marion too worried that a lack of body language or co-presence could lead to a greater chance of *miscommunication*; that the decontextualisation of words might mean those listening or interacting with people over socio-technical mediums might misconstrue the intended context. Referring to her experience of using email in the workplace Marion recalls:

I spose it depends on what it is and the person really. Some people you might need to be a bit more careful than others. But it is interesting sometimes because it's [email is] so quick I think it's the instant-ness of it that a) a lot of people feel you have to respond immediately, which they don't and certainly at work people feel emails have to be responded to immediately and they don't really, but yeah because you're not making eye contact and you may not know the person very well sometimes people can misinterpret the tone and that is because you're not seeing them or hearing their voice, for some people.

Like Susan who found that the lack of body language made it harder to understand the verbal utterances of some people, Marion highlights firstly, that in the same way that not all electronic communication technologies dull or remove body language in its entirety, that bodily co-presence is not synonymous with people being able to effectively interpret body language. She felt that a difficulty in deciphering someone's body language could lead to a misinterpretation of it and felt sometimes she needed to be 'careful' to avoid this. Secondly, Marion found the *transferability* of the meaning of body language problematic. A particular tone of voice or gesture as expressed by one person, can take on a different meaning when expressed by another or within a different socio-spatial context. Moreover, McIlvenny, Broth, and Haddington (2009,

p.1881) also alert us to the fact that body language and "social semiotics and studies of visual communication suggest that semiotic modalities are richer than once thought, and their complex interrelationships are not necessarily hierarchical". Whether or not Marion could make eye contact or see someone's gestures or hear their voice did not necessarily make a difference as each utterance or expression of body language has limited meaning outside of its broader context.

Co-Presence in Virtual Spaces

The proliferation of technology is yet another such means by which humans try to facilitate bodily co-presence when faced with absence, an aim shared by the participants of this research. For the majority of participants who had family or friends residing in distant locations, the mobilisation of their personal networks and available frequency of connections engendered by the adoption of communication technologies led to a renegotiation of the notion of bodily 'presence' and 'absence'. This is not to say that all absent others always wished to make themselves 'present' through the portal of the virtual, and vice versa. However, communication technologies more generally have led to the emergence of a new form of socio-technical 'absence' and 'presence', that of 'connected presence'. The notion of presence or absence has come to reflect a shared sense of emotional engagement, not simply the location of a physical body. Those modes of communication that afforded participants the greatest sense of 'presence' were text messaging and increasingly email (as the cost and boundary between the two lessens and blurs in the age of smart or internet-enabled phones). Take June who would sometimes send short text messages to enquire how family were or to let them know she was thinking of them. Although a text message remains a highly asynchronous form of interaction, as it is not occurring in real time and therefore allows for the editing of information before sending it with the response similarly constrained, June was not necessarily seeking any direct real-time exchange with the person whom she was messaging:

June: No it's just lovely to keep in touch with people and why I like emails and

mobile is because if the person you're contacting is busy at work and it's not their lunch hour, doesn't matter you don't have to answer straight away. On

the landline they had to stop, they do, and you feel you should.

Interviewer: Otherwise you might miss them and they don't know that you've tried or-June: [overlapping] yes, yeah where with a mobile the message is there when

they're ready and often people text you quite late in the evening 'oh I saw

your message this morning' and I like that idea.

When sending a text message June is not always seeking to speak with someone, nor does she have any particular information to impart; instead June likes the idea that emotional ties with others are maintained through the expression of a thought or feeling. This type of phatic communication has become the hallmark of connected presence and the deployment of a cyborgian subjectivity (Licoppe, 2004). June's text messages communicate an intent or emotion that fosters a sense of presence, not physical but with one another by being in their thoughts. Communication from this perspective is about attempting to capture someone's attention, and to claim a presence in their lives and enable mutual attentiveness to the relationship, that "the idea is that communication technologies compensate for distance and help to re-establish relational proximity threatened by geographic separation" (Licoppe, 2004, p.139).

For some participants the effects of connected presence expand beyond moments of discrete connection such that, there are barely any moments of a sense of emotional absence, as described by Frances and Mark:

Interviewer: Do you find that when you do see friends face to face, what you might say

or do together is altered because you've got quite a lot of contact with them in the meantime? Because you're in quite frequent contact when you do see

them you already know-?

Mark: Yes, yeah, absolutely

Frances: Mmm

Mark: In fact, there's no need to see them [laughs]

Interviewer: [laughs]

Frances: [laughs] yes, I think that's right so the women I go running with, we would

have had a series of you know, a sort of on-going conversation you know, during four days and then we will see each other and you're kind of up to

date [pause]

Here, Frances is referring to her running group with whom she has a group conversation on the messaging application WhatsApp where the members share frequent, communal messages with one another about both organising their next group run as well as other information about life in general. In addition to fostering a heightened sense of social connectivity, (text) messaging when used in this way "is frequently used to lubricate and engineer meeting face-to-face. In this respect, texting suspends the transition from inner thought to outer world" (L. Thompson & Cupples, 2008, p.99).

Text messaging was often used in this manner as a prelude to or prompt for face-toface interactions and for physical re-connection, and to inform people of specific events that might have happened. Marion refers to this social lubricating as 'short circuiting':

Yeah no sometimes it [text messaging] can short circuit it, so if something happens you might text someone and say 'oh this has happened' or 'oh I've got a new job' whatever it might be and then when you meet then you'll talk about it in more depth whereas I spose before it might only be in an emergency you'd pick up the phone and talk to people.

Marion would use text messaging to let friends and family know about specific newsworthy events so that when she saw them next in-person, they were already informed about happenings in her life, which they could then discuss further. Conversely, where Frances and Marion used this form of connected presence to maintain constant conversations with friends and family, Nigel used a similar strategy to overcome periods of what might be termed 'disconnected' presence from his extended family. Nigel reported using text messaging with family members to regain control of, and appease guilt over, the communication process when lapses had occurred (L. Thompson & Cupples, 2008). Speaking of the emotional impact of text messaging Nigel explains:

Well I think it, I mean it alters it for me. I am always concerned about 'oh my God it's been a month since I've been in touch with them' if I were to meet them face to face straight away I would be feeling 'oh dear it's such a long time since I've seen them, I've been really bad here, this is awful'. If I text them first and say 'how are you? How's it going? Sorry it's been such a long time, let's meet for coffee soon', when I meet with them then I feel it's much more, the relationship is as the relationship was.

If Nigel had let contact lapse for a period with family members, he would use text messaging as a means to make the first contact which enabled him to transition from a feeling of absence to presence. As with many other participants, although Nigel gives the example of asking how people are this too can be interpreted as a form of phatic communication as he it simply seeking to establish a type of emotional link, as opposed to garnering information. Lindley et al. (2009, p.1694) report that such interactions are a "type of contact that supports intimacy being low in informational content, yet laden with emotional significance".

Interestingly, Frances did add that "there are things that we wouldn't talk about on WhatsApp, for example, things about our children and how they're doing you know personal things, I wouldn't commit it to WhatsApp". Frances' reluctance to commit the 'personal' or specific emotions to a text-type message is emblematic of a number of participants' views. This is an interesting tension given friendships offer what

Cronin (2014, p.76) terms "ontological security" whereby it is perceived as safe to share emotions within such relationships. Notably, this space does not seem to extend into the domain of communication technologies for Frances, with her sense of ontological security disrupted, representing the way in which in-human actors, like technological devices, become complicit in older adults' ability to relate emotionally with others. Although participants were aware of the increasing trend towards 'connected presence', they used it selectively for themselves and tended to utilise text messaging for micro-coordination over hyper-coordination. Campbell and Park (2008, p.375) make the distinction between the two on the basis that micro-coordination "entail[s] instrumental uses of the mobile phone, such as coordinating basic logistics, redirecting trips that are already under way, or making plans with others entirely 'on the fly'" and hyper-coordination refers "the expressive and relational dimensions of mobile communication, such as chatting with family members or occasionally checking in with friends via text messaging" (see also Vroman et al. (2015).

Marion was one of several participants who was critical of people whom she perceived as using technology for the purposes of hyper-coordination, but was aware of her own complicated position as someone who would often message her nieces living overseas and considered her iPad to be her "partner in life":

Marion: Now you know it's not uncommon that people email each other sitting next

to each other or as I say my neighbours upstairs they're emailing each other rather than talking about it which I do find bizarre I must admit but I think that is the way we're all headed so I think I'm not sure that distance or space

is necessarily important now

Interviewer: It's more about the relationships or the person for example or?

Marion: Well it depends doesn't it? If it's you know a lover or somebody, you know

a more intimate thing you might just want to hear their voice or to just talk to them or something so yeah it can depend on the person and circumstances.

The statement made here by Marion raises the question does a (technologically) connected presence occur at the expense of a disconnected present? Are people able to maintain multiple different connections over temporally and spatially variable scales? Campbell and Park (2008, p.378) term this 'absent presence' which refers to "being physically present, but mentally and socially elsewhere". Again, this problem of absent presence did not seem to be an issue for the way in which participants used technology themselves but was sometimes problematic for how they encountered or experienced other's bodies.

Participants' inclination not to become micro- or hyper-coordinated with friends and family in this way also altered how others encountered their bodies. Although said in jest, Dennis recounts how when speaking with fellow classmates prior to a lecture recently, the tutor found it odd that they were speaking face-to-face with one another, rather than directing their communications to each other via technology:

Dennis: I mean one interesting thing, we were sat, there are a couple of classes I go

to where we normally get there an hour or half an hour in advance to just sit and chat and the tutor was saying 'this is not right you know, you're sitting face to face, you should be all using mobile phones like normal people to talk to each other get a making make and ring each other we' [laughed].

talk to each other, get a mobile phone and ring each other up' [laughs]

Interviewer: Yeah [laughs]

Dennis: And you see people on the bus talking to each other across, there was a

couple of girls the other day and one was saying 'look at that' and you know

I, what's wrong with face to face conversation?

The idea of communication increasingly needing to be mediated by a device raises a new set of questions about the role of technology as both a tool for communication and as an extension and fragmentation of the human body across dispersed and potentially dislocated scales and locations. Köhl and Götzenbrucker's (2014) interpretation of this dynamic sociability of emotions and technology is that emotions are regulated by 'feeling rules', or socially acceptable practices of sharing emotions, which encompass both the vocabulary used to do so through to the spaces and places in which emotions are shared. Moreover, these 'rules' are informed by broader societal trends giving rise to generational differences as to what is deemed acceptable. It is not that some modes of communicating are any more effective or satisfying than another, simply participants (such as Dennis) are adhering to a different set of 'feeling rules' than their younger peers.

Conclusion

As was established in Chapter Four, the socio-biological processes of ageing had highly individualised meanings for participants, and as Chapter Five has elaborated on, the experience of ageing in an era of greater technologisation of society has meant that participant communications, emotions and bodies have come to share greater kinship with technological devices. Participants of this research represented a unique generational shift whereby most had experienced the introduction of technology in the workplace, impacting on how technology was socialised in participants' lives. Many participants spoke of the process of learning to use and adapt to technology, namely becoming computer literate. Language skills were required for, and deployed

differently across, technological platforms dependent on participant preferences for written, verbal or face-to-face communications. The (re)formulation of language impacted upon the ability of respondents to relate emotionally with technological devices and people, with not all technologies interpreted as having the same emotional effects. The example of the language of social media was discussed, with participant opinion divided on the emotional appropriateness of, and new cultures of emotion that have arisen from, platforms such as Facebook.

From a post-human perspective, the latter part of the chapter examined the shared intersubjectivities between the human and more-than-human, resulted in different emotional geographies of ageing for some participants. For example, Carol re(ordered) the micro-geography of her home around being able to hear the 'ping' her computer made to notify her of a new email. Listening out for the noises of her computer became part of Carol's bodily sensing and limits and the 'ping' of the computer exerted an agency in Carol's (emotional) life. The computer was not merely a conduit for being able to relate emotionally with others, Carol's cyborgian subjectivity meant that, as theorised by Ahmed (2004), her relations of 'towardness' with the object of the computer itself, formed part of Carol's emotional geographies. The next and final empirical chapter will look beyond dyadic relationships between participants and technological objects to form a more cohesive view of participants' networked relations across time and space.

Chapter Six: Networked Relations

Where previous chapters examined how ageing and technology coincide, this final chapter will probe how technology and ageing bodies come together to enact sets of networked relations that vary across a range of temporal and spatial scales, particular types of emotional ties (e.g. kin or non-kin ties) and how the experience of place changes in relation to technology use. Firstly, familial or kin-based networks will be considered. Although diverse and multiple in form, primacy was given to discussing the role of family in participant lives in the context of this research. Secondly, friendship or non-kin based networks will be discussed. As compared with kin-based networks, non-kin networks were more variable in their composition and types of socio(technical) interactions. This was perhaps suggestive of the changing role of friendship in post-modern societies and the spatial distribution of family members, with many residing outside of London (Budgeon, 2006; Cronin, 2014). As equally instrumental as friendship was a third complementary network, those that often coalesced around shared interests, geographic proximity or technology related learning and support networks. These networks were distinct for the way in which emotional (and to an extent spatial) boundaries were monitored and isolated from familial and friendship based networks, yet were no less emotionally significant.

The final section of this chapter will investigate how as independent, community dwelling older adults, all participants of this research can be considered to be ageing in place, engendering certain notions about the nature of participant relationships to their home, neighbourhood and city environments. Here technology can be seen to be disrupting long-held conceptualisations in the geography of ageing literature about the form and function of the places of ageing. It was found that the use of technology to make and maintain connections with those in participants' personal networks has consequences that extend beyond affecting their social network composition and has a profound effect on how participants use time and space, which impacts on the emotional qualities of daily life. From this perspective there was a technological regulation of participants' emotional lives through the possibilities and constraints technology enables.

Familial Networks

Familial networks were spoken about in preference to any other relationships, perhaps being due to their (historically) more normative form and the naturalisation of blood and genetic ties "as the natural foundation of the social" (Nash, 2005, p.450); it is easier to isolate family from other forms of sociability and interpersonal relationships. Equally, Licoppe (2004, p.138) states: "a relationship stretches over a period of time that exceeds individual interactions. As it develops it is distributed in a multiplicity of contacts and situations...each of these mediated interactions reactivates, reaffirms, and reconfigures the relationship"; with family often subject to the greatest permanence. Participant connections with family were a highly individualised and complex amalgam of text messages, messaging platforms WhatsApp or Viber, email, landline or mobile telephone calls, Skype, Facebook and seeing each other face-to-face, with each mode of communication deployed using highly intricate strategies of selection and implementation. However, there were some consistencies regarding the affordances of technology. Utilising technology for the purpose of contacting family was perceived as increasing the impetus to do so and providing another channel through which people were able to communicate with family. In almost all instances, the use of technology was seen as supplementing as opposed to replacing, face-to-face interactions. Henry states of his technology adoption:

No I wouldn't say it's replacing, no. Yeah that's an interesting question [pause] no I don't think it's replacing the contact, it just means you're more likely to make contact because you haven't got to think 'how long have I got' you know? You can send them a quick text and ask them a question or tell them something. So that's certainly very useful.

Henry reported he most often texts his three adult children, all of whom live in close geographic proximity to him and his wife, followed by email and least often telephones. Henry elects to contact his children through written (as opposed to verbal) means of communication, modes often accused of lacking emotional depth. Crucially, Henry makes reference to using multiple technology platforms to make contact with his family, which has been associated with reflecting stronger social ties.

Henry perceived there was a greater motivation to communicate with his family via technology because he did not have to become entangled in social interactions beyond *his* set purpose and could manage the interaction to fit within both *his* temporalities and spatialities, and what knowledge he had of theirs, at any given time. Irrespective

of where Henry might be geographically and the amount of time he feels he has, he is able to send a text message. Nigel too considered where someone might be and the purpose of the communication, before deciding how to initiate contact:

If they are likely to be at work they're unlikely to be reading their personal email and I want to communicate with them there and then or 'are they're at work, this isn't really very important, I'll email it and they can read it when they get home'. So yes, I do take into consideration where they are and what they might be doing, that's a good point.

This is a well-documented tenet of mobile telephony; "owing to its portability, the mobile phone separates interlocutors' accessibility from constraints of location, at least theoretically" (Licoppe, 2004, p.137). Family networks become portable for those with mobile telephones through the linking of the telecommunication networks that enable such technologies with participant information about the geography of family members' lives. Family relationships, such as those with adult children or spouses, are able to "retain their levels of intimacy and affect despite geographic distance" (Felton, 2014, p.13) or geographic dislocation, thus enhancing the ability of participants to relate emotionally with family across a diverse range of temporal and geographic scales.

Technology use also facilitated direct connections with extended family members. Sam has a partner but no children of his own and all of his siblings, three sisters, live in his hometown 200 miles outside of London. Sam's uptake of technology meant he now had available to him different types of interaction that altered the temporalities of each familial relationship and the spatialities of his daily life, spending an increasing amount of time at home online each day:

Sam: My eldest sister I'm in contact with on Twitter and Facebook and by phone,

probably on a weekly basis. My middle sister I'm in contact with by Facebook and phone about once a month. My twin sister bizarrely I have the least contact with and generally we exchange comments on Facebook. So,

my contact is largely via computer really

Interviewer: [...] but before those things came about how were you keeping in touch with

your family who are further away? Has it changed how you keep in touch

with them or?

Sam: Well I mean I'm more in touch now. Well there's two things that have

happened one is I'm more in touch through the internet, so more regular contact. However, I make less visits. So I was going there two or three times a year? Last year I only went once and I had been going there more often so

it has changed.

Interviewer: Do you find because, as you mentioned you Facebook and you can see

pictures of things, is it similar to seeing someone in person? Or what would

you say are the benefits or pros and cons?

Sam: In some ways because I'm not that involved in the family so to speak, all my

sisters have got children, and their children have got children, they've got enough to do without me getting involved so I'm just watching from a safe distance and on Facebook it tells me when their birthdays are, what a fantastic thing and I can say 'Happy Birthday' job done. I send my sisters cards and presents but for the rest of the family, I can watch from a safe distance, they don't want to know really what I'm up to but they can look on Facebook if they want but I can see what's going on, it's quite interesting.

So you can kind of select how involved you want to be? Interviewer:

Absolutely, yeah Sam:

For Sam, technology increased the portability of such networks by allowing him to selectively engage in family life at a distance from London and also expanded the number of social ties he has with family members. Sam constructs himself as both an emotionally engaged audience member intermittently participating in family members' lives through the medium of Facebook, whilst sometimes opting to selectively retreat to a position of observation. Interestingly, Sam's social network has increased in geographic scale in virtual terms, with familial contacts dispersed throughout the country but has in turn decreased the extent of Sam's physical geography as he makes less frequent trips to see family members face-to-face. This was in some respects a purposeful reduction, as Sam expressed he was of limited financial means and with the cost of national train travel increasing, technology offered an affordable alternative to keeping in touch with family. Indiscernible from Sam's narrative is the emotional relationship he has with the *physical place* of his hometown and the impact his diminished trips to visit relatives has on this relationship.

Other participants also stated that technology increased the incentive to contact (extended) family and simultaneously reduced the transaction costs. Susan and Marion were able to keep in touch with nieces and nephews where they previously may have only been able to contact them through their parents, or not at all. Particularly for Susan, whose niece lives in Australia, her introduction to WhatsApp by her family meant she was able to message her niece directly despite time-zone differences and at a drastically reduced cost. At similarly expanded scales, Edward and his wife adopted a combination of cost-lowering strategies in order to communicate with their son living in Australia. Edward's preferred method was Skype as "it's always just nice to sit and talk literally face to face and ah we can also you know if they're feeling a bit guilty about something you can tell". Edward's statement speaks to the idea of shared and stretched emotions dispersed and connected across contemporary family networks, which sees a greater propensity for children to move away from home. However, timezone differences between London and Australia, combined with his son's busy work schedule, meant it was often challenging to know when he would be home and he was not often caught on a chance call. Telephone calls also remained expensive comparative to other communication technologies as his son only has a mobile telephone, so "I now go through one of these cheap calling cards, it's about 5p a minute or 0.5p a minute or something cheap so as it sort of line it up" in advance and ensuring that the cost was kept to a minimum. Hazel, a recent adopter of Skype, also found it a much cheaper alternative to telephoning which "cost me a fortune" and used it to keep in contact with her older siblings and adult nieces and nephews overseas. The lowered cost of communications driven by a deregulated and increasingly competitive telecommunications market, means there exists a greater potentiality for communication to take place (see Warf, 2013; Vertovec, 2004).

In addition to sustaining already established family ties, participants acted as intermediaries brokering new intra-family connections. Joan has two adult daughters with families of their own, one who lives in London and one outside of London. Her eldest grandson now attends university in London and:

He's not very talkative and he's got exams but I would send him one line [email] messages just to keep in touch and he'll send me one line back and that's fine and when we get together we make up for it.

The advent of email has provided Joan with a new avenue of communication through which she is able to directly contact her grandson, and would even email her 12 year old granddaughter in Sussex to enquire about important events such as exams or concerts. Consistent with other participants, Joan did not deem email a replacement for face-to-face contact, but it presented a new opportunity for enhanced interaction with grandchildren. Of equal delight to Joan was her ability to forge greater connectivity within her family, managed logistically via technology:

Interviewer: Is that instead of, before you were sending him those messages would you

have sent anything to him or you just wouldn't have had that level of contact

with him at all?

Joan: I probably wouldn't have the contact with him. I always spoke to him but it

was through parents you know? Now he is individual and he's an adult now, which is lovely and same with my granddaughter but not quite so much. They live in London but the same process. They tend not to phone me they tend to email but I do see them [pause] and what's nice is I've got twin granddaughters whom they hardly knew their cousin, my grandson, other than through their parents when they were younger and now he's in London

they come to me and they meet up there so that's lovely. Done, arranged by the internet.

Through email Joan liaises with her grandchildren directly to organise meeting together at her home so they are able to get to know one another better. Interestingly, it has been argued "grandparents associate geographical distance with infrequent and less meaningful contact with their grandchildren" (Dickinson & R. Hill, 2007, p.615; Harwood & Lin, 2000), yet this does not seem to apply to Joan irrespective of the geographic location of her grandchildren. Significantly, this research suggests participants reflected an intensification of emotion within family networks through facilitating both inter-generational and intra-generational links, with technology acting as the vector for emotions to be connected and shared.

Although the emotional outcomes of technology were viewed positively, the processes of adopting and integrating technology devices or platforms necessitated the (re)negotiation of a participant's entire communications landscape. June's family, for example, reside outside of London meaning that the majority of her links with them are asynchronous and occur across dispersed geographic scales with fewer opportunities to see them in person. June had been using email and a landline telephone until she was forced to move house in 2014, when the older adults' sheltered accommodation she was living in was closed down. Due to an increase in rent, June has to claim housing benefits to afford her new flat and therefore could not manage the additional cost of a landline telephone or internet connection at home. Consequently, June's granddaughter, when visiting from Scotland, persuaded her to get a mobile phone to compensate and so as not to lose connectivity with her family. June went through a transitional phase of learning to use and integrate the mobile phone into the rhythms and routines of daily life, which is now complemented by emails when she is able to access her account though publically available computers at local libraries. June's summation of her familial network is as follows:

When she's [my granddaughter's] coming to visit she sends a message on the mobile or email um if it's urgent, like 'I'm coming in a couple of days' it'll be mobile [laughs] if it's just 'next month we're coming, me and my husband' you know that sort of thing then [email]...One [son] doesn't want me to do email because it goes to him at work um the other one is the one who comes to see me now and then, brings the grandson and things and stays overnight once or twice so he would mobile, call on the mobile not message, call me. To say 'we're coming tomorrow is that alright' or 'we're coming the weekend' so that one does. Another one has only got a mobile so I send him a message 'are you alright?' and he just says 'I'm ok'. And I write letters when something big has happened like telling them about relatives or me moving or something, I would write a letter.

Evident in June's statement is an intricate knowledge about each of her family member's preferences and purposes for different modes of technology use and communication, which has a degree of temporal and spatial variance. For example, when June receives a text message she is able to predict that it will be one of several select people such as her granddaughter, who may be coming to visit at short notice, or her son messaging to ask her how she is. This is in contrast to when she receives a phone call on her mobile from her other son, who uses this as a mechanism to notify her that he is coming to visit at short notice.

Interspersed amongst June's communication practices were emotionally poignant routines and rituals. The sounds and images (such as a text message notification) that might appear on June's mobile phone most often preceded the notification a family member was coming to visit her. Associated with this type of interaction was a temporality and a spatiality. For example, a text message means that family members may be arriving at her home very soon. By contrast, one adult son has requested she does not email him for concern that it would be accessible, shared or viewed with colleagues at work. June does not elaborate if this is from fear of a lack of privacy or fear that it would be seen as inappropriate to use a work email address or work time in this manner. June adopts her own method of signifying events of emotional significance to her sons through letter writing. June frames this as a method for "when something big has happened like telling them about relatives or me moving" but it is safe to make the inference that these are usually written under negative circumstances. In light of June moving and her limited financial means, the emotional and social labour of relating with family and friends was for a time strained until the new technology of her mobile phone was acquired, learnt and integrated into her communications repertoire, and the concomitant loss of readily available email and internet connection was compensated for.

Whilst June managed to integrate the mobile phone positively into her familial network, it detrimentally affected her ability to connect with friends. June successfully uses her mobile phone to contact family within the UK, but not for contacting friends overseas. June explains, "I email to the friends who are abroad or write letters. But not mobile because I don't know would it fly there? And would it cost more? I don't

understand how it would work". June also still writes letters for specific occasions to certain people; for example, her old neighbour who does not live in London and whom she is not able to visit on account of her limited mobility. Of those friends who live locally to her in London, two of the three friends do not have email but she is still able to use the bus to visit them with outings arranged over very brief mobile phone calls: "they just phone and I say 'yes, I'm coming Saturday' or something". June's friends do have landline telephones:

But they tell me off, 'why did you cut your landline? I don't like mobiles' and one of them for a long time thought that she couldn't phone me from her landline to a mobile and then she found out that 'oh yes you can I gave you the number' 'oh' and then when she found out she still didn't want to do it because it's, it's more expensive of course. So I'm lucky that I can just see them.

Although June's narrative may seem ordinary, even mundane, it is deeply significant for the way it reflects how technology enables not only the portability of social networks, but also the *continuity*. Ageing in place literatures suggest that moving home in older age can be deeply disruptive to the affective bonds that a person forms, potentially over a sustained period of time, to both the physical place of the home and broader social contexts such as the neighbourhood (see Lager, Van Hoven, & Huigen, 2013; Wiles et al., 2012). Yet the proliferation of communication platforms and technologisation of society mean that June was at no point emotionally dissociated or distant from family. June was not dependent on any single mode of communication and each mode could be enacted at different physical sites or through different platforms such as letter writing, mobile telephone calls or text messages, and email. Although communication would have been made easier through an internet connection at home, June was not dependent on it. For example, June managed to locate and negotiate affordable public points of email access at libraries. Additionally, whereas previously a landline telephone was connected to a physical property, her mobile telephone and email address are entirely portable. This suggests that even limited or basic technology use in retirement can greatly benefit the ability of older adults to keep social networks intact and emotional connections with family, continuous. This builds empirically on the ideas put forward by Boyle et al. (2015, p.1505) who argue ageing in place often focuses on the maintenance and continuation of bonds to the physical spaces of ageing and in fact, for many older adults it "is the ability of place to support meaningful relationships" in old age that matters most.

Beyond mobile telephones making familial networks portable, for some participants mobile telephones were generative of any entirely new mode of emotional connectivity termed hyper-coordination. To elaborate, when June receives a text message from her son asking her how she is, her response is always "I'm ok" irrespective of how she is actually feeling. Campbell and Park (2008, p.376) argue that this is not necessarily as problematic as might be assumed because the simple act of these repeated and frequent acts of hyper-coordination "strengthens the personal bonds of social network ties". A number of other participants reported using mobile telephones for the purpose of both hyper- and micro-coordination, particularly with their adult children or spouses. On the day of Nigel's interview, we met mid-morning and he described "I've already had a couple of texts from my daughter...and same with my wife, I mean I've already had about three texts with her [my wife]". Nigel was engaged in a constant interchange of text messages with multiple family members throughout a typical day, on account of the unobtrusive, low cost and portable nature of mobile telephone communication. Nigel comments that much of this text message interchange occurs when he is on the train but similarly he emails when at home, although "of course with smart phones you don't tend to distinguish between text and email really". Modes of hyper- or microcoordination mediated by mobile technologies as a form of emotional bond is yet to be examined in relation to retirees with few comparable forms of communication predating it; for instance landline telephones would not usually be used in this way. It is an area that is predominantly researched in reference to teenagers (see Cupples & L. Thompson, 2010; L. Thompson & Cupples 2008; Park, 2015); however the social and physical spaces of ageing are markedly different to the lifeworlds of teenagers so although limited inference can be drawn between such work and this research, it is an area that could be usefully extended.

The use of travel time for the purposes of communication was not uncommon. Frances remarks she was initially resistant to adopting new technologies but younger colleagues over time persuaded her to, which altered how she used transit time across London:

It was younger colleagues who insisted that I got a smartphone because I was resisting and I said 'look I just want to make phone calls and send texts' of course as soon as I got my smartphone I was wedded to it. I don't know if sometimes I feel, I do think I'm a bit [pause] addicted in that I do, if I went on a journey I would find that I was checking to see if I'd had

responses to emails or any new emails coming in which isn't necessarily a good thing, I think you should have time when you're not communicating with anybody.

Despite an ideological resistance to always being online, Frances still found herself seeking a heightened sense of electronic or perhaps emotional connectivity that she describes as verging on being "addicted". Returning to Edward, two of his three adult sons lived in London and one still resided with Edward and his wife, with whom text messaging was frequently used for the micro-coordination of daily household activities:

I'll give you an example of contact with the kids [pause] so you get all these things 'are you eating at home tonight?' 'No I'm out.' 'Are you doing this?' 'Are you eating here tonight?' 'Oh I'll be at home for dinner' 'sorry, we're going out' and you get all this so it's all 'are you...?'

Even when travelling overseas, Edward found his desire for frequent contact with family did not ebb and whilst on a world tour last year, no matter what country he was in

There's a signal it's quite amazing, you're in the middle of nowhere in India and there's signal or in Australia, so it's made a huge difference [compared with] 15 years ago or something, just staying in touch, know what's going on, some reassurance.

For Nigel, Frances and Edward time is also a factor, not only with respect to the frequency of contact, but also the speed of dissemination that makes such hyper-coordination feasible. This has significant consequences for an individual's engagement with space and time, complicated by the differential relations retirees have to both as compared with some of their younger, employed interlocutors.

However, forms of hyper-coordination and the socio-technical promise of being contactable anytime, anywhere, is dependent upon the individual. Licoppe (2004, pp.137-138) notes, "we cannot equate (technical) accessibility and (social) availability". This is true for all interpersonal relations, not just familial networks. Having access to technology did not automatically equate to participants feeling inclined to interact with family members more frequently or for more prolonged periods. Technology "allows you to decide how involved you want to be" (Susan). While Nigel, Frances and Edward derived value and emotional reassurance from it, participants such as Joan or Helen were more reticent and used technology selectively. Joan and Helen expressed that such hyper- or micro-coordination was

counterproductive to maintaining familial ties. Joan, not a mobile phone user herself, observed an overreliance on, and unfettered use of, technology meant:

I think they [young people] use it too much and they're losing human contact. I don't know about mobile phones but it's reducing communication, not reducing, well it is reducing, but deteriorating relationships within families and within communities. You know when you go on the train or on the bus everybody's got their head down not talking to each other. I saw on the television a year or two ago about a family, each parent, and two children, each had a mobile phone and they were sitting at the meal table and they were all on their mobiles not talking to each other. And another thing that really bugs me is young women who are pushing their prams talking on a mobile phone, ignoring the child, it's really dangerous.

Whilst the above excerpt emphasises how Joan perceives networked relations between families, communities and strangers to be affected by an overreliance on technology, it is also noteworthy for what it signifies about how Londoners' use of technology mediates their bodily interactions with the city and its inhabitants. As highlighted in Chapter Four, public transport plays a pivotal role in the life of older Londoners and technology is often used in transit for the purposes of hyper-coordination and spatial alignment, but in doing so constructs emotio-spatial boundaries between themselves and others. By this it is meant that the use of technology has opened up people's spatial imagination through the accessing of more dispersed and varied geographic worlds (vicariously) through personal communications, social networking sites, blogs, newspapers and other similar websites. Yet concomitantly, as reported by participants, it has seen people in some instances become more selective and purposeful in their use of the city and an emotional disconnection from their immediate physical surroundings. For example, whereas Terence once used to go to the hardware store to find and purchase a tool, now through the Tool Station website he is able to check if an item is available and reserve it in store, online. Only then would Terence make the trip from his home to the store, greatly reducing his incidental use of the city.

With her own family, Helen witnessed her husband:

Just sits on his bottom and reads the paper and then looks at the news on the computer and then looks at the news on the tablet and I begin to hate technology sometimes because it's such a barrier.

This has strong parallels with Mark and Terence who, as discussed in Chapter Four, often elected to sit at home and experience the world through the vector of technology, at a distance, rather than participate in the world beyond the physical confines of the house. The tendency for Helen's husband to stay at home, dominating its social spaces

and technological devices, creates multiple 'barriers' for her. Technology, namely the tablet, becomes a barrier to how she and her spouse interact. The ready access to so much information deters Helen from wanting to engage her husband in conversation or speculation, as he will simply turn to the tablet for answers in preference to engaging in a conversation with her:

Helen: The tablet I'm beginning to hate because he's got his nose in it all the time

[laughs] you know if I say 'oh I wonder what the weather's going to be today?' off he is, turns on the tablet, 'oh it's going to be this' and I think 'I'm

not going to ask you that anymore' [laughs]

Interviewer: Yeah [laughs]

Helen: I'm not going to say anything like that anymore [laughs]

Interviewer: So it's kind of almost you can have a level of too much information in a

way?

Helen: Mmm and, and my son-in-law is just the same you know? You kind of

speculate about something and he's onto his phone and he's giving you the

answer.

Interviewer: Yeah?

Helen: And I, I quite like looking, looking things up you know? In sort of, in books

and things like that [laughs] I don't necessary want one touch, but that's me

I'm old fashioned.

Discernable from her remarks, is that Helen asks questions to spark a conversation with her husband and that such questions are in some ways rhetorical but the introduction of technology into their home has meant they are taken literally. Instead of sparking an interaction of momentary connected presence and pleasure between Helen and her husband, a sense of disconnected presence arises whereby his attention is captured and distributed between the tablet and her. When Helen's husband does use the tablet, he is static in their home and sits in a chair in the communal living space.

Helen continues.

The tablet was originally bought for 'me', in quotes, by my husband so I could download books for going on holiday but in fact I hardly ever get a chance to look at it because my husband uses it.

Helen's husband dominates the tablet to the extent that he subsequently bought her a Kindle Paperwhite to read books on. Having said this, Helen does find that she is more easily able to negotiate using the laptop with her husband and prefers it to the tablet, which can be a bit slow. This creates a spatial segregation between her and her husband as the laptop is set up in the spare bedroom, requiring her to remove herself from communal living areas and become temporarily confined to the spare bedroom. The kitchen is the space in which she would primarily access the tablet as:

I do use the tablet for recipes, if I can wrestle it off my husband. I do actually use it [laughs] although I've got dozen of books, sometimes I can't, you know I've got some particular ingredient and I think 'what am I going to do with this?' and I do find recipes on there but I don't use it [the tablet] very much, very much at all, partly because I can't get hold of it but partly because I don't feel the need to.

It is evident the 'barriers' Helen refers to are relational and spatial. Helen uses the violent symbolism of having to 'wrestle' the tablet off her husband to breach such barriers. The placement of technology within the home, and her ability to access it, delimits how Helen is able to use different communal and private spaces within her home, her ability to relate emotionally both with her husband, whose attention is dislocated between the home environment and other geographic locations accessed through the virtual portal of technology, and with others beyond the home through limited opportunities to access the technology.

When Helen stays with her daughter and son-in-law, who live outside of London, she feels technology use dominates their family life in a way not too dissimilar from Joan's depiction:

They both have their phones there and they respond to them all the time. They cannot switch them off and people just walking along the street, everything. It becomes a barrier between me and them and I've had words with my daughter about it especially when you have young children. I think it's a real mistake and of course the children are the same. They're absolutely mad. I mean I like technology naturally, and I'm not averse to that but they want to be on it all the time and, both my daughters are very good about rationing it for their children, but not necessarily for themselves [laughs] and I have real worries about the effect that's going to have on human relationships...it's the idea that you always have to be contactable is actually quite worrying.

Concerns about the impact of an increasingly 'networked and individuated' society and the implications this may have for human interactions, as expressed here by Joan and Helen, are debates that span the history of technology itself (Köhl & Götzenbrucker, 2014, p.509). This is because technology encourages "the (re)organizing of social relationships and cultural identities, [so] anxiety about the erosion of the meaning of sociality, friendship, and community still prevails in public discourse" (Köhl & Götzenbrucker, 2014, p.509). Perhaps too, Joan and Helen may see the emotional and physical attachments people form with material technology devices as a misappropriation of emotion or a fragmentation of the self split across the body and an increasing proliferation of devices (Köhl & Götzenbrucker, 2014). As discussed in Chapter Five, underlying the concerns shared by Helen and Joan is a

question of cyborgian subjectivity with agency becoming de-centred, intertwined and co-dependent on that of technological objects.

Further, underlying shifts in new modes of being socially available, as well as the wearability and portability of new technologies such as smart phones, are temporal and spatial changes in its use, meaning notions of 'public' and 'private' are increasingly fluid. People could now, from a distance, enter into a (controlled) electronic portal into one's private home through Skype or FaceTime type applications or conversely, conversations once reserved for the privacy of the home were now had in public. Through different bodily and social practices, 'public' space becomes personalised and the type of emotional sharing with distant others once only possible on a landline telephone is no longer bound to the homespace. To avoid members of the public becoming "unwittingly cast into the role of audience member" (Campbell & Park, 2008, p.377) the bodily and social practices that are adopted to demarcate private and public space are what Campbell and Park (2008, p.378) term 'symbolic fences' which, are "constructed through various forms of nonverbal behavior during a phone call, such as turning away from others, diverting one's eyes, and speaking quietly". L. Thompson and Cupples (2008, p.100) also attest to the way in which practices of visibility and invisibility or audibility and inaudibility become crucial to the successful use of portable, digital technologies in public spaces. Clearly, for Helen and Joan their families have not mastered the practices of visibility and invisibility, or audibility and inaudibility, with feelings of intrusion arising from technology use. This is a phenomenon that the current generation of retirees has experienced for proportionately less of their lives than others with mobile technology pre-dating their birth (Sayago & Blat, 2010). Concomitantly it is a phenomenon experienced at a time when older adults traditionally undergo a state of social flux. Retirement can bring the dissolution of work relationships and identities; there is the potential loss of what have historically been stable social relationships, with long-term friends or a spouse dying, and adult children making the transition into partnerships or families of their own.

The transition of adult children to having families of their own resulted in two potential shifts in the (emotional) dynamic between participants and their children. Firstly, for some it sparked a role reversal whereby adult children took on a 'parental' or 'caregiving' role of participants. Richard, feels:

With my daughter that lives local I find that, that instead of her being my child, I am now the child and she's that parent because I've been to the doctor this morning, she made the appointment, she took me to the doctors and she spoke to the doctor. I've listened and obey.

To a degree, Richard feels infantilised and many of the material forms of support he once provided for himself and potentially his children when they were younger, he now has provided for him. Richard has lost a degree of autonomy over his life but at the same time acknowledges he needs greater levels of support at a time when his health is declining. Secondly, particularly where adult children were not proximate to participants, or where there was a concern that participants may be burdening their children, day-to-day emotional and material support was increasingly provided within friendship networks as opposed to within familial networks. Joan discusses the many different and shifting dynamics within her family and the changes that have occurred as a result of her grandchildren reaching their teenage years, and with her adult son who lives outside of London. Joan both receives and provides support as part of the emotional, social and physical labouring of any body:

Joan: I mean I do more with my networks now, than in my family actually [...]

although [pause] because I'm moving this very next year I shall need a lot of help moving, they're offering that help to do that, both on the legal side, on the physical moving side, what to clear out so that's, they're a great help,

an emotional support but I'm also an emotional support for them.

Interviewer: In what ways do you support them, in terms of-?

Joan: [overlapping] well, my son is, is struggling financially but I haven't got

money to give and he wouldn't take it anyhow but as he says 'I know you're always there'. And he will talk to me because he needs to so I'm an emotional support for him and I don't interfere. When they were children, when the grandchildren were younger, I was an absolutely devoted grandmother I would push them and play with them and spend days with them while both parents were at work so we had a very close relationship [inaudible] so that's an emotional connection, so they've grown up with the children knowing me, they say my friend's grandparents aren't like you so

they're happy to have me.

For Joan there have been periods where she has provided greater levels of material support to her adult son, such as caring for his children when they were younger, and there are times when she expects she will receive greater material support from him, such as when she moves into her new co-housing arrangement. However, day-to-day social interaction and emotional support comes increasingly from her social networks with Joan stating she does more within her networks than with her family. Relationships such as Joan's challenge ideas of the role of bonds that tie kin and non-kin relations together, with many participants complicit in the normative ideals of the role and function of familial ties. However, Nash (2005, pp.452-453) critiques notions

of "biological or blood relatedness" and examines the "kin making practices" that constitute the idea of the family and puts forward the alternative notion of geographies of relatedness. The next section will explore in greater depth those types of relations beyond the familial, the emotio-spatial outcomes of friendships, and the role if any, of technology in mediating such inter-personal dynamics.

Friendship and Interest-Based Networks

Friendships have traditionally been differentiated from familial connections for the way in which "these bonds are described as informal, chosen, non-institutionalised, and egalitarian" (Budgeon, 2006, not paginated). Friendships are typecast as the antithesis of familial relations, with family perceived as pre-determined, institutionalised and hierarchical. Friendships are also more heterogeneous in form, yet no less instrumental in their ability to support mental and physical wellbeing "and provide key forms of emotional and practical support" (Cronin, 2014, p.72). As participants' children themselves became adult and had families of their own, selfsupporting friendships took on renewed and different meaning in older age. Illustrative of this is Mavis who by chance came across an art gallery in her local area in need of volunteers where she made connections who she has sometimes come to rely on for emotional support:

I just sort of went in and there was this lovely little walled garden and little Mavis:

gallery with fantastic work in it and very friendly volunteers there and I said 'do you want any more volunteers?' and they said 'yes please' and I said 'right how often and when?' and [laughs] they said sort of [laughs] 'anytime and can you start, next Tuesday?' [laughs] sort of thing and I've been going

there ever since. So it's been very much a part of my new life as it were, yes

Interviewer: And again is that quite social?

Mavis: Yes

Interviewer: Do you find that there are-

Yes, yes and it was lovely. When I had my knee broken and so on and was Mavis:

> housebound, the people used to ring up and say 'can I come and see you' and come over and have a coffee and a chat and so on, you know? And really

sort of kept in touch

That's nice Interviewer: Yes, really nice Mavis:

Mavis greatly valued the emotional support and companionship of her fellow volunteers at a time when she was unwell and housebound. In the absence of a spouse, and with her family "scattered around" with some of her adult children and grandchildren residing in and out of London, Mavis came to rely on the emotional support of those she had met as part of the "new life" she had built for herself after the

death of her husband. Mavis' experience is consistent with geography of care literatures that examine the role of non-kin in providing formal and informal care as an important aspect of linking people emotionally to the spaces of ageing in place (Boyle et al., 2015; Lapierre & Keating, 2013).

Relatedly, Joan emphasised the critical role friendships play in old age and as someone who socialised more with her 'networks' than her family:

Perhaps you're ill or in decline but if you have a good group of friends, one had to have a heart operation, she has no family at all and she was told that she either stayed in hospital and she didn't want to stay in the hospital after the operation, but that she should not be alone at night for at least two weeks so we organised a rota and we every couple of days would go and stay. So that's a really supporting relationship.

The support Joan and Mavis refer to demonstrates that friendships in older age, take on different 'supporting' or caring qualities, especially in the absence of a partner. Joan feels this is of particular significance for women who on average, live longer than men. This is a common trajectory in gerontological and geographies of care research which highlights narratives of material and emotional support provided between primarily family, but also friends, directed at health events or bodily states and conditions considered to be related to old age (see Milligan & Wiles, 2010)⁹. This discussion aims to articulate, apart from emergent research on the role of family and friends in the provision of telecare (see C. Roberts et al., 2012), such research excludes the role of technology in mediating friendship connections. The geographical literature on friendship in old age, much of which has not been updated since the 1990s and often considers friendship alongside neighbour relations (see Jerrome & Wenger, 1999; Wenger, 1990), could be beneficially enlarged by examining the impact of technology in mediating non-kin relations in retirement, where this research makes an intercession.

In addition to the continuation of existing friendships, many participants made attempts to make new friends. Both widowed, Joan and Mavis made active attempts

(Barrett, Hale & Gauld, 2012; Pickard, 2015).

⁹ Specifically, the academic focus tends to be directed at understanding the composition of social networks including the number of social ties (Keating, Otfinowski, Wenger, Fast, & Derksen, 2003); how neighbourhood changes affect 'stable' relationships (La Gory, Ward & Sherman, 1985; R. Walker & Hiller 2007); how relocation, transnationalism or distance from family affects social networks (see Gunaratnam, 2013; Warnes & Williams, 2006); and the propensity for social networks to provide care

to establish new social ties in retirement. This was not always easily achieved as "you have to cultivate friendships and contacts but when you're older it gets harder" (Joan). Difficulty in making friends arose as most participants had traditionally made friendships through school communities that coalesced around having young children or the workplace, with such networks weakening over time. Interestingly, for those who moved in retirement like Mavis who relocated from her home of 41 years to a new neighbourhood in London, and Violet who moved early in retirement to a farm with her partner and returned to London after his death, each move offered renewed possibilities for making friendships. With each move came the impetus to make new friendships sought from interest, social, community or volunteer-based networks. The care and support these women offered and received from those they met through their networks demonstrates a sense of generational solidarity and a recognition of the shared experience of ageing. The discretionary acts of care by friends or neighbours is also an important, established means by which older adults are connected to the spaces of ageing in place, such as the neighbourhood (Boyle, et al., 2015).

The narratives of Joan, Mavis and Violet were exceptionally interesting due to the parallels between their experiences and research conducted by anthropologist Jerrome (1981) over 35 years ago into the role of friendship among retired British women. Jerrome (1981, p.176) theorised that ageing was a time of "rolelessness", with a loss of purpose arising in retirement, and put forward the idea of "friendship as a way of coming to terms with them [the losses of ageing]". This echoes the experiences of Rita and Marion, who outlined the importance of structuring their time and the means by which they actively went about this. Jerrome (1981) observed strong gender differences, and as has been reported in this research, women more actively sought new social contacts, particularly those women who were single or widowed. In contrast, many of the male participants of this research elected to spend greater amounts of time at home or pursue individual, rather than group based, social contacts. Those women who sought to make new friendships were often successful in doing so, much like Jerrome's (see 1981, p.193) work, the mechanisms of friendship making remain largely unchanged, achieved primarily by participation in formal societies or voluntary organisations. The main point of differentiation being, once ties had been established, much like kin-based networks, friendships were shifted 'online'. The only benefit of technology for making new social contacts was through the use of the internet for locating suitable community and social groups, facilitating the ease and speed at which new connections could be made. For instance, Terence was a member of his local online community forum where members of the community, local business and the local council would post a wide range of information about the area including planning applications, local council events such as movie screenings, an arena for buying and selling items, as well as discussing news and social happenings. Connecting Terence to, and enabling him to shape his neighbourhood space (through contributions made on the forum in particular), Terence found out about a whiskey club that his friend suggested they should attend together, demonstrating the potential of technology as a socially inclusive tool.

Friendship-making for Joan was not simply about forming affective bonds, but a political position. Friendship was aimed at helping one another through the inevitable physical aspects of ageing but also as a means to navigate the many emotional layers associated with the unique experience of being old:

So yes, and through those things [the social networks] they [network members] become just like family really of formal information but then we meet up at different groups and we have really increasing friendships not only just friendships but we are there to support each other as some of us die or are ill um creates tremendous links to older people. I mean I'm one of the oldest people I know [laughs] and I know that so many old people are really lonely living alone and hardly see anybody.

Friendship kept Joan socially and mentally engaged with links formed with her peers on an intellectual basis, through sharing information about events, lectures and exhibitions of interest and learning communally at group outings, with relevant information more readily shared through group emails across her various networks. Joan's friendships played an important role in sustaining her self-identity, as well as allowing "for the presentation of a new identity, modified to match existing circumstances" (Jerrome, 1981, p. 194); but also provided many explicit, reciprocal forms of care such as the example she provides above. Lapierre and Keating (2013) suggest there remains a 'knowledge gap' in understanding how non-kin, such as friends and neighbours, provide care to older adults due to the normative expectation that care is provided by kin, thus non-kin is often excluded as a category of analysis, with even less of a focus on the role of technology in sustaining such relationships (Nocon & Pearson 2000).

Joan is one of the few participants to identify the increasingly prominent and intertwined issues of loneliness and living alone in older age stating, "I know that so many old people are really lonely living alone and hardly see anybody". The issues of loneliness and social isolation have gained considerable traction within academic and policy discourses over the past 10 years and important steps have been made towards recognising the socio-biological impacts that such feelings can have on ageing bodies (see Victor & Bowling, 2012; Milligan, 2014)¹⁰. Independent of whether participants lived alone or not, very few made reference to relationships with neighbours, with those who did often less engaged in using communication technologies. As neighbours were not the primary focus of this research, it could be a methodological oversight that participants largely neglected to discuss such relations. Alternatively, this could be indicative of the changing nature of ties to place in old age, precipitated by communication technology use. Research conducted in the 1990s before the rapid dissemination of technology, especially amongst older adults who are recognised as having a slower uptake of technology, pointed to the important role neighbours played in providing informal care through assisting with discretionary tasks and "involving a feeling of security as a result of their proximate presence" (Wenger, 1990, p.166). It could be suggested that technology is usurping this through aforementioned modes of hyper- or micro-coordination between family and friends, which means feelings of connectivity, security and presence negate the need to connect with those who live close by as feelings of closeness mediated via technology open the potential for older adults to be connected to multiple 'people' and 'places' at once. Milligan and Wiles (2010) explore the relationship between distance and the propensity to care for older family members, and find that 'caring' relationships are easily maintained at a distance: for example, adult children who have moved overseas are often still actively involved in daily care routines and monitoring.

Although the empirical material to fully substantiate the claim of technology supplanting neighbourly relations is less well developed, Rita's discussion of her relationships with neighbours makes a compelling argument. In the absence of the

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¹⁰ Some researchers suggest (see Lawson, 2007) that neoliberalism may be having the effect of socially isolating older adults through a tendency towards individualisation and self-reliance, leading to a greater number of single-person households. In the UK, "by 2037 there are projected to be 1.42 million more households headed by someone aged 85 or over – an increase of 161% over 25 years" (Government Office for Science, 2016, p. 9).

internet, and communication technology not featuring beyond the landline telephone, Rita relied heavily on much more happenstance modes of connection with her immediate neighbours and church community for making and maintaining social ties. Rita likened her network of neighbours to being "like a family", giving heed to the notion that friendships have taken on different ontological forms in postmodern societies. It could be said that "because social forms have become more fluid that friendships are becoming more important and central to people's lives as a source of continuity" (Budgeon, 2006, not paginated). As previously discussed, in speaking of her current living situation after a health event that required hospitalisation for a short time, Rita states:

At the moment I'm alright because my health is alright and I'm ah I have all these people around me as I've said...and this is the English custom you know because the industrial revolution from that time onwards people have moved away from their blood relations and homes and live hundreds of miles away and the custom grew up of having surrogate family around you, they function as family, that's why my neighbour said 'we are a family'...they are geographically closer to me so it makes sense for me to rely on them and to interact with them because all this blood family and so on becoming an academic point you know? [laughs] There's only one family and that's the human family. That's how I look at it because the world has shrunk now you know? It's just nonsense to talk about blood family.

Rita's network of neighbours provided one another with many different forms of material and emotional comfort. During Rita's illness, one neighbour called and alerted family members to her hospital admission. The neighbour has a key to her property and had dropped off bread and milk to Rita's house. Rita had arranged for a gardener to come and tend to a communal space, and knowing that she is financially constrained, a more affluent neighbour insisted on paying for the works by way of thanking her. Concomitant to highlighting how Rita connects directly with neighbours, as compared with other more technologically savvy participants, Rita's likening of her neighbours to family and the feeling that "blood family" is an "academic point" is a crucial one and resonates strongly with Catherine Nash's (2005) work on geographies of relatedness. Nash (2005, p.451) interrogates the way in which the ideas of blood and genetic relatedness are considered a prerequisite for, and have been naturalised as a means of, producing social categories such as family, gender, ethnicity and the nation, arguing instead for a view of kinship relations as a 'social practice' that is 'performatively produced'. Rita elucidates through the performativity of emotional and material forms of assistance within non-kin networks, the possibility for other geographies of relatedness in old age that are not as reliant on kin-based connections.

Among well-established friendships, there was a highly ritualistic approach to communication as compared with family. As discussed, within familial networks there was a high degree of temporal and spatial variance with different technologies used at different times of the day or days of the week to contact family, depending on where the participant was or family members were assumed to be. However, within friendships, participants had over time developed person-specific (socio-technical) modes of interaction. For Ruth, Keith, Joan and Violet postcards were part of an established communication infrastructure. Ruth and a particular friend always sent postcards to each other when they were on holiday. Similarly, Keith used to create address labels on his computer prior to going on holiday and would routinely send people postcards. Joan always exchanged a postcard with a friend after visiting an art gallery or concert:

Joan: I have one friend, whenever we go to an exhibition or concert or something

like that we always send each other a postcard 'go and see that' or 'go to the whatever' that's just for fun I mean we speak as well, but we have this correspondence of postcards and wherever we are we have bought a postcard

at the event and we send it you know?

Interviewer: That's a really lovely ritual.

Joan: Yeah, lovely.

Interviewer: And when you for example receive a postcard from her in the mail, does that

make you feel differently from when you speak to her on the phone or see

her?

Joan: Oh yes, it's lovely. Yes, I pin it on my board it's lovely, Interviewer: Yeah. So there's quite a ritual associated with it?

Joan: Absolutely, absolutely. It is a ritual but it's lovely.

Similarly to Joan, Violet had recently taken it upon herself to send a daily postcard to a friend for the past nine months, after his wife passed away having suffered from dementia. Violet was unsure how he would receive the postcards but he "loves receiving the letters". As discussed in Chapter Three, the appeal and success of postcards as a communication tool could be interpreted as having generational parallels with text messaging. In the same way that a text message is an asynchronous, brief, "thought at that moment" (Licoppe, 2004, p.150), postcards also operate along a set of social norms associated with the amount of time taken to complete them and the level of intimacy or emotional intrusion into one's. Postcards were not sent to family members or to convey information, rather they were sent to friends to maintain social bonds.

In constrast to many other male participants, Henry more actively enjoyed the physical co-presence and companionship of others, "I mean it would be very boring if you were just sat on your own [laughs] stuck at home or something", and since retirement he had instituted different socialising rituals with friends. Henry had what he termed his "Wednesday mate" who was his "a-technical friend, my Wednesday ex-colleague" who he would have lunch and see a movie with every Wednesday. After each movie, Henry said "I always put a little review in of it on Facebook, lots of people seem to like that". Through the technology of Facebook, Henry was able to share the experience and emotions with one friend, with many others who are emotionally, temporally and physically distant in his expanded social network. However, his "Wednesday mate" does not have a mobile phone and his use of email has lapsed so, whereas they used to email to arrange their weekly meeting, "now it's good old-fashioned telephone [laughs]". As a result Henry and his friend had devised a series of contingency plans in case the other was not able to show up and they had no way of contacting one another:

Henry: So that's a bit strange and if one of us is delayed or something you've just

gotta-

Interviewer: [overlapping] wait it out? [laughs]

Henry: [laughs] it's like in the old days before mobile phones, yeah. He has got my

number but he's never actually phoned me, he sort of tries and refuses to

[pause]

Interviewer: To engage?

Henry: To yeah that's right, not interested at all, which is a bit of a pain at times but

one copes. Yeah we've found ways round it obviously although you know, you have to do things like, 'well if you're not here by' or 'after 15 minutes I'll go straight into the restaurant and start eating' or something 'and

hopefully you'll arrive later' or not as the case may be [laughs]

Interviewer: Yeah [laughs]

Henry: [laugh] so it's quite, like looking back in, going back in time 20 years or

something.

Although Henry socialised with friends face-to-face as a preference, technology use, or his Wednesday mate's lack thereof, was seen to shape the nature of their relationship and the type of emotio-spatial engagement possible. Henry states he found his friend's aversion to technology "a bit of a pain at times" and felt he was "backward in this respect". Henry had even offered to assist with fixing his computer "but he keeps putting it off so [laughs] perhaps he's happier like that, I don't know [laughs]". Although Henry accepts his friend's disinterest in technology, he finds it a personal inconvenience and it creates an emotional vulnerability in their relationship. Were the strategies put in place to mitigate for non-attendance at their regular Wednesday date

to fail, or his friend's lack of technology use to inconvenience Henry, his feelings of irritation may become heightened and jeopardise the relationship or established Wednesday ritual. Liccope's (2004) research affirms that among those who have mobile phones but fail to utilise or be responsive to them, ill feeling can be created. Although Henry's Wednesday mate does not have a mobile telephone, the rapid and ever increasing socialisation and proliferation of mobile telephones means "it becomes either necessary to be available for interaction, or necessary to justify and renegotiate one's unavailability (Licoppe, 2004, p.143). Henry's friend's reluctance to engage with technology (re)attached Henry's communications to physical spaces, limiting the geographic range across which he could emotionally, and sometimes physically, connect with his friend.

Coincidentally, Edward had a recurring Wednesday social engagement:

Edward: Oh yes for instance we have a two things really, there's four of us now, four

retired guys and we go out every Wednesday lunchtime to just the local pub, fairly local pub but again you know if somebody has to drop out or someone's seen something about, we tend to try to go to those obscure

museums in London so,

Interviewer: [overlapping] of which there are many

Edward: Yes, there's a lot there's some interesting usually medical and weird things

so somebody's seen an article, 'oh what about so and so?' and there's all this

stuff arranging which train we're going to catch so,

Interviewer: By email or by text?

Edward: Um email generally and then texting is the last minute 'where are you now?'

As with Henry, Edwards's longstanding weekly engagements have come about since his retirement and involve a greater level of face-to-face interaction as compared with familial networks. Not surprisingly this reflects that communication practices are largely driven by time constraints, with older adults stereotypically having more leisure time. An interesting comparison can also be drawn between Henry and Edward whereby in the absence of technology Henry must device contingency plans whereas Edward uses different modes of technology, namely email to make arrangements and text message once he is en route to meet with his Wednesday friends, once more demonstrating the ability of technology to make (emotional) connections to friends both portable and continuous.

The important role of (technological) habits in sustaining friendships should not be underestimated and further reinforces the contention that some participants develop

and share cyborgian subjectivities. It is useful to draw on the work of Grosz (2013, p.218) who emphasises habit as a form of bodily attunement and "modes of self-organization". To elaborate, the communication habits of Ruth, Keith, Joan, Violet, Henry and Edward outlined here fit Grosz' (2013, p.221) critique in which habit:

Skeletalizes action, making it more efficient, minimizing the time and effort it requires while maximizing its effects. Habit is the creation of a new bodily mode of existence, the learning of a way of simplifying action by selecting its key muscular efforts while hiding their conceptual accompaniments.

For participants, the muscular efforts and conceptual accompaniments are many; they are bodily and technological. Participants must attune their bodies to seamlessly transition between the two, as one moves between different temporal and spatial scales. Said differently, Edward enacts different communication and social habits on different days of the week and on Wednesday his body is attuned to different technological objects and within that different communication platforms, either email or text message, that he will ritualistically transition between prior to meeting his friends. In the company of his friends, Edward has habitually attuned his body to interact with his friends in a certain way as he has become familiar with their bodily attunements. The habitual element to Edward's (and other participants) social rituals with friends allows for "the action of ever-growing connection between the subject and the object of thought" (Grosz, 2013, p.223), that of friendships and communication technologies.

Beyond family, neighbours and friends, a fourth discernible, habitual social network was in operation for all participants (excluding Jeff and Irene), who were engaged in some form of interest, community or volunteer-based network as shown in Appendix L: Participant Membership in Interest, Community, and Volunteer-Based Networks. The breadth of membership among this participant group is readily observable, with many participants engaged in multiple groups. It must be acknowledged this could be a methodological outcome as one of several recruitment strategies was through local community centres. It could also be contended that this reflects the unique social connections of older Londoners, to be explored further. Although such networks were not always discovered or conducted via technology, greater links were forged as a result. Joan's co-housing and older women's network predates her adoption of technology however she finds being online has been advantageous to her membership in many ways:

Well I'm a bit of a Luddite. I had an old typewriter and I would make expensive phone calls but nowadays part of my retirement has been coming into all sorts of networks and I have lists of people and a message goes out to everybody and I receive such a good source of information. Now I mean it's different what message I'm sending particularly with the new technology.

Joan feels that being able to send group emails to fellow members has enhanced her ability to share information easily and connect to a great number of people: "It's very, very useful for communicating information because I've got this network that with one press of a button, everyone knows". Joan is able to share news and upcoming events that may interest people beyond the immediate scope of the purpose or planned activities of the groups. For example, both of Joan's distinct networks have a set schedule of meetings but at the time of the interview there was an upcoming event at the British Library called 'Creating a New Magna Carta for Women' in celebration of 900 years since its creation. Joan decided to share simultaneously with both networks information about the event and as a result of the "huge response" Joan received, an outing was planned for the first time that amalgamated her women's network and cohousing group. Although such an outing could have been planned without the facilitation of technology, it was greatly enhanced by it; with the attendees "all really happy to have the information and weren't aware of it". Through initiatives such as this Joan has "enlarged my circle of friendships and acquaintances because of all the different groups". For people such as Joan technology has enriched the number of people she is connected to, the scope of those connections with a heightened frequency of contact as well as emotional depth, and has enabled her to act as an intermediary in networking others.

Social and interest based community groups were of particular interest for the way in which they afforded both material and emotional support to those within the group, but did not always go beyond its physical meeting space. Representative of the broader participant group are Barry, Keith, Richard and Sam who were part of an older men's network and lived on the same or neighbouring council housing estates. They would often see each other at other local community events or out and about on the street, but they never socialised in their homes or kept in touch via phone or email. In fact, they had not even exchanged telephone numbers with one another, yet the weekly club meetings and associated fundraising events were a cornerstone of their weekly routine. This could be accounted for by the fact there is a symbolic significance attached to the

shifting of relationships from offline meetings in communal situations to the realm of the personal online or mobile sphere. Licoppe (2004) highlights the (emotional) significance of disclosing one's mobile phone number to another; unless given it is usually unobtainable and it is to be treated as a gift. This, it could be argued, is increasingly applicable to other socio-technical interactions such as email in an era of smart-phones. This clear delineation by participants between social groups also reflects a broader generational divide. For older adults, the "home has always represented and symbolized the passage from the external world to the internal world, from the public sphere to the private one" (Cristoforetti, Gennai, & Rodeschini, 2011, p.226). Home is a place of exclusion or retreat from non-residents and strangers. However, it has been noted that social ties are becoming less communal and more person-al (i.e. more person to person) (Campbell & Park, 2008). As a result, social networks are based less on connecting with people in close geographic proximity, which in turn diminishes people's connection with place (Campbell & Park, 2008, p.376). As the final section will explore, shifts in 'place-based connectivity' were undeniably true for this participant group, causing new modes of ageing in place.

Ageing in Place, in London

As has been the focus of this chapter so far, the means by which older adults make and sustain relationships with family, friends and community members are evolving alongside participant relationships with technology. As participants of this research demonstrate, ageing in place with technology disrupts the many 'places' of ageing. Namely, technology enables new and different points of connection and interaction from the home, spanning the neighbourhood, city and globe. Places are often experienced simultaneously as the home becomes the site of access to many new virtual worlds. Technology also becomes a mechanism for locating new experiences, services and information relevant to participants' local communities transforming old relationships with place, for example through the utilisation of local council or community forums as a means of gathering and sharing information or altering mobilities digital mapping technologies.

Table 7.1: Residential Living Arrangements of Participants

	Lives Alone	Lives with Spouse	Lives with Spouse & Adult Child(ren)	Lives with Adult Child(ren)
Barry				
Keith				
Sam				
Richard				
Joan				
Jeff				
Norma				
Deborah				
Susan				
Carl				
June				
Frances				
Mark				
Helen				
Edward				
Rita				
Veronica				
Dennis				
Terence				
Irene				
Nigel				
Carol				
Hazel				
Henry				
Marion				
Violet				
Ruth				
Roy				
Mavis				

Reflective of the practice of ageing in place, there was a diverse range of residential circumstances as shown above in Table 7.1. This included people who lived alone, with spouses and some who had adult children living with them primarily on account of the expense of London property and their children's inability to purchase a home. Overwhelmingly, participants were of the opinion that there was a social and material advantage to living in London. Not all participants were born, or had spent their entire adult lives, in London, nor did their adult children necessarily remain there.

Approximately half of participants had moved to London early in their adult lives, usually for educational or employment purposes and had remained. Several participants lived outside of London for a period when their children were school aged but had long since returned to London. All except one participant who was planning to move to be closer to her daughter (Ruth), expressed a clear preference for ageing in London. Of the 29 participants, 20 had children of whom nine had all their children living in London, eight had at least one child residing in London and three had none of their children living in London. There seemed less propensity to live close to adult children than might be expected and as will be developed throughout this discussion; a plausible pretext for this is the ease of communication and ability to relate emotionally with family members enabled by technology.

A recurring sentiment for the decision to live in London was the desire to live in an urban environment, and London's unique characteristics were noted as setting it apart from other urban places. This is largely at odds with geographies of retirement literatures that document a preference for moving to coastal or rural environments, or purpose built retirement communities (see McHugh & Larson-Keagy, 2005; Warnes & Williams, 2006). As Bonvalet and Ogg (2007, p.63) state, once people reach retirement they are "faced with a new set of residential choices" and as financial and family circumstances change, with adult children being more geographically dispersed and London becoming increasingly expensive, the choice to remain in London has historically been less appealing. In general terms, clear patterns of out-migration among older adults have begun to slow (Bonvalet & Ogg, 2007) and the participants of this research identified numerous motivators for remaining in place. London was regarded as having heightened benefit beyond other urbans areas due to the breadth of recreational, cultural, learning and volunteer opportunities available, the array of commercial services, greater social and health care provision and if not relative proximity to family and friends, then excellent transport links which allowed regular visits. Marion encapsulated the lifestyle choice living in London represented:

Years ago it was common for people to retire to the seaside. To me it seems sensible to remain in the city with all it has to offer. If you have family around you and all the support services, medical provision, transport and great social opportunities that you have always had then it may be madness to move away from all of that to a strange place.

Sentiments to the effect of Marion's were near unanimously shared. For example, Violet, lived her working life and raised her children in London, but in retirement after meeting a new partner who was a farmer, she moved to the country. After his death, Violet decided to return to London and her experience is representative of what it was that drew people, or motivated their choice, to remain 'in place'. Having had the experience of living in a city and the country, Violet comments that the move back to London was "absolutely the right decision" and that it was "good for this moment in my life" due in part to the spatial proximity it afforded her to those people she had maintained social ties with and her family, as well as being able to access a range of social networks and sites (such as her gardening society membership, monthly knitting group and weekly physiotherapy exercise class). Violet felt she would have been socially isolated, left with restricted transport options and had poor access to health and social care, had she remained in the country.

The comparisons between rural settings and London were numerous. As a more active participant Dennis discusses:

With a freedom pass, I can go to galleries and museums, there's over 1,000 free ones in London! I could go to a free music concert every day. I do a gentle exercise class, Tai Chi, website design and how to use an iPad courses weekly [with a] total cost £5 a year between them. There is more cheap education, better medical care, cheap things to buy, I pay £1 for DVDs in cash converters, buy fruit at the local market. On holiday in Kessingland last week, near Yarmouth, the prices were astronomical. I couldn't afford to eat out, pricey supermarkets and petrol meant we nearly had to push the car back to London. And I find Londoners friendly. We take in parcels for each other where I live, always stop and talk to neighbours when I bump into them, chat over coffee at classes and meet up outside courses to natter.

Dennis outlines a vast array of benefits associated with living in London, but highlights that the desire to live in London stemmed from both an affinity for London as a place and simultaneously a perception of rural communities as being deficient environments in old age and perpetually under threat from the current governmental regime of austerity. Dennis' notion of the affordability of London is interesting as it runs counter to the gentrification and now super-gentrification occurring in London, making London unaffordable for many (see T. Butler, Hammett, & Ramsden, 2008; T. Butler & Lees, 2006). Connected to the notion of the precarity of rural environments, Joan states:

It's very relieving for the children to know that their parents are alright but so many older adults live alone, I mean it's ok in London, if you're living in a rural area, often the village

pubs gone, the village halls gone and you're dependent on social care, it's not a life and if you decline [pause].

Violet refers to, the "mass of humanity" in London perhaps idealistically suggesting it in some way mitigates the potential for social isolation and loneliness. Evidencing this is Keith who despite his known social engagement in a weekly older men's network and frequent associated community events, felt both very socially isolated and lonely in London. Keith was a single man living alone, with no partner or children or relatives who lived less than an hour away. Keith commented that visitors seldom came to his home, "only about every two months" and contrary to many other participants, found London hard to travel in as most people he knows are younger than him and insist on using their cars which Keith found exclusionary. Keith's experience of growing old in London underlies that, as reported by Wiles et al. (2012, p.358) in a New Zealand context, meaningful social contact can "ameliorate" negative relationships with place, which Keith felt he did not have (Boyle et al., 2015). Research also suggests that as for Keith, the number of social ties one has is not necessarily indicative of whether someone is lonely or not as a social network can be comprised of a small number of meaningful contacts or conversely a large network may consist of loose ties: it is the quality of a social connection that matters (Boyle et al., 2015; Keating, Otfinowski, Wenger, Fast, & Derksen, 2003).

The vast majority of participants who felt positive about their social connectivity enjoyed a wide range of social and cultural activities on offer including museums, parks and gardens, art galleries, cinema and theatre. Terence and Irene stated London was a fantastic place to retire in due to "lots of activities and places to visit", Helen enjoyed London's "diversity and so many great places to go like theatres, parks, museums etc." and Frances said she felt "very positive" about growing older in London as "I now have the time to explore this fascinating city and visit all the cultural centres it offers [and] I have built up a large network of friends who feel very supportive and stimulating". As aptly captured by Jeff, London is "a rich, vibrant, city with an unlimited potential to explore and exploit" and Nigel appreciated that "there is always something interesting happening". Joan adds, "there's constantly free entertainment, wonderful University of the Third Age, marvellous transport services, you can walk about anywhere, it's fantastic", with many aforementioned activities free or of reduced cost for pensioners. Dennis drew on Samuel Johnson's often cited quote made in 1777

that, "no, Sir, when a man is tired of London, he is tired of life; for there is in London all that life can afford" remarking that London has also "got better in the last 300 years". This accurately captures much of what participants felt about London; that it is a diverse and enticing city filled with potential.

The social diversity of London was a recurrent theme on which there was widespread consensus. Joan felt gender equality was less advanced for rural, older women: "in a village it's a small area, it's very much more reactionary" meaning that people have much less autonomy to decide how to live their lives. Joan believes "many of these women of that generation, my generation particularly out of the urban areas had been driven by their husbands". Joan's perception that cities are more socially just, although again perhaps an idealised positionality, matters in that it made Joan *personally* feel city life was a more suitable living environment, contributing to her emotional affinity for London. Joan valued experiencing different cultures and attitudes and felt it fostered a certain intellectualism in the city. As a migrant to London in the 1970s, Irene experienced widespread racism but felt that London had evolved to become much more culturally and ethnically diverse contributing to her sense it was a good place to retire in. Rita migrated to London in her teenage years, and at the age of 89 had lived most of her adult life there (apart from a short period living in Africa), and felt London's identity was distinct from anywhere else in the world:

It is my ideal spot. It is in a welfare state, which to me is the highest social and political achievement of man. Three hundred languages are spoken in the streets yet the readiness with which people help each other is quite remarkable. The intellectual and social stimulation is consistent. The "Freedom Pass" makes movement a right. Numbers of charities offer every manner of subject of support and help to elderly people. The "community centres" foster and strengthen local communities. The museums and art galleries of world fame are free to everyone. The deliberate care and attention shown to the elderly makes it a refuge. Everyone aims at going to West End theatre productions.

Rita eloquently describes how London affords people an intellectual freedom and stimulation as well as a social emancipation founded on the value of equality from which tangible benefits and programmes arise such as free art galleries and the Freedom Pass. For Nigel, London was "the best place to meet people from diverse backgrounds with different ideas". Jeff had moved to London from Scotland five years after completing university, living there until his wife became pregnant and they decided to return to their home town; they returned to London after a few years as "a bit of the bug for the kind of cosmopolitan life in London had hit us so we came back".

This is not to say that participants were unaware of the disadvantages of living in London, but that their lifelong emotional connections to London endured the social processes of retirement or the physicality of ageing.

Although London was deemed to be the preferred residential choice of participants, this is not to say that London was seen as an idyll for retirement. Participants provided balanced and pragmatic opinions about some of the challenging aspects of living in London, many of which could not be ameliorated by technology. A few participants felt concerned about the level of noise or air pollution and rubbish in London (Mark, Violet, Helen) but acknowledged that these were issues that affected not just older Londoners, but all residents. For instance Mark thought in his assessment of London "on one hand life is easier in the sense that everything you need is nearby and transport is good, on the other hand it is badly polluted". Expense was a universal concern, if not for oneself then for those older adult participants who were financially less secure. This related both to the acquisition and maintenance of technology as well as other day to day aspects of life.

Comparatively, for those more technologically engaged participants, its utilisation assisted in reinforcing their connection with London and the stability of their emotional ties. Significant aspects of the practices of daily life were influenced by technology, if only in subtle ways. Common online activities included but were not restricted; to how or what online newspapers or blogs people accessed (Jeff, Carol, Irene, Mark, Nigel, Terence); to conducting business transactions or doing online banking removing the need to visit a bank in person (Jeff, Susan, Frances, Mark, Edward, Dennis, Terence, Irene, Nigel, Marion, Ruth); and to purchasing clothes, books, groceries, holidays or theatre tickets online (Carol, Deborah, Dennis, Edward, Frances, Helen, Henry, Irene, Jeff, Marion, Nigel, Susan, Terence). Less common online activities by Nigel and Terence included carrying out extensive home renovations through goods and materials purchased on eBay: "eBay is one of those companies that we use a lot and we developed a double storey extension of more than 1000 square foot only buying from eBay, all the tiles, bathroom" (Terence). Edward used an app called 'Hive' for controlling his central heating anywhere from his phone commenting "I can switch our central heating off from here if I want to", showing that shifting dynamics between participants and technology were not entirely about connecting participants in the home out to the world beyond, but also enhancing their connectivity with their home whilst out and about. Despite being "knocked off" her bike a few years ago, Carol remained an active cyclist (which is "important to me for a sense of mobility locally, for local errands particularly") and regularly used a website called 'Fix My Street'. The 'Fix My Street' service run by a charity maps and reports "street problems to the councils responsible for fixing them – anywhere in the UK" (Fix My Street, 2016). Carol was very praiseworthy of the responsiveness of the service and saw that within her neighbourhood that items she reported were fixed. The website provided a new mechanism through which Carol could engage with her local area, in her capacity of both pedestrian and cyclist that gave her the confidence to continue to cycle.

Although many of the online activities discussed here may seem insignificant in shaping how people were able to access or interact with London, for participants they proved vital. For instance, many theatre tickets or holiday packages are increasingly online exclusives and the only available avenue for learning about and making such purchases is through the internet. Depending on which side of the digital divide one falls, this acts as either an exclusionary mechanism and delimits the type of activities one is able to participate in or conversely for those who are digitally included, opens up an array of new social possibilities and thus new connections to place. Several participants also expressed the opinion that their ability to utilise online services could ultimately affect their ability to remain living independently in London as it was anticipated that (eventual) reduced mobility would mean a heavy reliance on being able to order items such as groceries online. This gives further weight to the idea that ageing in place is undergoing a significant re-conceptualisation and that the expanding of the concept of mobilities, as discussed in Chapter Four, means people are set to 'move' in new ways in retirement opening up virtual worlds for people to be connected to people, places, ideas, experiences as well as necessities such as access to daily goods and services (see Burnett & Lucas, 2010, p.597).

Although it can be said for this participant group that technology is an important determinant in linking people quite literally to place, the recent government report *Future of an Ageing Population* (Government Office for Science, 2016) suggests, that as acknowledged by participants themselves through anecdotally comparing themselves to family members or peers residing outside of London, many of these

socio-spatial experiences and new 'mobilities' are part of a culture of ageing unique to London. The report found that ageing in place in London is an anomaly of sorts with proportionally more older adults living in rural locales: that "people aged 50 and over comprise approximately 50% of the population of small towns and rural areas with the number and proportion projected to increase by 2037" (Government Office for Science, 2016, p.91). People living in London were also shown to have a higher uptake of technology, (Government Office for Science, 2016, p.97; Office for National Statistics, 2016c) and further compounding the advantage of London retirees, the report confirmed that "those who use ICT appear to experience positive impacts on their level of participation in voluntary social, religious and political activities, clubs and organisations" (Government Office for Science, 2016, p.94). What remains uncertain, even within this participant group, is how older adults will keep pace with technological change and how this may regulate their ability to emotionally relate to London (Government Office for Science, 2016, p.9). Encouragingly, the focus on 'connectivity' in the report, defined "in a holistic way which includes physical mobility, transport, the built environment, the virtual world and the physical-virtual intersection" (Government Office for Science, 2016, p.90), suggests that the UK government better understands the potential for technology to alter the experience of ageing than perhaps academia. By comparison and to re-state, Skinner et al. (2015) in a review article tracing the development of geographies of ageing over the past 20 years and mapping its future trajectories, failed to produce a single mention of technology. This evidences a clear paucity of academic knowledge to substantiate precisely the emotio-spatial outcomes of technology use in old age both within a London context, to which this research makes a small contribution, but also given the highlighted disparities, in non-London contexts.

Conclusion

In summation, the preceding discussion firstly examined, how technology use affected the emotional geographies of participants within familial, friendship and social or interest-based networks. The proliferation of new (socio)technical modes of interaction meant no participant was reliant of any single mode of technology in order to be able to relate emotionally with others. Consequently, among family members, technology use increased the impetus to contact others through making said relations portable and thus emotional connections, continuous. This research also suggests

participants reflected an intensification of emotion within family networks through facilitating greater inter-generational and intra-generational links. Approaches to technology use and communication with friends were highly ritualistic, with participants having developed overtime person-specific (socio-technical) modes of interaction. For example, when Joan or her friend went to an art gallery or exhibition they would buy a postcard to send to the other. A number of participations also sought new friendships in old age and, whilst traditional mechanisms of meeting people (such as through formal societies or voluntary organisations) were relied on, once connections had been made relationships were shifted online. The important role of (technological) habits in sustaining friendships was reflective of a level of emotional intimacy having been reached with social contacts themselves and indicative that some participants developed and shared cyborgian subjectivities with more-than-human technologies. The final section of this chapter explored how participant connections with the physical spaces of ageing became altered through the new (techno)sociabilities technology gave rise to. Technology use saw participants virtual and imagined geographies expand as they were able to experience places beyond the home, through the portal of technology. Concomitantly, this meant for some participants their physical geographies decreased as incidental use of the city or roaming was reduced. Technology as an information tool meant it had the potential (dependent on individual capabilities) to be either an exclusionary or inclusionary mechanism for participating in city life beyond the home, opening up an array of new social possibilities and thus new connections to place.

Chapter Seven: Conclusion

This research set out to understand how technology use among older adults impacts on their ability to relate emotionally with others, and in doing so, inform our understanding of the emotional geographies of ageing. As noted in Chapters One and Two, concomitant with the transition to an ageing population, there has been a growing interest in the spatialities of ageing, with geographies of ageing making a significant contribution to the body of academic knowledge. Yet often such work is positioned in departments and publications external to the discipline, slowing its overall intellectual development (see G. Andrews et al., 2013; S. Harper & Law, 1995; Skinner et al., 2015). With regard to geography, the historical trajectory of the discipline has facilitated the conflation and convergence of medicalised and economic models of ageing, each propagating the other, leading to a tendency to either omit altogether the emotionality of old age or focus on primarily negative emotions. Similarly, the intersection of geographies of ageing and technology has been concentrated on healthcare technologies such as the implementation of telecare devices and services, and the surveilling and monitoring of the ageing body as a 'failing body' (Oudshoorn 2012; C. Roberts & Mort, 2009). Everyday technology specifically, in all its object and relational forms, is yet to adequately garner the attention of ageing-related academics (see Skinner et al., 2015). However, these noticeable absences in the geographies of ageing are not merely academic points, and it is here that this research has sought to make a decisive intervention.

Technology, as both an inclusionary and exclusionary social mechanism, has become pervasive in the lives of older adults. Even among those who do not directly engage with technology or are not 'online' so to speak, technology encroaches on their lives and bodily limits. With ageing in place firmly institutionalised in the UK policy landscape, understanding how the spatialities of ageing may be altered by an ever-increasing convergence of ageing (bodies) and technology (objects) is a critical area of inquiry. Technology comes into being through the formation of symbiotic human-machine relationships, with all technological objects part of broader socio-technical systems of use (Mort et al., 2013; Oudshoorn, 2009; Turkle, 1995); a crucial component of such 'socio-technical' systems being emotions. Emotions not only form

the basis for a distributed subjectivity with technology, but themselves 'move' and 'stick', both shaping and being shaped by their contact with bodies and objects (Ahmed, 2004). Yet as has been alluded to, not all 'human-machine' configurations are prioritised as the focus of study, with older adults most often out of purview. Able bodied, middle-aged adults are the implicit bodily norm and technology end-user (Joyce & Mamo, 2006). Perhaps it could be said that the 'technological' is so ubiquitous in the daily lives of most people (including those setting the research agendas), that there is a tacit assumption that technology will inevitably (recon)figure in geographies of ageing inquiry. Similarly, debate continues over the role and value of 'emotions' as the object of research. As previously raised by Thein (2005) and B. Anderson and Harrison (2006), as no element of human life is devoid of emotion, are emotions the focus or are they the measurement for social geographies? Others such as Longhurst (2001, p.11) have pointed to historically broader issues that have led to the omission of certain forms of knowledge from the discipline, with old bodies one of a number of bodies that are "likely to be marginalised as illegitimate bearers of geographical knowledge". The bodily difference ageing can represent has led to the perception of ageing being incongruent with technology. It is on this basis that Joyce and Mamo (2006) called for the cyborg to be 'grayed' and to which in part, this research responds.

The dearth of existing literature relating to both the use of communication technologies by, and the emotional geographies of, older adults, necessitated an intra- and inter- disciplinary approach. By looking beyond the scope of geographies of ageing, this research has been able to draw together other disciplinary perspectives, theoretically and methodologically, facilitating a much needed exchange of ideas. Within geographic sub-disciplines, namely emotional geography, it can be said that in the same way geographies of ageing have failed to pay sufficient attention to emotions, emotional geographies (although a discipline paradoxically in its infancy by comparison) is only now coming to realise the impact of 'age' on emotions through the ageing of its own wider scholarly community, including feminist geographers, sociologists and gerontologists (see Calasanti, 2005, 2008; Twigg, 2004). Emotional geographies too, elucidate the varied ways in which emotions are increasingly seen to have a direct impact on the construction of society, through affecting bodily capacities and wider materiality of the world.

Beyond geography, the allied field of sociology has been equally committed to theorisations of ageing which have usefully informed this research (see Gilleard & Higgs, 2000; Jones & Higgs, 2010). Through its concern with human relations and practices, sociology has been equally attendant to the notion of the 'mundane', 'everyday', and 'banal' qualities of life that this research works to explicate. Given that interpretations and experiences of ageing are predicated on bodily difference, the feminist commitment to disrupting normative and privileged framings of technology in critical science studies, and the contributions from academics such as Haraway (1991, 2003), Hayles (1999, 2004, 2005) and Turkle (1995, 2011), have offered much to this research with respect to applying certain critiques of the application of scientific knowledge and its connection with (gendered) bodies. A critical post-humanist frame was employed to the reading of each of these fields, meaning new perspectives could be drawn from existing literatures. The positioning of technology as existing within socio-technical systems of use, and post-humanism's concern with the inter- and intrarelationships between the human and more-than-human, aiming to include the distributed agentic, emotional forces and materiality of the wider world into the human (Badmington, 2003), made post-humanism an appropriate theoretical frame for this research. The entanglements critical post-humanists perceive as existing between the human and more-than-human are reflective of the materiality of the wider world in this contemporary technological moment.

Having advocated for and adopted an interdisciplinary approach, this research still firmly locates itself within the discipline of geography as a means to address long-held concerns over the cohesion and development of a geographies of ageing. As noted by G. Andrews et al. (2013), whilst other disciplines may offer their readership a spatially informed perspective of ageing they fail to offer a more critical engagement with the key and ever evolving tenets of geographical thought. In response to these gaps in knowledge, this research set about to become knowledgeable about the forms of communication technologies older adults employ; how their use impacts on the ability of older adults to relate emotionally with others, possibly through the advent of new (techno)sociabilities; and beyond this, what communication technology use might tell us about the emotional geographies of ageing.

Turning to the empirical material produced in this research and in thinking through the research question posed in Chapter One, what form of communication technologies do older adults employ and how do these shape emotional geographies? Participants, whilst not a representative sample, offer many new contributions to our knowledge. Among this group of 29 respondents, it was eludcidated that a diverse, highly individualised and complex amalgam of communication technologies including email, text messaging, messaging applications WhatsApp and Viber, Skype, Facebook and mobile telephones (including smart phones) were utilised. There was predictably variation between participants as to the type and number of technology devices and platforms utilised, as well as the frequency of use. This had implications for the ability of participants to relate emotionally with others and the resultant emotional geographies. There was a clear delineation between two participant subgroups. There were those who felt confident in their technological skills or had a readily accessible support network (such as a partner, child or friend they could call on for assistance), could afford to buy technology, were heavier users and accessing a greater range of devices, and were more likely to use portable technologies. Conversely, those respondents who felt less confident 'online' or experienced greater financial and support barriers to accessing technology were more likely to use (a more limited range of) second-hand or non-portable technologies (such as a desktop computer). Uniform among participants regardless of their technological competencies was the ability to use intricate strategies of selection and implementation to deploy each mode of communication technology. The time, place and type of technology used varied according to not only the temporalities and spatialities of participants' lives, but also according to the anticipated geographies of their interlocutors. Crucially, technology use as described by participants enabled the portability and emotional continuity of social networks in retirement as communication was no longer tied to certain physical spaces.

The question of the type of communication technologies employed and their impact on the emotional geographies of participants, feeds into a second and much broader research question about what the role of communication is in the emotional work of doing the ageing body. Participants maintained to varying degrees 'traditional' modes of communication regardless of their (often growing) kinship with technology: Communication technologies were a means of providing people with an "additional

channel" (Jeff) for keeping in touch with others. Nor were 'offline' and 'online' modes of communication dichotmous and discrete. However, perhaps as expected it was the process and experience of communication where participants were not face-to-face, that was most profoundly transformed by the utilisation of communication technologies. Participants cited that there was a changing bodily labour needed to negotiate sharing the same virtual communicative space but not the same physical space. Communicative acts are not constituted solely by their linguistic form, but are social and bodily acts. For participants this meant adopting and adapting to new modes of bodily regulation and expression that compensated for a lack of body language. Some participants such as Dennis, Marion and Nigel worried that a lack of body language or physical co-presence could lead to a greater chance of miscommunication; that the decontextualisation of words might mean those listening or interacting with people over socio-technical mediums might misconstrue the intended context. Alternatively, others such as Helen found new modes of communication like email were preferrable to 'traditional' formats such as letter writing, as many people struggled to read her handwriting often complaining about its poor quality. Importanly, in both instances communication technologies became the interaction partners of participants and through continuous, repetitive, and spatially and temporally varible 'contacts' between ageing bodies and technological objects the processes of communication came to alter the architecture of participants emotions (Ahmed, 2004; Kuntsman, 2012).

The most noteworthy shift in the infrastructure of participants emotions was the opportunity afforded for participants to perform a different kind of emotional work as they aged and as access to information and opportunities for social contact (if only theoretically) was increased through the portal of technological devices. Rita, as a non-user of technology, provided critical insight and was a point of comparison for how those participant's *who did use technology* reworked their communications landscape and consequently how this affected the types of emotional labour being performed. Rita had close connections to, and a reliance on, her neighbours for practical and emotional assistance, which fitted with long-held conceptualisations in the geography of ageing literature about the discretionary acts of care by friends or neighbours as an established means by which older adults age in place (Boyle et al., 2015). Counter to this, technology-using participants suggest that technology may be usurping emotional

ties with people and places proximate to older adults and their homes, in favour of establishing communication rituals and routines centred on modes of hyper- or microcoordination between family and friends. As a consequence, feelings of connectivity, security and presence negate the need to connect with those who live close by as feelings of closeness mediated via technology open the potential for older adults to be connected to multiple 'people' and 'places' at once. The use of technology in this way – i.e. to make and maintain connections with those in participants' personal networks – has ramifications that extend beyond affecting their social network composition and has a profound effect on how participants use time and space, which impacts on the emotional qualities of daily life. From this perspective, there was a technological regulation of participants' emotional lives through the possibilities and constraints technology enables. This pivotal finding is suggestive of the processes of communication giving rise to an inherently different kind of emotional labour in old age, an area of research that could be usefully extended in future research due to its critical importance in shaping ageing-in-place government policies.

The empirical material produced between participants and myself, the researcher, further demonstrated other significant new forms of (techno)sociability. Addressing the research questions - 'how does the use of communication technology impact on the social relations of older adults and what new forms of (techno)sociability does it give rise to?' and 'what can older adults' use of communication technology tell us about the emotional geographies of ageing?' – it can be said amongst this participant group that closer kinship and a distributed subjectivity between older adults and technology alters the emotional geographies of ageing. This (re)shaping of the emotional geographies of ageing was set out in this thesis as fitting broadly within three domains: how communication technology use connects people to said objects, people to people, and people to place in new and unexpected ways. By way of conclusion, each of these new (techno)sociabilities and thus emotional geographies will be addressed in turn. Participant relationships with technology, when viewed as arising from a distributed subjectivity between the human and in-human, were affected by the changing socio-biology of respondents' bodies. To quote Longhurst (2001, p.11, emphasis in original), "we do not have a body, we are a body" and the corporeality of ageing took on a multiplicity of forms beyond the simply biological, made up also of social and emotional labour affecting the material relations between bodies and objects. For example, June, Rita, Deborah, Mavis and Ruth all experienced reduced physical mobility to differing degrees. As the embodiment of their physically ageing body changed, the forging and maintenance of social links and the materiality of enacting different forms of mobility with, and as mediated by, technology, became more important. For some, technology allowed new mobilities to form, assisting participants to 'move' beyond the home through the portal of technology, creating new connections with people and imagined geographies with the places beyond the home.

However, technology was not merely a neutral tool or conduit for communicating the emotions of others. Marion used the phrase "partner in life" to anthropomorphise and depict the emotional significance of the material relations between herself and her iPad. The word 'partner' has strong emotive connotations, most commonly used to infer positive inter-personal relationships often reflecting exclusivity, a level of spatial and temporal synchronicity, and emotional intimacy. Marion also reflected on the idea that this partnership is also likely to have longevity suggesting she would not be able to live life without technology. Marion's cyborgian subjectivity, a new hybrid form of subjectivity synthesised by the symbiosis between technology and animal (see Barad, 2003; Haraway, 1999), meant that as theorised by Ahmed (2004), Marion's relations of 'towardness' with the object of the iPad itself formed part of Marion's emotional geographies. However, from a post-human perspective, agency as located within, and emergent from, human and non-human materialities or relations, meant there was a recursive relationship between respondents and technology. Technology had the potential to shape the socio-biology of the ageing body. Several participants saw everyday technologies as being able to ward off cognitive changes or as enabling certain geographies of (self) care, such as caring for ageing parents or facilitating their own continued ageing in place. The capacity of technology for self-care was primarily articulated as enabling participants, for example, Terence and Irene, to keep mentally agile and thus preventing cognitive decline, with technology providing an easy and convenient means to do so. Similarly, Henry compared himself to his mother-in-law who is not online and envisaged that technology could usefully assist him with the daily tasks of living that she struggled with were he to become increasingly housebound in the future. Henry did not perceive there would be a need for the use of specific telecare devices to enable him to continue living in his home as he aged.

Rather, the maintenance of current technology use and habits would begin to subtly increase over time to reflect Henry's changing body.

The role of communication technology in older people's ability to create and maintain new modes of (techno)sociability was manifold. Among family members there was much greater spatial, temporal and technological variation as to how (emotional) connections were made and maintained, suggesting participants reflected an intensification of emotional ties within family networks. Participant connections with family were a complex amalgam of text messages, messaging platforms WhatsApp or Viber, email, landline or mobile telephone calls, Skype, Facebook and seeing each other face-to-face, with the increased range of modes of communication enhancing the propensity to make contact with others, notwithstanding forging new intra-family connections. The proliferation of new (socio)technical modes of interaction meant no participant was reliant on any single mode of technology in order to be able to relate emotionally with others. For example, Sam lived some distance from his hometown and extended family members, but technology increased the portability of such networks by allowing him to selectively engage in family life at a distance from London via Facebook, also expanding the number of social ties he had with family members. Although technology increased the 'range', and dispersed Sam's emotional geographies in virtual terms, it in turn decreased the extent of Sam's physical geographies as he made less frequent trips to see family members face-to-face on account of affordability.

For a majority of participants, the mobilisation of their personal networks and available frequency of connections also engendered by the adoption of communication technologies, led to a renegotiation of the notion of bodily 'presence' and 'absence' with the emergence of a 'connected presence'. On the day of our interview, Nigel described "I've already had a couple of texts from my daughter...and same with my wife, I mean I've already had about three texts with her [my wife]". Nigel was engaged in a constant interchange of text messages with multiple family members throughout a typical day, due to the unobtrusive, low cost and portable nature of mobile telephone communication. Nigel used a similar strategy to overcome periods of what might be termed 'disconnected' presence from his extended family. Nigel reported using text messaging with family members to regain control of, and appease guilt over, the

communication process when lapses had occurred (L. Thompson & Cupples, 2008). It can be said, that through communication technologies emotional connectivity had the potential to become continuous. The new (techno)sociabilities arising from communication technologies were not always positive. For Helen, her husband's 'connected presence' and heavy use of their iPad meant he dominated the social spaces of their home and the technological devices in it, creating multiple 'barriers' for her. Technology created an emotional distance between Helen and her husband: since the introduction of technology into their home, when she asked her husband rhetorical questions to spark a conversation, such questions were taken literally. Instead of sparking an interaction of momentary connected presence and pleasure between them, a sense of disconnected presence arose whereby his attention was captured and distributed between Helen and the tablet.

As participants of this research demonstrated, ageing in place with technology disrupted many of the 'places' of ageing. Namely, technology enabled new and different points of connection and interaction in the home, neighbourhood, city and globe. Technology as a source of information allowed participants to become informed about events, activities and social organisations throughout the city of London; accessing theatre tickets, community events, art gallery or museum exhibitions, and staying connected to local authority information about the planning and redevelopment of local areas or health and social care services. It was expected by most participants that this heightened connectivity to place at both the local and city level, would ultimately affect their ability to remain living independently in London. Carol spoke eloquently of her desire to access online newspapers periodically throughout the day as "a touching down in some way. It's what's out there? What's been happening? I don't know why". It was likely this provided Carol with a new sense of social inclusion or 'techno-sociality', expanding Carol's virtual geographies greatly and her sense of participation and mobility, changing the bodily sense of movement in old age. Demonstrably, where computers were once seen as dyadic relationships between person and machine with potentially emotionally isolating effects, now "it can put you in the center of things and people – in the center of literature, politics, art, music, communication and the stock market" (Turkle, 1995, p.61). Although Carol was spatially distant from family and friends, an emotional void was fulfilled by having a sense of connectivity to the wider world through the portal of her computer. This gives

weight to the idea that ageing in place is undergoing a significant re-conceptualisation and that the expanding of the concept of mobilities, as discussed in Chapter Four, means people are set to 'move' in new ways in retirement; virtual worlds may be opened up for people to be connected to people, places, ideas, and experiences as well as necessities such as access to daily goods and services (see Burnett & Lucas, 2010).

Looking beyond the scope of this research, there remain many other opportunities and new avenues through which to extend this work. The gendered origins of both the production and socialisation of technology, and experiences of ageing, mean that a more explicitly gendered approach to understanding how older men and especially women use technology, could be warranted. This research has created a crucial entry point for adding diversity to the narrative of older adults and technology use. Yet, beyond the able bodied, middle-aged adults end-use bias, "many technologies are not designed for aging bodies, and when they are, they often privilege the aging male body" (Joyce & Mamo, 2006, p.114). Research focusing on older women's bodies would be critical in "reclaiming old women in particular as knowledgeable, technoscientific users [that] counters stereotypes that suggest they are baffled and illiterate when faced with machines or science" (Joyce & Mamo, 2006, p.116). Noticeably absent from the narratives of participants is how technology use materialises in sexual relations, either with existing partners or for example through dating apps or online dating. Understandably, given the potentially personal and emotionally heightened nature of such topics, participants were not openly forthcoming in this area. Methodologically, were cultural probes to be adapted or if future research was in a position to have more sustained and prolonged engagements, with fewer participants, sexuality and sexual relations may inevitably be included within the frame of such studies. Given too that emotions are not 'personal' in the sense that they do not originate from, or reside within bodies, attempts could be made to trace the movement and transmutation of emotions by technological objects. This could be achieved by conducting research that includes both older adults and those with whom they have emotional ties such as partners, children, grandchildren or friends.

From a broader theoretical and disciplinary perspective, there remains important work to be done to carefully and persistently disarticulate age(ing) from its perception as a

chronological variable. Significant steps have been made towards this, particularly within academic spheres, but much remains to be achieved within society more generally. As Gilleard and Higgs (2010, p.8) reflect "an individual's date of birth provides a key element in virtually every economic and social transaction he or she undertakes in modern society". This is strongly reminiscent of the way in which gender was once mapped onto biological sex, and was perceived as deterministic of certain (bodily) characteristics. Yet through the dedicated work of feminist scholars, the idea of bodies being subjectively gendered, not objectively sexed, has been progressed. The same cannot be said of ageing. In the same way that people are 'sexed' at birth, people are 'aged' at birth. A number is affixed to people at birth that sticks with them throughout their life, precisely like biological sex. Yet, like gender, age is a socially inscribed identity that has become subsumed into an objective reality. In the same way that for much of academic and indeed geographic history, 'the body' was synonymous with a white male body, when people now think of a 'body', I would suggest they do not think of an ageing or aged body (Longhurst, 2001). This means we must remain ever vigilant to the naturalised and socially organising function of chronological age. We need to work harder to reveal how age, like gender, is performed, discursively and materially produced, and the ways in which this impacts on individual bodies.

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Appendix A: Participant Information Sheet

Participant Information Sheet (March 2015 – August 2015)



Participant Information Sheet

Research study: Exploring the emotio-spatial dimensions of communication technology use among older adults in contemporary London.

We would like to invite you to be part of this research project. You should only agree to take part if you want to; it is entirely up to you. If you choose not to take part there won't be any disadvantages for you and you will hear no more about it. Please read the following information carefully before you decide to take part; this will tell you why the research is being done and what you will be asked to do if you do take part. Please ask if there is anything that is not clear or if you would like more information.

If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. An interviewer will then come and talk with you about how you choose to keep in touch with family members or friends. You may take as much time as you like to think about whether or not to take part. Please feel free to discuss this with family, friends or your doctor. You are still free to withdraw at any time up until June 23rd 2016, without giving a reason

What are the aims of this study?

This study is about older people in London and how and why they keep in touch with family members or friends. We are also looking to understand how it makes older people and their family members or friends feel when they to keep in touch with each other using different communication technologies. We also wish to speak with those who choose not to use communication technologies to understand how their experiences might differ from those who do.

Who can be in the study?

People, who are retired, are still living in their own home in London and who keep in touch with family members or friends, will be eligible to participate in the study.

What happens if I do decide to take part?

If you decide you would like to take part, an interviewer will come to talk with you for about one hour. You will be asked questions about the different ways you keep in touch with family members or friends, how often you communicate with them and how it makes you feel when you do. The interview will take place at a place of your choice (such as in your own home) and at a time that suits you. We will also ask you if you would like to participate in some other activities including taking photos, writing postcards and keeping a diary, for up to 2 weeks after the interview. This will be to record when, where, how and why you typically keep in touch with family members or friends during this 2 week period. You can photograph anything you think will help the researcher understand what it is like to communicate with your family members or friends, and how it makes you feel.

You will be provided with all the necessary equipment to complete these activities, but do not have to unless you want to. If you do want to, the interviewer would then like to interview you again for about one hour, to talk about each of the activities you have done. We would also like to have your permission to possibly use your photographs, diary or any other materials you make using the activity kit in presenting our research findings later on. To maintain your anonymity you will have the opportunity to review the photographs you take and decide which photographs, if any, you are happy to have included in the study. You are also able to request that certain parts of photographs are blocked out if you wish to help maintain your anonymity.

If you agree, we would like to record these discussions. You do not have to answer all of the questions and you may stop the interview at any time, and withdraw your recorded information at any time. You will not have to give a reason for withdrawing. If you wish, we will send you a copy of the transcript from the interview. You have the right to delete or change any portions of the transcript you do not want included in the study.

What are the risks and benefits of the study?

We do not believe there will be any risks from being in this study. In any information we present about the study, we will not use your name or anything that could identify you, and we will not use the names of any people you mention. We hope that this study will help older people in your community and the wider population. Although we cannot guarantee that you will benefit directly from being involved in this study, we do hope to develop information for policy makers and service providers in your area which may also benefit you.

Anonymity and Confidentiality:

Every step will be taken to ensure all personal information (such as your name, address and the people and places you may talk about) will be anonymised which means that nothing that could identify you or anyone you mention will be used in any reports, publications or conference presentations on this study. No information provided will be shared with any other participants of this research except when anonymised as part of the overall research findings. All interview transcripts, photographs and diaries will be kept confidential and password protected if stored on a computer, or otherwise stored in a locked and secure location at the School of Geography, Queen Mary University of London for the duration of this study. When the study is finished the interview records will be stored for 7 years in a secure location at the School of Geography, Queen Mary University of London. No data will be stored online at any point during the research.

Further information:

If you would like to know more about the study contact Alexandra Boyle on 020 7882 3363 or on 07424 663 964 or at a.f.g.boyle@qmul.ac.uk.

If you have any questions or concerns about the manner in which the study was conducted please, in the first instance, contact the researcher responsible for the study. If this is unsuccessful, or not appropriate, please contact the Secretary at the Queen Mary Ethics of Research Committee, Room W117, Queen's Building, Mile End Campus, Mile End Road, London or research-ethics@qmul.ac.uk.

Participant Information Sheet (September 2015 – October 2015)

Participant Information Sheet



Research study: Exploring the emotio-spatial dimensions of communication technology use among older adults in contemporary London.

We would like to invite you to be part of this research project. You should only agree to take part if you want to; it is entirely up to you. If you choose not to take part there won't be any disadvantages for you and you will hear no more about it. Please read the following information carefully before you decide to take part; this will tell you why the research is being done and what you will be asked to do if you do take part. Please ask if there is anything that is not clear or if you would like more information.

If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. An interviewer will then come and talk with you about how you choose to keep in touch with family members or friends. You may take as much time as you like to think about whether or not to take part. Please feel free to discuss this with family, friends or your doctor. You are still free to withdraw at any time up until June 23rd 2016, without giving a reason.

What are the aims of this study?

This study is about older people in London and how and why they keep in touch with family members or friends. We are also looking to understand how it makes older people and their family members or friends feel when they to keep in touch with each other using different communication technologies. We also wish to speak with those who choose not to use communication technologies to understand how their experiences might differ from those who do.

Who can be in the study?

People, who are retired, are still living in their own home in London and who keep in touch with family members or friends, will be eligible to participate in the study.

What happens if I do decide to take part?

If you decide you would like to take part, an interviewer will come to talk with you for about one hour. You will be asked questions about the different ways you keep in touch with family members or friends, how often you communicate with them and how it makes you feel when you do. The interview will take place at a place of your choice (such as in your own home) and at a time that suits you.

If you agree, we would like to record these discussions. You do not have to answer all of the questions and you may stop the interview at any time, and withdraw your recorded information at any time. You will not have to give a reason for withdrawing. If you wish, we will send you a copy of the transcript from the interview. You have the right to delete or change any portions of the transcript you do not want included in the study.

What are the risks and benefits of the study?

We do not believe there will be any risks from being in this study. In any information we present about the study, we will not use your name or anything that could identify you, and we will not use the names of any people you mention. We hope that this study will help older people in your community and the wider population. Although we cannot guarantee that you will benefit directly from being involved in this study, we do hope to develop information for policy makers and service providers in your area which may also benefit you.

Anonymity and Confidentiality:

Every step will be taken to ensure all personal information (such as your name, address and the people and places you may talk about) will be anonymised which means that nothing that could identify you or anyone you mention will be used in any reports, publications or conference presentations on this study. No information provided will be shared with any other participants of this research except when anonymised as part of the overall research findings. All interview transcripts, photographs and diaries will be kept confidential and password protected if stored on a computer, or otherwise stored in a locked and secure location at the School of Geography, Queen Mary University of London for the duration of this study. When the study is finished the interview records will be stored for 7 years in a secure location at the School of Geography, Queen Mary University of London. No data will be stored online at any point during the research.

Further information:

If you would like to know more about the study contact Alexandra Boyle on 020 7882 3363 or on 07424 663 964 or at a.f.g.boyle@qmul.ac.uk.

If you have any questions or concerns about the manner in which the study was conducted please, in the first instance, contact the researcher responsible for the study. If this is unsuccessful, or not appropriate, please contact the Secretary at the Queen Mary Ethics of Research Committee, Room W117, Queen's Building, Mile End Campus, Mile End Road, London or research-ethics@qmul.ac.uk.

Appendix B: Participant Consent Form

Participant Consent Form

Consent Form



Please complete this form after you have read the Participant Information Sheet and/or listened to an explanation about the research.

Title of Study: Exploring the emotio-spatial dimensions of communication technology use among older adults in contemporary London.

Approved by the Queen Mary Ethics of Research Committee on the 2nd of July 2014 to 23rd June 2016, Ref: QMERC2014/59.

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Participant Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

- I understand that if I decide at any other time during the research that I no longer wish to participate in this project, I can notify the researchers involved and be withdrawn from it immediately.
- I consent to the processing of my personal information for the purposes of this
 research study. I understand that such information will be treated as strictly
 confidential and handled in accordance with the provisions of the Data Protection
 Act 1998.
- I have read and I understand the participant information sheet for volunteers in this study of the emotional aspects of technology use between older adults and family.
- I have talked about this study with the researcher. I am happy with the answers I have been given.
- I know that until the 23rd June 2016 I can withdraw my interview recording.
- I know that my name will not be used in any report of the interview and that anything I talk about will be reported in such a way that I cannot be recognised.
- I have had time to think about whether to take part.
- I know who to contact if I have any questions about the study.

Yes / No	I agree to have this interview recorded. I know the recording will be cared for respectfully by the researcher.
Yes /No	I want to be sent a copy of the transcript of this interview,
	and know that I have the right to take out or change parts
	of the text.
Yes / No	I want the researchers to ask my permission to use the
	photographs or diary and interview excerpts in any
	publications or conferences
	a) each time they are used, OR
	b) I give permission now for all and any future use
	(delete as appropriate)
Yes / No	I want to be sent a short written copy of the overall results
	when they come out.
Yes / No	I want to be invited to come to a meeting where the
	researcher will explain the overall results of the study.
Yes /No	I would like to be sent a copy of any academic
	publications based on this study.
Yes / No	I consent to my information in this study being used for
	other studies in the future.
Participant's	
-	agree that the research project named agree to take part in the study. I have
	notes written above and the Participant Information Sheet about the project, and
	at the research study involves.
Signed:	Date:
Signes.	2
.	
Investigator's	confirm that I have carefully explained
the nature, der	nands and any foreseeable risks (where applicable) of the proposed research to
the volunteer.	• • • • • • • • •
Signed:	Date:

Appendix C: ICT Support Letter



Participant IT, Technology and Internet Assistance Sheet

Research study: Exploring the emotio-spatial dimensions of communication technology use among older adults in contemporary London.

Thank you for participating in this research study and volunteering to provide me with valuable information about the types of communication technology you use to keep in touch with distant family members or friends, and how it makes you feel when you keep in touch with each other using different communication technologies.

If you feel you require assistance or would like further information regarding your technology, IT or Internet use, please see below the list of organisations in your local area that may be able to offer you further assistance and information free of charge.

AbilityNet

Website: http://www.abilitynet.org.uk/

Telephone: 0800 269 545

Your local branch: [ADDRESS INFORMATION TO BE INSERTED]

AbilityNet offers IT support to disabled people in their own homes. You may be eligible for a verified AbilityNet volunteer to come to your home and provide IT related support such as help setting up, installing or adapting your computer to your needs, or to help you learn new skills. To find out if you are eligible please call their helpline 0800 269 545.

AbilityNet also offers a number of free online factsheets on technology and Internet related issues found on their website: http://www.abilitynet.org.uk/factsheets

Age UK

Website: http://www.ageuk.org.uk/work-and-learning/technology-and-internet/

Telephone: 0800 169 6565

Your local branch: [ADDRESS INFORMATION TO BE INSERTED]

Age UK offer online and in-person assistance to older adults in the area of technology and the Internet such as:

- A glossary of terms (http://www.ageuk.org.uk/work-and-learning/technology-and-internet/a-to-z-of-computing/).
- Free training courses. Call 0800 169 6565 to find the next course nearest to you.
- Information for staying safe online, protecting your privacy and who to call if you think
 you may be the victim of an online scam (http://www.ageuk.org.uk/work-and-learning/technology-and-internet/internet-security/5-common-online-scams/).

Citizens Advice Bureau

Website: http://www.citizensadvice.org.uk/

Telephone: 08444 111 444

Your local branch: [ADDRESS INFORMATION TO BE INSERTED]

Approved by the Queen Mary Ethics of Research Committee on the 2nd of July 2014 to 23rd June 2016, Ref. OMERC2014/59.

The Citizens Advice Bureau provides consumer related advice for those who may have questions about lost or stolen mobile phones, the service they are receiving from their mobile phone or Internet provider, how to select the right provider for you and staying safe online. Information sheets on these topics can be found on their website (http://www.adviceguide.org.uk/england/consumer_e/phones_tv_internet_and_computers_in_dex_e.htm) or by contracting your local branch.

[NAME OF LOCAL BOROUGH COUNCIL]

The contact information and and a list of services offered, if any, for each borough council will be included here. This will be tailored to the location of each participant.

Thank you again for your contribution to this research project.

Approved by the Queen Mary Ethics of Research Committee on the 2nd of July 2014 to 23nd June 2016, Ref. OMERC2014/59.

Appendix D: Stakeholder Participant Interview Schedule

Introductory Questions

- Can you briefly explain the role of the organisation you work for? And can you briefly describe what it is your job entails?
- · What is the most important aspect of your job?
- What is your organisations stance on the role of communication technologies in the lives of older adults? Why?

Interview Theme	Questions
Interview Theme	➤ In your professional capacity, how do you see the use of
Social Life Worlds	 communication technologies impacting the level and type of social interaction(s) older adults engage with? Do you think there are there different expectations of men and women using the same type of communication technology? How would you describe the changing social position of older adults in English society over the past ten years? What do you think has caused this change (or lack of)? How would you like to see the social position of older adults
	change over the next ten years?
	 How would you describe the state of older adult's access to technology in England? From your experience, what are the biggest obstacles for getting older adults to engage with communication technologies? And the greatest facilitators?
Communication Technology	 What skills do you think are needed for older adults to effectively engage with communication technologies? From your experiences of working with older adults, what is it that older adults are looking to gain from using communication technologies?
	 How do you think communication technologies might be enhanced or adapted to achieve this? How do you perceive technology complementing the broader care of older adults? What leads you to say this?
Emotions	From what older adults report to you, or your research shows, how has technology affected the social and emotional lives of your services users?
Institutional Roles and Impacts	 How would you describe the role of government in facilitating older adult's access to communication technologies? How effective are these? And have you observed changes in last ten years? Why do you think the government continued with this strategy? What do you think could have been done differently?
Research Methods	 In your experience, what are the most effective research methods for engaging with older adults? Upon commencing your project, how did you need to adapt and refine your research methods? Did you encounter and issues with the mental or physical competencies of participants affecting their ability to participate? Where you able to mitigate against these and in what ways?

Appendix E: Recruitment Flyer

Recruitment Flyer (March 2015 – August 2015)

Research Invitation

An invitation to retired people in London to participate in a study about how and why they keep in touch with their family and friends.



Researchers from Queen Mary University of London are keen to speak with retired people who live in Greater London about the different ways they keep in touch with family and friends.

Who can take part?

Retired men and women who live within the Greater London area.

What will I be asked to do?

- An interviewer will come to talk with you for about one hour.
- You may also be asked you if you would like to participate in some other activities
 including taking photos, writing postcards and keeping a diary, for up to 2 weeks after
 the interview. You will be provided with all the necessary equipment to complete these
 activities. An interviewer would then like to interview you again for about one hour, to
 talk about each of the activities.

Where and when?

The interviews will be arranged at times and locations to suit you. You can choose whether to be interviewed at your home, or a nearby location (e.g. community centre, café etc.) and I will travel to meet you or we can arrange for a room at the Queen Mary University of London, Mile End campus.

To volunteer or for further information please contact Alexandra Boyle (Postgraduate Researcher) on 07424 663 964 or at a.f.g.boyle@qmul.ac.uk.

Please consider asking friends or family if they would like to take part Thank you for reading!

Approved by the Queen Mary University of London Research Ethics Committee on the 9th of September 2014 for two (2) years (to 9th September 2016).

Reference Number QMERC2014/59.



Recruitment Flyer (September 2015 – October 2015)

Are you retired and living in London? If so, then researchers want to talk to you about how you keep in touch with friends and family.



Researchers from Queen Mary University of London are keen to speak with retired people who live in Greater London about the different ways they keep in touch with family and friends.

Who can take part?

We would be very interested in hearing from retired men and women who live within the Greater London area. We would also be keen to speak to:

- Retired Londoners who may have restricted mobility or
- Who don't see family and friends face-to-face very often, or
- Those who aren't online.

What will I be asked to do?

An interviewer will come to talk with you for about one hour.

Where and when?

The interviews will be arranged at times and locations to suit you. You can choose whether to be interviewed at your home, or a nearby location (e.g. community centre, café etc.) and I will travel to meet you or we can arrange for a room at the Queen Mary University of London, Mile End campus.

To volunteer or for further information please contact Alexandra Boyle (Postgraduate Researcher) on 07424 663 964 or at a.f.g.boyle@qmul.ac.uk.

Please consider asking friends or family if they would like to take part.

Thank you for reading!

Approved by the Queen Mary University of London Research Ethics Committee on the 9th of September 2014 for two (2) years (to 9th September 2016).

Reference Number QMERC2014/59.



Appendix F: Table of Participant Demographic Information

Pseudonym	Age	Gender	Technology User	Marital Status	Parental Status	Living Arrangement	Borough of Residence	Ethnicity	Previous Occupation	Recruitment Method	Interview Format	Postcard Cultural Probe
Barry	69	Male	Yes	Married	1 Daughter 1 Sons	Lives with Spouse & Adult Child(ren)	Tower Hamlets	Not specified	Not specified	Community Centre Visit	Group (with Keith, Sam & Richard)	Completed in Interview
Keith	Prefer Not to Say	Male	Yes	Single	No Children	Lives Alone	Tower Hamlets	English	Long-term Unemployed	Community Centre Visit	Group (with Sam, Barry & Richard)	Completed (via Email)
Sam	61	Male	Yes	Partnered	No Children	Lives Alone	Tower Hamlets	English	Not specified	Community Centre Visit	Group (with Keith, Barry & Richard)	Completed in Interview
Richard	85	Male	No	Widower	2 Daughters	Lives Alone	Tower Hamlets	Not specified	Not specified	Community Centre Visit	Group (with Keith, Barry & Sam)	Declined
Joan	85	Female	Yes	Widow	2 Sons	Lives Alone	Islington	English	Student Counsellor	Flyer	Individual; Café	Completed
Jeff	64	Male	Yes	Married	1 Son	Lives with Spouse	Croydon	Scottish	Social Worker	Personal Networks	Individual; QMUL	Completed
Norma	83	Female	No	Widow	No Children	Lives Alone	Tower Hamlets	Italian	Shop Assistant	Community Centre Visit	Individual; Community Centre	Did not respond

Pseudonym	Age	Gender	Technology User	Marital Status	Parental Status	Living Arrangement	Borough of Residence	Ethnicity	Previous Occupation	Recruitment Method	Interview Format	Postcard Cultural Probe
Deborah	Prefer Not to Say	Female	Yes	Married	2 Sons 1 Daughter	Lives with Spouse & Adult Child(ren)	Ealing	Not specified	Teacher	Personal Networks	Individual; Home	Could not be contacted
Susan	Prefer Not to Say	Female	Yes	Married	2 Daughters	Lives with Spouse & Adult Child(ren)	Ealing	Not specified	NGO Sector	Snowballing	Individual; Community Centre	Could not be contacted
Carl	58	Male	Yes	Unknown	No Children	Lives Alone	Tower Hamlets	Not specified	Long-term Unemployed	Community Centre Visit	Individual; Community Centre	Did not respond
June	82	Female	Yes	Widow	3 Sons	Lives Alone	Tower Hamlets	Not specified	Teacher	Community Centre Visit	Individual; Community Centre	Completed
Frances	58	Female	Yes	Married	1 Son	Lives with Spouse	Ealing	Not specified	Lawyer	Snowballing	Couple (with Mark); Home	Completed
Mark	68	Male	Yes	Married	1 Daughter 1 Son	Lives with Spouse	Ealing	Not specified	Lawyer	Snowballing	Couple (with Frances); Home	Completed
Helen	75	Female	Yes	Married	2 Daughters	Lives with Spouse	Camden	English	Social Worker	Flyer	Individual; Café	Completed (as part of full activity kit)

Pseudonym	Age	Gender	Technology User	Marital Status	Parental Status	Living Arrangement	Borough of Residence	Ethnicity	Previous Occupation	Recruitment Method	Interview Format	Postcard Cultural Probe
Edward	74	Male	Yes	Married	3 Sons	Lives with Spouse & Adult Child(ren)	Ealing	Not specified	Engineer	Personal Networks	Individual; Café	Declined
Rita	89	Female	No	Divorced / Single	No Children	Lives Alone	Camden	Sri Lankan	Teacher	Flyer	Individual; Home	Completed
Veronica	62	Female	Yes	Unknown	Unknown	Lives Alone	Unknown	Peruvian	Not specified	Community Centre Visit	Postcard Only; Community Centre	Completed (postcard only respondent)
Dennis	69	Male	Yes	Divorced	2 Sons	Lives Alone	Waltham Forest	English	Long Term Unemployed	Flyer	Individual; QMUL	Completed (via Email)
Terence	64	Male	Yes	Married	1 Daughter 1 Son	Lives with Spouse	Lewisham	English	Unknown	Online Forum	Couple (with Irene); QMUL	Completed (via Email)
Irene	60	Female	Yes	Married	1 Daughter 1 Son	Lives with Spouse	Lewisham	Chinense Malaysian	Self- Employed / Small Business Owner	Online Forum	Couple (with Terence); QMUL	Completed (via Email)
Nigel	70	Male	Yes	Married	1 Daughter	Lives with Spouse	Southwark	English	Programmer	Online Forum	Individual; Café	Completed (via Email)
Carol	74	Female	Yes	Widow	No Children	Lives Alone	Hackney	American	Office Manager	Community Centre Visit	Individual; Home	Declined

Pseudonym	Age	Gender	Technology User	Marital Status	Parental Status	Living Arrangement	Borough of Residence	Ethnicity	Previous Occupation	Recruitment Method	Interview Format	Postcard Cultural Probe
Hazel	70+	Female	Yes	Divorced / Single	No Children	Lives Alone	Hackney	Mauritian	Accounts Assistant	Community Centre Visit	Individual; Community Centre	Declined
Henry	65	Male	Yes	Married	2 Daughters 1 Son	Lives with Spouse	Bromley	English	Teacher	Online Forum	Individual; Café	Declined
Marion	59	Female	Yes	Single	No Children	Lives Alone	Southwark	English	Tertiary Sector Administrator	Online Forum	Individual; Café	Completed (via Email)
Violet	84	Female	No	Widow	1 Daughter 1 Son	Lives Alone	Kingston & Merton	English	NGO Sector	Personal Networks	Individual; Home	Did not complete
Ruth	80	Female	Yes	Married	3 Sons 1 Daughter	Lives with Spouse	Kingston & Merton	English	Homemaker	Personal Networks	Individual; Home	Did not complete
Roy	89	Male	No	Widower	1 Daughter 2 Sons	Lives Alone	Barnet	English	Engineer	Flyer	Individual; Home	Did not complete
Mavis	87	Female	Yes	Widow	3 Sons 1 Daughter	Lives with Adult Child(ren)	Kingston & Merton	English	Photographer	Snowballing	Individual; Home	Did not complete

Appendix G: Older Adult Participant Interview Schedule

Introductory Questions

- · Can you please describe for me a typical day for you?
- · And what about a typical week?
- Can you tell me something about what your life was like before you retired? And what is life like now you have retired?
- · Are you able to tell me how you feel about ageing and what growing older means to you?

Themes Generated from Literature	Associated Questions
Social Life Worlds	 How would you describe your social life here in London? And who do you communicate with regularly? And how you keep in touch with them? Would you be able to tell me a bit about your family and friends? How would you describe the role of family and friends in your life? So when you think about family or friends and you think about more specifically your family and friends, what kind of images and words would come to mind? Are you able to tell me about some of the ways you keep in touch with [FAMILY MEMBER/FRIEND] that are especially important and meaningful to you?
Communication Technology	 Are you able to tell me what the phrase 'communication' means to you? What images and words come to mind when you think about technology? Are you able to tell me about what types of technology you have in your home and how you use them? Can you tell me a bit about how you came to use [TECHNOLOGY TYPE]? What were the main challenges when you first started using [TECHNOLOGY TYPE]? You said you use [TECHNOLOGY TYPE] and [TECHNOLOGY TYPE] to keep in touch with family and friends. Could you tell me about any differences or similarities you find between the two? How were you keeping in touch with your family and friends before you began using [TECHNOLOGY TYPE]? How effective do you think [TECHNOLOGY TYPE] is at allowing you to keep in touch with family and friends? What leads you to say that? What do you believe to be the role of [TECHNOLOGY TYPE] to be in your life? When do you use this form of technology to communicate with people? Why? Where do you use this form of technology? Why? What do you think [TECHNOLOGY TYPE] offers to people like yourself? What services does [TECHNOLOGY TYPE] offer you aside from being able to keep in touch with family and friends? In what ways do you feel that your life has changed since you've been using [TECHNOLOGY TYPE]?

	Do you feel that [TECHNOLOGY TYPE] helps you to feel closer to your family and friends? If so, please explain. How does being able to contact your [FAMILY MEMBER/FRIEND]
Emotions	this way make you feel? Can you compare how you found it keeping in touch with family and friends before and after you started using [TECHNOLOGY TYPE]? How good or difficult is keeping in touch with [FAMILY MEMBER/FRIEND] using [TECHNOLOGY TYPE]? What is the most important aspect of being able to keep in touch with
	[FAMILY MEMBER/FRIEND] for you?

Prompts, Probes and Follow Ups:

- Can you give me another example of that?
 Does that happen all the time?
- > How does this compare with your experience elsewhere?
- ➤ Go on...
- ➤ Tell me more...
- > I'm not sure I understand, could you explain a bit further for me?
- > Could you please elaborate or be more specific?
- > Can you briefly explain...?
- I never knew that...
- > What I'd like to talk about today...
- Would you be happy to tell me more about that?
 How important was [INSERT FACTOR] in this decision?
- ➤ What are the best things about [INSERT FACTOR]? And the worst?
- What happened?
- ➤ How do you feel about [INSERT FACTOR]?
- Do you feel that you have changed as a person since you've [INSERT FACTOR]?
- Can you tell me a bit about the experience of [INSERT FACTOR]?
- Can you tell me about your first experiences of [INSERT FACTOR]?

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Appendix H: Outline of Cultural Probes Activities and Activity Kit Example

The six cultural probes in this research were selected or adapted from a broader range of probes used elsewhere in the literature and included: photograph taking with a Polaroid camera, postcard writing, writing (prompted) wish lists; keeping a diary (with cued phrases); drawing a home plan or maps and keeping a media log (see Gaver, et al., 2004; Gaver et al., 1999; C. Graham & Rouncefield, 2008; C. Graham et al., 2007; Pedell et al., 2010; Wherton, et al., 2012). The tool kit was designed to complement verbal elicitations of emotion (in the form of interviews), by producing visual and textual elicitations. This triangulation of methods remains an imperfect attempt at elucidating the non-representative qualities of emotions, but it was hoped it would be a more robust methodology than the use of any one method in isolation. The cultural probes were positioned as an activity kit that would help me, the researcher, to get to know participants better and understand what a typical week might be like for them. A guide or short example accompanied each activity but was not to be prescriptive in nature so that the response and interpretation of each probe was as unsolicited as possible to allow for participant agency and creativity to guide the process. As well as verbally explaining to participants how to use each of the items, written instructions outlining how to use equipment such as the Polaroid camera were enclosed for participants to refer to as required. A weekly phone call was to be made to each participant to ensure that they were comfortable with the cultural probes and had sufficient materials remaining to complete them.

Each of the cultural probes was orientated towards accessing different representations of emotions. All six cultural probes were compiled together in a booklet and to be distributed with a Polaroid camera and a 10 pack of film pre-loaded, colouring pens and stickers (of both words and images), to aid in their completion (see pages 290-291 for images of examples). The first probe, the Polaroid camera with accompanying prompts of potential images, was a variation of visual ethnography and an adaptation of previous cultural probe approaches that supply participants with disposable cameras with a list of prompts attached (Gaver, et al., 2004), or digital cameras (Wherton, et al., 2012). It involved solicited participant-led photograph taking without the presence

of the researcher, and at times and in places where it would not be possible for a researcher to be present. Although the aim of the activities was to allow for participant creativity to drive the process, the image prompts were included to stimulate photographs that convey something of the materialities and spatialities of technology use. The second probe, postcard writing, was one of several probes aimed at generating different format, textual representations of emotions. A statement or question was written at the top of each postcard for respondents to complete. Postcards have been a successful probe as they require minimal effort due their contained size and "because of their connotations as informal, friendly mode of communication" (Gaver et al., 1999, p.23). The third probe, writing 'wish lists', was a short format ranking exercise. Each 'wish list' posed a question or statement to which participants could record up to three 'wishes' in response, usually focused around things they would like to change in their life, such as three things they wished they could have more or less of in their lives.

The fourth probe, diary writing (with some pages including prompts at the top), was aimed at longer format textual representations of emotions. Participant diaries have the benefit of being a sustained, reflexive personal insight with no co-participant or interviewer interference and are also a rich and diverse information source as they may demonstrate a multiplicity and temporality of emotions and experiences not felt or expressed in a single encounter. Often, "because many of our everyday interactions are fleeting and mundane, or just plain routine and lacking in any obvious social consequence, potential research respondents will generally struggle to be able to anything much about them" (Latham, 2010, p.190). Through the use of participant diaries it was hoped that participants would be more reflexive about their relationship with communication technologies and family and friends, as "diaries can provide an opportunity for respondents to explain and explore highly emotional and personally sensitive issues with a frankness" (Latham, 2010, p.191) not given in in-person interviews. Diaries are also a proxy for, and more empowering means of, traditional ethnographic participant observation as they are participant directed (Jacelon & Imperio, 2005). However, solicited diaries are authored with the reader (the researcher) in mind. There is the risk that respondents will self-censor in the knowledge that the diary will be read by someone else, or the diary will be completed in the way the participants perceive the researcher would like it to be (Jacelon & Imperio, 2005).

From a practical perspective, the nominal time period of two weeks was selected for diary completion as Jacelon and Imperio (2005) completed a similar exercise with older adults and found that it took approximately a week for respondents to feel comfortable and become familiar with the process of writing a diary. Jacelon and Imperio (2005, p.994) reported that "as participants became more comfortable with maintaining the diaries, the introspection in the entries increased, and the self-conscious comments decreased". However, the time intensive nature of diary writing means that it would exert an undue burden on participants were it to be requested diaries are kept for a longer duration.

The fifth probe, mapping, requested participants map the spaces in the home where they use different technologies. Generic room layouts were included and participants were asked to include for each space the objects and activities that relate to each room, using the stickers and colouring pens provided. The final probe, was the keeping of a communication log. This activity was aimed at developing a cohesive sense of the people whom participants are in contact with, and the technologies, temporalities and spatialities of such interactions. It asked participants to record as accurately as possible for a seven day period, each interaction they had with someone noting the time of day, mode of communication, length of interaction, where they were and who it was with. It would not have been possible for any participant to recall this information in an interview setting. Thus, this probe was aimed at overcoming issues associated with memory recall and at contextualising participant narratives.

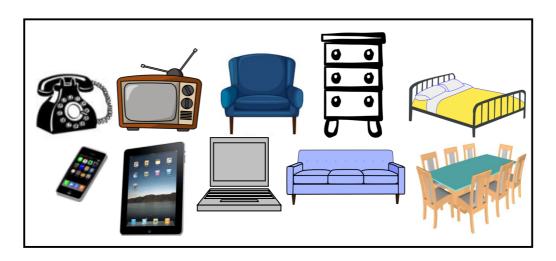
Upon completion of the two-week period, the activity kit was to be collected or returned to the researcher for a preliminary analysis before a second interview was arranged to discuss its contents. These interviews were to be less structured than initial interviews as they needed to be responsive to the individual themes and ideas that were produced during initial meetings and from the cultural probes.





Polariod Camera

Colouring Pens



Example of Stickers (not to scale).

Excerpts from Cultural Probe Activity Kit Bookle

The Talking About Technology Research **Project** Your personal activity kit.

What is in this activity kit?

Thank you for taking part in this study about older people in London and how and why they keep in touch with family members or friends. The information you are sharing is really helpful for us to understand how it makes older people and their family members or friends feel when they to keep in touch with each other using different communication technologies.

As part of this study, this activity kit has been put together so that we can get to know you a bit better in a way that suits you. There are 6 different activities in this kit. These include:

Writing postcards.

Taking photos.

Making wish lists.

Keeping a diary.

Keeping a communication log.

Drawing maps.





Communication Log

This activity helps us to understand who, what, when and where and how you keep in touch with family and friends in a typical week. Over a 7 day period this communication log asks you to record each time you interact with someone and make a brief note of who, how, when and where you

If you can't fill it out for every day or every time you see or speak with someone, that's ok – just fill in what you can.



Date: Queen Mary

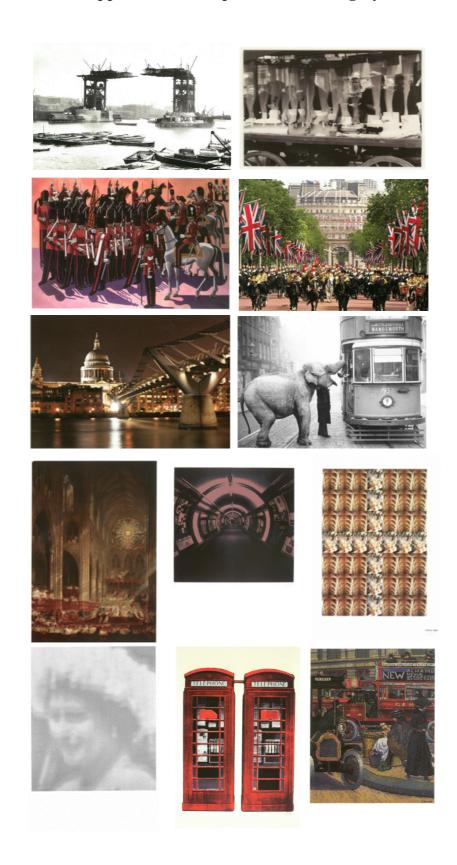
Wish Lists

Below are some wish lists. Each list poses a question or statement and asks you to record three wishes. You can make a list for all, none or just some of the wishes and complete them in any order you like.

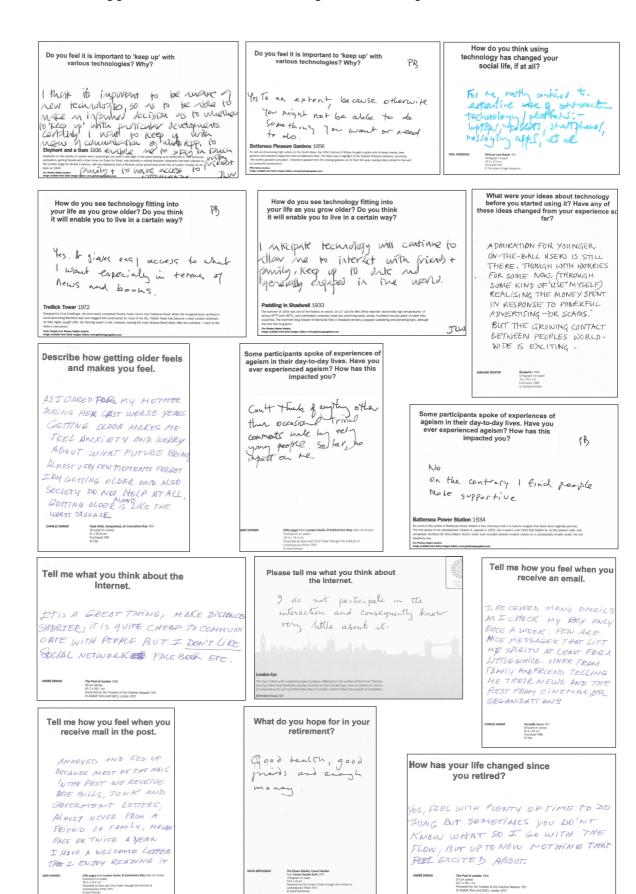


ke	hat are your three favourite ways of eping in touch with family and friends? hy?
1.	
2.	
3.	
3.	
	Queen Mary University of London

Appendix I: Example Postcard Imagery



Appendix J: Selection of Completed Participant Postcards



Appendix K: Example of Interview Transcript

Excerpt from Interview with Carol (74) at her Home

- I: Interviewer
- P: Participant
- I: And what about um friends locally in London, I guess you would have established?
- P: Likewise I frequently use email
- I: Mmm hmm
- P: And, and within my church community, I'm a Quaker and I'm actually correspondence clerk for the small meeting and without email what would I do? I mean I almost don't know how we communicated before email because it's a way of sending minutes, you know, reminders um, requests, communications form central office so to speak, from a friend's [inaudible] um the oldest member of meeting recently died, she was the only one not on email
- I. Mmm hmm
- P: Everyone's on email so I, I feel it facilitates communication enormously I mean you have to be discriminating and there are people who never respond ah and maybe never read what you send but, but for friends and for organising let's say a get together or today, today with a friend I, I, it happened quite spontaneously this, this friend I had lunch with sent me an email, she knew that I was open to her, to coming over and having a walk with her or a cup of tea, she's, she has terminal cancer but is, is mobile still and able to live in her home receiving ah palliative care treatment and she's had a rough couple of weeks because she's been on, having radio therapy for the first time so she's not, she's been out of touch but we did speak by phone because I was worried about her basically but we're not, we're fairly recent friends and therefore I cannot say we're close or deep friends but she's a neighbour whom I regard highly and she lives nearby and um she knew that I was available so to speak on a spontaneous basis so she wrote and, and said she was free this afternoon to,

just beginning to feel better and go out and it was perfect, perfect that we, that I could respond by calling her and saying 'yes, let's have lunch'

- I: Mmm
- P: Um that doesn't happen all that often usually I meet fiends more by arrangement but it did happen today and it happened with another friend this morning when we did happen to meet. This has nothing to do with technology but we happened to meet at he leisure centre where we were both doing some exercise independently and we walked back together and just chatted for a while here
- I: Mmm
- P: But he had to go, I had to go um it doesn't matter, I think I'm telling you irrelevant detail now but um I, I do use it a lot for friends here, friends here
- I. Mmm
- P: And for in a sense business purposes for example I'm a member of a housing co-operative and um at various times was let's say secretary of the management committee, I'm no longer actively involved on management side but, but by circulating minutes, certainly work by sending reminders, by, by sending a request you know for some work to be done you know they, that the co-op would be responsible for or doing so for a neighbour who doesn't have ah a computer ah link it's really good, wonderful, fantastic. I cannot exaggerate how, what, what an important um element of life, daily life, it is. I, to the point where I do make a daily practice of turning it off at night because I don't want to be, I don't want, I want to break my dependence through the night
- I: Mmm
- P: I listen out for those pings and they get my attention
- I: Mmm
- P: And I do see who's written me. There's some way in which I crave being wanted, being needed, you know being communicated with and I will go if necessary to satisfy that craving, maybe read the, read The Guardian website r the New, in particular the New York Times website which I am able to get a digest of every day by way of um ah a headlines service that my sister qualifies me for um because that way I'm learning about the world at least, if not my friends and family um

- I: So before you had the computer, would the sorts, would you keep in touch by the phone? Is this a recent advent would you say you're more in touch with people generally now?
- P· I would
- I: Or is it replacing other things that you used to do?
- P: It's a little hard to say um because it's such a radical change um
- I: Mmm
- P: I, I, I [pause] feel I'm in more touch, more closer touch, with more people, more often
- I: Mmm hmm
- P: Um [pause] I almost can't remember before [pause] phone was always too expensive
- I: Mmm
- P: Still is expensive, it's a major, because I get broadband service through it,
- I: Mmm
- P: It's always £30 a month, to me that's a lot
- I: Mmm
- P: Um [pause] but it vari-, it fluctuates a little bit but it's hardly ever less than 30
- I: Mmm
- P: Um [pause] I, I, it wouldn't have been phone, it would have to be letter I think
- I: Mmm
- P: And my family, my sister, that one sister over the other and my mother and father were pretty good corresponders as were my grandparents too um and so it runs in the family I would say, one aunt in particular was a very good writer and ah [pause] yeah but correspondence has lost out to, you know paper correspondence certainly has lost out to electronic

Excerpt from Interview with Jeff (64) at QMUL

- I: Interviewer
- P: Participant
- I: How did technology play a role in your professional, professional life? Like I mean was there a point at which these technologies were introduced to you through your working career or was it something you've always personally pursued for yourself?
- P: Well...certainly when I joined the workforce in the early 70s um there was no email um...so yeah so I mean I kind of lived through the introduction of email at work although I had it at home before it came to work you know but as soon, as soon as it was available I mean I was fascinated by the, you know by the...the concept that we almost take for granted now you know that I can type something on a keyboard here in London and if you're in Auckland you can get it minutes later that, I mean that just still seems like magic to me.
- I: Mmm.
- P: I mean I was, and I'll tell you why, just give you a very short example of that um we're going to a, rent a little former water mill in the Dordogne in France in June right?
- I: Sounds like a dream!
- P: And um the woman ah I did it through Air BnB, have you heard of that organisation?
- I: Mmm hmm.
- P: So I did it through that and she, we clinched the deal and she sent an information sheet and because I, I, I did a bit of French and I can understand and write it and she'd translated ah an information sheet about her mill into English, so very cagily I wrote to her and said 'look how would you feel about, if I just you know sort of did a few little tweaks to make it perfect?' trying to be very ah what's the word you know sort of careful not to make her feel bad 'cos I didn't want to make her feel bad I said 'look if I'm intervening too much tell me and um but I know I'm the sort of person that likes to be corrected in other languages you know but if you don't want me to' and she was delighted she said 'oh no please do that' so I just did it yesterday or the day before but

then it struck me and, and to get back to my point it struck me I just said, I was saying to my wife I said, 'isn't it incredible that you know there she's living a mile or so away from this lovely little water mill in rural France and you know I'm in London and what I can do here with those corrections is just winging its way to her' and you know okay that's an everyday occurrence that we've been living for, living with for how long? Decades, decades now but it, it does sometimes strike me as how fantastic it is to be able to do that you know? Electrons in the air as it were [laughs] and she's getting it in the countryside in France.

- I: Yeah [laughs].
- P: So, so, so yeah if you're asking was I into it you know before, I was kind of I, I, I had a dial-up so called um arrangement at home where you had all the, the, the whirling and clicking of the cogs you know?
- I: Yeah [laughs].
- P: Ah like a fax machine and you know but even then slow as it was and even then when it took [pause] you know like two minutes to load a page-
- I: Yeah [laughs].
- P: It was still wondrous to me.
- I: Yeah?
- P: I, I was, I was shocked by how wondrous it was.
- I· Mmm
- P: So
- It's wondrous as well in the sense I mean not just, going back to your France example, that, that can travel so quickly over such distance but all those associated forms of sociability almost like the transfer of knowledge, and how you think if you multiply that out across the social connections and knowledge for the whole world it's kind of happening multiple times over all the time it's just-
- P: [overlapping] exactly
- I: [overlapping] phenomenal
- P: [overlapping] it's like some neural pathways you know of fact and emotion
- I: Mmm
- P: I, I just, and, and so therefore it's the obvious thing that you know we've developed a relationship you know she knows a bit about me now and I've

helped her a little bit and so a relationship has been forged um where [pause] what 25 years ago that probably wouldn't have been possible.

- I: Mmm.
- P: You would've hand written.
- I: Do you think that, that's a different kind of experience, I mean obviously there's the kind of time scale, but in terms of hand writing a letter or doing that type of communication another way, what do you think would be the difference?
- P: Well yeah-
- I: [overlapping] for you personally I guess.
- P: Yeah well I, I mean I guess I take the general point that a lot of people make that there's something very personal about writing a letter, that you've had to take more time and care and you've had to post it in a box and [pause] you've invested arguably, arguably, more of yourself into that communication [pause] I suppose I'm not sure I wholly agree with that see I, I think that [pause] what say a letter, if we're comparing that, lacks, what a letter or what an email lacks in terms of the personal care and attention ah and trouble if you want to look at it and maybe cost to post it that, that, that takes is that because of the [pause] the frequency and the facility of being able to communicate so readily by email it, it offers at least potentially you a chance to be as factual and/or, as subtle and/or as intimate and/or as impersonal as you choose to be and I think if you, for me the, 'cos I'm quite interested in words and language [pause] the more I can use language to communicate, to influence, to resolve, to complain, whatever um [pause] the more likely it is to be a successful intervention for me um or a happy intervention or a ah sort of resolving intervention so, so for me the medium to be honest is maybe less important than the content and what happens, what relationships are built or um my ability to set out clearly what the key themes are and what I'd like someone to respond to but also it, it offers as much subtlety as I want to put into it in terms of trying to attune myself to how this will be received, what somebody's job is ah so, so just to jump of in a slightly different angle [laughs] um I'm known as being a kind of good complainer I get [pause] sort of good results simply because [pause] um [pause] I think I'm pretty good at um judging how to have, get something resolved because I'm good at judging what the recipient's likely perception is of a

complainer or, or whatever so, so I, I, I've been very successful and you know my friends again, among friends I'm kind of go to man about a problem, 'I've got this' you know?

- I: Yeah [laughs].
- P: 'How do you think I should handle this?', so you know, so yeah, yeah so that's part of me and that is I guess now is inextricably linked with the use of new technology but not exclusively limited to that because um because as you can gather I'm quite sort of a verbal person.

Appendix L: Table of Participant Membership in Interest, Community, and Volunteer-Based Networks

	Volunteer	Art Class or Craft Group (e.g. Knitting Group)	Book Group	U3A or Educational Institution	Choir	Lunch Club or Day Centre	Sporting Club (e.g. Tennis Club, Older Adult Exercise Group)	Gender Specific Older Person's Network	Faith-Based Organisation	Housing Co- Operative or Co-Housing Movement
Barry								V		
Keith						V		V		
Sam								✓		
Richard						V		✓		
Joan			V	✓	✓			V		✓
Jeff										
Norma						✓				
Deborah	✓	✓					✓			
Susan	✓						✓			
Carl		✓								
June		✓								
Frances	✓						✓			
Mark										
Helen					✓			V		
Edward							V			

	Volunteer	Art Class or Craft Group (e.g. Knitting Group)	Book Group	U3A or Educational Institution	Choir	Lunch Club or Day Centre	Sporting Club (e.g. Tennis Club, Older Adult Exercise Group)	Gender Specific Older Person's Network	Faith-Based Organisation	Housing Co- Operative or Co-Housing Movement
Rita			V	✓	✓			✓	✓	
Veronica						✓				
Dennis				✓	✓		✓			
Terence										
Irene										
Nigel										
Carol									✓	✓
Hazel				✓					✓	
Henry	✓									
Marion	✓		✓							
Violet		V	V	✓			✓			
Ruth	✓						✓		✓	
Roy						✓				
Mavis	✓								✓	