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Online as it is in Heaven

An Exploration of the Phenomenon of Digital Presence, Techno-Soteriology, and the Secularisation of Transcendent Being

By David Eaton

Abstract

This thesis explores the phenomenon of ‘Digital Presence’: the sense that Social Network Sites (namely Facebook) constitute the sole means of communicating with the deceased. Previous investigations of Digital Presence have largely been quantitative surveys seeking to document the extent of the phenomenon; qualitative inquiries have not attempted to determine why certain survivors experience Digital Presence whilst others do not.

This thesis is a qualitative inquiry featuring interviews with eight survivors who interact with the profiles of the deceased. It seeks to determine the conditions in which the phenomenon occurs, and to explain Digital Presence with reference to theories and concepts from the field of cognitive neuroscience.

It also argues that the phenomenon is contingent upon notions of ‘The Digital’ as a vista which is ontologically distinct from the ‘Physical World’; it concludes that Digital Presence is ultimately the ‘deathstyle’ of a particular, secular worldview, i.e. this worldview’s response to the existential challenge posed by death.

Research Masters Thesis
Department of Theology and Religion
Durham University
2015

Online as it is in Heaven

An Exploration of the Phenomenon of Digital Presence, Techno-
Soteriology, and the Secularisation of Transcendent Being

By David Eaton

This thesis is a result of my own work. Material from the work of others has been acknowledged and quotations and paraphrases suitably indicated. Excluding the title and contents pages, and the bibliography (but including all the chapter headings and subheadings within the main body of the text), the thesis is 49,736 words long.

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Introduction

That the internet has fundamentally and irrevocably changed the way we live is the clichéd salutation of virtually every article that has ever been written about it. But that's because it's true.

Based on data collated by the World Bank, the UN and the CIA, an estimated 3.19 billion people have access to the internet, c.40% of the global population.¹ We use it to shop, explore digitally mapped cities, and share information from our desks, our baths and our beds. It has also provided us with new ways of interacting with each other, as Social Network Sites (herein SNS) have become 'central to contemporary processes of... relationship maintenance, [and] self-expression'.²

The first dedicated SNS, Sixdegrees was launched in 1997 and was quickly followed by Friendster and Ryze. The first SNS to achieve 'mass popularity' however was Myspace, founded in 2003.³ At its peak, Myspace boasted 300 million users, 110 million of which logged into to the site at least once a month.

Since 2008 the world's most popular SNS has been Facebook. On the 27th August 2015, the company announced that more than 1 billion people had logged in and were online at that very moment. As of 30th June 2015, Facebook had 1.49 billion users who logged in at least once a month. It had 986 million users who logged in at least once a day. These users create Profiles, add their friends and family to their networks, and interact and share multimedia content with them. Most of these friends are alive. But some of them are dead.

Companies which manage the digital estates of the deceased such as their email and SNS accounts have estimated that 10,273 Facebook users die per day, and that more

¹ <http://www.internetlivestats.com/internet-users/>, accessed 07/09/15.

² T. Hutchings, '*Wiring Death: Dying, Grieving and Remembering on the Internet*', in D. Davies and C. Park (Eds) '*Emotion, Identity and Death*', (Farnham: Ashgate, 2012), p43.

³ D. boyd and N. Ellison, '*Social network sites: Definition, history, and scholarship*', *Journal of Computer-Mediated Communication*, 13 (1), 2007, [boyd opts not to capitalise her surname, as a political statement].

than 30 million have died since 2008.⁴ Current projections, based on ‘the total number of Facebook users, their ages and geographic distribution, and international death rates’⁵ predict that at the earliest, the dead will outnumber the living on Facebook around 2065. Many of these Profiles of the deceased (herein PDs) persist long after the death of their progenitors, and survivors continue to interact with them.

Memorialising the deceased online however is nothing new. Roberts,⁶ de Vries and Rutherford⁷ and Roberts and Vidal⁸ have documented how websites such as ‘World Wide Cemetery’ and the ‘Virtual Memorial Garden’ allowed survivors to create digital memorials including eulogies and photo montages as early as 1995. What is different about Facebook is the sense in which for some survivors, ‘it feels like the dead are listening.’⁹

For these survivors, Facebook is not simply one of a number of avenues used to continue a bond and communicate with the deceased, equitable to talking at the graveside or communing in their heads. Instead, Facebook is uniquely efficacious. It is ‘the only place to leave a message’,¹⁰ the only way to ‘get hold of’¹¹ the deceased. If the deceased’s Profile were to be deleted, it would ‘feel like I wouldn’t be able to talk to them properly’¹² as ‘it’s strange but part of me just feels like they see it somehow’.¹³

Carroll and Landry’s 2010 quantitative study of SNS mourning practices established

⁴ <http://www.nathanlustig.com/tag/facebook-death-rate/>, accessed 07/09/15.

⁵ Ibid.

⁶ P. Roberts, ‘*From My Space to Our Space: The Functions of Web Memorials in Bereavement*’, *The Forum* 32 (4), 2006.

⁷ J. Rutherford and B. de Vries, ‘*Memorialising Loved Ones on the World Wide Web*’, *Omega*, Vol. 49 (1), 2004.

⁸ P. Roberts and L. Vidal, ‘*Perpetual care in cyberspace: A portrait of Web memorials*’, *Omega*, 40, 2000.

⁹ E. Kasket, ‘*The Face(Book) of Death: Posthumous Identity and Interaction on a Social Networking Site*’, 9th International Conference on Death, Dying and Disposal, Durham, 2009, cited in T. Walter, R. Hourizi, W. Moncur and S. Pitsillides, ‘*Does the Internet Change How We Die and Mourn? An Overview*’, *Omega*, 64 (4), 2011, p16.

¹⁰ J. Hieftje, ‘*The Role of Social Networking as a Medium for Memorialization in Emerging Adults*’, (Doctoral Thesis, Indiana University, 2009), p139.

¹¹ Sam, respondent in my undergraduate dissertation study, Durham, 2013.

¹² E. Kasket, ‘*Being-Towards-Death in the Digital Age*’, 2011, https://www.academia.edu/1705544/Being-towards-death_in_the_digital_age, accessed 03/09/15.

¹³ E. Kasket, ‘*Continuing Bonds in the Age of Social Networking*’, *Bereavement Care*, 31, 2010, cited in E. Kasket, ‘*Access to the Digital Self in Life and Death: Privacy in the Context of Posthumously Persistent Facebook Profiles*’, *Scripted*, Vol. 10 (1), 2013, p15.

that some survivors were utilising Facebook PDs as sites of continued contact and communication with their decedents. In conclusion to their 2012 study of survivor interactions with PDs on Myspace, Brubaker et. al acknowledged that popular SNS practice had already shifted, and urged that ‘analysis of similar, but more recent content from additional sites, such as Facebook, is necessary’.¹⁴

Since then, a variety of qualitative inquiries into survivor interactions with the deceased on Facebook have been conducted by Kasket, Brubaker and Hayes, Marwick and Ellison, deGroot, and Church amongst others. All of these studies however have suffered from at least one of three shortcomings, and I include my earlier investigations amongst this number.

Firstly, several studies, including those conducted by Church¹⁵ and Carroll and Landry,¹⁶ have failed to note whether PDs were considered to be a uniquely efficacious means of communicating with the deceased. They did not inquire if the PD constituted the sole means by which survivors felt that they could communicate with their decedents, or whether it was only one of a number of channels (no more or less effective than speaking to a photograph or continuing a conversation in the mind).

Secondly, those studies which did note whether survivors considered PDs to be the sole means of contacting the deceased, wherein they experienced an ineffable ‘feeling’ that the deceased were present on Facebook (a phenomenon we shall refer to as ‘Digital Presence’) did not attempt to distinguish why some survivors experienced Digital Presence, whilst others felt that PDs no longer had any connection with the deceased.

Kasket¹⁷ and Hieftje¹⁸ have yet to suggest what might differentiate those who

¹⁴ J. Brubaker, F. Kivran-Swaine, L. Taber and G. Hayes, ‘*Grief-Stricken in a Crowd: The Language of Bereavement and Distress in Social Media*’, 2012 AAAI Conference, p49.

¹⁵ H. Church, ‘*Digital Gravescaples: Digital Memorializing on Facebook*’, The Information Society, 29 (3), 2013.

¹⁶ B. Carroll and K. Landry, ‘*Logging On and Letting Out: Using Online Social Networks to Grieve and to Mourn*’, Bulletin of Science, Technology and Society 30 (5), 2010.

¹⁷ Kasket, op. cit., 2009; 2010; 2011; 2013.

¹⁸ Hieftje, op. cit.

experience Digital Presence from their peers, and Brubaker et. al's¹⁹ 2013 study only examined attitudes towards Digital Presence expressed by those who knew people whom had experienced the phenomenon, not those who had experienced it themselves.

My own research, undertaken for my undergraduate dissertation, noted basic demographic information about my respondents, e.g. age and gender, and recorded the nature of their relationship with their decedents and the time elapsed since their deaths. It did not, however, note the personal beliefs of respondents, and it did not give adequate attention to the emotional states respondents associated with Digital Presence.

Finally, the majority of these surveys have examined survivor interactions with memorialised Profiles. In 2009, Facebook introduced the 'Memorialisation' function to allow survivors to remove certain features from a PD.²⁰ If requested, memorialised Profiles firstly inform visitors that the user has died, the Profile no longer appears in public searches or public groups and spaces, and it can only be viewed by members of the deceased's network. Studies conducted by Marwick and Ellison,²¹ Kern,²² Forman, Kern and Gil-Egui,²³ and DeGroot²⁴ amongst others have all focused on survivor interactions with memorialised Profiles.

But this function has not been universally well received by survivors. A number of surveys have found that 'most users choose to interact with a person's regular Facebook presence',²⁵ and that survivors would 'never ask for a slimmed down

¹⁹ J. Brubaker, G. Hayes and P. Dourish, 'Beyond the Grave: Facebook as a Site for the Expansion of Death and Mourning', *The Information Society*, 29 (3), 2013.

²⁰ See <https://www.facebook.com/help/contact/1605213279719667>, accessed 12/09/15.

²¹ A. Marwick and N. Ellison, 'There Isn't Wifi in Heaven!': *Negotiating Visibility on Facebook Memorial Pages*, *Broadcasting and Electronic Media*, 56, (3), 2012.

²² R. Kern, 'R.I.P.: Remain in Perpetuity. Facebook Memorial Pages', *Telematics and Informatics*, 30, 2013.

²³ A. Forman, R. Kern and G. Gil-Egui, 'Death and Mourning as Sources of Community Participation in Online Networks: R.I.P Pages in Facebook', *First Monday*, 17, (9), 2012.

²⁴ See J. DeGroot, 'For Whom the Bell Tolls': *Emotional Rubbernecking in Facebook Memorial Groups*, *Death Studies*, 37 (10), 2013, and 'Maintaining Relational Continuity with the Deceased on Facebook', *Omega*, 65, (3), 2012.

²⁵ S. Buck, 'How 1 Billion People Are Coping with Death and Facebook', *Mashable*, 13/02/13, <http://mashable.com/2013/02/13/facebook-after-death/>, accessed 03/11/14.

version' of the deceased's Profile.²⁶ And, following an involuntary memorialisation in 2012, around 1500 British parents established a campaign group to reinstate the Profile of a woman's deceased daughter back to full functionality.²⁷

Nonetheless, this inquiry and my undergraduate study both issued invitations intended to attract as broad a range of experiences as possible. In both studies however, respondents had only interacted with functionally consistent, non-memorialised PDs, and some respondents were vehemently opposed to the notion of memorialisation. Their testimonies and the above-mentioned surveys have confirmed the need for inquiries into Digital Presence to primarily focus on survivor interactions with functionally consistent PDs.

This study shall seek to address these shortcomings to discover why memorialisation is met with such hostility, and why some survivors experience Digital Presence whilst their peers do not. To do so, we shall also examine attitudes toward what Graham, Gibbs and Aceti,²⁸ and Donath²⁹ have described as 'The Digital', i.e. a purposively ambiguous term intended to express the fluidity with which digital hardware, software and the internet are collectively understood. Because as Ohnuki-Tierney has noted, there is 'a functional advantage in defining phenomena vaguely'³⁰ when 'the intellectual and emotional content of a phenomenon is only dimly perceived'.³¹

Of course, this is not without its difficulties: Digital Presence belongs to that category of experience described by Merleau-Ponty as 'Tacit cogito', and by James as 'Acquaintance knowledge' i.e. as a 'feeling' derived from experience, encompassing 'sensations, emotions, and vague 'feelings of relations.'³² As such, respondents are

²⁶ J. Kaleem, 'Death on Facebook Now Common As 'Dead Profiles' Create Vast Virtual Cemetery', Huffington-Post, 12/07/12, http://www.huffingtonpost.com/2012/12/07/death-facebook-dead-profiles_n_2245397.html, accessed 26/10/14.

²⁷ A. Smith-Squire, 'Facebook 'Heartless' Says Grieving Mum', The Magazine, <http://sellyourstoryuk.com/2012/03/04/facebook-heartless-memorialised/>, accessed 24/10/14.

²⁸ See C. Graham, M. Gibbs and L. Aceti, 'Introduction to the Special Issue on the Death, Afterlife, and Immortality of Bodies and Data', The Information Society, 29 (3), 2013.

²⁹ See J. Donath, 'Pamphlets, Paintings, and Programs: Faithful Reproduction and Untidy Generativity in the Physical, and Digital Domains', in 'Switching Codes: Thinking Through Digital Technology in the Humanities and the Arts', (Eds) T. Bartscherer and R. Coover, (London: University of Chicago Press, herein UCP, 2011).

³⁰ E. Ohnuki-Tierney, 'Illness and Healing Among the Sakhalin Ainu', (Cambridge: CUP, 1981), p157.

³¹ Ibid, p149.

³² Ibid.

characteristically incognisant of its causes and uncertain how to articulate their experiences, e.g. some have simply stated ‘It’s weird’³³ and that they ‘don’t know what I believe’.³⁴

Therefore, we must consider which qualitative methods we could employ to attempt to understand the ineffable; but firstly, given the nature of our subject matter, we must also determine whether we can conduct an investigation into Digital Presence without committing trespass and inflicting trauma.

³³ J. Kaleem, op. cit.

³⁴ Kasket, 2010, op. cit., cited in Kasket, 2013, op. cit., p15.

1

Trespass, Trauma and Understanding the Ineffable

Ethical Considerations and Methodology

'Next to Impossible' - Ethical Guidelines and Internet Research

Before employing qualitative methods to examine social media, we may wish to consult the research guidelines of one or more social scientific associations to familiarise ourselves with the ethical issues pertinent to digital technologies.

If we consulted the RCSI's '*Reflections on Cybermethodology*' we would discover that 'it is next to impossible to produce formal methodological guidelines for research in cyberspace at present'.³⁵ The British Sociological Association would inform us that 'sociologists have a responsibility to ensure that the physical, social and psychological well-being of research participants is not adversely affected by their research',³⁶ before qualifying that 'ethical standards for internet research are not well developed as yet'.³⁷

If we scoured the ESRC's '*Framework for Research Ethics*' for guidelines on internet research we would note that 'researchers... will often encounter new or unfamiliar ethics questions and dilemmas',³⁸ and that 'a good starting point is the Association of Internet Researchers Guidelines'.³⁹ Upon locating these professional conduct guidelines, we may well conclude that 'multiple judgements are possible, and ambiguity and uncertainty are part of the process'.⁴⁰

Of course, such tentative and qualified forewarnings are unsurprising, given that the environment under consideration is 'bound to evolve significantly in the time between

³⁵M. Aiken and C. McMahon, '*A Primer on Research in Mediated Environments*', RCSI, CyberPsychology Research Unit, Working Paper Series #14.2.m, July 2014, p7.

³⁶'*Statement of Ethical Practice for the British Sociological Association*', British Sociological Association, March 2002, p2.

³⁷ *Ibid*, p5.

³⁸ '*ESRC Framework for Research Ethics*' ESRC, 2012, p33.

³⁹ *Ibid*.

⁴⁰ AOIR Ethics Committee, '*Ethical Decision-Making and Internet Research*', 2012, p5.

conceptualization and publication'.⁴¹ For instance, any research which involved user engagement with the Android smartphone Facebook App would require continued reassessment, as there are currently 35 different versions of this application.

Over the course of a relatively brief period, even the focus of popular SNS practice can shift; Brubaker et al.⁴² have noted how a research inquiry into Myspace activity begun in 2007 would not reflect contemporary SNS practice by 2008, the year Facebook established itself as the dominant platform. Again, the particular methodological difficulties associated not with distinct media, but the distinct functional features of different SNS, warrants entirely different approaches.

However, as even the relatively inexperienced social-scientific researcher is aware, personal judgement is a *sine qua non* of ethical consideration. As reaffirmed in the BPS's Code of Human Research Ethics: 'thinking is not optional'.⁴³ Indeed, as the AOIR states, '*phronesis* is a crucial factor in determining the ethical applicability of any given methodology of internet research'.⁴⁴

Therefore research guidelines, echoing Moor's observation that due to the scale of technological development, there will forever be 'policy vacuums about how computer technology should be used',⁴⁵ emphasise the necessity of 'applying existing ethics principles in an IMR (Internet Mediated Research) context'.⁴⁶ They also stress the need to reflect on 'traditional and current'⁴⁷ research practices, and 'make choices on the basis of principles and values'.⁴⁸

One example of a codification of established research principles is the BPS 'Code of Ethics and Conduct'. These guidelines warn that as they were not drafted with consideration to internet research, we 'might wish to consider erring on the side of

⁴¹ E. Kasket, 'Review: *Dying, Death and Grief in an Online Universe*', Journal of Religion, Media and Digital Culture, 2 (2), 2013, p62.

⁴² See Brubaker et. al., 2012.

⁴³ 'Code of Human Research Ethics', British Psychological Society, 2011, p4.

⁴⁴ AOIR, op. cit., p4.

⁴⁵ J. Moor, 'Ethics and the Information Revolution', in 'Readings in Cyberethics', (2nd Ed), ed. R. Spinello and H. Tavani (London: Jones and Bartlett Publishers Int, 2004), p266.

⁴⁶ 'Ethics Guidelines for Internet-Mediated Research', BPS, 2013, p1.

⁴⁷ Aiken and Mc Mahon, op. cit., p7.

⁴⁸ BPS, 2002, op. cit., p1.

caution' in one's judgements'⁴⁹ when conducting such research.

The code recommends that we consider four basic principles before embarking upon any qualitative enquiry: 'respect for the autonomy and dignity of persons, scientific value, social responsibility, and maximising benefits and minimising harm'.⁵⁰ Examples of conventional applications include assessing the degree to which those studied may 'perceive apparent intrusions into their private and personal worlds',⁵¹ and the related extent to which 'research procedures might disrupt/harm social groups',⁵² both contingent upon determining whether research contexts constitute 'public situations'.

With regards to applying these principles to internet research, the code acknowledges that 'it is not always easy to determine which online spaces people perceive as 'private', or 'public'.⁵³ This assessment is deemed crucial to ensure respect for autonomy and dignity of persons, social responsibility (whether inquiries may be deemed 'invasive'), and to determine whether harm may result from not seeking informed consent in 'spaces where people believe that they are not likely to be observed'.⁵⁴

However, even when internet researchers have sought to uphold the harm principle through adhering to the reasonable expectation of online subjects, conflicting approaches have been formulated: whilst Elgesem and Walther have both maintained that 'the expectations of the actors/agents involved are paramount', Elgesem prohibits recording inter/actions in 'the public spaces on the net', while Walther concludes that such observations are ethically permissible.⁵⁵

Indeed, Walther appears able to justify his approach with reference to the 'Ethical Guidelines for Internet-Mediated Research', as these guidelines state that a researcher

⁴⁹ BPS, 2002, op. cit., p6.

⁵⁰ BPS, 2013, op. cit., p2.

⁵¹ BPS, 2002, op. cit., p4.

⁵² BPS 2013, op. cit., p5.

⁵³ Ibid, p6.

⁵⁴ Ibid.

⁵⁵ D. Elgesem, 'What is Special about the Ethical Issues in Online Research?', *Ethics and Information Technology*, 4 (3), 2002, and J. Walther, 'Research Ethics in Internet-Enabled Research', same publication, both cited in AOIR op. cit., p30.

may utilise ‘non-reactive’ techniques, wherein ‘data about individuals are collected unobtrusively, e.g. ‘in found text in online spaces’.⁵⁶ Getty et al. claim that such ‘unobtrusive’ methods are ‘sensitive to users’ in studies of digital post-mortem communication (herein DPMC), as ‘analysing extant posts on profiles is non-invasive, as users are not questioned or otherwise contacted by researchers’.⁵⁷ Likewise, Brubaker and Hayes ensured that of the 1369 deceased Myspace profiles they examined, the sample was limited to ‘Profile pages and comments [that] are publicly visible’,⁵⁸ so as not to be obtrusive, and thus insensitive to survivors.

Walther, Getty, Brubaker and Hayes can, with reference to the principles outlined above, claim they don’t require informed consent, as the scope of their inquiries was limited to ‘public’ spaces. Sinha and Back maintain SNS constitute ‘public’ spaces as through SNS interactions users ‘broadcast themselves’,⁵⁹ whilst Langer and Beckman have claimed that examining online spaces is ‘analogous to viewing readers’ letters to newspapers’.⁶⁰

Indeed, in relation to DPMC, to elicit consent may be contrary to the researcher’s obligation to minimise harm, as ‘requesting such consent in the immediate aftermath of a traumatic death could be enormously insensitive’.⁶¹

However, Beneito-Montagut has claimed that those using public websites ‘do not expect researchers to be gathering their exchanges of personal information as data’.⁶² Therefore, if online subjects reasonably expect publicly accessible websites to be afforded a degree of privacy, the harm principle would stipulate that we should attempt to gain consent to avoid a violation of privacy. Nonetheless, the extent to which informed consent is necessary to conduct any manner of SNS research, and

⁵⁶ BPS, 2013, op. cit., p2.

⁵⁷ E. Getty, J. Cobb, M. Gabeler, C. Nelson, E. Weng and J. Hancock, ‘*I Said Your Name in an Empty Room: Grieving and Continuing Bonds on Facebook*’, 2011 SIGCHI Conference, p997.

⁵⁸ J. Brubaker and G. Hayes, ‘*We Will Never Forget You- An Empirical Investigation of Post-mortem Myspace Comments*’, ACM 2011 Conference, p126.

⁵⁹ S. Sinha and L. Back, ‘*Making Methods Sociable: Dialogue, Ethics, and Authorship in Qualitative Research*’, *Qualitative Research* (herein ‘QR’), 14 (4), 2014, p484.

⁶⁰ R. Langer and S. Beckman, ‘*Sensitive Research Topics: Netnography Revisited*’, *Qualitative Market Research*, 8, (2), 2005, p189-203, cited in C. Paechter, ‘*Researching Sensitive Issues Online*’, QR, 13 (1), 2012, p80.

⁶¹ Hutchings, op. cit., p51-52.

⁶² R. Beneito-Montagut, ‘*Ethnography Goes Online: Towards a User-Centred Methodology to Research Interpersonal Communication on the Internet*’, QR, 11 (6), 2011, p730.

indeed, the legality of any such ‘non-invasive’ methods is the subject of renewed scrutiny.

When the studies cited above were published, discussions concerning the ethicality of different SNS research methods were largely confined to research communities and their journals. This changed in June 2014 when the findings of a study into SNS and emotional contagion were published, and SNS research became the subject of intense media and legal scrutiny.

‘I Am Not a Lab Rat’ - Research Ethics and Media Scrutiny

In January 2012 a member of Facebook’s Data Science department (Kramer), and research psychologists from the Universities of Cornell (Hancock) and California (Guillory), conducted an investigation entitled ‘*Experimental Evidence of Massive-Scale Emotional Contagion through Social Networks*’, designed to gauge if ‘exposure to emotions led people to change their own posting behaviours on Facebook’.⁶³ The inquiry involved the manipulation of Facebook’s ‘Newsfeed’, a perpetually dynamic visual representation of all the inter/actions of the members of a social network.

The experiment involved a group of 689,000 users, divided into two sample groups: one exposed to a 10% increase in positive posts, the other to an equal adjustment of negative posts over a period of one week. Whilst the findings suggest a minor increase in relative posts, i.e. ‘when positive posts were reduced in the News Feed, the percentage of positive words in people’s status updates decreased by $B = -0.1\%$ ’,⁶⁴ social media surveys record a massive increase in user vitriol following publication of the research paper. The BBC claimed the social media response ‘I am not a lab rat’ was typical of the adverse responses to the study.⁶⁵

The 2014 TRUSTe (a leading digital privacy certifier) consumer confidence index found that 84% of Facebook users had lost trust in the service, with 66% considering

⁶³ A. Kramer, J. Guillory and J. Hancock, ‘*Experimental Evidence of Massive-Scale Emotional Contagion Through Social Networks*’, PNAS, 111 (24), 2014, p8788.

⁶⁴ Ibid.

⁶⁵ ‘*Facebook Emotion Experiment Sparks Criticism*’, BBC, 30/06/14, <http://www.bbc.co.uk/news/technology-28051930>, accessed 31/10/14.

deleting their profiles because of the experiment.⁶⁶ Hancock claimed he had received a number of physical threats following the publication of his findings,⁶⁷ a statement from Cornell University sought to distance the institution from the experiment by claiming ‘the research was conducted independently by Facebook’.⁶⁸ Kramer published on the SNS ‘I can understand why some people have concerns about it, and my co-authors and I are very sorry’.⁶⁹

The project was widely criticised by a variety of academics and research associations: Schroeder of the Oxford Internet Institute stated ‘if this had been a study conducted within academia, I doubt very much it would have got ethical approval’;⁷⁰ the BPS claimed that the experiment ‘appears to contravene all four principles of research ethics as set out in the Society’s Code of Human Research Ethics’;⁷¹ and a member of the Commons Media Select Committee commented ‘if there is not already legislation on this, then there should be, to protect people’.⁷²

The study was not just criticised on the basis that exposure to abnormal levels of negative content risked harm. It was also criticised because it ‘failed to gain valid, informed consent from the participants’.⁷³ The 2014 TRUSTe index claimed that ‘the outcry in response to the experiments indicates that users have two unique expectations of social media: a heightened expectation of privacy, and higher levels of trust’.⁷⁴

⁶⁶ D. Deasy, ‘*Why Are Social Media Experiments Considered an Invasion of Privacy?*’, TRUSTe, 25/08/14, <http://www.truste.com/blog/2014/08/25/why-are-social-media-experiments-considered-an-invasion-of-privacy/>, accessed 24/10/14.

⁶⁷ A. Lafrance, ‘*How Much Should You Know About the Way Facebook Works?*’, The Atlantic, 20/08/14, <http://m.theatlantic.com/technology/archive/2014/08/how-much-should-you-know-about-how-facebook-works/378812/>, accessed 31/10/14.

⁶⁸ ‘*Cornell University’s Role in Facebook ‘Emotional Contagion’ Research*’, Cornell University, 30/06/14, <http://mediarelations.cornell.edu/2014/06/30/media-statement-on-cornell-universitys-role-in-facebook-emotional-contagion-research/>, accessed 31/10/14.

⁶⁹ A. Kramer, Response published on his personal Facebook Profile, 29/06/14, <https://www.facebook.com/akramer/posts/10152987150867796>, accessed 31/10/14.

⁷⁰ BBC, op. cit.

⁷¹ K. Bullen and J. Oates, ‘*Facebook’s ‘Experiment’ was Socially Irresponsible*’, The Guardian, 01/07/14, <http://www.theguardian.com/technology/2014/jul/01/facebook-socially-irresponsible>, accessed 31/10/14.

⁷² J. Sheridan MP, BBC, op. cit.

⁷³ The Guardian, op. cit.

⁷⁴ TRUSTe, op. cit.

Facebook claimed that informed consent was constituted by ‘agreement with our data use policy, to which all users agree prior to creating an account’;⁷⁵ however, Forbes has noted that the pertinent article in the data use policy was an addition made ‘four months after the study happened’.⁷⁶ And whilst Facebook claimed it took measures to ensure the privacy of affected users, as ‘none of the data used was associated with a specific person’s Facebook account’⁷⁷ (a precaution taken by Walther, Getty and Brubaker et. al) the degree of perceived violation suggests that ‘social media is a sort of online ‘home’.⁷⁸

Western legal systems have long recognised the home as a sacred place, and experiments that manipulate our ‘‘online homes’ may feel like the most serious transgression’.⁷⁹ Furthermore, Fiske, the study’s editor, has claimed ‘people are supposed to be told they are going to be participants in research and then agree to it and have the option not to agree to it without penalty’.⁸⁰

Thus, Crawford, an MIT Professor and Microsoft researcher, has claimed that ‘opt-in’, as opposed to ‘opt-out’ provisions are necessary to minimise the incidental risk of harm caused by a perceived violation of privacy, and to provide ‘more agency for users’.⁸¹ And whilst manipulating data is not pertinent to examining survivor interactions with PDs, the related issues of privacy and consent are. If SNS can be deemed equitable to ‘online homes’ and thus afforded a degree of privacy, then violating a point of continued contact and communication with the deceased, deemed a secure locale of such activity, could also be perceived as a severe violation of privacy.

⁷⁵ R. Booth, ‘Facebook Reveals Newsfeed Experiment to Control Emotions’, The Guardian, 30/06/14, <http://www.theguardian.com/technology/2014/jun/29/facebook-users-emotions-news-feeds>, accessed 31/10/14.

⁷⁶ K. Hill, ‘Facebook Added ‘Research’ to User Agreement 4 Months After Emotion Manipulation Study’, Forbes, 30/06/14, <http://www.forbes.com/sites/kashmirhill/2014/06/30/facebook-only-got-permission-to-do-research-on-users-after-emotion-manipulation-study/>, accessed 31/10/14.

⁷⁷ BBC, op. cit.

⁷⁸ TRUSTe, op. cit.

⁷⁹ Ibid.

⁸⁰ S. Fiske, The Guardian, 30/06/14, op. cit.

⁸¹ K. Crawford, ‘The Test We Can- and Should- Run on Facebook’, The Atlantic, 02/07/14, <http://www.theatlantic.com/technology/archive/2014/07/the-test-we-canand-shouldrun-on-facebook/373819/>, accessed 31/10/14.

Thus, we must consider the degree to which SNS can be described as ‘public’ or ‘private’ to determine whether eliciting consent best serves the harm principle. However, before such judgements are made, we must acknowledge that ‘there are national laws and administrative regulations, (for example, Data Protection Acts, the Human Rights Act, Copyright and Libel laws), which may affect the conduct of research’.⁸²

As the RCSI recognises, it is difficult to determine whether a methodology is permissible ‘in the face of vacillating legal frameworks’.⁸³ Nonetheless, research subjects are ‘likely to have rights under the Data Protection Act’,⁸⁴ informed by the EU Data Protective Directive if subjects are under EU jurisdiction. As ‘very often research participants will be located in one or more different counties, so a project may span multiple nations, cultures and legal jurisdictions’,⁸⁵ and given that Facebook’s Terms of Service state that a breach of contract will be litigated under US jurisprudence, it is also necessary to examine US legal frameworks.

This is particularly the case as Grimmelman, a law Professor at Maryland University, has claimed that failure to obtain informed consent in SNS research may breach the US Federal Policy for the Protection of Human Subjects.⁸⁶

Therefore, researchers need to examine emerging legal frameworks (or lack thereof) to determine if they are required to elicit informed consent from their SNS research subjects. For even if the technologically literate researcher recognises that ‘like Heraclitus’ river, we can never enter the same internet twice’,⁸⁷ they may still be swept away by the rising tide of case law and legal precedent.

‘All applicable laws’ – Information, Content, and Data Protection

Foremost scrutiny must be applied to Facebook’s Terms of Service, as this agreement constitutes a contract between the service provider and the user. It includes details of

⁸² BSA, op. cit., p1.

⁸³ RCSI, op. cit., p3.

⁸⁴ BPS, 2013, op. cit., p13.

⁸⁵ Ibid, p4.

⁸⁶ Guardian, 30/06/14, op. cit.

⁸⁷ RCSI, op. cit., p5.

the procedures and regulations researchers must abide by to avoid breach of contract, and the possible legal repercussions of any ensuing damage to Facebook's reputation.

We shall examine the latest version of the agreement, last revised 1st January, 2015.⁸⁸ In relation to publishing content and information, Facebook's 'Statement of Rights and Responsibilities' notes: '*when you publish content or information using the Public setting, it means that you are allowing everyone, including people not on Facebook, to access and use that information, and to associate it with you*'.⁸⁹

However, this does not stipulate that researchers have unhindered access, and the right to disseminate user content or information. A qualifying article in the section entitled 'Protecting other People's Rights' states '*if you collect information from users, you will: obtain their consent, make it clear that you (and not Facebook) are the one collecting their information and post a privacy policy explaining what information you collect and how you will use it*'.⁹⁰ Nonetheless, depending on our interpretation of the term 'information', a researcher could still observe, analyse, and publish details of DPMC on Facebook without requiring informed consent.

'Information', as defined by the Terms of Service, refers to '*Facts and other information about you*',⁹¹ and a sub-section concerning 'Community Standards, Identity and Privacy' states that '*on Facebook, people connect using their real names and identities. We ask that you refrain from publishing the personal information of others without their consent*'.⁹²

Given that 'Personal information' is related here to 'Identities', we could interpret 'Facts and Other Information' as pertaining to demographic details, such as age, ethnicity, political affiliation and religious belief. But, 'Information' is also described as encompassing '*actions taken by users and non-users who interact with*

⁸⁸ Initial reference was made to the November 2013 Terms of Service, however these were updated during the course of this study. No significant changes to any relevant subsections were made.

⁸⁹ Facebook Statement of Rights, Article 4, <https://www.facebook.com/notes/facebook-site-governance/statement-of-rights-and-responsibilities/183538190300>, accessed 22/10/14.

⁹⁰ Ibid, Article 7.

⁹¹ Ibid, Definitions.

⁹² Facebook Principles, op. cit.

Facebook'.⁹³ This may suggest that a researcher would be prohibited from recording user interactions such as one person commenting on another's Profile, as that act could be classified as an 'action'.

Discerning the scope of protected 'Information' is further complicated as another discrete category, 'Content', is defined as '*anything you, or other users post on Facebook that would not be included in the definition of information*'.⁹⁴ The fact that 'posts' are explicitly distinguished from protected 'Information', could well be interpreted to stipulate that a researcher could record and anonymise 'content' so as not to identify the action with the individual, and in doing so circumvent the informed consent article. Thus, providing the author could not be identified by their comment, we could maintain that there had been no breach of contract.

Whilst the ambiguity of these terms may technically allow for a violation of the spirit of the policy, a researcher could defensibly, with reference to the Terms of Service, collect, analyse and publish anonymised comments made on PDs without seeking informed consent. However, these terms further appeal to the authority of '*all applicable laws*'⁹⁵ relevant in the user's jurisdiction. Therefore, researchers operating within the EU are required to abide by the dictates of the EU Directive on Data Protection.

Article 6 of the Directive states that 'personal data must be collected for specified, explicit and legitimate purposes';⁹⁶ therefore, any party involved in gathering 'Personal Data' must issue a disclaimer alerting data subjects to their operations. However, in this instance 'Personal Data' are defined as 'any information relating to an identified, or identifiable natural person'.⁹⁷

In relation to data harvesting PDs, providing that contributions are not published verbatim, as these 'may be traced to... where they originated, where they are likely to

⁹³ Facebook, Definitions, op. cit.

⁹⁴ Ibid.

⁹⁵ Facebook, Statement of Rights, Article 9, op. cit.

⁹⁶ Directive 95/46/EC, 1995, EU, cited in D. Elgesem, '*The Structure of Rights in Directive 95/46/EC*', in Spinello and Tavani, op. cit., p423.

⁹⁷ Directive 95/46/EC, Ch. 1, Article 2.

be linked to an individual's identity',⁹⁸ then it appears these comments cannot be classified, and thus protected, as 'Personal Data'.

However, there are also provisions for the protection of 'Sensitive Data'; a researcher requires explicit consent from the 'data subject' to process such information. This data includes information 'revealing racial or ethnic origin, political opinions, or religious beliefs... sensitive in the sense that the dissemination of such data can be particularly harmful to the data subject's interests'.⁹⁹

If applied to comments left on PDs, then some comments could express cosmological concepts regarded as religious, e.g. references to Heaven. However, the fact that this is but one possible interpretation demonstrates the difficulty of applying the Directive to studies of DPMC.

Furthermore, even a researcher based in the EU could be subject to legal challenge under US jurisprudence, if Facebook were to enact legal proceedings for breach of contract and damage to reputation caused by the publication of a scandalous study. Article 1 of the 'Disputes' section of Facebook's Terms of Service states that '*the laws of the State of California will govern this statement, as well as many claims that might arise between you and us*'.¹⁰⁰

It is common practice for US Courts to cite other States' judicial rulings when a case pertains to a legal framework still in its infancy, in order to discern and apply any relevant legal principles. Therefore, we must note which established legal principles US courts' rulings on SNS privacy are based on to consider how these might be applied to SNS research by a Californian court.

Uninitiated or Foolish - Reasonable Expectation

US Judicial decisions concerning SNS privacy have been informed by the landmark *Katz v. US* (1967) case which established the principle of a reasonable expectation to

⁹⁸ BPS, 2013, op. cit., p10.

⁹⁹ Elgesem, op. cit., p421.

¹⁰⁰ Facebook, Statement of Rights, op. cit.

privacy. This principle is only applicable however when a concerted effort to protect privacy has been made. This is why a number of courts have claimed that examining and disseminating information found on SNS does not constitute an ‘invasion of privacy, because the facts are not actually private’.¹⁰¹

Courts across the US have claimed: ‘information posted on a public medium, and available to anyone with access to the internet, is not private information’;¹⁰² ‘the concept of internet privacy is a fallacy upon which no one should rely’;¹⁰³ and ‘only the uninitiated or foolish could believe that Facebook is an online lockbox of secrets’.¹⁰⁴

As noted however, the legal framework governing SNS privacy is still developing, and *Katz v. US* has also been cited to support rulings that ‘an individual’s right in controlling the dissemination of information regarding personal matters does not dissolve simply because that information may be available to the public in some form’.¹⁰⁵

Instead, the Californian Supreme Court has ruled that ‘mere visibility in a public space should not vitiate privacy rights... customs and usages of a space, and not the ‘objective’ facts of a space, should define the territory in which one could legally claim a right to privacy’.¹⁰⁶ Therefore, even in instances where privacy is not guaranteed by virtue of public accessibility, privacy may nevertheless be afforded, e.g. to publicly accessible Facebook profiles.

The parties present in a particular setting have also been considered by US courts when applying the reasonable expectation test. In the case of *Multimedia WMAZ v. Kubach*, the Georgia Court of Appeal ruled that we do not ‘waive [our] expectation of

¹⁰¹ *Moreno v. Hanford Sentinel*, Cal: Court of Appeal, 5th Appellate Dist. 2009, cited in A. Taylor, ‘Common Law Invasion of Privacy Claims in Social Media’, <http://www.wassom.com/common-law-invasion-of-privacy-claims-in-social-media-guest-post.html>, accessed 03/11/14.

¹⁰² *Womack v. Yeoman*, v.112283, Virginia Circuit Court of Richmond, 2009, cited in *Ibid*.

¹⁰³ *People of N.Y. v. Klapper*, (NY Crim. Ct. 2010), cited in R. Sprague, ‘Invasion of the Social Networks: Blurring the Line Between Personal Life, and the Employment Relationship’, www.ssrn.com/abstract=1773049, accessed 24/10/14.

¹⁰⁴ *Moreno v. Hanford Sentinel*, A. Taylor, op. cit.

¹⁰⁵ *Doe v. Poritz*, 142 N.J. 1, 1995, cited in Spinello and Tavani, p457.

¹⁰⁶ *Sanders V ABC*, 1999, cited in P. Sanchez-Abril, ‘Recasting Privacy Torts in a Spaceless World’, *Harvard Journal of Law and Technology*, 21 (1), 2007, p9.

privacy in information by disclosing it to a limited number of people who care about [us], or share [our] experience'.¹⁰⁷ Instead, in this case of a TV recording of an HIV support group, the court found that 'the bonds of intimacy between the plaintiff and his audience were key components in determining whether information was protected'.¹⁰⁸

In relation to researching DPMC, we could argue that whilst the data is publicly accessible, there are contextual expectations of privacy informed by the intention of sharing data with 'a limited number of people of shared experience', i.e. fellow survivors, and those authorised by the deceased to interact with their Profile. And as 'intended audience should be a factor in deciding whether the aggrieved voluntarily made information public',¹⁰⁹ we could claim that a PD constitutes a place of normative privacy.

However, contextual expectations of privacy protected by reasonable expectation must also be 'established by general social norms and must be objectively reasonable'.¹¹⁰ Therefore, we must determine whether there are any norms governing SNS behaviour, and whether any such norms could be described as 'objectively reasonable'; one means of assessing this is through judging whether a proposed norm is consistent with any coherent theory of privacy.

¹⁰⁷ Multimedia WMAZ v. Kubach 1994, cited in *ibid*, p43-44.

¹⁰⁸ *Ibid*.

¹⁰⁹ *Ibid*.

¹¹⁰ White, 344 NJ. Super, Ch.Div.2001, cited in Taylor, *op. cit.*.

Privacy

To Share, or Not to Share - Control theory

The control theory of privacy has gained broad support from legal practitioners and academic theorists alike, with its central tenet summarised by Fried: ‘one has privacy if and only if one has control over information about oneself’.¹¹¹ DeMarco has added that this account of privacy is one of the ‘ability of an individual to control the collection and dissemination of personally identifiable information by others’.¹¹²

Thus, Westin explains that this account of privacy ‘distinguishes between situations where a person’s privacy is violated, and situations where the person reveals personal information about himself. The difference is, on the control account, that there is a loss of control in the first case, while in the second case the person exercises his control’.¹¹³

By this account, it would be possible to deem a Facebook Profile private if an individual has the ability to control the extent to which their inter/actions are publicly accessible, and Facebook does indeed provide mechanisms to adjust privacy settings to reflect the extent to which a user wishes to share information and content.

‘Ownership and control of information’, one of Facebook’s codified ‘Principles’, states that ‘people should have the freedom to decide with whom they will share their information, and to set privacy controls to protect those choices’.¹¹⁴ The fact that a user has the ability to control the accessibility of information about themselves coheres with the US ruling that a claim to privacy on SNS is only available to those

¹¹¹ C. Fried, *An Anatomy of Values*, (MA: Harvard University Press, herein HUP, 1970), cited in Spinello, *Cyberethics: Morality and Law in Cyberspace*, (3rd Ed), (London: Jones and Bartlett, 2006), p143.

¹¹² D. DeMarco, *Understanding Consumer Information Privacy in the Realm of Internet Commerce*, Texas Law Review, 84, 2006, cited in J. Hiller, *The Regulatory Framework for Privacy and Security*, in J. Hunsinger, L. Klastrup and M. Allen (Eds), *The International Handbook of Internet Research*, (London: Springer-Verlag, 2010), p251.

¹¹³ A. Westin, *Privacy and Freedom*, (NY: Athenum, 1967), cited in Elgesem, 2004, op. cit., p428.

¹¹⁴ Facebook, Principles, Article 2, <https://www.facebook.com/principles.php>, accessed 11/01/15.

who ‘take measures to protect information’.¹¹⁵

Indeed, another court ruled that the plaintiff in an SNS privacy dispute ‘may have had a reasonable expectation that her Facebook posting would remain private, considering that she actively took steps to protect her Facebook page from public viewing’.¹¹⁶ Therefore, by the control account of privacy, an SNS profile can be described as private, and thus protected, if and only if users have adjusted their privacy settings accordingly.

However, the ability to alter privacy settings is the user’s alone. We might imagine that unless the deceased had forewarning of their demise and were particularly conscious that their Profile may be utilised as a site of continued contact, they are unlikely to have anticipated this contextual shift. Thus, even if privacy settings were adjusted to ‘public’, survivors may contend that this new context warrants an adjustment of the deceased’s privacy settings.

Furthermore, the ability to choose the privacy setting of another user’s inter/action with a Profile resides with the recipient user, i.e. ‘*when you comment on, or ‘like’ someone else’s story, or write on their timeline, that person gets to select the audience*’.¹¹⁷ Again, this control mechanism is redundant following the death of Profile’s user, as there is no agent to choose an appropriate privacy setting.

However, following such concerns, in October 2009 Facebook introduced the ‘Memorialisation’ function. If a request is made to memorialise a Profile, ‘*we keep the timeline on Facebook, but limit access and some features*’,¹¹⁸ specifically altering privacy settings to prevent users outside the deceased’s network from accessing the Profile, and viewing survivor inter/actions.

Therefore, a claim to privacy in accordance with control theory may still be valid, providing survivors have submitted a request to memorialise a PD. If this request has not been made, and privacy levels are set to ‘public’, then the means to control access

¹¹⁵ U.S. v. Gines-Perez, (D. P.R. 2002), cited in Sprague, op. cit., p15.

¹¹⁶ Ehling V. Monmouth-Ocean Hosp. Service Corp., 872 F. Supp.2d 369, 2012, cited in Taylor, op. cit.

¹¹⁷ Facebook, Data Use Policy, <https://www.facebook.com/policy.php>, accessed 11/01/15.

¹¹⁸ Facebook, Memorialisation, <https://www.facebook.com/about/privacy/other>, accessed 11/01/15.

are not being utilised and privacy cannot be ensured. However, as noted in our introduction, this function has not been universally well received and many survivors choose not to memorialise their loved ones' PDs.

Nonetheless, the dictates of control theory stipulate that if survivors are not willing to submit a PD to the memorialisation process, then that Profile can not be meaningfully described as 'private'; there can be no control over accessibility.

Control theory is not without criticism however. As Spinello notes, 'on a practical level, one is never able to have complete control over every piece of information about oneself'.¹¹⁹ In relation to researching DPMC, an equitable 'real world' situation would be observing mourners by the graveside. Graveyards are designated 'public' places, as there are no restrictions on public access, and therefore no means by which mourners can control who can observe them. Nonetheless, few would maintain that close observation and scrutiny of the bereaved was acceptable behaviour, simply on the grounds that such actions are not restricted by the parameters of architecture.

Similarly, Reiman claims that as 'privacy is a social practice, it involves a complex of behaviours, e.g. refraining from looking into open windows one passes on the street'.¹²⁰ Simply because we may not have the means to control who can observe us, does not imply that we forfeit any sense of privacy. The sociologist Goffman described the act of 'giving someone space', i.e. not scrutinising their inter/actions simply because we can, as 'Civil inattention'¹²¹ (a 'social norm, driven by an ideal of respect').

For example, if we are speaking to a friend in a café, there is an expectation that fellow patrons will not actively attempt to listen to our conversation, despite their ability to do so. Examples such as these demonstrate that beyond the onus of the

¹¹⁹ R. Spinello, 'Introduction to Privacy in Cyberspace', in Spinello, op. cit., p399.

¹²⁰ See J. Reiman, 'Privacy, Intimacy and Personhood', in F. Schoeman (Ed), 'Philosophical Dimensions of Privacy: An Anthology', (Cambridge: CUP, 1984), cited in H. Nissenbaum, 'Privacy in Context: Technology, Privacy, and the Integrity of Social Life', (Harrogate: Stanford University Press, herein SUP 2009), p455.

¹²¹ E. Goffman, 'Behaviour in Public Places: Notes On the Social Organisation of Gatherings', (NY: Simon and Schuster, 1966), cited in D. boyd and A. Marwick, 'Social Privacy in Networked Publics: Teens' Attitudes, Practices, and Strategies', 2011 OII Conference, p25.

individual to prevent the dissemination of information they wish to keep private, there are also social expectations informed by popular practice, or lack thereof, viz. norms.

Even in contexts where we lack the means of ensuring that our inter/actions are free from scrutiny, there remains an expectation that peers will not attempt to observe, or disseminate, that which we have not made a concerted effort to publicise. Therefore, it is necessary to acknowledge that ‘architecture’, i.e. the constraints of environment, is not the sole means of regulating behaviour, and thus privacy.

Indeed, as provisions in the US test of reasonable expectation allow, ‘social norms also regulate... understandings or expectations about how I ought to behave, enforced not through some centralised norm enforcer, but rather through the understandings and expectations of just about everyone within a particular community - direct and constrain my behaviour in a far wider array of contexts than any law’.¹²²

Lessig has identified four means of social regulation: law, social norms, market, and architecture, although when discussing digital contexts, Lessig substitutes architecture for ‘code’, i.e. the strictures of digital environments, such as the accessibility of an SNS Profile.

However, in digital environments, code does not appear to be an effective regulator of privacy, as ‘entrenched constructs [of privacy] are all related in one form or another to a pervasive consciousness of physical space, a concept that is no longer relevant in analysing many modern online privacy harms’.¹²³ Indeed, given how contentious SNS privacy is, it is evident that ‘without the ability to easily conceptualise location [and] boundaries... the traditional legal boundary between ‘public’, and ‘private’, have become blurred. As a result, expectations of privacy are unstable, and harder than ever to ascertain’.¹²⁴

Given the inherent ambiguity of digital structures in relation to conventional, spatial understandings of privacy, control theory appears applicable to ‘architecture’, but not

¹²² L. Lessig, ‘*The Laws of Cyberspace*’, in Spinello and Tavani, op. cit., p134.

¹²³ Sanchez-Abril, op. cit., p4.

¹²⁴ Ibid, p5-6.

‘code’, as ‘the idea of private and public spheres or activity assumes a community in which not only does such a division make sense, but the institutional and structural arrangements that facilitate an organic representation of this kind are present’.¹²⁵

Digital structures do not allow for ‘organic representations’ of this kind, as demonstrated by the increasing body of case law concerning SNS privacy.

However, when architecture/code is insufficient to regulate privacy, greater reliance is placed in the resource of social norms, as demonstrated through the popular practice of civil inattention in environments in which it is possible to observe and scrutinise behaviour, e.g. not staring at mourners in a public graveyard. This recourse to alternative forms of regulation is also enacted on SNS, as boyd and Marwick’s study of adolescent privacy strategies on Facebook found that ‘teenagers are especially wedded to social norms as the only regulatory force they feel empowered to shape’.¹²⁶

Indeed, boyd and Marwick encountered the popularly held conviction that ‘information that is publicly accessible is not necessarily intended to be consumed by just anyone. While teens may be negotiating privacy in a public-by-default environment, social norms also serve a critical role in how teens do boundary work’;¹²⁷ there was an expectation that ‘people ignore what’s not meant for them’.¹²⁸

Given the importance of social norms as a means of ensuring privacy (as noted in US case law), we must also examine the ‘Restricted Access’ theory, an approach charged with the criticism that it fails to ‘draw the distinction between private and public situations’,¹²⁹ i.e. situations classified as such by the control theory account of privacy. However, as we will see, this is the virtue of the restricted access theory.

In the Zone - Restricted Access

Restricted access theory acknowledges the limitations of ‘architecture/code’, dispenses with the inapplicable public/private dichotomy stipulated by control theory,

¹²⁵ R. Waks, ‘*Personal Information: Privacy and the Law*’, (Oxford: Clarendon, 1989), cited in Nissenbaum, op. cit., p7.

¹²⁶ boyd and Marwick, 2011, op. cit., p5.

¹²⁷ Ibid, p15.

¹²⁸ Ibid, p24.

¹²⁹ Elgesem, in Spinello and Tavani, op. cit., p427.

and accounts for the dictates of social norms as products of contexts.

One proponent of restricted access theory, Allen, has defined privacy as ‘a degree of inaccessibility of persons, of their mental states, and of information about them to the sense and surveillance of others’.¹³⁰ However, ‘access’ is not contingent on the mere possibility of accessibility; instead, this account of privacy crucially recognises ‘the importance of contexts, or ‘zones’ for protecting privacy’.¹³¹

Nissenbaum has described how the concept of privacy is relevant to ‘a situation or zone, and not to the information itself’.¹³² The idea of assessing privacy claims in terms of ‘Zones’, or contexts is also expressed by Elgesem, in terms of ‘Channels’ of information,¹³³ and by Hoven¹³⁴ and Schoeman¹³⁵ in terms of ‘Spheres’. In each of these articulations of restricted access theory, the norms of each ‘zone’, ‘channel’, or ‘sphere’ define what constitutes legitimate access to a particular context. Shoeman has identified the legitimate access criterion as ‘an associational tie’,¹³⁶ and Brown has elaborated that associational ties are understood ‘by virtue of their places in role structures’.¹³⁷

For example, a tax official is authorised to access an individual’s financial details in the conduct of their inquiries. However, if the same official were to access the same information to satisfy their own curiosity, with the search bearing no relevance to their role as a tax official, then we could claim an invasion of privacy had occurred despite no new information being gained. As Moor notes, ‘the employee has legitimate access in the first situation, but not the second’.¹³⁸

Similarly, a doctor or a lawyer is privy to information concerning their patients/clients in their role as service provider, but to attempt to gain this same information in a

¹³⁰ A. Allen, *Uneasy Access: Privacy for Women in a Free Society*, (NJ: Rowman and Littlefield, 1988), cited in Ibid, p426.

¹³¹ Spinello, op. cit., p399.

¹³² Nissenbaum, op. cit., p413.

¹³³ Elgesem, in Spinello and Tavani, op. cit., p432.

¹³⁴ J. Hoven, *Privacy and the Varieties of Informational Wrongdoing*, in Spinello, op. cit., p495.

¹³⁵ F. Schoeman, *Privacy and Social Freedom*, (Cambridge: CUP, 1992), p157, cited in Ibid.

¹³⁶ Ibid.

¹³⁷ G. Brown, *The Information Game: Ethics in a Microchip World*, (NY: Humanities Press, 1989), cited in Hoven, op. cit., p495.

¹³⁸ J. Moor, *Toward a Theory of Privacy for the Information Age*, in R. Spinello, op. cit., p413.

personal capacity would constitute an invasion of privacy; information can only be legitimately accessed if authority to do so is conferred by virtue of our role, relative to the data subject.

Therefore, the legitimacy of accessing a PD is contingent upon whether there is an associational tie between the individual and the deceased, with survivors occupying the roles of bereaved/consolated within a mutual support network of bereavement. Survivors would not anticipate extra-contextual dissemination of their inter/actions as this would ‘violate... the trust assumed in a relationship... if our interlocutor wants to publicise every detail, it is assumed that this intention will be announced’.¹³⁹

Indeed, an ‘invasion of privacy can be said to have occurred wherever the flow of information becomes divorced from the social role structure’,¹⁴⁰ a phenomenon termed the ‘Short Circuit effect’¹⁴¹ by Brown.

Therefore, even if we could claim the authority to legitimately access a PD by virtue of an associational tie to the deceased (and thus their network of survivors), to ‘short circuit’ this information would violate the norm of ‘contextual integrity’,¹⁴² as information would not be confined to the role structure in which it was shared.

Nissenbaum has described the dissemination of information beyond the confines of an established role structure as a ‘violation of contextual integrity’,¹⁴³ and she has noted that an ‘important function of privacy is to help maintain the integrity of intimate spheres as against more public spheres’.¹⁴⁴

Given the reasonable expectation of contextual integrity, based on the role structures of those who share an associational tie to the deceased, restricted access theory appears to afford PDs a degree of normative privacy. However, whilst civil inattention demands that we ‘refrain from looking into open windows we pass on the street’,¹⁴⁵

¹³⁹ boyd and Marwick, 2011, op. cit., p10.

¹⁴⁰ Hoven, op. cit., p495.

¹⁴¹ Brown, in Ibid.

¹⁴² Nissenbaum, op. cit., p127.

¹⁴³ Ibid.

¹⁴⁴ Schoeman, Ibid.

¹⁴⁵ Reiman, op. cit.

Reiman has clarified that normative privacy does not entail ‘the right never to be seen on a crowded street’.¹⁴⁶

As Facebook’s Newsfeed is a perpetually dynamic, visual representation of a network’s inter/actions, we must assess whether individuals have the ability to avoid inadvertently viewing survivor inter/actions with PDs. If commenting on a PD is akin to demanding that we never be seen on a crowded street, then it may be unreasonable to claim that only those with legitimate access may view PD inter/actions, if we cannot avoid observing them.

Therefore, a key determinant in deciding whether we can reasonably expect privacy on SNS is whether ‘information is in clear view to the casual observer, or whether the observer has to put forth significant effort to gain access’.¹⁴⁷

None of Your Business – Being Private in Public

It is important to note that SNS practices are not static. Instead, ‘people’s practices, expectations, and social norms have also co-evolved alongside the technical features’¹⁴⁸ of SNS platforms, and a crucial development has been that ‘traversing the connections between people to view profiles is no longer the sole - or, even primary - way of participation. Content is surfaced through streams’.¹⁴⁹

Users previously had to actively search for the Profile they wished to view, and then transgress the boundaries of that Profile to access it. Now, information is primarily accessed in the ‘Stream’ of the Newsfeed. The ‘salience of these features has shifted... media streams [the Newsfeed] have increasingly taken a more prominent role...the act of traversing did not change from a technical perspective, but became less central over time’.¹⁵⁰ As such, the ‘basic profile [is] increasingly irrelevant as a destination’.¹⁵¹

¹⁴⁶ Ibid, p43-44.

¹⁴⁷ A criterion proposed by Sanchez-Abril, op. cit., p33.

¹⁴⁸ N. Ellison and D. boyd, ‘*Sociality Through Social Network Sites*’, in W. Dutton (Ed), ‘*The Oxford Handbook of Internet Studies*’, (Oxford: OUP, 2013), p152.

¹⁴⁹ Ibid, p158.

¹⁵⁰ Ibid, p153.

¹⁵¹ Ibid.

Given the functional shift from traversing Profiles to examining the Newsfeed, a third party would have to make a concerted effort to search for, find and violate the contextual integrity of a PD by transgressing the boundaries of the Profile. For if we were not conferred the authority to access and contribute to the Profile by the deceased, then none of its activity would feature in our Newsfeed.

Therefore we could well claim that it is possible and reasonable to practise civil inattention toward PDs. Indeed, this functional shift may also facilitate ‘boundary work’, whereby individuals attempt to ‘create symbolic distinctions between objects, people, practices, and architectures, e.g. a teen’s car is ‘private’, yet their parent’s is ‘public’’.¹⁵²

For whilst ‘code’ cannot regulate privacy in the sense of limiting access through structure, in relation to social norms it may delineate the ‘public’ context of the Newsfeed, as the epicentre of activity and functional focal point, from the ‘private’ context of a PD. Thus, the boundaries of the Profile symbolically demarcate this distinction, much as St. Cuthbert’s line in Durham cathedral symbolically demarcated the spaces forbidden to women without physically restricting access to them.

It is also important to note that the sense of violation which accompanies the transgression of these symbolic boundaries and of ‘short circuiting’ information is not necessarily dependent upon subject matter, as boyd and Marwick have found.

When a local school authority presented images garnered from Facebook in a school assembly to demonstrate the need for privacy concern, there was a sense amongst students that ‘by taking the images out of context, the educators had violated students’ social norms, and thus, their sense of dignity, fairness, and respect’.¹⁵³ It was not the content of the images that offended the students, but the fact that their symbolic boundaries had been transgressed, and their information ‘short circuited’.

¹⁵² boyd and Marwick, 2011, op. cit., p15.

¹⁵³ Ibid, p6.

However, besides the inherent sense of violation accompanying ‘short circuiting’, there are a variety of potential harms associated with violating the integrity of a PD. Firstly, given the recognition that ‘most people behave differently when they are being watched or monitored’,¹⁵⁴ Zuboff has claimed it is not uncommon to find instances of what she has described as ‘anticipatory conformity’¹⁵⁵ among those being observed.

Whilst the Freudian ‘attachment’ theory of grief has been largely discredited by evidence supporting the ‘continuing bonds’ theory propounded by Silverman, Klass and Nickman¹⁵⁶ and Walter¹⁵⁷, it persists nonetheless. Therefore, it is still possible for a survivor who interacts with a PD to find their comments labelled indicative of ‘emotional stress’,¹⁵⁸ or as ‘symptomatic of pathology’.¹⁵⁹

Survivors may seek to avoid judgements of psychological irregularity by conforming to linear, staged-based attachment/loss accounts of grief, thus depriving them of a resource of unique efficacy. For privacy ‘enables us to form intimate bonds with people that might be difficult to form and maintain in public’,¹⁶⁰ particularly so if our inter/actions might be assessed in relation to attachment/loss theories of grief.

Furthermore, compromising a PD in this manner could constitute a denial of resource i.e. the resource of a secure locale of unique efficacy to communicate with the deceased, as interactions would no longer be confined to the context of bereaved mutual support.

Transgressing a PD could also violate what DeCew has described as ‘expressive privacy’, i.e. ‘expressing one’s self-identity or personhood through speech or

¹⁵⁴ Spinello, op. cit., p143.

¹⁵⁵ S. Zuboff, ‘*In the Age of the Smart Machine*’, (NY: Basic Books, 1988), p344, cited in Ibid.

¹⁵⁶ See D. Klass, P. Silverman and S. Nickman (Eds) ‘*Continuing Bonds: New Understandings of Grief*’, (Washington: Taylor and Francis, 1996).

¹⁵⁷ See T. Walter, ‘*On Bereavement: The Culture of Grief*’, (Maidenhead: OU Press, 1999).

¹⁵⁸ Brubaker et. al., op. cit., p44.

¹⁵⁹ As described by C. MacPherson, ‘*The Political Theory of Possessive Individualism*’, (Oxford: OUP, 1962), cited in A. Arnason, ‘*Individuals and Relationships: On the Possibilities and Impossibilities of Presence*’, in Davies and Park, op. cit., p59.

¹⁶⁰ J. Rachels, ‘*Why is Privacy Important?*’, *Philosophy and Public Affairs*, 4, 1975, p323, cited in Moor, ‘*Toward a Theory of Privacy*’, p410.

activity... when the activity in question helps define oneself as a person'.¹⁶¹ This form of privacy is particularly relevant if we appreciate inter-relational models of reflexivity, such as that of Walter: 'we create our selves through interacting with others',¹⁶² or Searle's which claims that maintaining a dialogue with the deceased 'serves as a micro-ritual for the sustenance and renewal of a secure narrative of self-identity'.¹⁶³

Therefore, I believe that these potential harms are sufficient to class the violation of the normative privacy of a PD 'offensive to a reasonable person', as a researcher would violate those most vulnerable and intimate exchanges which occur within a community of mutual support for the bereaved.

I also propose that the social norms which regulate the normative privacy of a PD can be described as 'objective norms', as the same principle which establishes the normative privacy of such protected institutions as patient/doctor confidentiality is applicable to PDs. Both are contexts protected by virtue of the associational ties and role structures in which information is exchanged in them.

Whilst the debate on whether the emergent norms of SNS can be considered 'objectively reasonable' may continue, the potential for such harms demonstrates that violating contextual integrity without permission contravenes a number of established principles in social-scientific research ethics. For example: 'participant protection... and vulnerable populations'¹⁶⁴ are not safeguarded by a violation of contextual integrity which ensures a denial of resource, both of a site of unique efficacy to contact the deceased, and of a potential social support network.

'Respect for the autonomy and dignity of persons... social responsibility, and, maximising benefits, and minimising harm' would be transgressed, as the autonomy of survivor groups would be infringed through the observation of a critical external agent. We could claim that 'the extent to which proposed research study procedures

¹⁶¹ J. DeCew, *In Pursuit of Privacy*, (Ithaca: Cornell University Press, 1997), p75, cited in Elgesem, in Spinello and Tavani, op. cit., p430.

¹⁶² Walters, op. cit., p71.

¹⁶³ C. Seale, *Constructing Death: The Sociology of Dying and Bereavement*, (Cambridge: CUP, 1998), p193.

¹⁶⁴ RCSI, op. cit., p6.

and dissemination practices might disrupt/harm social groups' would be irrevocable, as a violation of contextual integrity renders a PD as anything but a secure locale of continued contact and communication.

And through the act of trespassing on trauma, there may well be 'deleterious consequences for [those] who come after them... [which] might undermine the reputation of... a discipline',¹⁶⁵ as survivors may perceive researchers to be underhand, and socially irresponsible. Therefore, any potential benefit derived from covertly observing and publishing DPMC, i.e. being 'non-invasive', is vastly disproportionate to the potential harm caused by violating contextual integrity, and compromising a resource of unique efficacy.

For as the Facebook contagion experiment demonstrated, the inevitable publication of covert research will only further contribute to a sense of violation.¹⁶⁶ However, whilst we have demonstrated the need to gain informed consent, it is possible that the very act of attempting to gain consent could in itself constitute a breach of privacy.

¹⁶⁵ BSA, op. cit., p5.

¹⁶⁶ Hammersley elaborates that the attribution of processes which participants might dispute the existence of can contribute to a sense of violation: See M. Hammersley, '*On the Ethics of Interviewing for Discourse Analysis*', QR, 14 (5), 2014.

Methodology

Gatekeepers and Legacies – Selecting Research Participants

As Arksey and Knight have noted,¹⁶⁷ one of the most significant barriers to conducting qualitative research can be identifying potential respondents. This process is simplified however if relevant parties are ‘regularly located at the same place or scene’.¹⁶⁸ Those who experience Digital Presence are located on PDs (which can be readily discovered on directories such as ‘MyDeathSpace’).¹⁶⁹

As described, due to the dictates of normative privacy, any attempt to access a PD without consent could be deemed unethical. However, the act of requesting permission to avoid a violation of privacy is self-defeating, and paradoxical: it is akin to trespassing on another’s property in order to gain consent to enter said property.

To gain consent, a researcher would need to access a PD to contact survivors, thus alerting survivors to the presence of an external agent lacking a relational tie to the deceased. The ramifications of an external observer making their presence known could be severe; given the absence of any detectable digital footprint, such a presence would otherwise remain unknown. By alerting survivors to a breach of normative privacy, they may become aware of the constant potential for scrutiny that digital anonymity affords, and the existence of a panoptic research community. This realisation could well compromise the integrity of the entire institution of the PD.

I have previously written that as there is no coherent concept of ‘Ownership’, or ‘Stewardship’ in relation to PDs, it is difficult if not impossible for any one survivor to assert the authority of ‘Gatekeeper’ and grant access to a Profile. Kasket has also dwelt on the conflict between ‘the right of next of kin... and potentially the rights of

¹⁶⁷ See G. Arksey and P. Knight, ‘*Interviewing for Social Scientists*’, (CA: Sage, 1999), cited in C. Warren, ‘*Qualitative Interviewing*’, in (Eds) J. Gubrium and J. Holstein, ‘*Handbook of Interviewing*’, (CA: Sage, 2001), p87.

¹⁶⁸ J. Johnson, ‘*In-Depth Interviewing*’, in *Ibid*, p110.

¹⁶⁹ <http://www.mydeathspace.com/>, not accessed for ethical reasons.

other mourners, e.g. Facebook friends'¹⁷⁰ when it comes to making decisions about a PD (decisions such as who has the right to engage with a Profile, and whether it should persist). For example, even if a decedent's next of kin granted a researcher permission to examine a PD, other members of the deceased's network may object, not least on the grounds that this could short-circuit their own privacy.

This dilemma constituted an ethical and legal impasse when our study was conducted. However, in February 2015 Facebook introduced a function to resolve the issue of what constitutes authoritative stewardship of a PD. The 'Legacy Contact' feature allows users to nominate a contact to act as the official custodian of their Profile in the event of their demise.

Kasket has noted that 'while still living, the deceased made decisions about how to regulate their privacy, and admitted to the friends list only those who they wished to have access to information'.¹⁷¹ One of the features of the 'Legacy Contact' however is to allow the nominated custodian to 'respond to new friend requests',¹⁷² i.e. to effectively decide if a researcher can access the Profile. Therefore, researchers may now be in a position to seek, and gain the authority to access and examine a PD.

However, I believe that difficulties will remain. Firstly, as this feature is a relatively new development, we do not currently have any data on how widely it has been utilised. It is questionable how many users will elect to nominate a 'Legacy Contact', particularly as more than half of Facebook's users are aged under 35, and may not wish to spend time dwelling on their own demise.¹⁷³

Secondly, even if a 'Legacy Contact' is nominated, they will not be notified 'until your account has been memorialised'.¹⁷⁴ As noted, many users have expressed their opposition to the practice of Profile memorialisation, so it is questionable how many survivors would notify Facebook of a death, and so be in a position to enact 'Legacy' features. Therefore, whilst the introduction of the 'Legacy Contact' feature may allow

¹⁷⁰ Kasket, 2013, op. cit., p13.

¹⁷¹ Ibid, p16.

¹⁷² <https://www.facebook.com/help/1568013990080948>, accessed 06/09/15.

¹⁷³ <http://www.adweek.com/news/advertising-branding/new-social-stratosphere-who-using-facebook-twitter-pinterest-tumblr-and-instagram-2015-and-beyond-1622>, accessed 06/09/15.

¹⁷⁴ <https://www.facebook.com/help/1568013990080948>, accessed 06/09/15.

researchers to claim the authority to access PDs in some circumstances, it remains uncertain how often these conditions will be in place and does not negate the need to consider how we approach Profiles that for whatever reason lack a ‘Legacy Contact’.

Another approach to selecting researching participants is to avoid PDs and contact survivors listed on online directories of PDs such as ‘MyDeathSpace’; this however is also problematic, as a number of survivors have publicly denounced such directories for inviting violations of privacy, and causing harm.¹⁷⁵

Researchers may also attempt to document their own experiences of participating as a member of a bereavement community on a PD. They might issue a general notice on a PD that they plan to observe interactions, or may petition for interview respondents. However, this approach risks threatening coercion via consensus.

For even if fellow members are invited to object, or comment upon the proposal, if opposition is not forthcoming, more reserved members may conclude that the consensus is to allow scholarly scrutiny of the group. The imposition of such a request may itself discourage some members from engaging with the PD, and thus constitute a denial of resource (a problem which could also arise on Profiles with a ‘Legacy Contact’).

Therefore, whilst it may be true that ‘in-depth interviews rarely constitute the sole source of data in research’,¹⁷⁶ information elicited from respondent interviews in this study cannot be verified by participant-observation due to the related potential for harm. However, there are no difficulties in researchers identifying members of their own network who interact with PDs, if such interactions are publicly observable in their Newsfeed. A researcher could invite these members to share their experiences providing they emphasised that the PD would not be accessed, and could ask whether they would be happy to consolidate their own interactions for examination.

¹⁷⁵ See J. Pietras, ‘*The New American Way of Death*’, <http://www.salon.com/2007/07/31/deathspace/>, accessed 21/09/15.

¹⁷⁶ J. Johnson, ‘*In-Depth Interviewing*’, cited in C. Warren, ‘*Qualitative Interviewing*’, in (Eds) J. Gubrium and J. Holstein, ‘*Handbook of Interviewing*’, (CA: Sage, 2001), p104.

However, as there were no such cases in my own network at the commencement of this study, respondents were sought through advertisement. As a member of Durham University, I had access to a pool of 17,000 students and staff members, the majority of whom are members of the broad, dominant SNS demographic of 18-30 year olds (documented as being the demographic most likely to report sensations of ‘Digital Presence’).¹⁷⁷

The advertisement was disseminated via email by the Senior Tutors of Durham’s composite colleges. These figures were chosen to forward the advertisement, not simply due to the ease of this form of dissemination, but to provide the reassurance of a trusted gatekeeper to encourage responses.¹⁷⁸

Of course, the advertisement sought to attract those who had experienced what could be described as ‘Digital Presence’. However, the phrasing of the advertisement needed to satisfy seemingly contradictory requirements. It needed to effectively grant permission for respondents to adopt what Bennett described as a possibly stigmatised ‘super-natural’¹⁷⁹ semantic; however, I sought to avoid imposing a framework of interpretation, or utilising terms which could connote certain interpretations, to discourage acquiescence bias and prevent the creation of demand characteristics.

We Need to Talk about Presence – Avoiding Acquiescence

Whilst accounts of conventional presence experiences are well documented, some respondents are nevertheless anxious their experiences in a super naturalist semantic, due to the belief they will be ‘ridiculed or viewed as mentally unwell’¹⁸⁰ (particularly

¹⁷⁷ See J. Hieftje, op. cit.

¹⁷⁸ See C. Parkes, ‘*Guidelines for Conducting Ethical Bereavement Research*’, *Death Studies*, 19, 1995, cited in S. Adamson and M. Holloway, ‘*Negotiating Sensitivities and Grappling with Intangibles: Experience From a Study of Spirituality and Funerals*’, *QR*, 12 (6), 2012, p737.

¹⁷⁹ G. Bennet and K. Bennet, ‘*The Presence of the Dead: An Empirical Study*’, *Mortality*, 5 (2), 2000, p155.

¹⁸⁰ See C. Keen, C. Murray and S. Payne, ‘*A Qualitative Exploration of Sensing the Presence of the Deceased Following Bereavement*’, *Mortality*, 4, 2013, p340 for an extensive list of proponents of this position.

in the case of male respondents).¹⁸¹ Indeed, it is unsurprising that a participant in one study wondered ‘if this is a mental condition that afflicts me’,¹⁸² as adherents of the Freudian attachment theory of grief have labelled such experiences indicative of psychological disorder.

It has also been claimed that employing a non-materialist discourse may be ‘even more challenging in a society that is popularly regarded as secular’.¹⁸³ This fear may even persist when survivors recount their experiences to healthcare professionals, due to the ‘perceived lack of support’¹⁸⁴ some survivors have reported when the topic of the presence of the deceased has been broached.

For these reasons, Bennett has claimed that many participants in studies of presence articulate their experience through a materialist discourse, as ‘respondents know it will be the safest, if for no other reason than that researchers often assume that respondents share this world view’.¹⁸⁵

Therefore, to allow respondents to express their experiences in a manner which reflects their own perceptions and understandings, we must allow them to adopt a semantic field which does not necessarily reduce Digital Presence to a materialist explanation. Bennett and Bennett have noted how allowing a super naturalist discourse ameliorated respondent anxiety, and indeed, some respondents have ‘expressed relief at being able to share their experiences with others, who would not ridicule them’.¹⁸⁶

¹⁸¹ L. Daggett’s meta-study noted that men are ‘more reluctant to discuss such experiences’: ‘Continued Encounters: The Experience of After-Death Communication’, *Journal of Holistic Nursing*, 23, 2005, cited in *Ibid*, p355.

¹⁸² M. Maple, H. Edwards, V. Minichiello and D. Plummer, ‘Still Part of the Family: The Importance of Physical, Emotional, and Spiritual Memorial Places and Spaces for Parents Bereaved Through the Suicide Death of Their Son or Daughter’, *Mortality*, 1, 2013, p64.

¹⁸³ J. Swinton and H. Mowat, ‘Practical Theology and Qualitative Research’, (London: SCM, 2006), cited in Adamson and Holloway, p737.

¹⁸⁴ S. Taylor, ‘Between the Idea and the Reality: A Study of the Counselling Experiences of Bereaved People Who Sense the Presence of the Deceased’, *Counselling and Psychotherapy Research*, 5, 2005, cited in Keen, Murray and Payne, op. cit., p354.

¹⁸⁵ Bennet and Bennet, op. cit.

¹⁸⁶ Keen, Murray and Payne, op. cit., p355.

However, as was infamously demonstrated by Mead's Samoan ethnographies,¹⁸⁷ if respondents believe a study to exhibit demand characteristics, the potential for acquiescence bias may result in respondents simply recounting what they believe the researcher wants to hear. For example, if respondents noted that I was a researcher from a Theology and Religious Studies department, employing super naturalist language, they may articulate their responses accordingly (regardless of whether this accurately conveys their own understandings).

Therefore, I sought to eschew terms which implied particular convictions: e.g. whilst some of Hieftje's respondents referred to decedents accessing Facebook from 'Heaven',¹⁸⁸ this concept may not be a feature of our own respondents' experiences. Indeed, even terms such as grief/mourning may suggest a degree of anguish which subjects do not believe is applicable to their own experiences.

Instead, I opted to provide extracts of accounts of Digital Presence cited in other studies. These were introduced through stating that:

Some studies have found that people have noted that on the Facebook Profiles of the deceased, it 'feels like they're there', and/or people can 'get hold of', and/or 'get through to' the deceased, or that the deceased 'can read comments'.

The intention was to effectively grant permission for respondents to describe their experiences in terms of ineffable 'feelings', and in language which does not necessitate materialist reduction. Whilst a super naturalist semantic was employed, it was done through citing accounts of Digital Presence; therefore, the terms were not directly used to describe the phenomenon, but were made available for respondents to employ if they believed that they were appropriate.

Also, through providing our respondents with accounts of Digital Presence which may have resonated with their own experiences, these accounts acted as a form of

¹⁸⁷ D. Freeman, *Margaret Mead and Samoa: The Making and Unmaking of an Anthropological Myth*, (MA: HUP, 1983), cited in Johnson, op. cit., p104.

¹⁸⁸ See Hieftje, op. cit, p144.

complementary reciprocity. Those who may have believed that their experiences were unique and peculiar may have found recognisable descriptions of Digital Presence to be comforting. Therefore, in the absence of ‘strict reciprocity’¹⁸⁹ we could still establish a form of rapport building exchange.

To also allow a more sceptical, materialist semantic to be employed, I omitted any mention of the Theology and Religion department in our invitation to interview, and instead referred to myself as a research postgraduate from the Arts and Humanities faculty. I also chose to cite the extract ‘deceased can read comments’ as opposed to the extract ‘deceased can access comments’, as I believed that ‘access’ could suggest a more active form of engagement and deceased agency. Instead, ‘read’ was chosen to allow for understandings of a more general notion of deceased omniscience as opposed to notions of a decedent directly accessing and engaging with the SNS.

I also extended the invitation to interview to *‘anyone who’s had a similar experience, or anyone who would like to talk about their experiences of writing on a deceased person’s Profile’*. In doing so, I sought to welcome those who may not have identified with the accounts cited, yet might still have had what could be described as *‘a similar experience’* to Digital Presence. By differentiating Digital Presence from other *‘experiences of writing on a deceased person’s profile’*, I sought to invite those who had not experienced Digital Presence so as to compare their accounts with those who had, to examine commonalities and differences between these groups.

Furthermore, mindful that the advertisement was directed towards a university community, I substituted the term ‘interview’ with ‘conversation’, given the emotional potency of the former for a group inculcated in interview etiquette. This was also an attempt to reduce any possible anxiety of scrutiny and judgement, and any possible empirical, positivist demands the term may possess for potential respondents.

Instead, ‘conversation’ was employed to imply a greater degree of symmetry than might be anticipated in an ‘interview’ by a university populace. Finally, to further encourage comfort, the invitation to interview concluded that all ‘conversations’

¹⁸⁹ Terms described by Johnson: ‘Strict’ as an equivalent communicative exchange of experience, ‘complementary’ as some other form of exchange, in op. cit., p109.

could be conducted ‘*In-person, or on skype (as a video-call, audio-only, or text-only conversation)*’.

Face-to-Face or Screen-to-Screen? – Mediums and Mediation

The primacy of the in-person, or face-to-face mode of conducting interviews has been widely affirmed, and described by some commentators as the ‘gold standard in terms of validity and rigour’.¹⁹⁰ For ‘bodily presence is crucial’¹⁹¹ in order to both discern the ‘nuances of speech’,¹⁹² and also to note non-verbal cues, e.g. ‘facial features and body language’.¹⁹³

Indeed, some qualitative researchers have questioned whether language is ‘too limited in its ability to truly interpret people’s feelings and meanings, never mind language in typed format’¹⁹⁴ with regards to conducting interviews via text-based digital exchanges. As such, these purists regard any form of technological mediation, from text-based online messaging clients to telephone interviews as insufficient to discern the true nature of a respondent’s experiences.

However, even proponents of the primacy of the in-person interview have recognised that ‘the vehicle for conducting interviews has always been less important than the provision to the respondent of the opportunity to tell their own story’.¹⁹⁵ As such, there may be instances when the in-person mode can inhibit authentic disclosure, as vulnerability (particularly documented in male respondents) results in reticence. For example, Stroebe has claimed that male survivors are disproportionately absent from bereavement studies, for ‘fears of giving way to emotion at the interview’,¹⁹⁶ and

¹⁹⁰ J. McCoyd and T. Kerson, ‘*Conducting Intensive Interviews Using Email*’, *Qualitative Social Work*, 5 (3), 2006, cited in H. Deakin and K. Wakefield, ‘*Skype Interviewing*’, *QR*, 14 (5), 2014, p604.

¹⁹¹ J. Gubrium and J. Holstein, ‘*Introduction to Technical Issues*’, in Gubrium and Holstein, *op. cit.*, p490.

¹⁹² C. Riessman, ‘*Analysis of Personal Narratives*’, in *Ibid*, p706.

¹⁹³ R. Poynter, ‘*Handbook of Online and Social Media Research*’, (Oxford: Wiley, 2010), p128.

¹⁹⁴ *Ibid*, p127.

¹⁹⁵ Gubrium and Holstein, ‘*Introduction to Technical Issues*’, in Gubrium and Holstein, *op. cit.*, p490.

¹⁹⁶ M. Stroebe, ‘*Bereavement Research: Methodological Issues and Ethical Concerns*’, *Palliative Medicine*, 17, 2003, cited in Adamson and Holloway, *op. cit.*, p737.

Adamson and Holloway¹⁹⁷ have added that men may feel they cannot discuss such issues with family and friends.

This reticence however is not exclusively a gender norm. While conducting research for my undergraduate dissertation, I encountered a female respondent whose sense of vulnerability greatly restricted her ability to articulate her experiences. However, from the security of her room she could freely express herself in text-based exchanges over online messaging clients; that ‘safe locations’ can be disinhibiting has also been noted by Hanna¹⁹⁸ and Golden.¹⁹⁹

It also appears that richer responses can be elicited by text-based exchanges not simply because respondents are in ‘rooms they already feel comfortable in’,²⁰⁰ but because such distance removes respondents from a researcher’s gaze.

Commentators have noted that communicating through text-based digital clients can facilitate the recording of ‘false nonverbals’, i.e. ‘feelings and emotions that do not correspond to demeanour’,²⁰¹ as researchers have no access to non-verbal cues to discern the respondent’s ‘physical and/or emotional state’.²⁰² Instead, respondents could provide ‘vague or inaccurate responses’²⁰³ which could be discerned as such in an in-person interview, but not a text-based exchange.

However, this deficiency is also a virtue. Instead of facilitating the documentation of ‘false nonverbals’, several studies have concluded that ‘for some topics, people may be willing to be more honest online’,²⁰⁴ particularly in relation to ‘sensitive, or embarrassing questions’.²⁰⁵

¹⁹⁷ Adamson and Holloway, op. cit., p747.

¹⁹⁸ P. Hanna, ‘Using Internet Technologies (Such as Skype) As a Research Medium: A Research Note’, QR, 12 (2), 2012, p241.

¹⁹⁹ T. Golden, ‘Healing and the Internet’, The Forum, 32 (4), 2006.

²⁰⁰ Ibid.

²⁰¹ A. Fontana, ‘Postmodern Trends in Interviewing’, in Gubrium and Holstein, op. cit., p169.

²⁰² R. Shuy, ‘In-Person Versus Telephone Interviewing’, in Ibid, p548.

²⁰³ Ibid.

²⁰⁴ See M. Herbert, ‘Comparing Online and Face-to-Face Qualitative Research: From Teenagers to Third Aged’, AQR/QRCA, 2001, cited in Poynter, op. cit., p113.

²⁰⁵ C. Madge and H. O’ Connor, ‘Online Methods in Geography Educational Research’, Journal of Geography in Higher Education, 28 (1), 2004, cited in Deakin and Wakefield, op. cit., p605.

For example, Poynter recorded that respondents felt ‘less subject to social pressures’²⁰⁶ when they were not physically co-present with a researcher, and Newman et al. found that respondents were more likely to report ‘stigmatised behaviour’²⁰⁷ through digital mediums than they were in-person. Whilst Barak et al.²⁰⁸ have claimed that it is the anonymity the internet provides which encourages greater emotional disclosure, studies by Sweet²⁰⁹ and Rand²¹⁰ concluded that a lack of ‘personal interaction’ also elicited more candid responses.

Bampton and Cowton have made similar claims, and concluded that the physical separation digitally mediated interviews allow reduces social desirability distortion and inhibition.²¹¹ Indeed, in the case of my above-mentioned respondent, her identity had already been disclosed; the distance provided by the online client was sufficient to allow her to express herself.

These claims are substantiated by similar findings from studies on the efficacy of telephone interviews: studies by Groves and Kahn,²¹² and Sykes and Collins²¹³ found that respondents were ‘less likely to cast their answers to threatening or sensitive questions in the most positive light’,²¹⁴ suggesting that a lack of physical observation can facilitate more accurate accounts of sensitive experiences.

Therefore, it is the fact that conducting qualitative interviews through digital mediums

²⁰⁶ Poynter, op. cit., p113.

²⁰⁷ J. Newman, D. Des Jarlais, C. Turner, J. Gribble, P. Cooley and D. Paone, ‘*The Differential Effects of Face-to-Face and Computer Interview Modes*’, *American Journal of Public Health*, 92 (2), 2002, cited in K. Stacey and J. Vincent, ‘*Evaluation of an Electronic Interview with Multimedia Stimulus Materials for Gaining In-Depth Responses from Professionals*’, *QR*, 11 (5), 2011.

²⁰⁸ A. Barak, M. Bobiel-Nissin and J. Suler, ‘*Fostering Empowerment in Online Support Groups*’, *Computer in Human Behaviour*, 24, 2008, cited in Paechter, op. cit., p79.

²⁰⁹ C. Sweet, ‘*Designing and Conducting Virtual Focus Groups*’, *Qualitative Market Research*, 4 (3), 2001, cited in Poynter, op. cit., p130.

²¹⁰ Y. Rand, ‘*Worth Another Look*’, *Quirk’s Marketing Research Review*, 2003, cited in Ibid.

²¹¹ R. Bampton and C. Cowton, ‘*The e-Interview*’, *Forum: QR*, 3 (20), 2002, cited in Stacey and Vincent, op. cit.

²¹² R. Groves and R. Kahn, ‘*Surveys by Telephone: A National Comparison with Personal Interviews*’, (NY: Academic Press, 1979), cited in Shuy, op. cit., p544.

²¹³ W. Sykes and M. Collins, ‘*Effects of Mode of Interview: Experiments in the UK*’, in ‘*Telephone Survey Methodology*’, (Ed) R. Groves, O. Biemer, L. Lyberg, J. Massey, W. Nichols and J. Waksberg, (NY: John Wiley, 1988), p301, cited in Ibid, p544.

²¹⁴ Shuy, op. cit., p544.

‘remains distant’²¹⁵ that means that some vulnerable respondents may better articulate their experiences this way; indeed, Bennett has claimed that the use of technological mediation can facilitate access to ‘men who might have avoided discussing emotions if interviewed face-to-face’.²¹⁶

Mann and Stewart however have questioned whether it is ‘possible for an interviewer to develop rapport with participants whom he or she may never have seen or heard’.²¹⁷ Critics of digitally mediated interviews have noted how rapport is developed and discerned via ‘eye contact, facial expression, and bodily idiom’,²¹⁸ and how the in-person mode prompts self-generated responses through ‘visual signs to encourage respondents to elaborate, clarify, or amend’²¹⁹ their responses. Respondents are also eased into candid expression owing to the ‘contextual naturalness’²²⁰ of the in-person interview, i.e. this mode best accords with the natural expression of thoughts and feelings.

However, Major has advanced the retort familiar to any parent who has attempted to sustain conversation with an adolescent: ‘the technical has become the natural’.²²¹ The twenty first century has undoubtedly, in part, been defined by the frequency and familiarity of communication via digital mediums; for ‘Generation Y’, the politics and nuances of text-based digital exchanges have been ingrained in them through near perpetual engagement with digital chat clients and text messaging.

Thus, Smith-Stoner has responded that ‘rapport is absolutely possible online’,²²² and that through responding in a manner consistent with informal online conversation, ‘virtual relationships can become very personal, very quickly’.²²³ Indeed, whilst non-verbal signifiers may be absent, a number of scholars have attested to the ability to

²¹⁵ Fontana, op. cit., p169.

²¹⁶ C. Bennett, ‘*Men Online: Discussing Lived Experiences on the Internet*’, Honours Dissertation, James Cook University.

²¹⁷ C. Mann and F. Stewart, ‘*Internet Interviewing*’, in Gubrium and Holstein, op. cit., p613.

²¹⁸ Johnson, op. cit., p109.

²¹⁹ Shuy, op. cit., p543.

²²⁰ Ibid, p541.

²²¹ M. Savin-Baden and C. Howell Major, ‘*Interviews*’, in (Eds) M. Savin-Baden and C. Howell Major, ‘*Qualitative Research: The Essential Guide to Theory and Practice*’, (London: Routledge, 2013), p364.

²²² M. Smith-Stoner, Personal Correspondence, in Mann and Stewart, op. cit., p614.

²²³ M. Smith-Stoner and T. Weber, ‘*Developing Theory Using Emergent Inquiry: A Study of Meaningful Online Learning for Women*’, Ph.D Dissertation, California Institute of Integral Studies, cited in Ibid.

detect changes in tone through the language employed in online exchanges, and to determine the significance of qualifying phrases, e.g. ‘you may want to’, or ‘if you like’.²²⁴

Also, the relative ellipsis of a text-based online interview can be used as an indicator of a respondent’s emotional/psychological state: in Cabaroglu et. al’s comparative study of pauses, repetitions and recasts, they found ‘no significant difference’ between in-person and online interviews.²²⁵ Admittedly, a respondent could falsely attribute a pause to being absent from their computer, as opposed to struggling with a question; however, relative pauses and delays, coupled with a discernment of tone as conveyed by language, can indicate emotional state to the initiated researcher.

Indeed, Denscombe’s comparative study of rapport concluded that carefully conducted online interviews produced ‘much the same quality of responses as produced by more traditional methods’,²²⁶ whilst Poynter has concluded that interviewees can contribute more online than they would in-person.²²⁷ Again, this is perhaps due to the technical being organic for a generation attuned to digital nuance.

It is for these reasons that Deakin and Wakefield have claimed that the online interview should be ‘treated as a viable option, rather than an alternative when face-to-face interviews cannot be achieved’.²²⁸ The security of distance, the fluency of text-based digital communication, and the amelioration of social desirability distortion combine to render text-based modes of interview particularly apt for interviews concerning Digital Presence (as demonstrated by my anxious respondent). Therefore, this study allowed participants to select between a variety of interview modes: Skype with video, Skype audio-only, Skype text-only, or Facebook chat text-only.

²²⁴ See Ibid, and J. Galegher, L. Sproull and S. Kiesler, ‘*Legitimacy, Authority and Community in Electronic Support Groups*’, *Written Communication*, 15, 1998, cited in Ibid.

²²⁵ N. Cabaroglu, S. Basaran and J. Roberts, ‘*A Comparison Between the Occurrence of Pauses, Repetitions and Recasts Under Conditions of Face-to-Face and Computer-Mediated Communication*’, *Turkish Online Journal of Educational Technology*, 9 (2), 2010, cited in Deakin and Wakefield, op. cit., p606.

²²⁶ M. Denscombe, ‘*The Good Research Guide*’, (Maidenhead: OU Press, 2003), cited in Ibid, p610.

²²⁷ Poynter, op. cit., p121.

²²⁸ Deakin and Wakefield, op. cit., p604.

If the disinhibiting effects of a familiar environment and the distance afforded by digital mediation are sufficient, than Skype with video could still allow for the discernment of physical non-verbal cues, e.g. facial expressions and body language. However, if respondents opt for text-only interviews, paralinguistic features can still be discerned, whilst respondents may more fully and accurately articulate their accounts and feelings of presence phenomenon (also achievable through audio-only means, as demonstrated by the aforementioned telephone studies).

Regardless of the mode, each interview has constituted an individual case study, and no attempts have been made to classify respondents as a 'sample'. Instead, each case study was examined individually before attempts were made to identify commonalities and differences between cases, and each case was also examined to assess the applicability of what some scholars have described as 'grief conventions' in respondents' accounts.

A Stiff Upper Lip – Case Studies and Grief 'Conventions'

Each interview constitutes a case study as there are currently no theories to account for the emergence of Digital Presence. Therefore, to attempt to categorise accounts based on respondents' demographic characteristics is arbitrary at best; as Hollway and Jefferson have stated, unless cases are examined individually at this stage of analysis, commonalities may well 'produce spurious, misleading generalisations'.²²⁹

Respondents are characteristically not aware of which factors may cause Digital Presence, e.g. 'It's weird, I don't even know what my own motives are'.²³⁰ Therefore, attempts to identify any demographic feature, and/or confessed beliefs as necessary characteristics or conditions of the phenomenon are speculative at best.

To attempt to synthesise data would also require a uniformity of understanding amongst respondents that could not be guaranteed: even if the terms employed by

²²⁹ W. Hollway and T. Jefferson, *Doing Qualitative Research Differently: Free Association, Narrative, and the Interview Method*, (London: Sage, 2009), p127-128.

²³⁰ Kaleem, op. cit.

researcher and respondent are the same, there is nothing to suggest that the understandings of those terms are similar.²³¹

Each interview was also examined as a separate case study to identify the presence of so-called ‘grief conventions’, particularly in relation to gender; for the charge has been made that social scientific researchers have been insensitive to gendered responses.²³² Therefore, examining each account as a case study can allow us to determine: if the male reticence characteristic of grief studies persists in accounts of DPMC;²³³ if the ameliorating effects of technological mediation apply to accounts of Digital Presence; and through comparing cases, whether other factors can influence a respondent’s degree of disclosure.

Viewing respondent accounts as case studies also allows us to identify commonalities and differences in later analysis, as opposed to allowing concepts discussed by one respondent to dictate the direction of inquiry in subsequent interviews.

As noted however, characteristic of accounts of Digital Presence are respondents’ incomprehension of the phenomenon, and their reluctance to suggest possible contributing factors. Therefore, it is pertinent to question by what means a researcher could elicit a narrative fruitful for analysis, and by what means such a narrative could be analysed.

How Did That Make You Feel? – Our Methodological Approach

As conscious motives are absent and the phenomenon is inexplicable even to those who experience it, we must analyse that which is accessible, i.e. descriptions of experience, and accounts of the conditions under which they occur, e.g. our

²³¹ Indeed, J. Johnson and S. Weller note that to synthesise interview material, ‘each and every respondent should have the same understanding/interpretation of the questions’, which cannot be guaranteed, ‘*Elicitation Techniques for Interviewing*’, in Gubrium and Holstein, op. cit., p500.

²³² C. Gilligan, ‘*In a Different Voice: Psychological Theory and Women’s Development*’, (MA: HUP, 1982), cited in Johnson, op. cit., p109-110.

²³³ As identified, amongst others, by Stroebe, op. cit., and Adamson and Holloway, op. cit., p747.

respondents' emotional states. Of these two central concerns, phenomenological analysis is best suited.²³⁴

For as well as seeking to elicit descriptions of phenomenon and their emergent conditions, interpretive phenomenological analysis appreciates 'an individual's personal perception or account of an object or event, as opposed to attempting to produce an objective statement of the object or event itself'.²³⁵ This is particularly apt, as there are no grounds to assume any common conceptual understandings of digital artefacts or processes.²³⁶

Whilst proponents of this approach do not claim that 'the thoughts of an individual are transparent within verbal reports',²³⁷ the method does appreciate that the 'lived experience' of any one object or event may vary depending on any number of circumstances. Therefore, instead of attempting to provide an 'objective' description of an object, a comparative study of each respondent's account with a phenomenological focus on the qualities of their experiences may well illuminate the factors necessary for the phenomenon to occur.

Also, a comparative phenomenological analysis of varying presence phenomena as experienced by respondents, e.g. as felt at potent places such as graves, or whilst interacting with conventional media, such as photos, can offer insight. If the embodied sensations of such phenomena differ, or their emergent conditions vary, it may be possible to identify the peculiar influences of Digital Presence.

However, 'free imaginative variation',²³⁸ i.e. the process of altering aspects of phenomenon to determine their essential features (as pioneered by Husserl) is not practicable in this instance. Given the privacy we have afforded PDs, it is uncertain how they could be manipulated. Whilst the conditions of interaction could be varied,

²³⁴ These two concerns are described as central to phenomenological analysis by C. Moustakas, *Phenomenological Research Methods*, (CA: Sage, 1994).

²³⁵ Ibid, p443

²³⁶ Instead, such an approach seeks 'to uncover what several participants' experiences have in common': J. Creswell, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, (2nd ed), (CA: Sage, 2007), cited in Ibid, p214.

²³⁷ A qualification made by R. Golsworthy and A. Coyle, *Spiritual Beliefs and the Search for Meaning Among Older Adults Following Partner Loss*, *Mortality*, 4 (1), 1999, p24.

²³⁸ Described by Savin-Baden and Howell Major, *op. cit.*, p216.

e.g. varying the time and place interactions with PDs occurred, the fact that such interactions would be under scrutiny could render them subject to the Hawthorne effect (i.e. the effect by which observing an agent can alter their experiences and behaviour).

Instead, phenomenological analysis of DPMC, coupled with a comparative phenomenological analysis of different presence phenomena may elucidate the essential features of Digital Presence.

None of the terminology or concepts utilised by one respondent were introduced to any other respondent. In contrast to the identification and verification of ‘categories’ popularised by grounded theory,²³⁹ interviews focused on respondents’ descriptions of events; descriptions of their emotional states; and descriptions of their individual convictions. As noted, understandings of common terms may have varied, and as our respondents’ motives were unconscious I did not wish to provide resources which they could have appropriated to organise, justify or explain their experiences.

Similarly, respondents were not prompted to provide an explanation of their experiences. I concur with Geertz’s claim that ‘the best informants are those who can describe... not necessarily those who analyse or theorise’.²⁴⁰ As Sacks discovered, ‘a ‘why’ question elicited an intellectualisation... interviewees offered sociological responses’, which were ‘disconnected from their actual lives’.²⁴¹

Instead of attempting to organise and explain the incoherent and inexplicable, interviews simply sought to elicit that which was available to respondents: their experiences, as lived. However, as Dingwall has observed, the act of interviewing prompts organisation, as respondents attempt to ‘turn the helter-skelter, fragmented process of everyday life into coherent explanations’.²⁴²

²³⁹ See B. Glaser, ‘*Theoretical Sensitivity*’, (CA: Sociology Press, 1978), and/cited in K. Charmaz, ‘*Qualitative Interviewing and Grounded Theory Analysis*’, in Gubrium and Holstein, op. cit.

²⁴⁰ C. Geertz, ‘*Works and Lives: The Anthropologist as Author*’, (CA: SUP, 1988), cited in Johnson, op. cit., p111.

²⁴¹ Noted as cited in S. Chase, ‘*Taking Narrative Seriously: Consequences for Method and Theory in Interview Studies*’, in ‘*The Narrative Study of Lives*’, (Ed) R. Josselson and A. Lieblich, (London: Sage, 1995), cited in Hollway and Jefferson, op. cit., p35.

²⁴² R. Dingwall, ‘*Accounts, Interviews and Observations*’, in ‘*Context and Method in Qualitative Research*’, (Eds) G. Miller and R. Dingwall, (CA: Sage, 1997), cited in Fontana, op. cit., p166.

Despite our best efforts to deter respondents from inadvertently providing an ‘intellectualisation’ of their experiences, (thus potentially inviting distorted accounts and hastily seized upon interpretations), the act of narrating experience necessarily involves the employment of ‘cohesive devices’,²⁴³ as it attempts to ‘organise human experiences into temporally meaningful episodes’.²⁴⁴

Thus, a researcher must respond to the question (particularly apt in this instance): if one of the ‘defining features of the narrative form is coherence, how does this affect our knowledge of the potential incoherence of life as it is lived?’²⁴⁵.

We can answer that the narrative features utilised by respondents, as resources appropriated to validate experience, can be of interest in themselves. Conceptions of time, the language used to describe the relationship between the living and the deceased, and if that language varies can all offer insight and were all considered in analysis. The description of emotional states, both in relation to physical and digital stimuli may also have exhibited something of a respondent’s understanding of digital ontology, and so these were also considered in our analysis.

²⁴³ A phrase employed by M. Bamberg and A. McCabe, ‘*Editorial*’, *Narrative Inquiry*, 8 (1), 1998, cited in Riessman, op. cit., p698.

²⁴⁴ D. Polkinghorne, ‘*Narrative Knowing and the Human Sciences*’, (NY: NYU Press, 1988), cited in Hollway and Jefferson, op. cit., p32.

²⁴⁵ *Ibid.*

2

Feeling, Looking, Thinking, Being**Contact Comfort, ‘Biological’ Motion, the Extended Mind and the Digital Body****Data summary**

After contacting the Senior Tutors of Durham University’s 16 constituent Colleges: 11 Senior Tutors failed to reply to the invitation to interview; 2 objected on the grounds of sensitivity, as their colleges had recently suffered the death of a student, and 3 agreed to disseminate the invitation. Of those 3, 2 disseminated the invitation in a dedicated email, and 1 included it toward the conclusion of a weekly email bulletin. As it is questionable how many students read such emails, more so in their entirety, this form of dissemination potentially limited the number of unique impressions the invitation made.

Of those 3 Colleges which received the invitation to interview, their combined membership allowed for a potential reach of 2688 undergraduate and postgraduate students. The same invitation was also advertised on the Facebook profile of a friend, who acted as a gatekeeper for her network; the potential reach of her advertisement was equivalent to the number of contacts in her network, i.e. 407. Of the potential pool of 3095 respondents, 8 responded to the invitation (7 in response to emails circulated by Senior Tutors, 1 in response to the Facebook advertisement).

In relation to comparable inquiries (those which specifically examined interactions with PDs), 8 cases represents the largest qualitative investigation to date. Kasket’s²⁴⁶ investigation featured 3 case studies, Hieftje’s²⁴⁷ 6, and whilst Brubaker, Hayes and Dourish²⁴⁸ interviewed 16 respondents, none had personally engaged in DPMC.

Instead, the insights of Brubaker et. al’s respondents are speculative, e.g. ‘Kevin

²⁴⁶ Kasket, 2011, op. cit.

²⁴⁷ Hieftje, op. cit.

²⁴⁸ Brubaker et. al., (2013), op. cit.

speculated that',²⁴⁹ or 'Catherine characterised post-mortem Wall posts as'.²⁵⁰ They are based on their observations of interactions between members of their own social networks. Whilst their speculations may provide some insight into their own beliefs, they do not contribute to a greater understanding of the affective quality of Digital Presence, or the operant motives and beliefs of those who experience the phenomenon.

7 of this study's respondents belonged to the broad 'emerging adult'²⁵¹ demographic (18-25 year olds) examined in the work of Kasket²⁵² and Hieftje;²⁵³ 5 undergraduates aged 18, and 2 postgraduates aged 25. These include David, George, Catherine, Lucy and Julia,²⁵⁴ all 18 year old first year undergraduates; Thomas, a 25 year old first year PhD student, and Sarah, a 25 year old final year PhD student.

The remaining respondent, Joan, is in her early 40s, however the degree to which she engaged with Facebook was equitable to other respondents. She reported heavy usage, and described herself as '*addicted*' to the platform. Similarly, the respondents from Durham University described the frequency of their interactions with Facebook as being '*quite often*';²⁵⁵ some utilised the platform '*up to 15 times a day*';²⁵⁶ all accessed it '*everyday*';²⁵⁷ and some described themselves as being '*always on*'.²⁵⁸ Kasket and Hieftje do not note the usage patterns of their respondents, so comparison is not possible.

As for gender ratios, a study composition of 5 female, 3 male respondents appears consistent with previous response rates in online grief studies. Male participants form a third of Hieftje's respondents, and a quarter in Carroll and Landry's²⁵⁹ survey of online grieving practices amongst 'emerging adults'; Kasket's study is entirely female, although the small sample size of 3 cases may account for this.

²⁴⁹Brubaker et. al., (2013), op. cit., p155.

²⁵⁰ Ibid.

²⁵¹ J. Arnett, '*Suffering, Selfish, Slackers? Myths and Reality about Emerging Adults*', Youth Adolescence, 36, 2007, cited in Hieftje, op. cit, p127.

²⁵² Kasket, op. cit.

²⁵³ Hieftje, op. cit.

²⁵⁴ All names are pseudonymous to ensure confidentiality.

²⁵⁵ George.

²⁵⁶ Julia.

²⁵⁷ Lucy.

²⁵⁸ Catherine.

²⁵⁹ Carroll and Landry, op. cit., p341–349.

That men constitute between one-quarter and one-third of respondents in such studies is unsurprising: Daggett's meta-study of bereavement research concluded that men are 'more reluctant to discuss such experiences'.²⁶⁰ Stroebe,²⁶¹ Adamson and Holloway²⁶² and Bennett²⁶³ have claimed that the absence of men from such studies may be due to 'fears of giving way to emotion at the interview'.²⁶⁴ Whilst Brubaker, Hayes and Dourish's study included a greater proportion of male respondents with 7 male and 9 female participants, none of the male respondents were questioned about their personal experiences of interacting with PDs; this may account for a greater willingness amongst male respondents to participate.

Despite Bennett's claim that technological mediation could facilitate greater access to male experiences of grief, the option to participate via online text or video messaging failed to increase the proportion of male respondents beyond the average. However, of the 3 male respondents, none opted for any form of technological mediation; all 3 respondents participated in face-to-face interviews, and comfortably described their emotional responses to bereavement. For example, David describing how he felt '*upset*', and '*hollow*', and Thomas described how he '*broke down*' upon discovering the death of a friend.

Only 2 respondents, Joan and Sarah, opted for an online text-based interview. Both chose to utilise Facebook's 'Chat' feature as they found it more convenient than travelling for a face-to-face interview. As per Cabaroglu et. al's²⁶⁵ findings, I found 'no significant difference' between the in-person and online interviews. The duration and frequency of pauses were comparable to the face-to-face interviews, although Joan and Sarah both navigated to PDs during the course of their interviews to verify the information they had given. Otherwise, the duration of these interviews and their degree of candour were equitable.

Our respondents all comfortably communicated their experiences despite their close relationships with the deceased. In David's case, a school friend of 6 years had been

²⁶⁰L. Daggett, op. cit., p191, cited in Keen et. al, op. cit, p355.

²⁶¹ Stroebe, op. cit.

²⁶² Adamson and Holloway, op. cit.

²⁶³ Bennett, op. cit.

²⁶⁴ Stroebe, op. cit.

²⁶⁵ Cabaroglu et. al, op. cit.

treated for a critical illness and showed signs of recovery before a sudden death; George's Aunt had also received treatment for a critical illness, exhibited signs of recovery, then deteriorated rapidly; Thomas' *'really close friend'* had committed suicide, and all three male respondents described the deaths as a sudden *'shock'*.

3 of the female respondents shared a strong bond with the deceased: Catherine described the sudden death of her father as a *'major shock'*; the death of Joan's close friend *'who was like family'* was *'devastating'*, and Lucy's close friend who appeared to be recovering from a critical illness before a sudden death was also a *'shock'*. One female respondent, Sarah, said of her friend *'we didn't stay very close... but [his death] affected me a lot'*, while Julia experienced an adverse reaction when she noticed that a school friend's PD was active, claiming *'it's just a bit disturbing'*.

The time elapsed since the death of each of the respondents' decedent and their interviews ranged from 2 months to just under 3 years; a greater range than the 2-to-20 months of Hieftje's respondents. However, the respondent with the greatest time elapsed (Catherine) demonstrated one of the most acute experiences of Digital Presence, as she continued to utilise a PD as the sole site of continued contact and communication with her father.

6 respondents were British citizens, including George, although he had *'always lived abroad'*, and his parents originated from India. Thomas is a Canadian citizen, studying in the UK, and Sarah is a French citizen studying in the UK. The only respondent exhibiting evidence of non-western cultural influences was George, who *'celebrates Dewali, and Christmas'*, and was raised learning *'hymns or prayers from Christianity, Islam and Hinduism'*.

Respondents' beliefs are absent in Kasket and Hieftje's studies: there is no mention of the beliefs of Kasket's respondents, whilst the only possible indicator of belief in Hieftje's study is one respondent's allusion to 'Heaven', which remains ambiguous.

Besides celebrating Dewali and Christmas and learning about Christianity, Islam and Hinduism as a child, George also *'prays to multiple gods'*, and *'distinguishes between the body and the soul'*; Joan describes herself as *'spiritual'*, and *'believes in a god'*;

Thomas also describes himself as '*spiritual*', and questions '*how much do we know about life after death?*'; David describes himself as '*relatively agnostic*'; Sarah is '*not religious at all, I don't believe in anything*'; Lucy identifies as an '*atheist*', and Catherine stated that she is '*not religious*' and therefore rejects the concepts of '*prayer, and communication*' with the deceased.

However, despite rejecting the notion of post-mortem communication, Catherine utilises the Profile as the sole site of continued contact and communication with her father, wherein '*it feels like messages get through*'. Similarly, whilst Lucy describes herself as an '*atheist*' and rejects the notion of an afterlife, (she claimed '*Heaven doesn't exist and all of this*'), she also regards the Profile as uniquely efficacious; she claimed that '*it doesn't really feel like she's actually gone*' on Facebook, and she sends private messages directed to the deceased via their PD. Joan too communicates with her deceased friend through their PD, although she also talks to photos of them, and claims she '*talks to her in my mind*'.

George however described how he '*didn't feel [the PD] had any attachment to her*'; he did not experience any form of Digital Presence, and so did not attempt to communicate with his aunt via Facebook; David experienced an '*empty feeling*' when he visited his PD, and so does not utilise it as a means of continuing a bond.

Sarah only viewed '*what other people have posted*', and did not attempt to communicate with the deceased in any manner; Julia left a tribute on her decedent's PD, as she '*felt like I maybe ought to write something*', but she does not attempt to communicate with her friend and finds her active PD '*uncomfortable*'; and Thomas has left tributes, but claimed that he '*didn't really have anything to confess, I feel like I said everything to him that I wanted*'.

Thus, 3 of our 8 respondents utilise PDs to communicate with the dead. For 2 of these, PDs are the sole means by which they '*feel*' that they can do so. The remaining 5 do not attempt to communicate with the deceased via Facebook; nonetheless, their beliefs, and experiences of PDs offer as much insight into the mechanics of Digital Presence as those who are familiar with the phenomenon.

But before we explore the possible causes of Digital Presence, perhaps we should consider how an intangible digital artefact can serve as a referent for the deceased when ‘physically tangible memorials’²⁶⁶ are necessary to sustain a bond beyond death.

For Baptist claims that the referents employed must be physical in order to subdue the ‘corporeal withdrawal’²⁶⁷ survivors experience in the absence of the deceased; only tangible objects can become ‘dwelling places for the deceased’.²⁶⁸ Similarly, Massimi and Baecker claim that physical objects ‘represent the corporeality of the deceased in almost all cultures’,²⁶⁹ and Lambert has agreed that ‘immanence benefits from a relic’s materiality’.²⁷⁰ Why then do respondents feel that the deceased are present on their Profiles?

Perhaps because they can ‘*actually look back on the life of a person, and their posts, the fact it’s their writing*’;²⁷¹ ‘*you can actually go through the whole history and see all the comments and everything*’,²⁷² and with that sense of ‘*character still there*’,²⁷³ ‘*it felt like it was still there, it was still back there... coz you’re looking at things she was doing when she was alive*’.²⁷⁴

²⁶⁶ E. Haskins, ‘*Between Archive and Participation: Public Memory in a Digital Age*’, *Rhetoric Society Quarterly*, 37, 2007, p414.

²⁶⁷ K. Baptist, ‘*Diaspora: Death without a Landscape*’, *Mortality*, 15:4, 2010, p300.

²⁶⁸ *Ibid*, p299.

²⁶⁹ M. Massimi and R. Baecker, ‘*A death in the family: Opportunities for Designing Technologies for the Bereaved*’, 28th international Conference on Human Factors in Computing Systems, 2010, p1821.

²⁷⁰ R. Lambert, ‘*Descriptive, Narrative, and Experiential Pathways to Symbolic Ancestors*’, *Mortality*, 11:4, 2006, p332.

²⁷¹ Julia.

²⁷² Thomas.

²⁷³ Catherine.

²⁷⁴ Lucy.

Contact Comfort

Wire-mesh and Terrycloth – Multimedia and Contact Comfort

As well as visiting PDs to direct publicly observable or private messages to the deceased, our respondents also focused their attention on ‘*going through all the picture’s*,²⁷⁵ ‘*looking at photos*’,²⁷⁶ and viewing their decedent’s ‘*videos*’.²⁷⁷ Lucy claimed that upon discovering their friend’s death, ‘*the moment we [her school class] got home from school... we went through all the profile pictures*’.²⁷⁸ Hieftje’s study also found that one of the activities survivors engage in on PDs is ‘*looking at pictures*’.²⁷⁹ This is unsurprising, given that a study conducted by Massimi and Baecker found that 92% of respondents valued photos of the deceased, which have enjoyed pride of place in homes long before the advent of the digital age.²⁸⁰

However, a PD is not just an assembly of multimedia representations of the deceased. It ‘*means a lot more than looking back at a photo album [as the deceased has] written the status, or the comments, and you kind of, often can see a person’s humour or something like that on Facebook*’.²⁸¹

Thomas also observed that survivors can ‘*see all the comments*’²⁸² written by the deceased, and Catherine claims the PD is ‘*not even just photos and videos, it’s his wit and views there, they still remain and can be visited*’, which allow her to experience ‘*an aspect of his character*’.²⁸³ Lucy even described how she utilises Facebook’s ‘See Friendship’ function, whereby users can ‘*see friendship between us, like things that we’d ever posted between [each other]*’,²⁸⁴ i.e. she could view every interaction she had ever had with her friend on Facebook.

²⁷⁵ Thomas.

²⁷⁶ Sarah.

²⁷⁷ Catherine.

²⁷⁸ Lucy.

²⁷⁹ Hieftje, op. cit., p116.

²⁸⁰ See M. Massimi and R. Baecker, op. cit.

²⁸¹ Julia.

²⁸² Thomas.

²⁸³ Catherine.

²⁸⁴ Lucy.

Thus, we may be able to begin to understand why it ‘feels like’ the deceased are present on their Profiles. Objects that have been manipulated by the deceased, such as items of clothing may ‘invoke a greater sense of immediacy’²⁸⁵ than other referents as they bear a physical imprint of the deceased ‘marked by use through wear and tear’.²⁸⁶ However, users also impart an imprint on digital constructs by imbuing them with multimedia representations and written status updates.

This may account for why PDs are, in some cases, favoured over traditional monuments or symbolic objects such as heirlooms which belonged to the deceased. For the distinction between static memorials, such as plaques or benches, and PDs which retain the multimedia and written status updates imbued by their users is reminiscent of the distinction between the two substitutes employed in Harlow’s maternal deprivation experiments.

In 1958, Harlow, a researcher in early cognitive development, conducted a series of controversial experiments involving a number of rhesus macaques deprived of maternal contact from birth. This cohort of macaques was later introduced to two different maternal surrogates: a wire-mesh mother macaque, and a comparable model with terrycloth ‘fur’.

Harlow discovered that the macaques unequivocally favoured the terrycloth models, even when the wire-mesh surrogates were fixed with feeding bottles, their sole form of nutrition. Harlow termed this preference for the affectively familiar (in this instance, the resemblance between the tactile quality of terrycloth and rhesus macaques), ‘contact comfort’.²⁸⁷

We can draw parallels between the cold, unresponsive substitute of the wire-mesh mother and the static memorial which does not speak, and the terrycloth mother and the PD: the written contributions, photos and videos of the deceased providing some small comforting familiarity. Like the terrycloth, these personal contributions exhibit recognisable affective qualities, which grant the PD a closer phenomenological

²⁸⁵ M. Gibson, ‘*Melancholy Objects*’, *Mortality*, 9:4, 2004, p290.

²⁸⁶ *Ibid.*

²⁸⁷ See S. Suomi and H. Leroy, ‘*In memoriam: Harry F. Harlow (1905–1981)*’, *Am. J. Primatol.*, 2, 1982.

resemblance to the deceased, i.e. a greater sense of ‘contact comfort’. The PD thus functions as a simulacrum; not as a surrogate, but as a referent for the absent deceased.

It is unsurprising then that survivors may also continue to write on PDs through comments and private messages. Of all the available means of externalising inner thoughts, feelings and desires about/to the deceased, such as by vocalising feelings at a graveside, or in a domestic setting,²⁸⁸ Lattanzi notes how writing has a ‘*cathartic benefit... enabling bereaved individuals to explore, and express, their hopes, fears, fantasies, and realities*’;²⁸⁹ indeed, Catherine described how she experiences feelings of ‘*relief*’²⁹⁰ whenever she writes a message to her father on his PD.

However, whilst writing may be inherently cathartic as it allows survivors to organise their thoughts and cogently express their feelings, that the object of this action is a closer phenomenological approximation of the deceased than a static memorial may account for the greater sense of ‘presence’ located on PDs. Or, expressed in neurological terms, the variety of sensory stimuli evident on PDs can be imaginatively engaged with to evoke an internal multimodal representation of the deceased.

Imagine Seeing you Here – Multimodal Representations and Person-File Types

Schroeder and Matheson, and Kandel, Schwartz and Jessell have documented the process whereby ‘stimulation of the sense organs produces neural signals, which in turn create patterns of activity in the brain’.²⁹¹ They have described how whilst ‘these patterns of activity are initially segregated by sense modality’, the brain can synthesise input from multiple sensory channels to compose ‘multimodal representations’, i.e. composite images formed by a variety of sensory stimuli. For example, an internal mental image of a person is a multimodal representation composed of their tone of voice, appearance, odour, etc.

²⁸⁸ See C. Parkes and R. Weiss study of widows, ‘*Recovery from Bereavement*’, (London: Basic Books, 1983), cited in Silverman and Klass, op. cit., p12.

²⁸⁹ M. Lattanzi and M. Hale, ‘*Giving Grief Words: Writing during Bereavement*’, Omega, 15 (1), 1984.

²⁹⁰ Catherine.

²⁹¹ E. Kandel, J. Schwartz and T. Jessell, ‘*Principles of Neural Science*’, 4th ed, (New York: McGraw - Hill, 2000), cited in T. Schroeder and C. Matheson, ‘*Imagination and Emotion*’, in ‘*The Architecture of the Imagination: New Essays on Pretence, Possibility, and Fiction*’, (Ed) S. Nichols, (Oxford: OUP, 2006), p28.

Boyer has claimed that when these multimodal representations are of people, they act as sensory signatures to allow internal ‘Person-file’ types to be retrieved. For instance, when we ‘hear people’s voices’, or identify ‘other such cues’, this induces ‘memories of past interaction episodes, people’s general dispositions, facts about their histories, etc’.²⁹²

When these multimodal representations are induced, corresponding neural impulses are automatically sent to ‘emotional centres like the orbitofrontal cortex, affective striatum, and amygdala. When stimulated, these ‘emotional centres’ are responsible for the feelings and physical responses we associate with emotions’.²⁹³

But perhaps more interestingly, multimodal representations can also be induced by ‘fictional’ stimuli, i.e. sensory stimuli known to be simulacra, such as the howl of a wolf in a horror film. For it appears that ‘there is no distinct anatomical region of the brain, nor distinct set of nerve fibres... designated for receiving input’²⁹⁴ from ‘fictional’ sensory stimuli. Emotional centres are also stimulated, as ‘it appears that fictional stimuli have their emotional effects via the same types of causal pathways as ‘real’ stimuli’.²⁹⁵

Indeed, ‘fictional stimuli are known to be so great in the brain's representational and emotional systems that scientists experiment upon human subjects using fictions to elicit feelings’.²⁹⁶ For example, Teasdale²⁹⁷ and O’ Dougherty²⁹⁸ have used representations of events and objects to produce responses equitable to those elicited by the events and objects themselves.

²⁹² P. Boyer, *Religion Explained: The Human Instincts that Fashion Gods, Spirits and Ancestors*, (London: Random House, 2002), p251.

²⁹³ Schroeder and Matheson, op. cit., p28.

²⁹⁴ Ibid.

²⁹⁵ Ibid, p29.

²⁹⁶ Ibid.

²⁹⁷ J. Teasdale, R. Howard, S. Cox, Y. Ha, M. Brammer, S. Williams and S. Checkley, ‘*Functional MRI Study of the Cognitive Generation of Affect*’, *American Journal of Psychiatry*, 156, 1999, cited in Ibid.

²⁹⁸ J. O’Doherty, M. Kringelbach, E. Rolls, J. Hornak and C. Andrews, ‘*Abstract Reward and Punishment Representations in the Human Orbitofrontal Cortex*’, *Nature Reviews Neuroscience*, 4, 2001, cited in Ibid.

Perhaps then, the richness of the sensory stimuli found on PDs has invoked internal multimodal representations, (and thus ‘Person-file’ types) in our respondents. And as fictional stimuli activate the same causal pathways as ‘real’ stimuli, our respondents have experienced a sense of presence because the brain’s emotional centres have been stimulated accordingly.

However, Catherine commented that *‘we’ve got photos albums and we’ve got writing and things that he’s done, and drawings, and that’*²⁹⁹ in other, analogue formats, yet neither the sum nor whole of these parts invoked the same sense of presence as the PD, which constitutes Catherine’s sole site of contact with her father. So perhaps it is not simply that the sensory stimuli derived from multimedia representations of the deceased found on PDs act as invocations of the deceased, or even that these invoke *‘memories’*.³⁰⁰

Perhaps it is the inherent ability to *‘go back anywhere in time’*,³⁰¹ and Lucy’s observation that by *‘scrolling back to before she was ill’*, it *‘was still like, it was still back there’*, i.e. *‘it’s more like she’s alive, coz you’re looking at things that she was doing when she was alive’*³⁰² that accounts for Digital Presence.

For the induction of multimodal representations from fictional stimuli requires a degree of ‘imaginative engagement’;³⁰³ when watching a play, ‘in spite of the fact that simulated assaults and emotions are all known simulacra, they are represented much as real things would be, by the same multimodal representational structures’³⁰⁴ providing we suspend our disbelief that what we are watching is fiction. And Profiles, by design, allow an individual to be experienced synchronically, via the atemporality afforded by Facebook’s ‘Timeline’ feature.

²⁹⁹ Catherine.

³⁰⁰ Joan.

³⁰¹ Thomas.

³⁰² Lucy.

³⁰³ Schroeder and Matheson, op. cit., p28.

³⁰⁴ Ibid.

Like You're Still Here – Atemporality and Imaginative Engagement

By 'going back', or 'scrolling back', respondents are referring to the ability to navigate through a Profile's history via its 'Timeline' feature. Whilst the perpetually dynamic 'Newsfeed' presents interactions between members of a social network linearly and in real time, the Timeline feature of a Profile allows users to navigate all prior comments, interactions and multimedia uploads made on a Profile. These are not presented in archival form; by 'scrolling back', users can regress to any point in time.

By not only allowing us to move freely through every major (and minor) life event, expression, comment and interaction, but to view them simultaneously, an individual can be experienced synchronically. The effect of this feature will be examined in greater detail in Chapter 3, however for now it is sufficient to note that when Catherine has '*a moment when I really miss him*', she utilises the Timeline feature to '*read some messages that he'd once sent*'.³⁰⁵ Whilst visiting her friend's grave, the gravestone is a '*constant reminder, she is gone*' for Lucy, but through 'scrolling' back through the PD, there is '*the tense, that she's still there*', as Lucy can immerse herself in '*the things that she was doing when she was alive*'.³⁰⁶

As there are no indicators to the contrary, and given Lucy's desire to '*think you're still here*',³⁰⁷ shared by Catherine as she '*really misses [her father]*',³⁰⁸ there is reason and motive to suspend disbelief that the deceased are absent. When utilising the Timeline function, the regressed PD removes evidence of mortality, and presents a multimedia image of the deceased in life. Thus, survivors can imaginatively engage with these stimuli to pretend that the deceased '*haven't gone yet*',³⁰⁹ through inducing a multimodal representation of the deceased complete with the attendant affective response of 'presence'.

This suggestion is substantiated by David's account: he did not utilise the Timeline feature of his PD, and consequently claimed '*all the stuff that's posted is all, about*

³⁰⁵ Catherine.

³⁰⁶ Lucy.

³⁰⁷ Ibid.

³⁰⁸ Catherine.

³⁰⁹ Lucy.

him, in, you know past tense'. David also reported an *'empty feeling'* when he engaged with this PD, and felt no sense of Digital Presence. However, one striking feature of Catherine and Lucy's accounts is that they both experienced a pervasive feeling of *'sadness'*,³¹⁰ and were *'quite emotional'*³¹¹ when they engaged with their PDs.

Despite their ability to use the Timeline to imaginatively engage with a multimedia image of their decedents alive, they experienced a pervasive feeling of sadness due to their ever conscious acknowledgement that their loved ones are deceased.

Furthermore, Thomas also noted how he could *'go back anywhere in time too, and get information from anywhere in time'*,³¹² although Thomas did not experience any sense of Digital Presence on his PD.

Instead, Digital Presence might be accounted for by evidence of the implicit classification of Profiles into distinct binary categories; these stipulate that whilst Catherine and Lucy recognise that their loved ones are dead, their Profiles may be alive and well.

³¹⁰ Lucy.

³¹¹ Catherine.

³¹² Thomas.

‘Biological’ Motion

A Normal Friend – Implicit Profile Categorisation

Implicit in respondents’ accounts of their interactions with PDs is the binary classification of a Profile as either ‘normal/living’, or ‘abnormal/deceased’. These are not official classifications (in the sense that they are designated thus by Facebook), but emergent categories that are independent of the status of their users, e.g. a PD may still be deemed ‘normal/living’.

Lucy described her deceased friend’s Profile as akin to that of a *‘normal friend’*, and David differentiated the PD he interacted with from a *‘normal’* Profile (which he elaborated as that belonging to *‘someone who’s still alive’*). George claimed that his Aunt *‘never used it in the same way, as normal’*, i.e. hers was not a ‘normal’ Profile as its activity was *‘very sporadic’*. Lucy distinguished her deceased friend’s Profile from a *‘deceased Profile’*, as it demonstrated functionality not applicable to that category; she *‘assumed that if they were deceased, they’d take it off groups and friends lists’*.

The implicit classification of a Profile is, as evidenced by Lucy’s account, independent of the status of the individual: whilst the individual may be deceased, their Profile may well be ‘alive/normal’. Those Profiles which satisfied the criteria of a ‘normal/living’ Profile are those which invoke an ineffable sense of presence, or in Julia’s case, unsettle and *‘disturb’* (the reasons for the disparity between Julia’s affective response, and those of Catherine and Lucy will be considered later in this chapter).

The classification of a Profile as ‘living/normal’ is based on a tripartite criterion (herein referred to as the LPC, or ‘Living Profile Criteria’), which consist of the inextricable interaction/activity dyadic, and integration, i.e. inclusion in groups, lists, and events.

The interaction/activity dyadic refers to the dynamic of Profile interaction, and the subsequent activity that interaction generates. For example, if we comment on a Profile, that interaction will feature in the Newsfeed for public consumption. Thus, any form of interaction will generate activity, although acknowledgement of this causal connection is not evident in our respondents' accounts. The integration criterion refers to the continued participation of a Profile in Facebook groups, and lists; for example, if the Profile features in a list of people invited to a party, or continues to be present in a special interest group, e.g. a group for a particular rugby team.

These criteria are demonstrated on Catherine's father's Profile: there is continued interaction with the Profile by members of its network, e.g. friends continue to *'update him on the football scores'*; a product of such interaction is activity in the Newsfeed, as *'the people that my dad is friends with on Facebook, and I'm friends with on Facebook, and my mum's friend's with on Facebook, all see these messages'*. The Profile also remains integrated in standard groups featuring living people, e.g. special interest groups on Facebook, as *'even things he liked, you can see'*, and *'invitations to come to a party, and friend requests'* are present.

The Profile David interacted with, which left him feeling *'empty and hollow'* does not satisfy the LPC. It is not active: *'it's been quite a long time since I'd seen anything'*, and does not participate in groups, or feature alongside other Profiles in event lists: *'it doesn't have any of the standard kind of, pages that people have liked that come up'*.

Lucy's however, like Catherine's, demonstrates interaction and subsequently activity, and integration. There is a *'steady stream'* of *'people talking to her'* (interaction), which is *'keeping it going'* (i.e., active), and *'all of the friends lists and everything, she's still in like loads of the Facebook groups' ... I see her in the little 'going' column [on an event]'* (integration).

George's Aunt's Profile did not exhibit any indications of interaction, as *'no-one had commented'* on it, and consequently it was not active and did not appear in his Newsfeed. Similarly, Joan's friend's Profile is *'always silent'* as it is not interacted with or active, and Sarah claimed *'there's not often much new... it's kind of sad'*, as it never appears in her Newsfeed.

Julia's friend's Profile continues to function as a focal point for interaction as users continue to 'write messages' to the deceased, which ensures that the PD is 'still active' in her Newsfeed; it also remains integrated within the system, as 'you get the birthdays, and they turn up, and you kind of, you click on it', a feature memorialised Profiles lack. As noted however, the reasons why Julia might find these indicators of vitality 'disturbing' as opposed to comforting will be explored in greater detail later in this chapter.

Why then does a 'normal/living' Profile invoke a sense of Digital Presence, even when respondents are conscious that its user is deceased? Perhaps because 'an animal's survival depends on its ability to identify the movements of prey, predators and mates, and to predict their future actions'.³¹³

Hunting Prey, Avoiding Predators – Biological Motion

Santos et. al have noted how 'humans like most other animals equipped with visual senses are very sensitive to detect biological motion in their environment',³¹⁴ and Saygin et. al have commented that this ability to detect biological motion is necessary for tasks of 'ecological significance, such as hunting prey, avoiding predators, communication and social interaction'.³¹⁵ Boyer has labelled this capacity the 'Animacy system', i.e. a system 'activated by the sight of any object that moves in a purposeful manner, it produces expectations and inferences about animals and persons'.³¹⁶

Particular neural regions have evolved to specialise in detecting biological motion. Representations of articulated biological motion have consistently been observed to evoke stimulation in one particular cerebral region, the Superior Temporal Sulcus

³¹³ S. Blakemore and J. Decety, 'From the Perception of Action to the Understanding of Intention', *Nature Reviews Neuroscience*, 2, 2001, p561.

³¹⁴ N. Santos, B. Kuzmanovic, N. David, A. Rotarska-Jagiela, S. Eickhoff, J. Shah, G. Fink, G. Bente and K. Vogeley, 'Animated Brain: a Functional Neuroimaging Study on Animacy Experience' *NeuroImage* 53, 2010, p291.

³¹⁵ A. Saygin, T. Chaminade, H. Ishiguro, J. Driver and C. Frith, 'The Thing That Should Not Be: Predictive Coding and the Uncanny Valley in Perceiving Human and Humanoid Robot Actions', *Soc Cogn Affect Neurosci* 7(4), 2012, p413.

³¹⁶ Boyer, op. cit., p250.

(STS). For example, Bonda et. al.³¹⁷ detected activity in the STS when subjects viewed grasping hand movements as opposed to random movement, and Grezes et. al.³¹⁸ have documented STS activation when subjects viewed meaningful hand gestures with tools and objects, amongst innumerable other studies.

Even abstract representations can be identified as exhibiting biological motion and can stimulate the STS, as demonstrated by experiments featuring point-light representations of human figures walking (originally conducted by Johansson,³¹⁹ and replicated by Blake and Shiffrar³²⁰ and Blakemore and Decety).³²¹ Infants too can identify articulated biological motion exhibited by point-light figures, and can differentiate these from random point-light sequences, which suggests that ‘the detection of biological motion may become hard-wired in the human brain at an early age’.³²²

Neural responses to point light displays that portrayed random, rigid motion were ‘localised more posteriorly in the occipito-temporal junction’,³²³ as opposed to the STS. Also, the motion of tools and ‘other forms of mechanistic motion’³²⁴ have been found to stimulate the neighbouring MTG region, as opposed to the STS. Thus, neurologists such as Lange and Lappe have concluded, following an extensive review

³¹⁷ E. Bonda, M. Petrides, D. Ostry and A. Evans, ‘*Specific Involvement of Human Parietal Systems and the Amygdala in the Perception of Biological Motion*’, J. Neurosci. 16, 1996, cited in F. Castelli, F. Happe, U. Frith and C. Frith, ‘*Movement and Mind: A Functional Imaging Study of Perception and Interpretation of Complex Intentional Movement Patterns*’, NeuroImage 12, 2000, p321.

³¹⁸ J. Grezes, N. Costes and J. Decety, ‘*Top-down Effect of Strategy on the Perception of Human Biological Motion: A PET Investigation*’, Cogn. Neuropsychol. 15, 1998, cited in Castelli et al., op. cit., p321.

³¹⁹ G. Johansson, ‘*Perception of Biological Motion and a Model for its Analysis*’, Percept. Psychophys, 14, 1973, cited in N. Santos et al., op. cit., p291.

³²⁰ R. Blake and M. Shiffrar, ‘*Perception of Human Motion*’, Ann. Rev. Psychol., 58, 2007, cited in N. Santos et al., op. cit., p291.

³²¹ See Blakemore and Decety, op. cit.

³²² B. Bertenthal, ‘*Infants Perception of Biomechanical Motions: Intrinsic Image and Knowledge-based Constraints*’, in C. Granrud (Ed), ‘*Visual Perception and Cognition in Infancy*’, (NJ: Erlbaum, 1993), cited in Blakemore and Decety, op. cit., p562.

³²³ J. Grèzes, P. Fonlupt, B. Bertenthal, C. Delon-Martin, C. Segebarth and J. Decety, ‘*Does Perception of Biological Motion Rely on Specific Brain Regions?*’, Neuroimage 13, 2001, cited in Blakemore and Decety, op. cit., p562.

³²⁴ K. Pelphrey, T. Mitchell, M. McKeown, J. Goldstein, T. Allison and G. McCarthy, ‘*Brain Activity Evoked by the Perception of Human Walking: Controlling for Meaningful Coherent Motion*’, J Neurosci 23, 2003, cited in J. Thompson, M. Clarke, T. Stewart and A. Puce, ‘*Configural Processing of Biological Motion in Human Superior Temporal Sulcus*’, Journal of Neuroscience, 25 (39), 2005, p9063.

of biological motion research employing PET scans and fMRI imagining that ‘studies almost uniformly report activation of the STS when subjects viewed biological motion displays’³²⁵ (a conclusion corroborated by Gobbini et. al’s. comprehensive review of biological motion research).³²⁶

Lange and Lappe have also claimed that biological motion detection is contingent upon ‘analysis of the global form of the human body’,³²⁷ i.e. the identification of form as well as movement. They have cited Shiffrar et. al’s experiments, in which ‘they presented stick figures of walking humans seen through apertures. Despite the ambiguous motion signals through the apertures, subjects recognized the human figure easily’.³²⁸ They also alluded to Hirai and Hiraki’s findings that ‘the amplitude of event-related potentials elicited by point-light biological motion is mainly dependent on the spatial structure of the walker rather than on the temporal structure of the dot movement’.³²⁹

The same position is advocated by Thompson et al., who derived their assertion from their study of mannequins; some were fully intact, others were presented in various states of dismemberment, yet all appeared to walk. They noted ‘greater activation [of the STS] to the intact relative to apart walker’,³³⁰ even when they occluded the figures with solid black bars in video presentations. When the mannequins’ form was disrupted through dismemberment, ‘there was significantly greater activation relative to intact walkers in bilateral superior parietal lobule (SPL), right parieto-occipital cortex, and left middle temporal gyrus (MTG)’.³³¹

As such, Thompson et al. concluded that ‘the STS does not process biological movement simply by monitoring the temporal correlation between independently

³²⁵ J. Lange and M. Lappe, ‘*A Model of Biological Motion Perception from Configural Form Cues*’, *Journal of Neuroscience*, 26 (11), 2006, p2895.

³²⁶ See M. Gobbini, A. Koralek, R. Bryan, K. Montgomery and J. Haxby, ‘*Two Takes on the Social Brain: A Comparison of Theory of Mind Tasks*’, *Cognitive Neuroscience*, 19 (11), 2007.

³²⁷ Lange and Lappe op. cit., p2895.

³²⁸ M. Shiffrar, L. Lichthey and C. Heptulla Chatterjee, ‘*The Perception of Biological Motion across Apertures*’, *Percept Psychophys* 59, 1997, cited in Lange and Lappe, op. cit.

³²⁹ M. Hirai and K. Hiraki, ‘*The Relative Importance of Spatial versus Temporal Structure in the Perception of Biological Motion: An Event-Related Potential Study*’, *Cognition*, 99, 2006, cited in Ibid.

³³⁰ Thompson et al., op. cit., p9063.

³³¹ Ibid, p9062.

moving objects but instead requires these moving objects to be configured in a manner consistent with a body shape'.³³² This relationship between form dependency and STS activation is undermined however by well documented cases of geometric shape animations that have elicited STS stimulation.

In an experiment originally conducted by Heider and Simmel in 1944, subjects were presented with animations of numerous geometric shapes present in the same frame. More recently, neurological researchers have replicated this experiment, and through PET studies observed 'activation of the STS'³³³ in subjects viewing these animations. Comparable findings have been documented by Gobbini et. al³³⁴ and Martin and Weisberg³³⁵ amongst others.

As well as stimulating the STS, these animated presentations of dynamic geometric shapes also activated the Medial Prefrontal Cortex (mPFC), as subjects characterised the featureless shapes as scared, angry, and helpful. The mPFC is consistently identified as the locus of intention attribution, as 'activity associated with making inferences about the mental states of characters in stories or nonverbal cartoons is observed in the mPFC'.³³⁶ Goel et. al,³³⁷ Fletcher et. al,³³⁸ and Gallagher et. al³³⁹ are just some of the many research teams to have corroborated this claim, as they have observed mPFC stimulation via fMRI studies of participants in intention attribution exercises.

That stimulation of the mPFC was documented in subjects presented with animations of dynamic geometric shapes is unsurprising, given that 33 of Heider and Simmel's

³³² Ibid, p9063.

³³³ See Castelli, op. cit.

³³⁴ See Gobbini et al., op. cit.

³³⁵ A. Martin and J. Weisberg, 'Neural Foundations for Understanding Social and Mechanical Concepts', *Cognitive Neuropsychology*, 20, 2003, cited in Ibid.

³³⁶ C. Frith and U. Frith, 'Interacting Minds: A Biological Basis', *Science*, 286, 1999, p1693.

³³⁷ V. Goel, J. Grafman, J. Tajik, S. Gana and D. Danto, 'Modelling other Minds', *Brain*, 120, 1998, cited in Castelli, op. cit., p319.

³³⁸ P. Fletcher, F. Happe', U. Frith, S. Baker, R. Dolan, R. Frackowiak and C. Frith, 'Other Minds in the Brain: A Functional Imaging Study of "Theory of Mind" in Story Comprehension', *Cognition* 57, 1995, cited in ibid.

³³⁹ H. Gallagher, F. Happe', N. Brunswick, P. Fletcher, U. Frith and C. Frith, 'Reading the Mind in Cartoons and Stories: An fMRI Study of Theory of Mind in Verbal and Nonverbal Tasks', *Neuropsychologia* 38, 2000, cited in ibid.

34 subjects ‘attributed intention and mental states to the shapes, including chasing, aggression, and helping’,³⁴⁰ and that ‘the sight of any object that moves in a purposeful manner produces expectations and inferences’.³⁴¹ This phenomenon has also been documented cross-culturally in similar experiments conducted by the Japanese neurologist Hashimoto,³⁴² and Danish neurologist Marek³⁴³.

Some researchers, such as Aronoff, Barclay and Stevenson³⁴⁴ have suggested that form was a factor in the attribution of intention to these shapes: the triangle was deemed ‘angry’, and their research has suggested that large, angular shapes are perceived as more ‘aggressive’, and ‘dominant’, than small, round objects’.³⁴⁵ However, even when videos of the shapes were quantised, i.e. disrupted and permuted to vary their structural features, ‘subjects continued to describe the movements as the intentional actions of motivated beings’.³⁴⁶

Shaw and Warren³⁴⁷ have claimed there are two invariants present in any event. Structural invariants, which include the size and shape of the objects participating in an event, and dynamic invariants, which include the styles of change such objects exhibit, e.g. alterations of speed, trajectory and placement. On the basis of these Heider and Simmel type experiments, a variety of neurological researchers have concluded that structural invariants are largely irrelevant.

Instead, ‘research on the experience of animacy has put forward the notion that different variations of movement influence our ability to attribute mental states to moving objects’,³⁴⁸ a position propounded by Santos et. al, and supported by

³⁴⁰ D. Berry, S. Misovich, K. Kean and R. Baron, ‘*Effects of Disruption of Structure and Motion on Perceptions of Social Causality*’, *Personal. Soc. Psychol. Bull.* 18, 1992.

³⁴¹ Boyer, op. cit., p250.

³⁴² H. Hashimoto, ‘*A Phenomenal Analysis of Social Perception*’, *Journal of Child Development*, 2, 1966, cited in *ibid.*

³⁴³ J. Marek, ‘*Information, Perception, and Social Context II*’, *Human Relations*, 19, 1966, cited in *ibid.*

³⁴⁴ J. Aronoff, A. Barclay and L. Stevenson, ‘*The Recognition of Threatening Facial Stimuli*’, *Personal and Social Psychology*, 54, 1988, cited in *Ibid.*

³⁴⁵ Berry, op. cit., p283.

³⁴⁶ *Ibid.*, p243.

³⁴⁷ W. Warren and R. Shaw, ‘*Events and Encounters as Units of Analysis of Ecological Psychology*’, in W. Warren and R. Shaw (Eds), ‘*Persistence and Change*’, (NJ: Lawrence Erlbaum, 1985), cited in *Ibid.*

³⁴⁸ Santos et. al., op. cit., p291.

equivalent findings from Barrett et. al,³⁴⁹ Abell et. al,³⁵⁰ and Tremoulet and Feldman³⁵¹ amongst others.

These ‘variations of movement’ more specifically ‘yield impressions of socially relevant qualities’.³⁵² Examples include self-propelled motion, i.e. ‘initiation of movement without an external cause’,³⁵³ contingency between objects,³⁵⁴ and responsiveness to the motion by the environment.³⁵⁵ What though, renders the approach and responsiveness of one object to another as indicative of a ‘social cue’, and why attribute intentions motivated by fear and anger to simple geometric shapes?

In the original Heider and Simmel experiment, extensively replicated in studies of biological motion detection and intention attribution, the shapes’ environment was a hollow rectangle, with a single hinged opening resembling a door; as such, the structure resembles a house. The presentation of this structure and the shapes’ interactions constitute a topographically consistent representation of physical interactions.

Therefore, an object (in this case a triangle or a circle) approaching another object which ‘responds’ through altering its relative position, e.g. a sudden rapid approach eliciting a judder and a rapid retreat, is comparable to a ‘bird’s eye view’ representation of a confrontational physical exchange. Similarly, one object gradually approaching and making contact with another which reciprocates this contact is comparable to an aerial perspective of an amicable greeting, and so on.

³⁴⁹ H. Barrett, P. Todd, F. Miller and M. Blythe, ‘*Accurate Judgments of Intention from Motion Cues Alone: A Cross-Cultural Study*’, *Evol. Hum. Behav.*, 26, 2005, in *ibid.*

³⁵⁰ F. Abell, F. Happe and U. Frith, ‘*Do Triangles Play Tricks? Attribution of Mental States to Animated Shapes in Normal and Abnormal Development*’, *Cognitive Dev.*, 15, 2000, cited in *ibid.*

³⁵¹ P. Tremoulet and J. Feldman, ‘*The Influence of Spatial Context and the Role of Intentionality in the Interpretation of Animacy from Motion*’, *Percept. Psychophys.*, 68 (6), 2006, cited in *ibid.*

³⁵² Berry, *op. cit.*, p238.

³⁵³ See A. Leslie, ‘*Spatiotemporal Continuity and the Perception of Causality in Infants*’, *Perception* 13 (3), 1984, and J. Stewart, ‘*Object Motion and the Perception of Animacy*’, *Psychonomic Society Meeting*, 1984, cited in Santos et al., *op. cit.*, p292.

³⁵⁴ S. Blakemore, P. Boyer, M. Pachot-Clouard, A. Meltzoff, C. Segebarth and J. Decety, ‘*The Detection of Contingency and Animacy from Simple Animations in the Human Brain*’, *Cereb. Cortex*, 13 (8), 2003, cited in Santos et. al., *op. cit.*, p292.

³⁵⁵ J. Schultz, K. Friston, J. O’Doherty, D. Wolpert and C. Frith, ‘*Activation in Posterior Superior Temporal Sulcus Parallels Parameter Inducing the Percept of Animacy*’, *Neuron*, 45 (4), 2005, in *ibid.*

In the digital age, intersubjectivity is not restricted to physical interaction (or in some instances, its prevalent mode). Instead, as near perpetual digital connectivity and engagement is now beginning during formative periods of acute neuroplastic malleability, a generation inculcated in a digital doxa³⁵⁶ may well be hardwired to identify the dynamic invariants of a ‘living’ Profile as socially intelligible movements indicative of ‘biological’ motion.

Neurons that Fire Together, Wire Together – Neuroplasticity and ‘Biological’ Motion

Until the 1950s, it was received knowledge that after an initial formative period of neurological development, the brain was effectively ‘fixed’. However, in 1951, the biologist Young conducted a series of experiments and announced ‘there is evidence that the cells of our brains literally develop and grow bigger with use, and atrophy or waste away with disuse’.³⁵⁷

More than 50 years later, and following extensive research utilising PET scans and fMRI imaging, Hallett was confident enough to declare that ‘neuroplasticity is not only possible, it is constantly in action’,³⁵⁸ Pascual-Leone that ‘neuroplasticity is the normal ongoing state’³⁵⁹ of the brain, and Choudhury and McKinney that ‘because of neuroplasticity, we can say that the brain and nervous system are constantly changing in response to environmental stimuli as well as the brain’s own activity’.³⁶⁰

As such, any ‘repeated experience influences our synapses’.³⁶¹ For example, the repeated use of primitive technologies such as pliers and rakes by monkeys has been found to result in ‘significant growth in their visual and motor areas involved in

³⁵⁶ We shall refer to ‘Doxa’ as per Bourdieu’s use of the term, i.e. as denoting ‘a set of fundamental beliefs which does not even need to be asserted in the form of an explicit, self-conscious dogma’; referring to ‘the apparently natural beliefs or opinions that are intimately linked to habitus, the taken-for-granted assumptions of an epoch which lie beyond ideologies’: P. Bourdieu, ‘*Pascalian Meditations*’, (Trans. R. Nice), (Cambridge: Polity, 2000), p16, and C. Hardy, ‘*Hysteresis*’, in M. Grenfell (Ed), ‘*Pierre Bourdieu: Key Concepts*’, (Stocksfield: Acumen, 2008), p120.

³⁵⁷ J. Young, ‘*Doubt and Certainty in Science: A Biologist’s Reflections on the Brain*’, (London: OUP, 1951), p36, cited in N. Carr, ‘*The Shallows: How the Internet is Changing the Way we Read, Think, and Remember*’, (London: Atlantic Books, 2010), p21.

³⁵⁸ M. Hallett, ‘*Neuroplasticity and Rehabilitation*’, *Journal of Rehabilitation Research and Development*, 42 (4), 2005, cited in *ibid*.

³⁵⁹ *Ibid*.

³⁶⁰ S. Choudhury and K. McKinney, ‘*Digital Media, the Developing Brain and the Interpretive Plasticity of Neuroplasticity*’, *Transcultural Psychiatry* 50 (2), 2013, p194.

³⁶¹ Carr, *op. cit.*, p49.

controlling the hands that held the tools'.³⁶² Similarly, an fMRI investigation into the brains of violinists concluded that 'playing a violin, a musical tool, results in substantial physical changes in the brain', as the sensory cortex that processes signals from the left hand (used to finger the strings) was 'significantly larger than those of non-musicians';³⁶³ these findings were repeated for violinists who had only practised the instrument as adults.

However, it is not just the repeated manipulation of physical objects that can provoke neuro-physiological development, but altering the focus of cognitive exertion too. In an imagining study on the brains of London taxi drivers, this cohorts' posterior hippocampi, 'a part of the brain that plays a key role in storing and manipulating spatial representations of a person's surroundings, was much larger than normal'.³⁶⁴

Whilst this manner of synaptic recalibration occurs throughout a lifetime, either through acquiring a new manual skill or altering our focus of mental exertion, there are acute periods of neuroplastic malleability, 'such as adolescence, when the brain is especially susceptible and vulnerable to environmental input and to the formation of irreversible pathways and networks'.³⁶⁵

Post-mortem histological and fMRI studies conducted by Blakemore and Frith³⁶⁶ suggest that adolescence is a neurologically sensitive period, and Johnson has suggested on the basis of his fMRI scans that this period witnesses 'increasing functional specialisation of brain areas involved in social cognition, executive function, and emotional processing'.³⁶⁷

Whilst the manipulation of physical objects and concerted shifts in cognitive exertion can forge novel, or reinforce existing neural pathways, Carr claims that 'if you were

³⁶² M. Umiltà, L. Escola, I. Instrukirveli, 'When Pliers Become Fingers in the Monkey Motor System', Proceedings of the National Academy of Sciences, 105 (6), 2008, cited in *ibid*, p32.

³⁶³ *Ibid*.

³⁶⁴ E. Maguire, D. Gadian, I. Johnstrude, 'Navigation-Related Structural Change in the Hippocampi of Taxi Drivers', Proceedings of the National Academy of Science, 9 (8), 2000, cited in *ibid*, p32-33.

³⁶⁵ Choudhury and K. McKinney, *op. cit.*, p196.

³⁶⁶ S. Blakemore and U. Frith, 'The Learning Brain: Lessons for Education', (Oxford: Blackwell, 2005), cited in *Ibid*, p199.

³⁶⁷ M. Johnson, 'Interactive Specialization: A Domain-General Framework for Human Functional Brain Development?', *Developmental Cognitive Neuroscience*, 1 (1), 2010, cited in *ibid*, p201.

to set out to invent a medium that would rewire our mental circuits as quickly and thoroughly as possible, you would probably end up designing something that looks and works a lot like the internet'.³⁶⁸ Small has concurred, and stated that 'digital technology is rapidly and profoundly altering our brains, stimulating brain cell alteration, gradually strengthening new neural pathways in our brains, while weakening older ones'.³⁶⁹

Small conducted fMRI scans on 12 regular internet users, and 12 individuals who rarely, if ever, used the internet in any capacity. The regular user cohort's fMRI images exhibited 'a much broader range of brain activity' when exposed to digital technologies, while both cohorts demonstrated equitable neural activity when reading from books; thus, Small noted that 'the experienced net users' distinctive neural pathways had developed through their internet use'.³⁷⁰

However, Small's most remarkable findings were that 'after just five days of practice, the exact same neural circuitry in the front part of the brain became active in the internet-naïve subjects. Five hours of the internet, and the naïve subjects had already rewired their brains'. Small subsequently posed the question, 'if our brains are so sensitive to just an hour a day of computer exposure, what happens when we spend more time online?'.³⁷¹

Merzenich, one of the fathers of neuroplasticity, answered: 'The heavy use of digital tools has neurological consequences. It creates DIFFERENT brains'.³⁷²

Given the degree of engagement Catherine and Lucy have had with this medium, I propose that 'socially relevant' behaviour is as evident online as it is offline, and that indications that a Profile is 'alive' are interpreted as cues of animate motion which subsequently activate the animacy system. This occurs as near perpetual digital

³⁶⁸ Carr, op. cit., p116.

³⁶⁹ G. Small and G. Vorgan, *iBrain: Surviving the Technological Alteration of the Modern Mind*, (New York: Collins, 2008), p1, cited in ibid, p120.

³⁷⁰G. Small, T. Moody, P. Siddarth and S. Bookheimer, 'Your Brain on Google: Patterns of Cerebral Activation during Internet Searching', *American Journal of Geriatric Psychiatry*, 17 (2), 2009, cited in Carr, op. cit., p121.

³⁷¹ Ibid.

³⁷² M. Merzenich, 'Going Googly', On the Brain blog, 11/08/08, <http://www.onthebrain.com/2008/08/going-googly/>, cited in Carr, op. cit., p119-120.

connectivity has led to the creation and reinforcement of synaptic pathways which identify these criteria as ‘socially relevant’, relative to the architecture and functionality of Facebook.

For example, motion contingency is satisfied by the interaction/activity dyadic: ‘living’ Profiles respond to interactions in a spatially and temporally consistent manner, i.e. according to the same ‘real-time’ dynamic that governs the Newsfeed; responsiveness to the environment is satisfied through the effects of the same dyadic, and spatial and temporal synchrony between objects is met by the integration criterion (these Profiles remain embedded in the wider architecture of Facebook, such as in groups and events and respond in the same manner as any other ‘living’ Profile).

Such movements are ‘socially relevant’ within the context of Facebook, and may thus be classified as digital ‘behaviour’. In our case studies, respondents demonstrated prolonged exposure to digital interactivity, claiming they were ‘*always on*’,³⁷³ that they ‘*scrolled through it a lot, everyday*’,³⁷⁴ and even that they were ‘*addicted*’.³⁷⁵

Of our two acute cases of Digital Presence, their exposure began prior to and persisted through the formative neuroplastic period of adolescence: both Catherine and Lucy began using SNS around the age of 10, and continued throughout adolescence when they were particularly prone to generating new synaptic connections.

A further catalyst for the LPC impacting ‘biological’ motion detection is found in the ‘chronic over-activity of those brain regions implicated in social thought’.³⁷⁶ When individuals lie and rest quietly, most of their brain activity decreases. However, the mPFC, the temporo-parietal junction and the medial parietal cortex, i.e. ‘the brain regions identified during mind-reading tasks continue to churn away’.³⁷⁷ Thus, Mitchell claims that ‘this chronic engagement of ‘social brain’ regions suggests that the human brain has a predilection for contemplating the minds of others’.³⁷⁸

³⁷³ Catherine.

³⁷⁴ Lucy.

³⁷⁵ Joan.

³⁷⁶ J. Mitchell, ‘*Watching Minds Interact*’, in M. Brockman (Ed), ‘*What’s Next: Dispatches on the Future of Science*’, (New York: Vintage, 2009), p85.

³⁷⁷ Ibid.

³⁷⁸ Ibid.

I believe that this ‘predilection’; the unique neurological impact of digital technologies; and prolonged and persistent exposure to these technologies, particularly during periods of acute neuroplastic malleability, render the LPC of ‘living’ Profiles as indicative of ‘biological’ motion.

Of course, testing this hypothesis would not be without its difficulties. Whilst an fMRI compatible device could allow subjects to access Facebook whilst under observation, some important questions remain to be considered. Would respondents need to identify the LPC while under observation to activate their animacy system? Or would previous identification of these criteria designate their PD as ‘living’, i.e. is the potential for motion sufficient?

Furthermore, the appearance of indicators of the LPC are independent invariables, which could not be elicited in controlled conditions. However, if any/all of these criteria did occur while respondents were under observation, then fMRI scans could determine: if ‘living’ Profiles of living users stimulate the STS/mPFC; if ‘living’ Profiles of deceased users do, and if there are any differences in activation levels between these two. We would also need to negotiate the difficulties posed by the Hawthorne effect, whereby in observing an agent, we alter their behaviour (although whether this effect extends to this manner of neural activity is questionable).

Of course, it is necessary to acknowledge that neurology is not yet the panacea it may promise. The explanatory potential of neurology is currently limited by the inherent ambiguity of contemporary methods of mapping neural functions on cerebral regions.

For example, whilst Gobbini et. al claimed in their study of intention attribution ‘the involvement of the pSTS/Temporal Parietal Junction in the systems for action understanding and Theory of Mind may reflect a common anatomical substrate for the representation of the intentions of others’, they later conceded that given the ambiguity of current mapping techniques, ‘the involvement of this region may reflect nearby but functionally dissociable regions’.³⁷⁹ Similarly, Lange and Lappe have qualified their hypotheses with comments such as ‘the contribution of form

³⁷⁹ Gobbini et al., op. cit., p1804.

processing areas to biological motion perception is less clear'.³⁸⁰

This degree of qualification and ambiguity in certain quarters of neurological inquiry has prompted Satel and Lilienfeld to claim that 'dozens of inconclusive studies have been spun into the oversimplification, interpretive license, and premature application of brain science'.³⁸¹ In a similar vein, Choudhury and McKinney note that despite its limitations, 'cerebral language and neuro-discourses increasingly assume a privileged explanatory status in explaining and intervening in human behaviour'.³⁸²

They claim that 'despite the absence of solid evidence, this limited brain data is used to support normative claims about adolescents and digital media',³⁸³ such as those made by Greenfield that 'young brains are being disturbingly reshaped, which could shorten attention-spans'.³⁸⁴ Indeed, Dumit has claimed that 'in biomedicalized cultures, the 'brain' exists as a vital metaphor for what is most true, durable, universal, and uncontestable about who we are'.³⁸⁵

I would add that a field deemed to represent the zenith of our cognitive endeavours (as for quantum physics, well, it's not brain surgery), a field promising universal benefit, but mysterious and inaccessible to all but a small minority would see its practitioners' revelations as privileged as the words of the sages (a notion I will return to in chapter three in relation to the 'god of technology'). However, despite these qualifications, even Choudhury and McKinney acknowledge that 'certainly some prepositions are well founded'.³⁸⁶

Indeed, the sheer quantity of data which consistently isolates the STS in explicit

³⁸⁰ Lange and Lappe, op. cit., p2902.

³⁸¹ G. Marcus, 'The Problem with the Neuroscience Backlash', <http://www.newyorker.com/tech/elements/the-problem-with-the-neuroscience-backlash>, accessed 13/05/15.

³⁸² Choudhury and McKinney, op. cit., p195.

³⁸³ Ibid.

³⁸⁴ www.dailymail.co.uk/news/article-1153583/Social-websites-harm-childrens-brains-Chilling-warning-parents-neuroscientist.html, begrudgingly accessed 13/05/15.

³⁸⁵ J. Dumit, 'Picturing Personhood: Brain Scans and Biomedical Identity', (NJ: Princeton University Press, 2004), in Choudhury and K. McKinney, op. cit., p209.

³⁸⁶ Ibid, p195.

identifications of biological motion, as documented by Peuskens et. al,³⁸⁷ Thompson et. al,³⁸⁸ and Vaina et. al³⁸⁹ amongst others, and the mPFC in the attribution of intention (see Goel et. al,³⁹⁰ Fletcher et. al,³⁹¹ and Gallagher et. al³⁹²), presents a convincing case for the localisation of these functions.

Therefore, providing we do not wholesale reject the field of neurology and its existing findings based on the limits of its utility in other areas, then the intention attributed to this form of ‘biological’ motion and its contribution to the phenomenon of Digital Presence can be discerned. As the Profile’s appearance and movements remain congruent, it can be attributed with the intention of ‘living’ Profiles: *‘being nosy’*, and reading all the contributions made by the members of our networks.

‘If she’s going to be anywhere, she’s going to be there’ - Intention Attribution

For *‘Facebook is... being nosy isn’t it?’*,³⁹³ a space where we *‘nose at friends and family’s Profiles’*.³⁹⁴ Julia further acknowledged that *‘all the stuff I’m putting on Facebook you [a user] can see’*. Lucy noted that activity centres on *‘scrolling through it a lot’*, i.e. examining content, and Catherine recognised that the messages posted to her Father’s Profile are read by others. That users might not generate their own content appears irrelevant, as Lucy stated that her friend *‘might have gone a couple of days without posting something’*, despite *‘always [being] on’* Facebook.

Indeed, David claimed that the certainty that anything posted to a ‘living’ Profile will be seen by its intended recipient is so great (given the average degree of digital connectivity), that a response is not necessary to be confident that a message sent is a message received. He claimed *‘you know you’d post something, or send them a message, and you knew that they’d get back to you at some point about it’*.

³⁸⁷ H. Peuskens, J. Vanrie, K. Verfaillie and G. Orban, *‘Specificity of Regions Processing Biological Motion’*, Eur J Neurosci 21, 2005, cited in Lange and Lappe, op. cit., p2895.

³⁸⁸ Thomas et al., op. cit., cited in ibid.

³⁸⁹ L. Vaina, J. Solomon, S. Chowdhury, P. Sinha, J. Belliveau, *‘Functional Neuroanatomy of Biological Motion Perception in Humans’*, Proc Natl Acad Sci USA 98, 2001, cited in ibid.

³⁹⁰ Goel et al., op. cit., cited in Castelli, op. cit., p319.

³⁹¹ Fletcher et al., op. cit., cited in ibid.

³⁹² Gallagher et al., op. cit., cited in ibid.

³⁹³ Julia.

³⁹⁴ Joan.

That the intention of reading messages is attributed to ‘living’ Profiles may account for why Catherine *‘feels’* that *‘messages get through’* to her deceased Father via his Profile, even though she has struggled to reconcile this ineffable ‘feeling’ with the reality that he is gone. For *‘If I, think for a second, erm, you know and, apply, logic, and, yeah, I mean, yeah, if I think about it for a second I go no, erm, but yeah, I suppose actually I kind of do’*. Similarly, Lucy described how although her friend is dead, it *‘feels a lot more like she’s still reading it’*, and so directs messages she wishes to communicate through her PD, e.g. *‘I just like to think that you’re still here’*.

In other reported cases of Digital Presence, the intention of reading messages has been attributed to the deceased ‘on Facebook up in Heaven’;³⁹⁵ I also encountered the notion that the deceased read Facebook messages in ‘Heaven’ in my dissertation study, as respondents requested that the deceased *‘Say hi to mum for me’*.³⁹⁶ However, one of the limitations of my previous study was that respondents were not asked if their PDs constituted their sole means of interacting with the deceased.

This is important to discern as it allows us to distinguish the differences between Catherine and Lucy’s experience of Digital Presence, wherein PDs are utilised as the sole means of contacting the deceased, and Joan’s experience. For whilst Joan continues to direct messages to her friend’s Profile, she describes herself as *‘spiritual, believing in a god’*, and maintains that her friend is in *‘Heaven’*.

Thus, whilst the PD functions as a focal point for her continuing bond with her friend, as *‘there are memories there’*, communicating via this medium is *‘the same as speaking to photos, or talking to her in my mind’*. Through a general notion of deceased omniscience, *‘talking about those who have passed keeps them close’*.

However, in Catherine and Lucy’s cases, there is a wholesale rejection of the concept of an afterlife, or any form of ‘supernatural’ immaterial transcendence. When both individuals described their ineffable experience of presence in response to the question ‘how did you feel after you had left a comment?’, they claimed: *‘I’m not a*

³⁹⁵ Hieftje, op. cit., p144.

³⁹⁶ Sam, dissertation study.

religious person’,³⁹⁷ and *‘I’m an atheist’*.³⁹⁸ These were both unprompted remarks which they reiterated throughout their accounts to qualify our perception of their experiences.

Of course, identifying as *‘not religious’*, or as an *‘atheist’* does not in itself entail a rejection of post-mortem persistence. However, Catherine elaborated that one must be *‘religious’* in order to believe that one can *‘communicate’* with the deceased, and claimed that *‘if I was religious [this would be like] praying and communication’*. She then acknowledged and struggled with the difficulties Digital Presence poses for her convictions.

Lucy meanwhile described how her atheism necessitated that *‘if she’s going to be anywhere, she’s going to be there [on Facebook]’*. That the intention of reading messages is still attributed to the deceased is unsurprising: the habitual association of the Profile with the user; the LPC which indicate persistent vitality; and the effects of the emergent *‘contact comfort’* which invokes the deceased’s *‘Person-File’*³⁹⁹ cumulatively ensure that the PD continues to *‘feel’* like the deceased.

However, Lucy’s comment that *‘if she’s going to be anywhere, she’s going to be there [on Facebook]’* demonstrates how Catherine and Lucy can continue to attribute intention to the deceased, whilst avoiding the paradox of attributing an intention to an agent whom no longer exists. For Catherine, Facebook is a place where she can go to *‘see something of him’*, because a *‘presence of who he was remains there’*; it is a *‘part’* of her father, allowing her to *‘visit him’*. Thus, despite her rejection of supernatural transcendence, *‘it feels like messages get through’*.

As such, whilst there is no *‘Heaven’* for the deceased to persist in, by attributing intention to the *‘living’* Profile of the deceased, recourse is made to the deceased persistent in their Profile; this was illustrated by Lucy when she explained how her experience of Digital Presence had led her to consider that the deceased may be *‘sticking around somewhere’*, and that *‘if she’s going to be anywhere, she’s going to*

³⁹⁷ Catherine.

³⁹⁸ Lucy.

³⁹⁹ Boyer, op. cit., p251.

be there?

The Extended Mind

Beyond Skin and Skull – Extended Mind

In their seminal paper, ‘The Extended Mind’, Clark and Chalmers considered the possibility that cognitive processes, and indeed, mental states, might extend beyond the boundaries of the brain and into our external environments. They were by no means the progenitors of the concept of cognitive processes or the ‘mind’ extending beyond ‘skin and skull’.⁴⁰⁰ In 1916 Dewey had claimed that ‘hands and feet, apparatus and appliances of all kinds are as much a part of thinking as changes within the brain’.⁴⁰¹ Earlier still, Merleau-Ponty presented an image of the human animal as ‘la texture commune’,⁴⁰² while Husserl described how appropriating external media such as napkins could aid cognitive processes.⁴⁰³

Clark and Chalmers did however develop the concept, and illustrated cases in which ‘the human organism is linked with an external entity in a two-way interaction, creating a coupled system that can be seen as a cognitive system in its own right’.⁴⁰⁴ They claimed that if ‘part of the world functions as a process which, were it done in the head, we would have no hesitation in recognising as part of the cognitive process, then that part of the world is part of the cognitive process’,⁴⁰⁵ and thus ‘if we remove the external component of the system behavioural competence will drop, just as it would if we removed part of its brain’.⁴⁰⁶

For example, they alluded to the use of a computer program to manipulate geometric shapes as opposed to mentally rotating them as an example of a cognitive process (mental rotation) extending from the brain and occurring in an external component;

⁴⁰⁰ A. Clark and D. Chalmers, ‘*The Extended Mind*’, *Analysis*, 58 (1), 1998, p7.

⁴⁰¹ J. Dewey, ‘*Essays in Experimental Logic*’, (Chicago: UCP, 1916), cited in S. Gallagher, ‘*The Socially Extended Mind*’, *Cognitive Systems Research*, 25, 2013, p4.

⁴⁰² D. Moran, ‘*The Phenomenology of Embodiment: Intertwining and Reflexivity*’, in R. Jensen and D. Moran (Eds), ‘*The Phenomenology of Embodied Subjectivity*’, (London: Springer, 2013), p301.

⁴⁰³ T. Nenon, ‘*Intersubjectivity, Interculturality, and Realities in Husserl’s Research Manuscripts on the Life-World*’, in *ibid*, p151.

⁴⁰⁴ Clark and Chalmers, *op. cit.*, p8.

⁴⁰⁵ *Ibid*.

⁴⁰⁶ *Ibid*.

they also claimed that mental states can be ‘constituted partly by features of the environment’,⁴⁰⁷ using the example of belief.

They claimed that if the information which informs a dispositional belief is externally coded in a readily available and accessible manner, e.g. in the well guarded and oft-employed notebook of an Alzheimer’s patient, then that information functions equitably as ‘the information constituting an ordinary non-occurrent belief; it just happens that this information lies beyond the skin’.⁴⁰⁸ The patient and her notebook constitute a ‘coupled system’ which extends the mental state of believing from the agent to the external component.

I propose that such a coupled system can be founded between a user and their Profile, and the appreciation that this coupling has occurred, however latent and cumbersome to articulate, forms the neurological basis of Catherine and Lucy’s sense that the Profile was a ‘*part*’ of their decedents. However, in order to maintain this proposal, we must first consider the objections made to the concept of ‘extended cognition’ itself.

No Man is an Island – Cognition Extended or Embedded

Clark and Chalmers pre-empted the objections of those who might equate cognition with consciousness when they described how memory retrieval, linguistic processes and skill acquisition are all ‘beyond the borders of consciousness, yet play a crucial role in cognitive processing’.⁴⁰⁹ Despite allaying this concern, their extended cognition/extended mind hypothesis has been met with opposition on the grounds of qualitative distinction and false inference.

The ‘Difference argument’ posed by Rupert contends that internal cognitive processes and those supposedly ‘external’ are qualitatively distinct,⁴¹⁰ Adams and Aizawa’s related ‘Mark of the cognitive’ objection posits that any external processes are

⁴⁰⁷ Ibid, p12.

⁴⁰⁸ Ibid, p13.

⁴⁰⁹ Clark and Chalmers, op cit., p10.

⁴¹⁰ R. Rupert, ‘Challenges to the Hypothesis of Extended Cognition’, *Journal of Philosophy* 101, 2004, cited in S. Bernecker, ‘How to Understand the Extended Mind’, *Philosophical Issue* 24, 2014, p7.

‘incompatible with any plausible criterion that specifies the conditions under which a process qualifies as cognitive’;⁴¹¹ and Adams and Aizawa’s ‘Coupling-Constitution fallacy’ claims that Clark and Chalmers confuse causal and constitutive functioning.⁴¹²

While these objections are valid, they are not fatal to the concept of the coupled system. Providing we concede that while ‘cognitive processes do not extend outside the skin, they do depend very heavily on the external environment’,⁴¹³ then for all intents and purposes, we can claim that removing an external component of a coupled system will reduce the behavioural competences of that system in a comparable manner to removing part of the brain.

Bernecker has acknowledged that adopting an ‘embedded cognition’ hypothesis, makes no ‘substantive difference’⁴¹⁴ to Clark and Chalmer’s model of the coupled system; it may well be that ‘future cognitive research will allow us to select one of the two rival hypothesis’, however the current limits of neurological inquiry are such that extended and embedded cognition hypotheses are ‘empirically and evidentially indistinguishable’.⁴¹⁵ In any case, ‘both theories stress the dependence of cognition on the environment’,⁴¹⁶ differing only in the location of cognitive processes; thus, both support the notion of cognition being dependent on external components.

That coupled systems are not only possible, but that the brain has a proclivity to form them is suggested by data which demonstrate that neuro-physiology develops in a manner ‘that complements external structures’.⁴¹⁷ Umilta et. al’s neuro-imaging study of monkeys discovered that newly introduced tools ‘came to be incorporated into the brain maps of the animals’ hands’.⁴¹⁸ Similarly, Bassolino et. al found that the

⁴¹¹ F. Adams and K. Aizawa, *The Bounds of Cognition*, Ch.6, (Oxford: Wiley-Blackwell, 2008), cited in Ibid.

⁴¹² Ibid.

⁴¹³ Bernecker op. cit., p2.

⁴¹⁴ Ibid, p11.

⁴¹⁵ Ibid, p9.

⁴¹⁶ Ibid.

⁴¹⁷ Clark and Chalmers op cit., p12.

⁴¹⁸ Umilta et al, op. cit., cited in Carr, op. cit., p32.

manipulation of tools remaps the somatosensory cortex in the human brain in a manner that incorporates the tools themselves.⁴¹⁹

There is of course a type distinction between rakes and pliers and Facebook Profiles, although Clark and Chalmers' claim that 'extended cognition is a core cognitive process'⁴²⁰ appears well founded when we consider the history of technological development. Our early ancestors may have reduced memory load through cave paintings, and humans have employed everything from the abacus to the iPad to perform arithmetic and other mental processes. But what of our contemporary zenith, the internet?

To Have and to Hold – The Internet as External Component

To conclude their 'Extended Mind' paper, Clark and Chalmers rejected the notion that the internet can function as a reliable component of a coupled system. Smart concurred on the same grounds: the internet does not satisfy the external component criteria, established by Clark and Chalmers in response to Rupert's 'Cognitive Bloat' objection.⁴²¹ Rupert claimed that no external component could be sufficiently integrated with the subject, and Clark and Chalmers acknowledged the danger that 'decoupling' could occur frequently enough to disqualify certain components from forming a true cognitive system.⁴²²

Therefore, Clark and Chalmers claimed that 'the resource must be reliably available; any information retrieved from the external resource must be more or less automatically endorsed; information contained in the resource should be easily accessible as and when required'.⁴²³ They rejected the internet on the basis of the availability criteria; Smart similarly claimed that as our 'HTML based... document-centric, 'Web of documents' is a very inefficient means of information access',⁴²⁴ the

⁴¹⁹ M. Bassolino, A. Serino, S. Ubaldi and E. Ladavas, 'Everyday Use of the Computer Mouse Extends Peripersonal Space Representation', *Neuropsychologia*, 48 (3), 2010, cited in Gallagher, op. cit., p10.

⁴²⁰ Clark and Chalmers, op. cit., p9.

⁴²¹ R. Rupert, 'Cognitive Systems and the Extended Mind', (Oxford: OUP, 2009), cited in B. Jarvis, 'Evaluating the Extended Mind', *Philosophical Issues*, 24, 2014.

⁴²² Clark and Chalmers, op. cit., p11.

⁴²³ Ibid.

⁴²⁴ P. Smart, 'The Web-Extended Mind', *Metaphilosophy*, 43 (3), 2012, p452.

internet fails to satisfy the accessibility criteria.

However, Clark and Chalmers' objection is based on the technological capacities of 1997, when web-enabled devices were not portable, and required a good few minutes of noisy fanfare to connect to the internet. They recognised that 'if people always carried a calculator, or had one implanted', then these would be 'part of the basic package of cognitive resources that I bring to bear on the everyday world',⁴²⁵ i.e. external components. As Clayton et. al's study of smartphone use amongst University students discovered, in 2015 it can be hard to distinguish whether web-enabled iPhones are always carried, or implanted. Given the prevalence and dependence on smartphones amongst this demographic, there is no danger of casual 'decoupling'.⁴²⁶

As for Smart's claim that the 'HTML based Web of Documents' fails the accessibility criteria, he is correct: scanning pages of text, either manually or through a digital search function, does not afford the accessibility of internal memory. Profiles however do not present information in a 'document-centric' fashion, but through rich multimedia, and more intuitively through the Newsfeed and Timeline features.

Gray et. al's study of 'cognitive impartiality' found that 'our tendency to consult our internal memory as opposed to information stored externally is only informed by the time/cost of access, not location per se',⁴²⁷ and our respondents do appear to be delegating memories of the deceased to their PDs: Catherine claimed that her PD is the '*easiest way to... have memories*', and Lucy stated that she used her PD to '*go back*', and recollect.

Admittedly, the extent to which memory is truly delegated to PDs is questionable, as stimuli such as photos may simply act as prompts to respondents' biological memory. However, Clark and Chalmers and Smart's examples pertain specifically to the extension of memory retrieval. If we recognise that external components can be constitutive of cognition in the manner a shovel is to the act of digging, or pen and

⁴²⁵ Clark and Chalmers, op. cit., p11.

⁴²⁶ R. Clayton, G. Leshner and A. Almond, '*The Extended iSelf*', *Journal of Computer-Mediated Communication*, 20 (2), 2015.

⁴²⁷ W. Gray, C. Sims, W. Fu and M. Schoelles, '*The Soft Constraints Hypothesis*', *Psychological Review*, 113 (3), 2006, cited in Bernecker, op. cit., p10.

paper are to Feynman's thinking, then the Profile and its users can form a coupled system.

Thinking with Things – External Components as Constitutive of Cognition

Gallagher has analogised the constitutive role of external cognitive components with the act of digging: 'take away the musculature, or the shovel, or the ground, and nothing like digging would be going on'.⁴²⁸ Similarly, the Nobel prize winning physicist Feynman claimed that the process of creating notes and sketches with pen and paper was part of the cognitive work itself; Clark has suggested that Feynman 'was actually thinking on the paper',⁴²⁹ and Smart elaborated that in Feynman's case, 'writing is constitutive of thinking'⁴³⁰ as the machinery of cognition extends beyond the brain to pen and paper.

In this case, Feynman and his pen and paper constitute a coupled system: 'if we remove the external component of the system behavioural competence will drop, just as it would if we removed part of its brain'. The organisational potential of pen and paper 'shapes the flow of thoughts and ideas',⁴³¹ to the effect that Feynman's particular manner of thinking may not have been possible through alternative modes of expression.

Similarly, it may not be possible for others to articulate an idea through the distillation of pen and paper which could be realised through the Profile, i.e. through its possible modes of expression such as text, video, audio, hyperlinks to user created digital content, and the pictographic medium of 'emoji'.⁴³² The Profile is also an inherently intersubjective and enactive medium of expression, as Catherine observed in her father '*not holding back from having an argument*' and thus collaboratively constructing ideas and opinions; it necessitates a manner of thinking particular to this form of digital intersubjectivity.

⁴²⁸ Gallagher, op. cit., p10

⁴²⁹ A. Clark, '*Supersizing the Mind*', (NY: OUP, 2008), cited in Smart, op. cit., p454.

⁴³⁰ Ibid.

⁴³¹ Ibid.

⁴³² 'Emojis' or 'Emoticons' are graphic representations of moods and attitudes, e.g. ☺ for happiness, ☹ for sadness, etc.

Therefore, we can understand why Catherine and Lucy believe the Profile is like a 'part' of their decedents: for Lucy *'it had to be a part of her... she was on Facebook so much'*, and Catherine's father used his Profile to express *'jokes, opinions, views, wit'* through *'photos and videos and things'* The degree of use of this constitutive component of cognition is such that the Profile and its user formed a coupled system.

What we cannot understand on this basis alone however is why *'if she's going to be anywhere, she's going to be there'*, and why there is a *'feeling that messages get through'*. Even if we subconsciously recognise the cognitive connection between a decedent and an external component, that does not entail that writing in an deceased Alzheimer's patient's notebook guarantees that a message will be communicated beyond the grave. We still cannot explain how the intention of viewing messages posted on a PD can be attributed to the deceased when the notion of supernatural transcendence is rejected.

Instead, we need to consider the manner in which our idiosyncratic interpretation',⁴³³ (the manner in which the tacit knowledge of coupled systems is interpreted through our worldview and culture) is informed by the digital doxa our respondents live in. In this context, the external component, the Profile, is an avatar: a form of alternative embodiment, necessary to interact with (and interact in) the ontologically distinct vista of the 'Digital'.

⁴³³ Boyer, op. cit., p251.

‘Being’ Online

Logging on, Going in – A Dialectic of Worlds

Accessing the internet doesn’t just involve booting up and logging on. It involves going in: passing through the ‘gateway of a computer screen’⁴³⁴ into a ‘digital world’.⁴³⁵ This dialectic of ‘worlds’ dominates public discourse, as the Prime Minister regularly refers to the ‘digital world’,⁴³⁶ and the head of GCHQ, an agency commonly associated with cutting edge technology describes the internet as the ‘online world’.⁴³⁷

Researchers have reported that this ‘digital world’ is variably described as ‘E-space’;⁴³⁸ the ‘virtual world’;⁴³⁹ the ‘virtual plane’;⁴⁴⁰ the ‘electronic realm’;⁴⁴¹ and most frequently as ‘cyberspace’.⁴⁴² These scholars also employ these terms in their own references to digital technology and the internet, although the Digital is not simply described as a ‘world’ due to the scope of its creative potential.

This ‘realm’ is explicitly distinguished from the ‘real world’,⁴⁴³ which is further defined as the ‘material realm’,⁴⁴⁴ or the world of ‘physical matter’.⁴⁴⁵ As such, ‘cyberspace’ is distinguished from ‘real, geographic space’,⁴⁴⁶ and ‘being’ online means navigating ‘the virtual terrain of cyberspace’.⁴⁴⁷

⁴³⁴ H. Campbell, *Exploring Religious Community Online: We Are One in the Network*, (Oxford: Peter Lang, 2010), p12.

⁴³⁵ J. Zaleski, *The Soul of Cyberspace: How New Technology is Changing Our Spiritual Lives*, (NY: Harper-Collins, 1997), p228.

⁴³⁶ <https://engage.number10.gov.uk/digital-single-market/>, accessed 09/07/15.

⁴³⁷ BBC News Channel, Internet Discussion, 30/06/15.

⁴³⁸ D. Cowan, *Contested Spaces: Movement, Countermovement, and E-Space Propaganda*, in L. Dawson and D. Cowan, *Religion Online: Finding Faith on the Internet*, (London: Routledge, 2004), p257.

⁴³⁹ M. Benedikt, *Introduction*, in (Ed) M. Benedikt, *Cyberspace: First Steps*, (MA: MIT Press, 1992), cited in Campbell, op. cit., p10.

⁴⁴⁰ S. O’ Leary, *Cyberspace as Sacred Space: Communicating Religion on Computer Networks*, in L. Dawson and D. Cowan, op. cit., p47.

⁴⁴¹ B. Woolley, *Virtual Worlds*, (Oxford: Blackwell, 1992), p123.

⁴⁴² D. Groothuis, *The Soul in Cyberspace*, (Michigan: Baker Books, 1997), p9.

⁴⁴³ Cowan, op. cit., p257.

⁴⁴⁴ O’ Leary, op. cit., p48.

⁴⁴⁵ L. Paccagnella, *Getting the Seat of your Pants Dirty: Strategies for Ethnographic Research on Virtual Communities*, *Journal of Communication*, 3(1), 1997, cited in Campbell, op. cit., p45.

⁴⁴⁶ C. Prebish, *The Cybersangha: Buddhism on the Internet*, in Dawson and Cowan, op. cit., p145.

⁴⁴⁷ B. Brasher, *Give Me That Online Religion*, (SF: Jossey-Bass, 2001), p9.

This dialectic of the ‘real/physical world’ and ‘digital/online world’ is evident in the work of SNS researchers: Brubaker et. al make a distinction between the ‘physical world’, and the ‘digital world’,⁴⁴⁸ Walter et. al discuss the conventions of the ‘online world’,⁴⁴⁹ and Massimi and Baecker distinguish between the ‘real and digital worlds’⁴⁵⁰ amongst other examples.

This trope is also evident in representations of the Digital in popular culture as not just qualitatively, but ontologically distinct. The ‘online world’ as ontologically distinct is a recurring theme in Channel 4’s popular ‘Black Mirror’ series, the BBC’s ‘Dr Who’, and several high grossing films such as ‘Tron’, ‘The Matrix’, and ‘Transcendence’; these promulgate and reinforce the concept of the Digital as an ‘otherworldly space’⁴⁵¹ that can sustain human consciousness, independent from the physical body.

Campbell has claimed that the etiology of this dialectic, and the accompanying notion that the digital is ontologically distinct from the ‘physical’, or ‘real’ world is the etiology of the term ‘cyberspace’, introduced in a science fiction novel published 1984. The portmanteau ‘cyberspace’ (‘Cyber’ from cybernetics, and ‘space’) was coined by Gibson in his novel ‘Neuromancer’, in which the inhabitants of a ravaged Earth connect the planet’s computers to a global network, accessed through a ‘virtual-reality grid space’;⁴⁵² once in this virtual world, anything is possible.

Campbell believes that Gibson’s construct of ‘cyberspace’ became conflated with the ‘internet’ as the former became employed as a metaphor for the latter. She has noted that Rushkoff and Benedikt were amongst the first scholars to employ the concept of ‘cyberspace’ as a metaphor for the internet, as they described it as ‘a parallel universe created and sustained by the world’s computers’.⁴⁵³ In the process of adopting cyberspace as a metaphoric construct, ‘cyberspace moved from a construct confined to science fiction to being used as a descriptive noun’.⁴⁵⁴

⁴⁴⁸ Brubaker et. al., op. cit, p42.

⁴⁴⁹ Walter, et. al., op. cit., p285.

⁴⁵⁰ Massimi and Baecker, op. cit., 1829.

⁴⁵¹ Campbell, op. cit., p7.

⁴⁵² Ibid, p10.

⁴⁵³ Benedikt, op. cit., cited in Campbell, op. cit., p10.

⁴⁵⁴ Ibid.

This metaphor was then adopted and perpetuated by a group described by Campbell as the ‘Digirati’: ‘the digital elite of the 1990s, such as Esther Dyson, Bill Gates, and Michael Dertouzos’,⁴⁵⁵ which ensured the transition of cyberspace from myth to metaphor. Given the popularisation of the term as a descriptor of the internet, by the mid 1990s ‘the rhetoric of cyberspace began to blur what was real about how the internet really functioned’, a thesis shared by Bukatman.⁴⁵⁶

Sherlock is unsurprised that a metaphoric construct has become popular understanding, as the incomprehensibility of the mechanics of digital technology to all but a minority ‘leaves the door wide open for mythical interpretation’.⁴⁵⁷ Nunes has related this process of cyberspace ‘becoming an actual place’ to the process discussed by Baudrillard in relation to hyperreality, wherein ‘the map of the territory itself becomes the territory’.⁴⁵⁸

Campbell has proposed that it is this process of the evolution of myth to metaphor, and the subsequent conflation of cyberspace and the internet that informs the dialectical rhetoric of ontologically distinct ‘worlds’. However, whilst the ‘Digirati’ may have adopted cyberspace as a metaphor to express the creative potential of the medium, Campbell does not account for why the concept found such currency amongst scholars, or why it has been so pervasive, readily received and resonant. Furthermore, she fails to explicate the intellectual heritage of Gibson’s construct, or describe the cultural influences evident in Gibson’s work.

Sconce’s account of the emergence of this dialectic maintains that Gibson’s cyberspace does have cultural antecedents, and that the concept is a particular historio-cultural manifestation of what he refers to as ‘the consistent representational strategy of electronic transmutation’.⁴⁵⁹ Sconce has posited that since the 18th century, electricity, information, and consciousness have all been understood in relation to the

⁴⁵⁵ Campbell, op. cit., p10.

⁴⁵⁶ S. Bukatman, ‘*Terminal Identity: The Virtual Subject in Post-Modern Science-Fiction*’, (London: Duke University Press, herein DUP, 1993), cited in J. Sconce, ‘*Haunted Media: Electronic Presence from Telegraphy to Television*’, (London: DUP, 2000), p203.

⁴⁵⁷ A. Sherlock, ‘*Larger Than Life: Digital Resurrection and the Re-Enchantment of Society*’, The Information Society, 29 (3), 2013, p173.

⁴⁵⁸ M. Nunes, ‘*Jean Baudrillard in Cyberspace: Internet, Virtuality and Postmodernity*’, Style, 92 (2), 1995, cited in Campbell, op. cit., p12.

⁴⁵⁹ J. Sconce, op. cit., p7.

metaphor of ‘flow’.

He has cited: how electricity has been conceived of as a ‘current’ for over two hundred years; Williams James’ description of the ‘stream of consciousness’ in the age of Victorian electrification; and Raymond Williams concept of ‘information flow’ in the field of media studies as examples of how the metaphor of ‘flow’ is consistently employed to understand these three concepts.⁴⁶⁰

Sconce has claimed that this shared metaphor allows ‘the possibility of analogous exchanges, electricity mediating the transfer and substitution of consciousness and information between the body and a host of electronic media technologies’.⁴⁶¹ Thus, with the advent of ‘electronic telecommunications’ with the invention of the telegram in the 19th century, the ‘spark’ of consciousness could be transmuted and communicated via electricity.

The invention of wireless radio allowed this ‘spark’ to be transmuted to electrons in the ‘ether’, and the manifestation of this ‘enduring logic of transmutable flow’ in television resulted in the emergence of the notion of the ‘self-contained electronic world’. For the ‘visual flow’ of this medium ‘depicted the apparent transmutability of human consciousness and electrical transmission in a more palpable form’.⁴⁶²

We can appreciate why this world, referred to as ‘television land’ by Sconce, is more palpable than the ‘ether’ of the radio airways: it is a visual representation of reality, of the ‘physical’ world. As such, it is readily inhabitable, as this ‘world’ is negotiated via the physical body, albeit atomised and reassembled in ‘television land’.⁴⁶³

Thus, Sconce has claimed that the concept of ‘cyberspace’ is another expression of the logic of electronic transmutability. It is perceived as ontologically distinct due to its evolutionary heritage in television, which engendered the popular notion of the ‘electronic world’ through visually manifesting the electronic transmutation of consciousness in a ‘palpable’ manner.

⁴⁶⁰ Sconce, *op. cit.*, p8.

⁴⁶¹ *Ibid.*

⁴⁶² *Ibid.*, p17.

⁴⁶³ *Ibid.*

I posit that at best, Sconce has committed the genetic fallacy. The Digital was described as a ‘world’ long before the sort of photo realistic representations that digital technology can manufacture today. Sconce claimed that the construct of the ‘electronic world’ emerged as ‘television land’ was hospitable, i.e. it can be negotiated via the body. But at least initially, the ‘digital world’ was not readily inhabitable: the ‘virtual terrain of cyberspace’ could not be explored with the body, or an atomised representation of the body.

In contrast to Sconce’s thesis that an alternative mode of being facilitated the notion of a digital world, I contend that the notion of a digital world necessitated an alternative mode of being. That the Digital is referred to as a ‘world’ is not due to an evolutionary ancestry in television, but due to the resources available to describe a liminal space.

The No Place – The Digital as Liminal Space

Zaleski has noted that although the word ‘space’ features in synonyms of the internet such as cyberspace, ‘this is not everyday, three-dimensional space’,⁴⁶⁴ an observation reiterated by the head of GCHQ who has distinguished between the internet and ‘normal, three-dimensional space’.⁴⁶⁵ Instead Zaleski has claimed that on the internet, the ‘laws of space grow hinky’.⁴⁶⁶ Hyperlinks allow us to traverse the vast expanse of the web instantaneously, and the internet allows us to experience co-presence via SNS, regardless of geographic distance.

As McLuhan famously observed when he described how the internet had transformed the planet into a global village, ‘the internet has abolished space’.⁴⁶⁷ Space as experienced in the ‘physical’ world is collapsed, rendering the internet a ‘no place’. This term does not refer to Augé’s concept of the ‘super-modern non-place’;⁴⁶⁸ it is

⁴⁶⁴ Zaleski, op. cit., p31.

⁴⁶⁵ BBC News Online, 30/06/15.

⁴⁶⁶ Zaleski, op. cit., p236.

⁴⁶⁷ M. McLuhan, ‘*Understanding Media: The Extensions of Man*’, (London: Routledge, 1964), p5, cited in Woolley, op. cit., p123.

⁴⁶⁸ M. Augé, ‘*Non-Places: Introduction to an Anthropology of Supermodernity*’, (Trans. J. Howe) (London: Verso, 1995), p77.

intended to denote a place ‘that transcends geography in the conventional sense’.⁴⁶⁹

The Digital also distorts time, creating a sense of what Qiu refers to as ‘timeless-time’, wherein a ‘seemingly perpetual movement of digital exchanges eliminate the linear sequencing of events and practices, as best exemplified by hyperlinked communication’.⁴⁷⁰

Brasher has noted how the medium ‘forcefully expands time, freezes time, causing everything to exist in a perpetual present, and compresses time’, and has elaborated that these ‘alternative time experiences’ are comparable to the ‘sacred time’ experienced in the great cathedrals and temples of Catholicism, Hinduism and Buddhism⁴⁷¹ (an idea we will return to in chapter three).

Our capacity to describe this sense of timeless time and spaceless space is limited, and I believe our experiences of the internet best accord with those of liminal places, which are in the words of Leach, ‘both in this world, and not in this world’⁴⁷²: they do not appear to be governed by the same temporal laws of physics. Instead, ‘cyberspace embodies the sense of betwixt and between’.⁴⁷³

As it is immaterial and distinct from geographic space, engaging with this vista necessitates an alternative mode of being⁴⁷⁴ as unlike ‘television land’, this is not a ‘flesh and blood world’.⁴⁷⁵ That is, this world cannot be readily inhabited by the same means of extension as the ‘physical world’, i.e. the physical body. Instead, engaging with the Digital necessitates an ‘ontological shift’,⁴⁷⁶ as the medium ‘unties the mind from the body’.⁴⁷⁷

⁴⁶⁹ O’ Leary, op. cit., p51.

⁴⁷⁰ J. Qiu, ‘*Network Societies and Internet Studies*’, in Dutton, op. cit., p120.

⁴⁷¹ Brasher, op. cit., p49.

⁴⁷² E. Leach, ‘*Culture and Communication: The Logic by which Symbols are Connected*’, (Cambridge: CUP, 1976), p71.

⁴⁷³ V. Mosco, ‘*The Digital Sublime*’, (London: MIT Press, 2004), p32.

⁴⁷⁴ The tacit understanding of ‘being’ as ‘being somewhere’ described by Lakoff and Johnson further reinforces the popular understanding of the Digital as onto-distinct, G. Lakoff and M. Johnson, ‘*Philosophy in the Flesh*’, (London: Basic Books, 1999), cited in K. Hodge, ‘*On Imagining the Afterlife*’, *Journal of Cognition and Culture*, 11, 2011, p372.

⁴⁷⁵ W. Griffin, ‘*The Goddess Net*’, in Dawson and Cowan, op. cit., p189.

⁴⁷⁶ M. Heim, ‘*The Metaphysics of Virtual Reality*’, (Oxford: OUP, 1993), p8, cited in S. Waters, ‘*Ghosting the Interface*’, *Science as Culture*, 6 (3), 1997, p429.

⁴⁷⁷ Campbell, op. cit., p22.

Gray and Escalante have claimed that this sense of an alternate mode of being results in notions of disembodied immateriality, as ‘minds roam free in cyberspace’⁴⁷⁸ as we browse and surf the web. Similarly, Hillis has levelled the charge that this conception ‘repeats a form of Cartesian dualism’.⁴⁷⁹ However, this critique is not pertinent due to the validity of a popular criticism of Cartesian dualism: disembodied existence is incomprehensible.

While we may browse and surf the web freely enough, early adopters and proponents of digital technology grappled with the question, ‘what kind of persistence do users need in order to recognise each other?’⁴⁸⁰ i.e. how do users become intelligible and thus allow intersubjectivity in an ‘immaterial realm’? Ultimately, what does it mean to ‘be’ online? As Stiegler has acknowledged, ‘the who is nothing without the what’.⁴⁸¹ That what, the means by which we our embodied and may interact with others in the ‘digital world’, is the avatar.

Flesh Made Profile – Forms of Digital Embodiment

In the beginning was the word. And the word was (the) avatar. When digital interactions were limited to text based exchanges, an individual’s username functioned as their avatar, their means of extension, from which the words they wrote in chatrooms and forums emanated. Dawson’s early study of digital text based exchanges found that if enough time was spent in the Digital by means of this avatar, users reported that ‘I associate myself with the words that I’m typing’.⁴⁸²

Numes has described how through this form of digital embodiment via the avatar of

⁴⁷⁸ S. Gray and M. Escalante, ‘*Digital Dead Remains: Exploring Material and In-Material Legacies*’, Death Online Research Network Symposium, 2014, p11.

⁴⁷⁹ K. Hillis, ‘*Digital Sensations: Space, Identity, and Embodiment in Virtual Reality*’, (Minneapolis: University of Minnesota Press, 1999), cited in G. Bollmer, ‘*Millions Now Living Will Never Die: Cultural Anxieties About the Afterlife of Information*’, The Information Society, 29 (3), 2013, p144.

⁴⁸⁰ R. Schroeder, ‘*Social Interaction in Virtual Environments*’, in R. Schroeder (Ed) ‘*The Social Life of Avatars*’, (London: Springer, 2002), p7.

⁴⁸¹ B. Stiegler, ‘*The Carnival of the New Screen: From Hegemony to Isonomy*’, http://forskning.blogg.kb.se/files/2012/09/YouTube_Reader_reader.pdf#page=21, cited in Gray and Escalante, op. cit., p2.

⁴⁸² L. Dawson, ‘*The Mediation of Religious Experience in Cyberspace*’, in M. Højsgaard and M. Warburg (Eds) ‘*Religion and Cyberspace*’, (London: Routledge, 2005), p24.

the username, ‘our words are our bodies’,⁴⁸³ and Campbell has elaborated that this avatar provides the intelligibility that facilitates intersubjectivity, as ‘people become known by their words or their taglines [which are] a defining factor of who one is in cyberspace’.⁴⁸⁴

In the words of one user in Dawson’s study, the adoption of textual avatars is ‘like flesh made word’,⁴⁸⁵ and Zaleski encountered some users so immersed in the Digital via their avatars that they claimed ‘you sort of forget you have a body’.⁴⁸⁶

As graphic processing became more sophisticated, graphic avatars representing human or animal forms became available. In Taylor’s study of a graphical intersubjective environment, he also concluded that users do not ‘simply exist just as a ‘mind’, but instead ‘construct their identities through avatars’.⁴⁸⁷ Taylor is unequivocal in his description of these avatars as ‘digital bodies [which] root us and make us present, to ourselves and to others’,⁴⁸⁸ equated by users with their corporeal bodies in the ‘physical’ world.

In 2015, the avatar of choice is the Facebook Profile, as this SNS is the dominant mode of digital intersubjectivity. The PD, as the external component of a coupled system which Catherine and Lucy believe has a connection to the deceased, also functions as an alternative means of embodiment.

Before discussing what I believe to be the mechanics by which Catherine and Lucy’s decedents persist through their Profiles, I will address the observations made by Graham, Gibbs and Aceti: that the ‘digital/material’ dialectic is ‘creating a false dichotomy with regard to the body and technologies such as the internet’, which suggests a ‘particular ontology that may in fact be faulty, because it artificially segregates the physical body and an internet presence’.⁴⁸⁹

⁴⁸³ Nunes, op. cit., p326, cited in Campbell, op. cit., p20.

⁴⁸⁴ Ibid.

⁴⁸⁵ Dawson, op. cit., p24.

⁴⁸⁶ Zaleski, op. cit., p75.

⁴⁸⁷ T. Taylor, ‘*Living Digitally: Embodiment in Virtual Worlds*’, in Schroeder (Ed), op. cit., p40.

⁴⁸⁸ Ibid, p41.

⁴⁸⁹ Graham, Gibbs and Aceti, op. cit., p135.

That the Digital is not actually ontologically distinct from the physical has also been affirmed by Gray and Escalante, whose ‘New Materialist’ approach defines the Digital as ‘stuff which is incorporated in materiality rather than floating as a metaphysical substance in virtual space’.⁴⁹⁰

While these scholars may be seeking to redress the prevalence of a discourse which reinforces a structural division between ‘physical’ and ‘digital’, to describe the act of identifying an avatar as a ‘distinct bodily entity, as a kind of metaphor for the physical body’ as a ‘fallacy’⁴⁹¹ is of no explanatory utility.

This etic, realist proscription is akin to criticising the Catholic who maintains the Eucharist is the body of Christ. It offers no insight into the emic understanding of avatars, and fails to engage with the context of an inculcated digital doxa in which these interactions occur and are meaningful. These statements are comparable to those of colonial anthropological traditions which would relegate tribal rite to ‘magic’, and do nothing more than describe the savagery of the digital native.

Instead, if we acknowledge the influence of a digital doxa and the effects of this dialectic, then understanding the necessity of an alternative mode of being in the liminal space of the ‘digital world’ allows us to understand why ‘*if she’s going to be anywhere, she’s going to be there*’,⁴⁹² and why there is a ‘*feeling that messages get through*’.⁴⁹³

Making Sense of the Worlds – Emic interpretations of Neurological Processes

The Profile has already demonstrated that it can sustain consciousness in the ‘digital world’, and Vealey has also described the Profile as a ‘digitalised body’.⁴⁹⁴ He has claimed that the ‘body is further extended into cyberspace’,⁴⁹⁵ although he does not elaborate on the nature of this extension or the ontological implications of his

⁴⁹⁰ Gray and Escalante, op. cit., p4.

⁴⁹¹ Graham, Gibbs and Aceti, op. cit., p134.

⁴⁹² Lucy.

⁴⁹³ Catherine.

⁴⁹⁴ K. Vealey, ‘*Making Dead Bodies Legible: Facebook’s Ghosts, Public Bodies, and Networked Grief*’, <http://www.gnovisjournal.org/2011/04/03/making-dead-bodies-legible/>, accessed 23/05/15.

⁴⁹⁵ Ibid.

reference to ‘cyberspace’; as such, this statement appears to exhibit the influence of a digital doxa without critically reflecting on it.

Vealey has also claimed that whilst Profiles can function as ‘digitalised bodies’, PDs are ‘unresponsive’, ‘electronic tombs’, and any address to them ‘undoubtedly fails’:⁴⁹⁶ they are mummified cyber corpses. However, as our respondents have reported, their attempts to communicate with the deceased through PDs have not ‘failed’, in that it feels like messages are received. These PDs are also responsive, in that they react and respond to continued systemic integration and interaction, which generates activity.

With the identification of ‘biological’ motion at the site of the PD a corresponding intention attribution must be made, and due to the PDs ‘contact comfort’, attributed to the deceased. As our respondents acknowledge that their loved ones are dead, and as they reject the possibility of supernatural transcendence, intention cannot be attributed to the deceased in ‘Heaven’.

Instead, the sole means of recourse is the PD, as an alternative form of embodiment connected or ‘part’ of the deceased as an element of a coupled system. Unlike Vealey’s cyber corpses, these avatars are still deemed viable conduits, as healthy digital bodies. As such, there is a sense in which as the physical body has perished, the ‘ontic substance’⁴⁹⁷ of the deceased has migrated to their avatar, to that viable ‘part’ of themselves.

This confluence of neurological processes (which produce examples of what Boyer has described as ‘specific intuitions that are not delivered by conscious, deliberate processes’)⁴⁹⁸ are ‘idiosyncratically interpreted’⁴⁹⁹ through a digital doxa and secular worldview as indicators of the transmutation of the deceased to their alternative form of embodiment, i.e. the Profile.

Indeed, Lucy claimed that the only form of life after death she had ever entertained

⁴⁹⁶ Ibid.

⁴⁹⁷ M. Eliade, *The Sacred and the Profane: The Nature of Religion*, (Trans. W. Trask) (London: Harvest, 1957), p64.

⁴⁹⁸ Boyer, op. cit., p250.

⁴⁹⁹ Ibid, p251.

was reincarnation, i.e. a tangible form of re-embodiment. This was short lived, although her beliefs were ‘*starting to change*’ in response to her experiences of Digital Presence. That Lucy rejected the notion of ‘Heaven’ at around the age of 8, yet is willing to accept that the deceased might persist on Facebook demonstrates how the Profile can offer a plausible form of post-mortem existence when a tangible, viable form of re-embodiment is necessary for belief.

As noted, Sconce has attempted to delineate the logic of transmutation with reference to the imaginative potential of electricity; Bollmer identified information as the process’ *sine qua non*,⁵⁰⁰ and Hayles⁵⁰¹ and Thacker⁵⁰² have both claimed that bioinformatics has discursively ‘transformed ‘life’ into little more than disembodied code, able to exist in any formally compatible material substrate’.⁵⁰³

I maintain that it is sufficient that there is simply some form of connection which allows this transmutation to occur. As an element of a coupled system, the Profile is emically recognised as being a ‘part’ of the deceased; thus there is a connection, however ineffable, which facilitates the transmutation of ‘ontic substance’ from the corporeal, to the digital body.

As a feature of what Leach described as ‘magical logic’,⁵⁰⁴ i.e. the unknown and mysterious causal processes of the incomprehensible, the existence of this connection is sufficient to sustain the logical possibility of transmutation. To contest the means by which this logic operates to akin to Martin Luther’s criticism of the Catholic Church’s recourse to Aristotelian logic to validate the act of transubstantiation: the actual process is ill-considered and largely irrelevant to the lay.⁵⁰⁵ What matters is that it works, even if the means by which it does so are not fully understood. That a lack of understanding does not nullify the efficacy of the process is demonstrated by the lack of comprehension Catherine and Lucy have expressed in their accounts of Digital

⁵⁰⁰ Bollmer, op. cit., p145.

⁵⁰¹ N. Hayles, ‘*How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*’, (Chicago: UCP, 1999), cited in Ibid.

⁵⁰² E. Thacker, ‘*Biomedica*’, (Minneapolis: University of Minnesota Press, 2004), cited in Ibid.

⁵⁰³ Bollmer, op. cit., p145.

⁵⁰⁴ Leach, op. cit., p31.

⁵⁰⁵ See M. Luther, *The Babylonian Captivity of the Church*, http://pdf.amazingdiscoveries.org/eBooks/babylonian_captivity_of_the_church.pdf, accessed 18/09/15.

Presence.

Nonetheless, we may well ask why Julia also identifies the LPC on a PD in her network and yet finds the experience '*disturbing*' as opposed to welcome. Julia had witnessed continued interaction as '*better friends still post on a regular basis*' and sustained activity two years after the individual's death. She also noted evidence of systemic integration as the PD was included in '*the reminders you get of their birthdays*', i.e. automatically generated birthday reminders for members of one's social network.

Like Catherine and Lucy, Julia did not define herself as religious, although unlike Catherine and Lucy, Julia did not describe her relationship with the deceased as close. She had '*not spoken to [the deceased] in years*', and had only visited the PD as she '*felt like I maybe ought to write something, because other people had written something*'. The crucial differentiating factor in these cases is the desire to maintain a bond.

Julia had no desire to maintain a bond with an old school friend whom she had not spoken to in years, and so experienced her presence as '*disturbing*'. Catherine however, '*really misses*' her father, regularly '*visits him*' on his Profile, and '*wanted to do something [to] keep his presence there*', by continuing to engage with the PD. Similarly, Lucy continues to direct messages to the deceased as the PD allows the same means of social engagement practiced in life.

Therefore, it does not appear that the phenomenon of Digital Presence is contingent upon a desire to maintain a bond with the deceased; it does, however, appear to influence the emotional response to the phenomenon. The presence of the deceased, absent the desire to maintain a bond when no alternative means of transcendence are available, may be akin to seeing a digital ghost.

But what are the implications of Digital Presence when survivors indulge the phenomenon to maintain a bond with the deceased? Does the emic interpretation of contact comfort and 'biological' motion in the context of a digital doxa and a secular worldview realise the techno-soteriology of the post-humanist? Does it enable the

secularisation of transcendence through the digital body that does not decay? Can it really be Online as it is in Heaven?

3

Online as it is in Heaven

Techno-Soteriology, Sacred Spaces, Rituals, and Worldviews

Techno-Soteriology*God, Google, and the Last Great Gap – Digital Epistemology*

Whilst most people use the internet to check their emails, keep in touch with friends and family and watch videos on YouTube, the digital pioneers of the 90s and early 00s shared somewhat grander expectations for the potential of mass networked communication. Negroponte believed that we would witness the establishment of ‘things like world peace’,⁵⁰⁶ and McLuhan and Zingrone foresaw a ‘technologically engendered state of universal understanding and unity... creating a perpetuity of collective harmony and peace’.⁵⁰⁷

Dyson shared this optimism, and predicted that in the immediate future, ‘cyberspace’ would create a ‘wonderful pluralistic... free and diverse world’,⁵⁰⁸ while Bill Gates explained ‘the network will draw us together, if that’s what we choose’.⁵⁰⁹ Brasher believed that the cumulative effect of our digital endeavours would ‘make the politics of oppression and resentment obsolete’,⁵¹⁰ and some technological theorists even envisioned an emergent ‘kind of group consciousness’.⁵¹¹ Indeed, the similarities of the Digital to Chardin’s concept of the ‘Noosphere’, as a ‘level of unified consciousness’⁵¹² did not go unnoticed by the ‘Digirati’.

However, as is only too evident, we need only read the comments below any given

⁵⁰⁶ N. Negroponte, ‘*Being Global*’, Lecture at the Getty Institute, 1997, cited in S. O’ Leary, ‘*Utopian and Dystopian Possibilities of Networked Religion in the New Millennium*’, in Højsgaard and Warburg, op. cit., p47.

⁵⁰⁷ E. McLuhan and F. Zingrone (Eds), ‘*The Essential McLuhan*’, (NY: Basic Books, 1995), cited in ibid.

⁵⁰⁸ E. Dyson, G. Gilder, G. Keyworth and A. Toffler ‘*Cyberspace and the American Dream*’, The Information Society, 12 (3), 1996, cited in Campbell, op. cit., p6.

⁵⁰⁹ Campbell, op. cit., p15.

⁵¹⁰ Brasher, op. cit., p32.

⁵¹¹ D. De Kerckhove, ‘*The Skin of Culture*’, (Toronto: Somerville House, 1995), cited in Campbell, op. cit., p21.

⁵¹² Groothuis, op. cit., p109.

YouTube video or venture into an online forum on any given topic to conclude that this vision of universal harmony is far from realised, as digital anonymity continues to breed animosity. Such early hopes for the medium are now described as the ‘first wave’ of research, characterised by the belief that ‘computers and the internet could (and probably would), do almost anything’.⁵¹³

The ‘second wave’ of commentary, a product of the mid-to-late noughties, tended to urge toward caution and an appreciation of a broader historical and social context; some first wave proponents of the Digital later recanted, and conceded that their earlier work was ‘naïve, and even utopian’.⁵¹⁴ The failure of the dawn of the Digital to herald a utopian revolution is comparable in scale to the unfulfilled promise of those psychoanalysts, sociologists and philosophers who prophesised that the popularisation of the scientific method would ultimately spell the demise of religious belief and ideation.

In his *The Future of an Illusion*, Freud projected that increased proliferation and sophistication of ‘proper education’ would nullify the need for the human wish project that is religion;⁵¹⁵ through Zarathustra’s madman declaring ‘God is dead’, Nietzsche suggested that the concept of God would soon no longer prove viable,⁵¹⁶ and Comte believed that the rationalisation of thought fostered by the scientific method would render the ‘old myths’ of religion⁵¹⁷ obsolete.

The belief that greater popular scientific knowledge would provoke the decline and death of religion has been maintained by Stark and Iannaccone, who have claimed that ‘it is science that has the most deadly implications for religion’⁵¹⁸ for Western Europe; they have claimed that religious beliefs are less credible as individuals have become ‘better educated and less credulous’.⁵¹⁹

⁵¹³ Højsgaard and Warburg, op. cit., p8.

⁵¹⁴ O’ Leary (2005), op. cit., p38.

⁵¹⁵ Brasher, op. cit., p17.

⁵¹⁶ Ibid.

⁵¹⁷ S. Bruce, *Religion in the Modern World*, (Oxford: OUP, 1996), p38.

⁵¹⁸ R. Stark and R. Finke, *Acts of Faith: Explaining the Human Side of Religion*, (LA: University of California Press, 2000), cited in S. Bruce, *God is Dead*, (Oxford: Blackwell, 2002), p106.

⁵¹⁹ Ibid.

Chadwick has claimed that the proliferation of ‘doubt’ in Victorian England between 1855 and 1885 was attributed to this process of scientific rationalisation, as ‘some blamed science, or fastened upon the name of Darwin as a symbol of an entire development of the sciences as they came to bear upon the truth of religion’.⁵²⁰ The sum of these assertions has inspired Messerly to announce, as Freud, Nietzsche and Comte amongst others before him, that ‘our belief in the gods will not endure. Our descendents will be too advanced to share such primitive beliefs’.⁵²¹

However, as with the utopia the dawn of the Digital was supposed to realise, the secular revolution has failed to materialise. As Brasher has noted, ‘public education has spread tremendously, yet religion has not vanished’.⁵²² For as Wilson observed, ‘religion and science can co-exist as alternative orientations to the world’:⁵²³ contrary to the Enlightenment view, Bruce contends that there is no ‘zero-sum knowledge competition’,⁵²⁴ as people continue to maintain religious beliefs despite advances in scientific insight.

That is not, however, to say that scientific advancement has not been identified as having what Martin and Catto have described as an ‘indirect impact’⁵²⁵ on the process of Western European secularisation. Along with the fragmentation of societies and social life, the disappearance of the community and the growth of centralised bureaucracy, Martin and Catto have claimed that the ‘advance of technical rationality’⁵²⁶ has been partly responsible for increased secularisation (I am aware that the term ‘secularisation’ is by no means unequivocal, but I refer to it to describe a decline in explicit religious conviction, as expressed in censuses, etc.).

Wilson described ‘technical rationality’ as the effect of technology to ‘reduce the

⁵²⁰ O. Chadwick, *The Victorian Church* Vol. II, (London: A and C Black, 1970), p1, cited in G. Hyman, *A Short History of Atheism*, (London: I.B. Taurus, 2010), p101.

⁵²¹ J. Messerly, ‘*The End of Religion*’, <http://reasonandmeaning.com/2015/01/24/the-end-of-religion-technology-and-the-future/>, accessed 13/07/15.

⁵²² Brasher, op. cit., p17.

⁵²³ B. Wilson, ‘*Religion in Secular Society*’, (London: C.A. Watts, 1966), cited in S. Bruce (2002), op. cit., p26.

⁵²⁴ Ibid.

⁵²⁵ D. Martin and R. Catto, ‘*The Religious and the Secular*’, in L. Woodhead and R. Catto (Eds), *Religion and Change in Modern Britain*, (London: Routledge, 2012), p376.

⁵²⁶ Ibid.

occasions on which people have recourse to religion',⁵²⁷ due to, as Bruce phrased it, 'the success of technology in delivering the goods'.⁵²⁸ Technological efficiency reduces uncertainty, and thus the need to petition the supernatural: 'there is simply no need to turn to the gods for help with ringworm in cattle when you can buy a drench which was proved over and over again to be an excellent cure for the condition'.⁵²⁹

Martin has elaborated that 'the overwhelming sense of divine limits which afflicted previous generations is much diminished'⁵³⁰ as we have extended the scope of our technological mastery over nature. Thus, it is not that religion lacks plausibility in a world of medicine and microchips; it is that it increasingly lacks utility, as 'the frequency and seriousness with which people attend to religion decreases'⁵³¹ as our 'notion of the scope of the divine'⁵³² declines. Indeed, Winner claims that the extent of this process is such that the 20th century was in part defined by this technical rationality, as it was 'taken for granted that the only reliable sources for improving the human condition stem from new machines'.⁵³³

Brasher even characterises ours as a 'digital epistemology',⁵³⁴ wherein 'new computers or new software materialise as the most plausible response to whatever problems arise',⁵³⁵ and in which 'cyberspace' 'is continuously available and can answer our every desire: want a new car? Go online. Want companionship? Go online. Want to know what the weather is like in Antarctica? Go online'.⁵³⁶

The Digital is now utilised for everything from finding a lover, to providing the answer to any given question as people across the planet petition the search engine Google as the first reference for any enquiry; it processes more than 3 billion searches

⁵²⁷ Wilson, op. cit., cited in Bruce, 2002, op. cit., p27.

⁵²⁸ Bruce, 1996, op. cit., p50.

⁵²⁹ Ibid.

⁵³⁰ D. Martin, '*The Religious and the Secular*', (London: Routledge, 1969), cited in Bruce (2002), op. cit., p28.

⁵³¹ Ibid, p27.

⁵³² Ibid, p50.

⁵³³ L. Winner, '*The Whale and the Reactor*', (Chicago: UCP, 1986), p10, cited in Groothuis, op. cit., p15.

⁵³⁴ Brasher, op. cit., p145.

⁵³⁵ Ibid.

⁵³⁶ Ibid, p8.

a day.⁵³⁷ If we are sceptical that for many Google functions as the source of all wisdom, simply enter the words ‘How do I’ into the search bar and view the range of popular search suggestions.

Thus, whilst Benedikt’s claim that the Digital would establish a utopia of peace and harmony has yet to be realised, his claim that ‘everything important to the life of individuals... will be found for sale or for the taking in cyberspace’⁵³⁸ appears more substantiated. Also, Buick and Jevtic’s claim that the ultimate manifestation of this digital epistemology is our desire to create ‘a human made machine with all the answers’⁵³⁹ has also been substantiated.

IBM’s ‘Deep Blue’ supercomputer that beat the chess Grandmaster Kasparov in 1997 is a pocket calculator in comparison to IBM’s ‘Watson’. A networked artificial intelligence, showcased on the US game show ‘Jeopardy’ in which it defeated every human opponent, ‘Watson’ is now ‘training’ to be a cancer consultant. Watson is ‘finding personalised treatments for every cancer patient by comparing disease and treatment histories, genetic data, scans and symptoms against the vast universe of medical knowledge’, i.e. every journal article, textbook and research paper that has been digitalised.⁵⁴⁰

Thus, as technology continues to ‘reduce the domain over which religion offers the most compelling explanations and most predictable outcomes’,⁵⁴¹ Postman’s ‘god of technology’ (a term which describes ‘the sense that people believe technology works, that they rely on it, that it makes promises’)⁵⁴² will continue to supplant the ‘god-of-the-gaps’, (the practice of ‘looking for god when our human skills fall short of what we wish we could achieve’).⁵⁴³ To rephrase Groothuis, who asks ‘apart from God,

⁵³⁷ <http://searchengineland.com/google-1-trillion-searches-per-year-212940>, accessed 18/07/15.

⁵³⁸ Benedikt, op. cit., p2, cited in Campbell, op. cit., p14.

⁵³⁹ J. Buick and Z. Jevtic, ‘*Introducing Cyberspace*’ (NY: Totem Books, 1995), cited in Campbell, op. cit., p9.

⁵⁴⁰ A. Eunjung Cha, ‘*The Human Upgrade*’, The Washington Post, 27/06/15, <http://www.washingtonpost.com/sf/national/2015/06/27/watsons-next-feat-taking-on-cancer/>, accessed 16/07/15

⁵⁴¹ Bruce (1996), op. cit., p50.

⁵⁴² N. Postman, ‘*The End of Education: Redefining the Value of School*’, (NY: Alfred A. Knopf, 1995), p38, cited in Groothuis, op. cit., p14.

⁵⁴³ U. Görman, W. Drees and H. Meisinger (Eds), ‘*Creative Creatures: Values and Ethical Issues in Theology, Science and Technology*’, (London: Continuum, 2005), p5.

where better to search than in cyberspace?':⁵⁴⁴ *why* search for God when we can search in cyberspace?

We may answer that whilst the god of technology has sealed some of these gaps, strongholds of hopelessness remain. As Bruce has noted, 'religion is most used for the dark recessive areas of human life over which control has not been established by technology',⁵⁴⁵ with the great gap, death, remaining the preserve of religion. However, new Posthuman prophets, serving as the outriders of the secularisation of transcendence are presenting technological possibilities once consigned to science fiction as imminent reality, as technology attempts to span the chasm of the last great gap, the abyss of death.

Staring into the Abyss – The Secularisation of Transcendent Being

Death has been described as the 'mainspring of human activity'⁵⁴⁶ and has been explored as the central preoccupation of the homo-sapien by countless scholars. Therefore, it is unsurprising that Kerr may observe 'the longings that human beings naturally seem to have for some sort of transcendence of finitude',⁵⁴⁷ and Groothuis may claim that 'much of human endeavour has been concerned with how to throw off the limitations of our mortal bodies'.⁵⁴⁸

For transcending the corporeal is a recurring trope in Semitic religions, and 'a staple of Greek philosophies such as Platonism and Neo-Platonism, and non-Semitic religions such as Gnosticism, Hinduism, Buddhism, and many of the New Age expressions of today'. Groothuis believes this is because the 'vicissitudes of the body' are such that 'many have banned it from the realm of final redemption'.⁵⁴⁹

Whilst humans have attempted to technologically ameliorate these vicissitudes of the corporeal condition through medicine, and, Groothuis claims 'labour-saving devices

⁵⁴⁴ Groothuis, op. cit., p112.

⁵⁴⁵ Bruce (1996), op. cit., p51.

⁵⁴⁶ E. Becker, '*The Denial of Death*', (London: Macmillan, 1973), p.ix.

⁵⁴⁷ F. Kerr, '*Immortal Longings: Visions of Transcending Humanity*', (London: SPCK, 1997), p164, cited in D. Davies, '*Emotion, Identity, and Religion*', (Oxford: OUP, 2012), p229.

⁵⁴⁸ Groothuis, op. cit., p37.

⁵⁴⁹ Ibid, p37.

such as the washing machine',⁵⁵⁰ the universal transcendence project has only been realisable through religion. Nonetheless, the salvific potential of technology, a form of techno-soteriology, has long fascinated authors. Sconce has noted how writers and film producers have indulged in the 'fantasy [of] an autonomous being at last purged... of the material world'.⁵⁵¹

Arthur Clark's 1956 novel *The City and the Stars* presented a future in which immortality has been achieved through 'people being stored in a computer and downloaded over and over again into new bodies',⁵⁵² and Aldous Huxley's classic dystopian novel *Brave New World* also explored the possibility of alternative forms of existence.⁵⁵³ Moravec too has written about the uploading of consciousness to mainframes, and its downloading to new, robotic bodies.

He describes a future in which the brain can be 'simulated and excavated', and consciousness 'downloaded' to 'a shiny new body'.⁵⁵⁴ The only difference is that Moravec was the Director of the Mobile Robotics Laboratory in Carnegie-Mellon's Field Robotics Centre, and his book is shelved under 'non-fiction'.

A number of scholars have claimed that we have been on the verge of actually achieving forms of secular transcendence. Munnik believed that we were advancing beyond symbolic immortality, and claimed that 'now, what you can do with words, sounds and images, you might be able to do with life forms';⁵⁵⁵ he asked 'how fictional is 'Jurassic Park'? Dolly the Sheep exists, and so does CopyCat'.⁵⁵⁶ Moravec has maintained that robotic embodiment is inevitable, and Steinhart believes that within the next 100 years, via advanced neurological scanning technology 'you can have a virtual afterlife with a virtual body in a virtual world'.⁵⁵⁷

⁵⁵⁰ Ibid.

⁵⁵¹ Sconce, op. cit., p5.

⁵⁵² A. Eunjung Cha, 'Tech Titans' Latest Project: Defy Death', The Washington Post, 04/04/15, <http://www.washingtonpost.com/sf/national/2015/04/04/tech-titans-latest-project-defy-death/>, accessed 16/07/15.

⁵⁵³ O' Leary, 2005, op. cit., p48.

⁵⁵⁴ H. Moravec, *Mind Children: The Future of Robots and Human Intelligence*, (MA: HUP, 1988), p6, cited in Groothuis, op. cit., p43.

⁵⁵⁵ R. Munnik, 'ICT and the Character of Finitude', in Görman, Drees and Meisinger, op. cit., p28.

⁵⁵⁶ Ibid, p29.

⁵⁵⁷ E. Steinhart, 'Survival as a Digital Ghost', <http://www.ericsteinhart.com/articles/ghosts.pdf>, accessed 13/07/15.

Nonetheless, whilst self-styled ‘futurist’ Ross has claimed that humanity should aspire to ‘discard the body and upload the mind into the world-wide cyberspace web’,⁵⁵⁸ this remains the preserve of science fiction. Bell, a Co-Founder of Microsoft, has claimed that it is more likely that ‘you will have virtual immortality through your digital memories being invested in an avatar’⁵⁵⁹ (simply a more sophisticated form of symbolic immortality). Kurzweil believes that this form of symbolic immortality will evolve into the actual immortality of consciousness, as our data will achieve self-consciousness in a moment he refer to as the ‘singularity’;⁵⁶⁰ again, these projections pertain to the world of science fiction.

They do, however, portend to the Posthuman prophets to whom I initially referred. As early as 2001, Brasher observed that like the knights who pursued the medieval Holy Grail, ‘electronic knights’ pursue ‘the Techno Grail, whose marvellous properties are associated with the next new product, muddying the divide between humanity and death’.⁵⁶¹ These Posthuman prophets should not be mistaken for some of the new generation of millennial philanthropists such as Low, who invested millions of dollars to harness technology to ‘upgrade and heal the human body’,⁵⁶² i.e. simply to ameliorate the vicissitudes of the corporeal condition, as humanity as done for millennia.

Instead, I refer to a new generation of Silicon Valley billionaires who, characteristic of their ilk, haven’t just identified the problem, as Ellison has: ‘How can a person be there and then just vanish, and not be there?’⁵⁶³ They are also seeking to ‘solve’ the problem; to, in the words of Thiel, ‘turn the fact of life [death] into a problem to be solved – a problem towards whose solution I hope to contribute in whatever way I can’,⁵⁶⁴ through investing billions of dollars to ‘explore ways to digitise the brain

⁵⁵⁸ D. Ross, ‘Persons, Programs, and Uploading Consciousness’, *Extropy* 4, 1 (9), 1992, p14, cited in Groothuis, op. cit., p43.

⁵⁵⁹ G. Bell and J. Gemmill, ‘Total Recall: How the e-memory Revolution Will Change Everything’, (NY: Dutton, 2009), cited in Bollmer, op. cit., p149.

⁵⁶⁰ R. Kurzweil, ‘The Singularity is Near: When Humans Transcend Biology’ (NY: Viking, 2005), cited in Bollmer, op. cit., p149.

⁵⁶¹ Brasher, op. cit., p32.

⁵⁶² A. Eunjung Cha, ‘The Human Upgrade’.

⁵⁶³ A. Eunjung Cha, ‘Tech Titans’ Latest Project’.

⁵⁶⁴ Ibid.

based on the theory that your mind could live long after your body dies'.⁵⁶⁵ Thiel and Ellison are two amongst a number of the Silicon Valley elite who believe that the secularisation of transcendence is less than a lifetime away.

Nonetheless, despite the presentation of these Posthuman possibilities as imminent reality, they are beyond contemporary technological capacities, and thus it appears transcendence is still rooted solely in the domain of religion. However, as Bollmer has noted, 'it is important to remember that many claims about technology, especially in the form of utopian or anti-utopian arguments about the future, are not about the actuality of technology'.⁵⁶⁶

Instead, as Kling observed, such speculative projections 'articulate a social vision that constructs the limits and possibilities of technology in contemporary society, in spite of any actual material limitations and potentialities of technology'.⁵⁶⁷ Midgley concurs, as she has described how such technological speculation 'plays a part in shaping the world-pictures that determine our standards of thought, the standards by which we judge what is possible and plausible'.⁵⁶⁸

Thus, whilst the technologies to realise their dreams of secularising transcendence do not exist, in foretelling the imminent realisation of digital transcendence, these Posthuman prophets have indirectly and inadvertently allowed it occur. By validating science fiction fantasy, they have reinforced the dialectic informing the digital doxa our respondents live in, and assured it a newfound plausibility.

As demonstrated by our respondents, the interpretation of 'biological' motion detection, contact comfort and cognitive coupling through a secular worldview and digital doxa then becomes sufficient to sustain the possibility of a form of secular post-mortem persistence: a life after death not contingent on the supernatural. Has the

⁵⁶⁵ Ibid.

⁵⁶⁶ Bollmer, op. cit., p143.

⁵⁶⁷R. Kling, 'Hopes and Horrors: Technological Utopianism and Anti-utopianism in Narrative of Computerization', In R. Kling (Ed), 'Computerization and Controversy', (CA: Academic Press, 1991), cited in Bollmer, op. cit., p144.

⁵⁶⁸ M. Midgley, 'Science as Salvation: A Modern Myth and its Meaning', (London: Routledge, 1992), p15, cited in Wertheim, op. cit., p255.

god of technology inadvertently flushed the god-of-the-gaps out of his final foxhole, death?

Before we proceed, it is important to define what achieving the secularisation of transcendence, and overcoming death means to our respondents. Neither Catherine nor Lucy feared nor acknowledged their own mortality (unsurprising for two individuals in their early 20s living in Western Europe). Furthermore, neither of them mentioned that the phenomenon of Digital Presence subdued any personal existential anxieties.

However, Hodge has proposed that afterlife beliefs are not primarily ‘personal attempts to attain immortality, but rather a way to imagine deceased loved ones continuing to exist’.⁵⁶⁹ Hodge has cited a series of experiments conducted by Bering⁵⁷⁰ in which all of the participants’ references to afterlife beliefs were made in relation to ensuring the continued existence of deceased loved ones.

Thus, there is a sense in which to conquer death is not necessarily to be assured of our own immortality, but to be able to continue a bond with the deceased in spite of death. Indeed, Catherine and Lucy only seek to maintain a bond with their decedents, and the notion of abolishing death as continuing a bond is evident in the early twentieth century Spiritualist tradition: as one medium claimed, to effectively communicate with the deceased is to ‘abolish the conception of death which now prevails in the world’.⁵⁷¹

Is it then accurate to claim that in discovering what Perry-Barlow classified as a ‘non-spiritual technique’⁵⁷² to transcend the corporeal body, ‘the dreams of a complete absenting of the body... have shifted from the metaphysics of the Church to those of the computer chip’?⁵⁷³ Might we witness an increasing number self-defining as ‘not

⁵⁶⁹ Hodge, op. cit., p368.

⁵⁷⁰ J. Bering, ‘*The Folk Psychology of Souls*’, Behavioral and Brain Sciences, 29, 2006, and J. Bering, ‘*The End? Why So Many of Us Think Our Minds Continue After We Die*’, Scientific American Mind 19, cited in *ibid*.

⁵⁷¹ E. Stead, ‘*My Father: Personal and Spiritual Reminiscences*’, (London: Heinemann, 1913), p301, cited in S. Waters, op. cit., p424.

⁵⁷² Personal Communication, Zaleski, op. cit., p35.

⁵⁷³ Sconce, op. cit., p20.

religious’, as the transcendence project is no longer dependent upon the supernatural? When the sacred canopy above us is replaced with the Net, to catch us when we fall, has technology killed God?

The short answer is probably not. I am cautious not to believe that the context and circumstances in which I conduct my research are entirely unique, and that I stand on the edge of history. Instead, as Bollmer notes, technology has always ‘transformed concepts of the self’.⁵⁷⁴

From Cave Paintings to Profiles – Techno-Salvation

Görman, Drees and Meisinger have provided examples of how technology can influence self-understanding, as we claim to feel ‘under stress, and feeling huge pressure’, which requires us to ‘let off steam’; ‘these are images from the steam age... early radio receivers also left their own traces in our language – we need to tune in’.⁵⁷⁵ I would add that we can also be like an ‘open book’, and occasionally need to ‘unplug’.

As well as our concepts of the self, technology has also affected our religious beliefs. I am not referring to technological innovations that facilitate conventional acts of worship or ritual; such attempts to ‘spiritualise the novel habitus’⁵⁷⁶ of the Digital, through utilising the internet to facilitate performances of religious rituals at physical sites of worship,⁵⁷⁷ or ‘replicating charismatic meetings in cyberspace using an online multi-user virtual world’.⁵⁷⁸

Although there is evidence that millions of people in the US alone use the internet for such religious purposes on a daily basis,⁵⁷⁹ I am referring to how technology has actually fostered new religious beliefs. For humanity has employed each new

⁵⁷⁴ Bollmer, op. cit., p144.

⁵⁷⁵ Görman, Drees and Meisinger, op. cit., p4.

⁵⁷⁶ Brasher, op. cit., p142.

⁵⁷⁷ As can be done for a number of Indian Hindu Temples, and the Western Wall, as documented by O’Leary, op. cit., p42.

⁵⁷⁸ R. Schroeder, N. Heather and R. Lee, ‘*The Sacred and the Virtual: Religion in Multi-User Virtual Reality*’ *Journal of Computer Mediated Communication*, 4 (2), 1998, cited in Dawson, op. cit., p27.

⁵⁷⁹ S. Hoover, L. Schofield Clark and L. Rainie, ‘*Faith Online*’ www.pewinternet.org, accessed 02/05/04, cited in *ibid*.

innovation in communications technology to attempt to transcend the structural division between the mundane and the supernatural, between ‘this’, and ‘other’. To traverse worlds to commune with the ‘other’, be that the ‘divine’ or the deceased transcendent (or both) since before the Tower of Babel.

In doing so, these attempts have fostered new beliefs; sometimes adopted as orthodox, sometimes hetero-orthodox, from the prehistoric era, to the modern day.

Between 10 and 30 thousand years ago, one band of humans spent ‘hours crawling through deep, narrow, labyrinthine, utterly dark passageways which led to special chambers’,⁵⁸⁰ in order to create seemingly three-dimensional art in the caves of Lascaux, Southern France. These ochre paintings portrayed images of bison, birds, symbols and human figures, and the archaeologist Pfeiffer believes that these ochre paintings ‘suggest such things as intense rituals, ordeals, journeys underground for mystic reasons’,⁵⁸¹ as these chambers were lit with torches, arduous to reach, and filled with ‘pictorial symbols of technological and spiritual principles’.⁵⁸²

He has claimed that the process of travelling underground and viewing images which were only visible if torchlight struck them at particular angles, and were painted over natural features to give the illusion of three-dimensions was the culmination of a process intended to alter consciousness. The technological innovation of symbolic ochre painting was employed in ‘mystical rituals’ to express ‘spiritual principles’ and to interact with the ‘other’.

Rheingold has noted that ‘we will never know with absolute certainty what went on there’,⁵⁸³ although we can be more certain that another ancient people employed the technological innovations of their day to interact with the ‘other world’. Another archaeologist, Blundell, has claimed that the San people of Southern Africa ‘believed that there were passageways linking our world to the spirit world’,⁵⁸⁴ as some of their

⁵⁸⁰ J. Pfeiffer, *The Creative Explosion*, (NY: Cornell University Press, 1982), p205, cited in H. Rheingold, *Virtual Reality*, (London: Secker and Warburg, 1991), p379.

⁵⁸¹ Ibid, p381.

⁵⁸² Rheingold, op. cit., p382.

⁵⁸³ Ibid, p379.

⁵⁸⁴ G. Blundell, *The Great Dance*, exhibition hosted by the Origins Centre, Wits University, Johannesburg, September 2014.

painted images appeared to enter and exit ‘cracks and crevices in rock surfaces, as if through a veil between the two worlds’⁵⁸⁵ (specifically via a thin red line weaving in and out of the cracks in rock faces).

Blundell has thus maintained that ‘the rock surface acted as a veil between the real and spirit worlds, and the images entering or exiting natural features in the rock surface were actually entering or exiting the spirit world’.⁵⁸⁶ His claims have been supported by the testimony of Manqindi Dyantyi, an early 20th century member of the San in the former Transkei territory of South Africa whose father was the last of the San painters, who has corroborated this position.

Blundell believes that the San culture of Manqindi Dyantyi at the beginning of the 20th century is representative of a San culture spanning the centuries, possibly extending to the pre-historic. Whilst this is contentious for a great number of reasons, this testimony nonetheless demonstrates that the San have utilised the technology of their day to interact with the ‘spirit’ world.

Technology has also, at least in the Western Christian tradition, been augmented with the supernatural to conquer death, in one form or another. Whether technology has been incorporated into similar acts of eschatological ideation in other religious traditions warrants further investigation, although such an inquiry is beyond the scope of this study.

Munnik has classified Christianity as a ‘technologically mediated religion, because its perspective on the divine, was, (and is), the perspective of an alphabetic, literate mind’.⁵⁸⁷ For this was the God who ‘created the world with a spoken word’,⁵⁸⁸ and wrote the law with His own hand. I would add that it is also through the written word that the reader can conquer death through immortality, as John wrote ‘I have written this to you who believe in the name of the Son of God, so that you may know you have eternal life’,⁵⁸⁹ the means of disseminating the ‘word’ of God, and thus

⁵⁸⁵ Ibid.

⁵⁸⁶ Ibid.

⁵⁸⁷ Munnik, *op. cit.*, p20.

⁵⁸⁸ Ibid.

⁵⁸⁹ John, 5:13.

conquering death, is through reading the written word, to become one of the ‘people of the book’.

In the Byzantine Empire, the technological artistry of their iconographic tradition, of creating representations of the divine adorned with ethereal gold leaf functioned as a means of communing with the divine; the sum of the material elements, skilfully arranged through preparing the board, engraving, colouring, and adorning to represent the divine functioned ‘like a window to the spirit world’.⁵⁹⁰ Again, with the divine as the source of eternal life, to interact with those Saints depicted was to secure intercession to ensure that the worshipper too would conquer death and achieve immortality.

In the 19th and early 20th century, not long after the advent of electronic telecommunications technology, these new innovations were also utilised to mediate between the mundane and the supernatural, through the birth of Spiritualism. Durham Peters has documented how the modern Spiritualist movement, founded by the Fox sisters in 1844, ‘explicitly modelled itself on the telegraph’s ability to receive remote messages’.⁵⁹¹

The Fox sisters claimed to understand the rapping sounds heard in their séances as ‘a telegraphic cipher attempting to bridge the chasm between the living and the dead’,⁵⁹² and the term ‘spiritual telegraph’ was applied ‘almost from the first’.⁵⁹³ Indeed, a British newspaper published in 1852 termed the Fox sisters activities a ‘systematic mode of telegraphy’,⁵⁹⁴ and Sconce has claimed that the Foxes’ contemporaries understood the ‘spiritual telegraph’ as ‘more than a metaphor, as an actual technology of the afterlife, invented by scientific geniuses in the world of the dead’.⁵⁹⁵

With the invention of the telephone, contemporary commentators re-conceptualised

⁵⁹⁰ V. Urubshurow, *Introducing World Religions*, (London: Routledge, 2008), p122.

⁵⁹¹ J. Durham Peters, *Speaking into the Air: A History of the Idea of Communication*, (London: Chicago, 1999), p95.

⁵⁹² Ibid.

⁵⁹³ Ibid.

⁵⁹⁴ Ibid, p95.

⁵⁹⁵ Sconce, op. cit., p12.

the spiritualist medium, post-1876, as like ‘the receiver of a telephone’,⁵⁹⁶ with the earthly medium and otherworldly spirit functioning like ‘a pair of operators, connected by a telephone of rather delicate and uncertain quality’.⁵⁹⁷ Durham Peters has posited that these media ‘helped re-populate the spirit world’.⁵⁹⁸ I would contend that these technologies did not help to ‘re-populate’ an ethereal beyond, but provided another means to attempt to bridge the divide between worlds, perhaps re-exciting the popular imagination through spiritualism’s promise of ready universal access to the deceased.

Through these methods of supernatural augmentation, telecommunications technologies were appropriated to conquer death through, in the words of one spiritualist medium ‘abolishing the conception of death which now prevails in the world’,⁵⁹⁹ i.e. through allowing us to continue a bond, in spite of death.

Whilst Catherine and Lucy both maintain a secular worldview, the Digital has also been adopted as a means of conquering death (through maintaining a bond) by those who profess a Christian faith. During my undergraduate dissertation research, I encountered survivors who interacted with their decedent’s Profiles to petition them to ‘say hi’ to other deceased friends in ‘Heaven’, and Hieftje’s research discovered that some Christian respondents believed that there was a sense that the deceased could ‘*get on Facebook up in Heaven*’.⁶⁰⁰

Furthermore, whilst Joan’s communication with her decedent appears to operate via a general notion of deceased omniscience, she claimed that ‘*in my mind she was with me on the other end of the computer*’, and thus ‘*posting a private message was like sending it to heaven*’. Whilst Joan claims that the efficacy of communicating via PDs is equitable to speaking to photos, or ‘*talking to her in my mind*’, she nevertheless explicitly reconfigures her belief in relation to this digital medium.

Instead of the deceased simply knowing, the deceased is envisioned as ‘*on the other*

⁵⁹⁶ H. Baylay, ‘*Independent Spirits: Spiritualism and English Plebeians, 1850-1910*’, (London: Routledge, 1986), cited in Waters, op. cit., p424.

⁵⁹⁷ O. Lodge, ‘*Raymond, or Life After Death*’, (London: Methuen, 1916), cited in *ibid*.

⁵⁹⁸ Durham Peters, op. cit., p139.

⁵⁹⁹ Stead, op. cit., p301.

⁶⁰⁰ Hieftje, op. cit., p144.

end of the computer... in Heaven', as they are in Hieftje's examples, and those from my previous study. Again, the technological zenith of a period, in this instance digital technology, is utilised to breach the impasse between realms, and in doing so fosters new beliefs: in these examples, that the Digital is a liminal space which can be engaged with from Earth, and from computers in 'Heaven'.

Another example of the Digital being used to mediate between worlds is found in the Neo-Pagan community. Davis' studies found that Neo-Pagans who performed rituals online believed that the Digital was 'a way to be between worlds',⁶⁰¹ that it functioned as a 'portal into another world',⁶⁰² and McSherry discovered that Neo-Pagans idealised the Digital as 'a technological doorway to the astral plane... once we enter cyberspace, we are no longer in the physical plane; we literally stand in a place between the worlds'.⁶⁰³

Darling, a commentator interviewed in a survey on the initial uses of new technologies claimed that the first response to such innovations is 'how can I have sex with it'.⁶⁰⁴ I would add that accompanying this response is the equally primitive desire to discover 'how do I conquer death with it'. As technology is appropriated in this aim it is also incorporated into larger schemas of religious ideation, although whether these new beliefs and practices are adopted as orthodox is variable, and perhaps dependent on the degree of unmediated, democratic accessibility they allow.⁶⁰⁵

⁶⁰¹ E. Davis, 'Technopagans: May the Astral Plane be Reborn in Cyberspace', p5, Wired, January 1998, cited in Dawson, op. cit., p23.

⁶⁰² E. Davis, 'TechGnosis: Myth, Magic, and Mysticism in the Age of Information', (NY: Random House, 1998), cited in Campbell, op. cit., p58.

⁶⁰³ L. McSherry, 'The Art of Ritual Class', retrieved from www.jaguarmoon.org, 26/08/03, cited in D. Cowan, 'Cyberhenge', (London: Routledge, 2005), p78.

⁶⁰⁴ 'The Digital Love Industry', Vice, 28/11/14, https://www.vice.com/en_uk/video/love-industries-digital-sex-669, accessed 17/07/15.

⁶⁰⁵ After completing this chapter, T. Walter's published a similar history of the relationship between the presence of the deceased and communications technology, entitled 'Communication Media and the Dead: From the Stone Age to Facebook', *Mortality*, 20 (3), 2015. Walter's article however is not 'concerned with private encounters with the recent dead' (p217). Instead, it considers the extent to which different media afford opportunities to memorialise diverse groups of ancestors, e.g. from the familial to the national. It also considers how 'each new communication technology affords possibilities for the dead to legitimate and help construct new social groups' (p228), such as how a canon of national heroes might be remembered to foster a sense of national identity. Unlike our account, Walter does not examine how different technologies have been utilised to maintain a bond through continued communication with the deceased, as his focus is on symbolic presence and group dynamics, as opposed to those between individual survivors and their decedents.

I initially claimed that the Digital was not unique in the respect that it has been augmented with the supernatural to mediate between the mundane and the supernatural and thus conquer death. This is true. It is, however, the first form of technology that can also sustain the ‘other’, i.e. the deceased transcendent, without reference to or dependence on the supernatural.

Nonetheless, whilst the Digital may be the first form of technology to allow the secularisation of transcendence, that is not to say, like Brooks, that ours is a ‘post-sacred age’.⁶⁰⁶ Instead, the complexity and liminal nature of the Digital is re-enchanting our world through the *sensus numinis* it invokes.

⁶⁰⁶ P. Brooks, ‘*The Melodramatic Imagination*’, (CN: Yale University Press, 1976), cited in Brasher, op. cit., p157.

The Sacred Profile

Heaven.com – Equating the Digital with Heaven

Some scholars have felt confident enough to claim without hesitation that ‘the sacred is present in computers’;⁶⁰⁷ that we can refer to ‘cyberspace... as a sacred place’⁶⁰⁸ and engage with ‘the sacred mechanisms of cyberspace’,⁶⁰⁹ which ‘definitely qualifies for Eliade’s vision of sacred space’.⁶¹⁰ Others, such as Talbott, have claimed that the Digital cannot possibly function as a sacred space, as ‘cyberspace gives us a world of indirect interaction... an abstracted world’,⁶¹¹ i.e. a lack of materiality which precludes the ‘profound penetration of reality’⁶¹² necessary to qualify a space as ‘sacred’.

I nevertheless contend that PDs can be considered sacred spaces, and believe that Talbott has falsely approximated the concept of ‘sacred space’ with superficial aspects of particular, conventional sacred places. I would also challenge the basis on which Mosco, Cobb, Chama and Stenger deem the Digital to function as a ‘sacred space’, for I believe that they have inappropriately equated the Digital with an experiential character derived from Judeo-Christian notions of the transcendent.

Jacob’s study on the use of the internet by conventional religious groups demonstrates Talbott’s fallacy. Jacob examined a ‘Virtual Hindu Temple’ created by the Student Hindu Council of the University of Illinois, and the Christian Virtual Church, designed by the Pastor of Cheltenham’s Harvest Church.⁶¹³ Users of the Virtual Temple claimed that ‘a Virtual Temple cannot recreate the same experience’⁶¹⁴ of a Temple in the ‘real world’, and that whilst it could not ‘recreate the same experience

⁶⁰⁷ J. Chama, ‘*Finding God on the Web*’, Time, 16/12/96, p57, cited in Campbell, op. cit., p53.

⁶⁰⁸ See V. Mosco, op. cit.

⁶⁰⁹ J. Cobb, ‘*Cybergrace: The Search for God in the Digital World*’, (NY: Crown Publishers, 1998), p43, cited in Campbell, op. cit., p53.

⁶¹⁰ M. Wertheim, ‘*The Pearly Gates of Cyberspace*’, (London: Virago, 1999), p254.

⁶¹¹ S. Talbott, Personal Correspondence, Zaleski, op. cit., p237.

⁶¹² Ibid.

⁶¹³ See S. Jacobs, ‘*Virtually Sacred: The Performance of Asynchronous Cyber-Rituals in Online Spaces*’, Journal of Computer-Mediated Communication, 12, 2007.

⁶¹⁴ Ibid, p1104.

fully, it is better than nothing,⁶¹⁵ i.e. ersatz at best.

Jacobs claimed that these comments were representative of users' experiences at both sites, and noted that 'there is a general consensus that suggests that virtual sacred spaces... lack something in relation to their 'real world' counterparts'.⁶¹⁶ Indeed, the designer of the Virtual Church acknowledged that 'online interaction could neither replace nor fully replicate the physical co-presence of fellow worshippers',⁶¹⁷ and the creator of the Virtual Temple 'emphatically indicated that the Virtual Temple is not equivalent to a consecrated Temple located in the physical world'.⁶¹⁸

Instead, as Jacobs noted, 'the designer and the users of the virtual sites tend to see them in terms of simulation, a false approximation of the real',⁶¹⁹ for these sites were graphic representations of physical sites: by clicking on a door, users would enter the space, and then navigate digital simulations of sites modelled on actual architectural structures. Dawson's study of Neo-Pagan uses of the internet similarly concluded that 'we witness an attempt to recreate or simulate real space in virtual space'.⁶²⁰

Campbell's survey of online religion found that faith groups 'incorporate the internet into their traditional religious practices',⁶²¹ and Jacobs similarly concluded his study by stating 'there is an attempt to recreate online, as far as possible, the experience of being in a 'real world church/temple', located in geographical space... this suggests that the internet is utilised as a tool in the maintenance of traditional practices',⁶²² i.e. to simulate and attempt to facilitate conventional acts of worship.

As the efficacy of these sites are judged by their ability to simulate physical places of worship, and physical acts, they will inevitably be found lacking. The inability of digital simulacrum to recreate the sensory affectivity of their physical counterparts disqualifies them from functioning as sacred spaces, when the simulation criterion is

⁶¹⁵ Ibid, p1117.

⁶¹⁶ Jacobs, op. cit., p1117.

⁶¹⁷ Ibid, p1104.

⁶¹⁸ Ibid.

⁶¹⁹ Ibid.

⁶²⁰ Dawson, op. cit., p20.

⁶²¹ Campbell, op. cit., p56.

⁶²² Jacobs, op. cit., p1117.

strictly imposed.

Chama however, has claimed that simply ‘signing onto the internet is a transformative act’,⁶²³ as the ability of the Digital to invoke a sense of liminality, via its apparent immateriality, designates all of ‘cyberspace’ as ‘sacred’ space. Brasher has claimed that through the sense of what Qiu described as the ‘timeless-time’⁶²⁴ experienced in the Digital, ‘cyberspace breathes new life into the sacred idea of eternity’.⁶²⁵

For as ‘people customarily relate to emergent technologies by means of practices and ideas with which they are already familiar’,⁶²⁶ for Western consumers, ‘cyberspace imaginatively accorded... with the religious idea of eternity as perpetual persistence... bequeathed through ancient Jewish and Christian beliefs’.⁶²⁷

As well as this interpretation of ‘timeless-time’, Wertheim has claimed that the sense of immateriality ascribed to the Digital, as distinct from ‘geographical space’, accords with our ‘Western Judeo-Christian heritage, which has within it a deep current of dualism that has always associated immateriality with spirituality’.⁶²⁸ Thus, it is not ‘particularly surprising that essentially religious dreams are projected onto cyberspace’.⁶²⁹ Lanier has also claimed that popular notions of ‘cyberspace’ express ‘Christian ideas’⁶³⁰ of the transcendent as immaterial and eternal.

In this vein, Benedikt has likened the Digital to ‘the image of the New Jerusalem of the Book of Revelation’;⁶³¹ Stenger has similarly maintained that the Digital is sacred due to its apparent likeness to the Christian notion of ‘Paradise’.⁶³² Wertheim has claimed that the sense of the Digital as sacred ‘begins with the vision of the Heavenly city’,⁶³³ as the sense that the Digital can afford the transcendence of the physical body through its liminal character relates to ‘the Christian vision of the Heavenly City as a

⁶²³ Chama, op. cit., p57.

⁶²⁴ Qiu, op. cit., p120.

⁶²⁵ Brasher, op. cit., p52.

⁶²⁶ Ibid.

⁶²⁷ Ibid.

⁶²⁸ Wertheim, op. cit., p254.

⁶²⁹ Ibid.

⁶³⁰ Personal correspondence, Lanier, in Zaleski, op. cit., p156.

⁶³¹ Benedikt, op. cit., p6.

⁶³² N. Stenger, ‘*Mind is a Leaking Rainbow*’, in Benedikt, op. cit., cited in Wertheim, op. cit., p254.

⁶³³ Wertheim, op. cit., p256.

dream about transcendence'.⁶³⁴

These proponents of the 'sacred digital' contest Otto's claim that monumental architecture is the most effective means of representing the numinous,⁶³⁵ and Van der Leeuw's comments on the 'singular potential of expressing the holy through massive monumental architecture'.⁶³⁶

Conventional places of worship may attempt to mediate between the mundane and the supernatural through architecturally invoking a sense of place as '*imago mundi*',⁶³⁷ an axis between the mundane and the supernatural, but the quality of digital space allows us to experience something of the experiential quality of the supernatural, e.g. 'Heaven', more directly.

That experiences of temporal and spatial distortion are inherent to encounters with Otto's 'numinous' is also suggested by the cognitive neuro-scientific inquiries of Newberg and d'Aquili. The pair used SPECT imaging to scan the brains of Franciscan Nuns and Buddhist meditators while they reported 'religious experiences'. In both cases, the Posterior Superior Parietal lobe, associated with orientation, was inhibited, as respondents reported a sense of 'timelessness', 'infinity', or 'closeness to God'.⁶³⁸

Newberg and d'Aquili (albeit tentatively) concluded that experiences of being in the presence of that deemed 'sacred' can be associated with decreased levels of temporal and spatial orientation. This data could be cited to substantiate the claim that the Digital is 'sacred' as it has the capacity to invoke a similar sense of temporal/spatial distortion, which accords with the reticent resources of a Judeo-Christian milieu, i.e. Heaven.

⁶³⁴ Ibid, p257.

⁶³⁵ R. Otto, '*The Idea of the Holy*', (trans) John. W. Harvey, (London: OUP, 1923), cited in L. Jones, '*The Hermeneutics of Sacred Architecture: Experience, Interpretation, Comparison Vol. 1*', (MA: HUP, 2000), p115.

⁶³⁶ G. Van der Leeuw, '*Sacred and Profane Beauty: The Holy in Art*', (trans) David E. Green, (NY: Holt, Rinehart and Winston, 1963), p206-207 cited in *ibid*.

⁶³⁷ L. Jones, '*The Hermeneutics of Sacred Architecture: Experience, Interpretation, Comparison. Vol. 2*', (MA: HUP, 2000), p36.

⁶³⁸ A. Newberg, E. d'Aquili, S. Newberg and V. deMarici, '*The Neuropsychological Correlates of Forgiveness*', in (Eds), M. McCullough, K. Pargament and C. Thoresen, '*Forgiveness: Theory, Research, and Practice*', (NY: Guildford Press, 2000), cited in K. Seybold, '*Explorations in Neuroscience, Psychology and Religion*', (Ashgate: Aldershot, 2007), p83.

However, I do not believe that this account, that the Digital is popularly deemed ‘sacred’ due to its experiential accordance with the concept of ‘Heaven’ is in any way relevant to our respondents’ experiences. Catherine and Lucy reject the Judeo-Christian concept of ‘Heaven’, with Lucy explicitly stating ‘*No, Heaven doesn’t exist*’.

Whilst Brasher may claim that experiences of ‘timeless-time’ are best interpreted with the resources of a reticent Judeo-Christian milieu, there is no need to reference religious concepts to interpret digital liminality; as described, the effects of an inculcated digital doxa allows for the interpretation of ‘the sacred idea of eternity’⁶³⁹ as a qualitative feature of the onto-distinct ‘digital world’.

Thus, any account of the Digital functioning as a sacred space because of its apparent accordance with ‘the vision of the Heavenly City’⁶⁴⁰ is not pertinent to our respondents. Instead, any allusion to Christian notions of ‘Heaven’ are made post-facto, and function as comparisons made for descriptive utility, demonstrating the prevalence and dependence of the Western transcendence project on such religious ideation.

Furthermore, this account suggests that the Digital is considered sacred in its entirety, but before the death of their decedents our respondents did not experience or treat these Profiles as distinct from any others. It is only post-mortem that PDs are experienced as distinct, as Lucy reported that her deceased friend’s Profile ‘*definitely feels different*’; as for Catherine, whilst other members of her network can be contacted via other mediums, the PD constitutes her sole means of contacting her decedent.

For Wertheim, Stenger and Benedikt, the Digital can be deemed sacred as it accords with the experiential quality of their source of sanctity, the transcendent ‘Heaven’. For our respondents however, the source of sanctity is the deceased, transcendent via their transmutation to their Profiles.

⁶³⁹ Brasher, op. cit., p52.

⁶⁴⁰ Wertheim, op. cit., p255.

Murti, Menhirs and the Deceased Transcendent – Sanctity and Transubstantiation

Hubert has noted how ‘burial sites often become sacred places in themselves’,⁶⁴¹ and Davies has documented how secular sites that have become associated with the deceased, like British crematoria, come to be deemed sacred as ‘the sense of sacredness seems to be associated with the dead and the rites preformed for them’.⁶⁴² As noted however, PDs are not merely associated with the deceased: due to the confluence of neurological processes invoked by PDs, idiosyncratically intuited in relation to a secular worldview and digital doxa, the PD is the deceased, transcendent via transmutation.

Expressed in semiotic terms, PDs function as icons, i.e. ‘signs in which the signifier imitates and resembles, as closely as possible, the signified’;⁶⁴³ they are thus akin to a variety of symbols wherein the transcendent is transubstantially manifest in the mundane.

For example, Kunin has noted that in certain tracts of the Torah, the God of Israel is ‘viewed as actually dwelling in the Tabernacle and the Ark’;⁶⁴⁴ in the Hindu tradition, the ‘Murti’ or temple is ‘considered to be a form of the sacred, and not simply a symbolic representation’;⁶⁴⁵ and at the Japanese site of Okitama-No-Kami ‘the deity resides in a rock, or in the stones, conceived as the abode of the deity as opposed to its actual body’.⁶⁴⁶

A number of scholars have also claimed that as well as deities, deceased ancestors have been understood to be manifest in an iconic sense via transubstantiation. Burls has claimed that ‘there is, in some contexts, an important sense in which built forms

⁶⁴¹ J. Hubert, ‘*Sacred Beliefs and Beliefs of Sacredness*’, in ‘*Sacred Sites, Sacred Places*’, (Eds) D. Carmichael, J. Hubert, B. Reeves and A. Schanche, (London: Routledge, 1994), p15.

⁶⁴² D. Davies, ‘*Christianity*’, in ‘*Sacred Place*’, (Eds) J. Holm, with J. Bowker, (London: Continuum, 2003), p43.

⁶⁴³ D. Chandler, ‘*Semiotics: The Basics*’, (London: Routledge, 2002), p36, cited in Jacobs, op. cit., p1110.

⁶⁴⁴ S. Kunin, ‘*Judaism*’, in Holm, with Bowker, op. cit., p128.

⁶⁴⁵ Jacobs, op. cit., p1112.

⁶⁴⁶ K. Tange and N. Kawazoe, ‘*Ise: Prototype of Japanese Architecture*’, (MA: MIT Press, 1965), p39, cited in Jones, Vol. 2, p98.

actually are the dead'.⁶⁴⁷ Jones concurs that dead ancestors have been 'actually identified with, or 'transmuted' into architectural, specifically stone, structures'.⁶⁴⁸

He has cited Hayden's claims that there was a 'confidence among ancient Mexicans that their ancestors were embodied, and apparently living on, in rocks and stones',⁶⁴⁹ and Mabbett's that 'often, a Hindu shrine is an embodiment of the soul of a real human being, for whom his new home is regarded as a lodging in exactly the same way as his body during his life'.⁶⁵⁰

Jones has also claimed that Northern and Western European Neolithic menhirs and dolmens were not simply 'giant tombstones... or some sort of posthumous housing for the (un)dead... the dead would have been more directly identified with, or transubstantiated in the stones'.⁶⁵¹ He noted that such structures were 'of course, of stone', due to stone's ability to 'cultivate a sensation of atemporality, and thus of deathless life'.⁶⁵²

Lefebvre has also commented on the ability of stone to 'transcend death',⁶⁵³ and Eliade has noted that it is through stone (a material reserved for such funerary constructions in the European Neolithic period in contrast to the ephemeral dwellings of the living) that these dwellings of the dead could 'last forever', and thus constitute an 'inexhaustible reservoir of vitality and power'.⁶⁵⁴ Geldern has similarly claimed that in 'a pervasive Neolithic cult of ancestors', stone represented 'the human hope that one's person would be remembered, perhaps immortalised, through the agency of stone'.⁶⁵⁵

Indeed, we can also identify a confidence in the durability of stone to preserve the

⁶⁴⁷ A. Burl, *Rites of Gods*, (London: J.M. Dent and Sons, 1981), p47, cited in Jones, Vol. 2, p160.

⁶⁴⁸ Ibid.

⁶⁴⁹ D. Heyden, 'Caves, Gods, and Myths: World-Views and Planning in Teotihuacán', in *Mesoamerican Sites and World-Views*, (Ed) Benson, (DC: Dumbarton Oaks, 1981), p10, cited in Jones, Vol. 2, p162.

⁶⁵⁰ I. Mabbett, 'The Symbolism of Mount Meru', *History of Religions*, 23, 1983, p74, cited in Ibid, p163.

⁶⁵¹ Ibid, p162.

⁶⁵² Ibid.

⁶⁵³ H. Lefebvre, 'The Production of Space', (Trans. D. Nicholson-Smith), (MA: Basil Blackwell, 1991), p221, cited in *ibid*.

⁶⁵⁴ M. Eliade, 'A History of Religious Ideas' (Trans W. Trask), (Chicago: UCP, p1988), p123, cited in *ibid*, p160.

⁶⁵⁵ Ibid.

deceased in contemporary public memorials, as the Commonwealth War Graves Commission describes Lutyens' 'Stone of Remembrance' as 'as durable as any work of man can be'.⁶⁵⁶

Whilst stone may have been appropriated by the transcendence project to provide a sense of atemporality and ensure that the transubstantiated deceased could constitute an 'inexhaustible reservoir of vitality and power', Jones concludes his observations by noting that 'in stone's stead, photography, (and now maybe some sort of computer-generated imaging) may currently provide the most expeditious medium for the transubstantiation of the dead'.⁶⁵⁷

In this prediction, he foreshadowed the utilisation of PDs as a means of transmuting the deceased, and, as stone has done, 'keeping alive one's forebears to assume continued relations with them'.⁶⁵⁸ However, PDs are far more precarious than many would like to believe. They are forever contingent upon SNS policies which may be expedient to ensuring the accuracy of marketing data at the expense of being sensitive to the needs of survivors. Nonetheless our respondents' confidence in the durability of the Digital is demonstrated by their responses to the suggestion that these PDs may not last forever.

The notion of a PD being deleted was almost unintelligible to Catherine who visibly struggled to comprehend the idea, replying '*erm, yeah, it's yeah... that's a strange thought*', and claimed that she would be '*pretty devastated*' if her PD was deleted. Lucy was also taken aback by this suggestion, and believed that there would be '*a massive outrage against that*', and that it would be '*like losing her again*'.

Given its liminal, 'eternal' quality, there is a sense in which the Digital, and particularly PDs, will endure. Confidence in a PDs durability may have encouraged our respondents to engage with them: they are always present to them, even '*if I'm just lying in bed and thinking about her, then I'll scroll through it myself*', and there is

⁶⁵⁶ www.cwgc.co.uk, accessed 24/03/03, cited in F. Speed, '*The Sacred Environment: An Investigation of the Sacred and its Implications for Place-Making*', in (Ed) S. Menin, '*Constructing Place: Mind and Matter*', (London: Routledge, 2003), p59.

⁶⁵⁷ Jones, Vol. 2, p164.

⁶⁵⁸ Ibid, p163.

no perceived risk of *'losing them again'*. As such, PDs satisfy two of Eliade's criteria of the 'sacred', i.e. 'enduringness',⁶⁵⁹ not of rock, but of the Digital, and 'efficacy'⁶⁶⁰, through the interpretation of the neurological processes they can invoke.

Thus, I posit that for our respondents, their PDs constitute a sacred space: from an etic perspective, the PD is an iconic symbol of the deceased; emically, the PD, akin to the Catholic Eucharist, Hindu Murti, and Neolithic menhir is the actual source of sanctity, i.e. the transcendent, in this instance understood as the deceased transcendent via transmutation.

Although, whilst such iconic symbols conventionally function as mediums, e.g. Davies has noted that the Catholic relics of the 8th and 9th century acted as mediums between the mundane and the supernatural,⁶⁶¹ for our respondents immanence/transcendence is a redundant dichotomy. Given their unique worldviews, the transcendent deceased is inherently immanent via their PD, which functions as Eliade's 'hierophany', i.e. as something 'sacred' manifest in the mundane yet 'continuing to participate in its surrounding cosmic milieu'⁶⁶² (if we define the SNS as the cosmic milieu of the Profile).

A Threshold, a Limit, a Boundary – Demarcating Sacred Space

However, I believe that PDs can not only be deemed sacred spaces as they constitute a source of sanctity; they can also satisfy Eliade's requirement that a sacred space have a 'threshold, a limit, a boundary',⁶⁶³ Jones' requirement that it has 'configurations [which] work to enclose perimeters',⁶⁶⁴ Hubert's condition that 'the sacred be placed apart from everyday things or places',⁶⁶⁵ and Chidester and Linenthal's that a sacred space is 'maintained and reinforced by boundaries that keep certain persons outside the sacred space'.⁶⁶⁶

⁶⁵⁹ M. Eliade, 1957, op. cit., p12.

⁶⁶⁰ Ibid.

⁶⁶¹ Davies, in Holm with Bower, op. cit., p43.

⁶⁶² Eliade, op. cit., p11.

⁶⁶³ Ibid, p25.

⁶⁶⁴ Jones, Vol. 2, p291.

⁶⁶⁵ Hubert, op. cit., p11.

⁶⁶⁶ D. Chidester and E. Linenthal, *'American Sacred Space'*, (IN: Indiana University Press, 1995), p8.

Brasher has legitimately questioned what the notion of sacred ‘cyberspace’ ‘implies for the boundaries between the sacred and profane’.⁶⁶⁷ Jacobs has claimed that his case studies of the Virtual Temple and Virtual Church ‘suggest that it is possible to set apart virtual sacred spaces’.⁶⁶⁸ He asserts this however on the basis that ‘the design of the sites derives from conventional and traditional conceptions of sacred space’,⁶⁶⁹ i.e. with simulations of anti-chambers and thresholds designed into these simulacra of physical sacred spaces.

Facebook, however, as noted in Chapter 1, delineates between the ‘profane’ Newsfeed and the ‘sacred’ PD through the possibilities afforded by the code of the SNS, i.e. it symbolically demarcates one space from another. To access a PD, members must transgress the boundaries between the Newsfeed and the Profile by actively selecting it, or running a search for it, and choosing to enter it. Thus, it is possible, in a Durkheimian fashion, to discern two classes, two opposite kinds, on Facebook: the profane Newsfeed, and the sacred PD, with their boundaries clearly delineated.

PDs also satisfy Eliade’s requirement that sacred spaces operate via ‘sacred time’. Eliade has explained how in a Christian context, ‘liturgical time... unfolds in a historical time sanctified by the incarnation of the Son of God’.⁶⁷⁰ As Bowker and Holm elaborated, ‘the faithful engage in a kind of participation with the past as part of worship itself’;⁶⁷¹ by ritually re-enacting the historical actions of Christ, worshippers depart from conventional ‘profane time’.

In a similar fashion, our respondents do not experience the ‘profane time’ of the present on PDs. Instead, they ‘scroll back’ to the time of the source of sanctity, the deceased. Lucy described how she would ‘*scroll through it, go back all the way*’ until it ‘*felt like it was still back there*’. Catherine also scrolled back to the point at which she could ‘*read messages that he once sent*’, an act which regressed the PD to a point at which she could re-enact that time occupied by the source of sanctity.

⁶⁶⁷ Brasher, op. cit., p42.

⁶⁶⁸ Jacobs, op. cit., p1104.

⁶⁶⁹ Ibid.

⁶⁷⁰ Eliade, op. cit., p72.

⁶⁷¹ Holm and Bowker, op. cit., p2.

The PDs break with profane time is accentuated by its juxtaposition with the perpetually dynamic, quintessentially ‘present’ Newsfeed; as well as updating all information in real time, it is also ephemeral: updates disappear as frequently as they appeared. While the profane time of the Newsfeed is present and ephemeral, the ‘sacred’ time of the PD is the ‘historical time sanctified’⁶⁷² by the deceased, permanent and durable.

Discovering Through Labour – Maintaining Digital Presence

Also, like a number of sacred places where the source of sanctity is transubstantiated into the very architecture, this presence must be maintained. Freedberg has catalogued a variety of consecration rites, wherein ‘inanimate constructed objects are imbued with life’, e.g. the ‘washing and opening of the mouth’⁶⁷³ rites performed on Babylonian statues of gods, and the Hindu ‘eye-painting ceremonies’ wherein images are ‘animated’ in the act of painting eyes onto them.⁶⁷⁴

Consecration alone however is insufficient to maintain this presence. Such Hindu images are daily ‘awakened by a priest... then bathed and adorned. With ritual puja, food is offered to the deity’. If such rituals are not performed ‘the deities are not present, and the temple lies dormant as the deities are not ‘in residence’’.⁶⁷⁵ I propose that the Digital Presence found on PDs is also ritually maintained, and that this particular form of ritual mediates between two broad accounts of sacred space: the substantive and the situational.

The substantive, or phenomenological approach, evident in ‘Otto’s ‘Holy’, Van der Leeuw’s ‘Power’, and Eliade’s ‘Real’⁶⁷⁶ posits, as Harries has described, that ‘meaning cannot finally be made or invented, only discovered’,⁶⁷⁷ or as Kristensen

⁶⁷² Eliade, op. cit., p72.

⁶⁷³ D. Freedberg, ‘*The Power of Images*’, (Chicago: UCP), p82, cited in Jones, Vol. 2, p101.

⁶⁷⁴ A. Coomaraswamy, ‘*The Transformation of Nature in Art*’, (NY: Dover Publications, 1956), p156, cited in ibid, p102.

⁶⁷⁵ G. Mitchell, ‘*The Hindu Temple: An Introduction to its Meaning and Forms*’, (London: Elek Books, 1977), p62, cited in A. Roma Choudhury, ‘*Hinduism*’, in Holm with Bower, op. cit., p77.

⁶⁷⁶ Chidester and Linenthal, op. cit., p5.

⁶⁷⁷ K. Harries, ‘*Thoughts on a nonarbitrary architecture*’, in (Ed), Seamon, ‘*Dwelling, Seeing and Designing*’, (NY: NYU, 1993), p47, cited in Speed, op. cit., p62.

claims, that sacred spaces cannot be made through ‘the utterance of a prayer, the swearing of an oath, or performance of a ritual’.⁶⁷⁸ Humans do not ‘create, fabricate, or sanctify particular places’.⁶⁷⁹ The substantive school maintains, as Eliade has described, that sacred spaces are ‘never, properly speaking, ‘chosen’ by people... instead, it falls to homo religiosus to search for, and to discover’⁶⁸⁰ such places.

The situational approach, propounded by ‘Durkheim, van Gennep and Levi-Strauss [maintains] that nothing is inherently sacred’.⁶⁸¹ In the words of Levi-Strauss, the sacred is ‘a value of indeterminate signification, in itself empty of meaning and therefore susceptible to the reception of any meaning whatsoever’,⁶⁸² wherein sanctity ‘can be assigned to virtually anything through the human labour of consecration’.⁶⁸³

I propose that the ritual means of sustaining Digital Presence mediates between these approaches of considering signs and symbols as of arbitrary or inherent value: the Profile is not arbitrary, its meaning ‘cannot finally be made or invented, only discovered’. However, contrary to Eliade, the Profile’s sanctity does depend upon ‘social human choices, even of an unconscious sort’,⁶⁸⁴ as Digital Presence is sustained through what Smith described as the ‘result of the cultural labour of ritual’.⁶⁸⁵

⁶⁷⁸ B. Kristensen, ‘*The Meaning of Religion*’, (Trans. J. Carman), (The Hague: Springer-Science, 1960), p359, cited in Jones, Vol. 2, op. cit., p34.

⁶⁷⁹ M. Eliade, ‘*Patterns in Comparative Religion*’, (Trans. R. Sheed), (NY: Sheed and Ward, 1958), p369, cited in *ibid*, p35.

⁶⁸⁰ *Ibid*.

⁶⁸¹ Chidester and Linenthal, op. cit., p5.

⁶⁸² C. Levi-Strauss, ‘*Introduction: I l’oeuvre de Marcel Mauss*’, in M. Mauss, ‘*Sociologie et anthropologie: prcbdd d’une introduction cf l’oeuvre de Marcel Mauss*’, (Paris: Presses universitaires de France, 1950), cited in J. Smith, ‘*To Take Place: Toward Theory in Ritual*’, (Chicago: UCP, 1978), cited in *ibid*, p6.

⁶⁸³ *Ibid*.

⁶⁸⁴ Eliade, 1958, op. cit., p383, cited in Jones, Vol. 2, op. cit., p35.

⁶⁸⁵ Smith, op. cit., p107, cited in Chidester and Linenthal, p6.

Ritual Interaction

From Fiddler Crabs to Facebook Profiles – Digital Ritual

As with the Digital and sacred spaces, it is necessary to determine whether ‘digital ritual’ is a valid category, or a contradiction in terms; and as with digital sacred spaces, the fallacy of approximating the concept with superficial aspects of conventional praxis has been made in relation to ritual.

O’ Leary believes that ‘digital ritual’ is an invalid term, as ‘even with the best graphics, sound, and three-dimensional simulations, the participant in such rituals remains too much of a spectator, separated from the virtual space by the box on the desk’.⁶⁸⁶ This comment however is in reference to the simulation of conventional rituals in digital space, and as O’ Leary later concedes following a discussion with a designer of virtual environments, ‘the physicality of the sacred ritual is only the sign, not the thing signified’.⁶⁸⁷

Therefore he suggests that the materiality associated with conventional rituals may not be a prerequisite of ritual per se. Indeed, Dawson has claimed that ‘the opportunity exists to participate in virtual rituals... and some people have tried to do so’.⁶⁸⁸ However, as Rappaport has observed, the term ‘ritual’ is broad enough to be applied to actions ranging from ‘the courtship of fiddler crabs [to] the Roman Mass’,⁶⁸⁹ and like the term ‘sacred’ it is by no means unequivocal.

Therefore, before we consider how interacting with a PD sustains Digital Presence, we must consider whether interacting with a PD could be described as a ‘ritual’. We will determine whether PD interactions adhere to a variety of proposed definitions of ‘ritual’ to ensure that we can employ the term ‘digital ritual’ and apply it to PD interactions with confidence.

⁶⁸⁶ O’ Leary, op. cit., p44.

⁶⁸⁷ Ibid, p45.

⁶⁸⁸ Dawson (2005), op. cit., p15.

⁶⁸⁹ R. Rappaport, ‘*Ritual and Religion in the Making of Humanity*’, (Cambridge: CUP, 1999), p25.

We could begin by considering Rappaport's definition of ritual, as denoting 'the performance of more or less invariant sequences of formal acts and utterances not entirely encoded by the performers',⁶⁹⁰ a definition from which he derives five criteria: that performers have not encoded these invariant sequences themselves; adherence to form, including specified context; invariance; a performative character; and formality vs. physical efficacy (a criterion we shall examine separately below).⁶⁹¹

We can observe that interacting with a PD includes 'acts and utterances'. Survivors must actively choose to navigate away from the Newsfeed to the PD, and then choose to 'enter' it. Once accessed, survivors communicate via comments on the deceased's Profile, or through private messages (both examples of utterances). Thus, the fourth criteria, performance, is satisfied.

Criteria one through three are also satisfied by the architectural dictates of the SNS. In relation to the first criterion, i.e. 'the relationship of performers to their own performances of invariant orders that they themselves have not encoded',⁶⁹² whilst Rappaport qualifies that this condition 'does not hold for occasional innovators',⁶⁹³ PD interactions nonetheless adhere to this rule.

Survivors 'themselves have not encoded'⁶⁹⁴ this 'more or less invariant sequences of formal acts and utterances'. The architecture of the SNS is such that our expressive capacities are confined by the dictates of code; the act of 'entering' a PD, in order to communicate utterances via public comments or private messages are the only options available. As such, this sequence is the product of the SNS, rather than performers, i.e. our respondents.

The second and third criteria, those of 'formality, i.e. adherence to form including 'specified contexts'⁶⁹⁵ and 'invariance'⁶⁹⁶ are also products of the confines of code: these forms, i.e. acts of entering and the means of utterance, are necessarily performed

⁶⁹⁰ Rappaport, op. cit., p24.

⁶⁹¹ Ibid, p31.

⁶⁹² Ibid.

⁶⁹³ Ibid, p32.

⁶⁹⁴ Ibid, p24.

⁶⁹⁵ Rappaport, op. cit., p33.

⁶⁹⁶ Ibid, p36.

in the specified context of the SNS, and are invariant to the extent that these are the only options available to survivors. Therefore, I maintain that PD interactions satisfy Rappaport's broad definition.

We may also consider Lévi-Strauss' description of ritual as 'the exact inverse to a 'game': it brings about a union, or in any case an organic relation between two initially separated groups... there is asymmetry which is postulated in advance between profane and sacred, dead and living, etc, and the 'game' consists in making all the participants pass to the winning side'.⁶⁹⁷

Lévi-Strauss' structuralist definition can also be applied to PD interactions: these interactions facilitate mediation between the otherwise mutually exclusive, negative structural relation between 'living' and 'deceased', otherwise intractable for our respondents. Also, as our respondents do not acknowledge a supernatural realm, the 'winning side', or positive valence is 'alive', a side the deceased are brought to (via transmutation to a 'living' Profile).

Rue's definition of ritual as 'any repeatable unit of behaviour, the performance of which... is conducive to a religious experience'⁶⁹⁸ initially appears problematic. Such exchanges are evidently 'repeatable units of behaviour'. But is their performance 'conducive to a religious experience'? We will consider whether such interactions can be deemed 'religious' in our next section, '*Religiosity, Worldviews, and Enchantment*', but for now we can note that Rue elaborates 'ritual includes prayer'.⁶⁹⁹

Catherine reported that her interactions would be '*like, praying and communication...if I was religious*'. Nonetheless, if we understand 'prayer' as communication with the transcendent, however that may be conceived, then it may not be too outlandish to suggest that PD interactions, as 'repeatable units of behaviour', may be 'conducive to a religious experience' when that religious experience is specified as 'prayer' (as noted, we will give greater consideration to whether such interactions can be deemed 'religious' in '*Religiosity, Worldviews, and*

⁶⁹⁷ C. Lévi-Strauss, '*The Savage Mind*', (London: Weidenfeld and Nicolson, 1966), p32, cited in Rappaport, op. cit., p45.

⁶⁹⁸ L. Rue, '*Religion is Not about God*', (London: Rutgers University Press, 2005), p134.

⁶⁹⁹ Ibid.

Enchantment’).

In relation to Tambiah’s broad definition of ritual as ‘a culturally constructed system of symbolic communication constituted of patterned and ordered sequences of words and acts’,⁷⁰⁰ again, words and acts are patterned and ordered according to the dictates of SNS architecture, and we will discuss PD interactions as symbolic communication shortly.

To review, it would appear, as Kinney predicted, that ‘the technical innovations on the Net are likely to encourage the development of new forms of ritual’.⁷⁰¹ But to understand how these rituals sustain Digital Presence, we must understand how bread can become body.

Wish you Were Here – The Illocutionary Force of Communal Performative Utterances

In Catholic theology, the Eucharist succeeds ‘*ex opera operato*’, i.e. ‘the words are themselves efficacious’.⁷⁰² An ordained Priest, saying the right words, in the right place, at the right time, can turn bread into the body of Christ through the power of those words alone. Such speech-acts are not confined to Catholicism. Austin has described such acts as ‘performative utterances’,⁷⁰³ Searle as ‘speech acts’;⁷⁰⁴ O’ Doherty as ‘factitive utterances’,⁷⁰⁵ and Skorupski as ‘operative acts’.⁷⁰⁶

A performative utterance is ‘a speech-act that effects what it describes... the words of institution... do not merely describe an existing state of things’.⁷⁰⁷ Through being spoken, they realise a new state. As Danet has noted, ‘these are instances when saying

⁷⁰⁰ S. Tambiah, ‘*A Performative Approach to Ritual*’, (London: British Academy, 1979), p119, cited in Jacobs, op. cit., p1110.

⁷⁰¹ J. Kinney, ‘*Networth? Religion, Cyberspace and the Future*’, *Future*, 27 (7), 1995, p763, cited in Jacobs, op. cit., p1110.

⁷⁰² Dawson and Cowan, op. cit., p42.

⁷⁰³ J. Austin, ‘*How to Do Things with Words*’, (Oxford: OUP, 1962), cited in Rappaport, op. cit., p114.

⁷⁰⁴ J. Searle, ‘*Speech Acts*’, (Cambridge: CUP, 1969), cited in *ibid*.

⁷⁰⁵ F. O’ Doherty, ‘*Ritual as a Second Order Language*’, 59th Burg-Wartenstein Conference, cited in *ibid*.

⁷⁰⁶ J. Skorupski, ‘*Symbol and Theory*’, (Cambridge: CUP, 1976), cited in *ibid*.

⁷⁰⁷ O’ Leary, (2004), op. cit., p42.

is doing',⁷⁰⁸ and for our respondents, their interactions function as performative utterances. In uttering 'wish you were here', the deceased are present. The very act of communicating creates the conditions in which such communication is effective.

For interacting with the deceased generates activity on their Profile and subsequently in the Newsfeed, which in turn contributes to the classification of the PD as a 'living' Profile via the 'activity' criterion. The interactions themselves transform the current state of affairs into the desired state of affairs. In proclaiming 'this is the body of Christ' the Priest makes it so; in writing 'it feels like you're here' our respondents realise that effect. Such interactions possess an 'illocutionary force',⁷⁰⁹ in that the efficacy of PDs to communicate a message is instituted, reified and sustained through such utterances.

However, the deceased are not transmuted to their Profiles by a lone voice crying out across a vast social network. Contrary to Lingel's claim that 'rituals of death have become increasingly individualised in contemporary society',⁷¹⁰ and Walter's projection that 'Western individualism'⁷¹¹ will produce increasingly 'individualised' rituals, this is a collective ritual. This form of speech-act is a communal performative utterance.

Church is correct in noting that PDs cannot be defined as places of communal grieving, as survivors tend not to interact with each other, opting instead to 'deflect their attention from each other, to the deceased'.⁷¹² But, to the extent that certain survivors can experience PDs 'as' the deceased, they are products of communal ritual. For as noted in Chapter 2, activity alone is insufficient to categorise a Profile as 'living'. 'Activity' and 'interaction' form a dyadic, as the two are inextricably linked: activity is generated by the interaction of other members of the deceased's network.

⁷⁰⁸ B. Danet, 'Speech, Writing and Performativity: An Evolutionary View of the History of Constitutive Ritual', in G. Britt-Lowise, P. Lineell and B. Nordberg (Eds), *The Construction of Professional Discourse*, (London: Longmans, 1996), cited in *ibid*.

⁷⁰⁹ J. Austin, 'Philosophical Papers', (Oxford: OUP, 1970), cited in O' Leary, 2004, *op. cit.*, p42.

⁷¹⁰ J. Lingel, 'The Digital Remains: Social Media and Practices of Online Grief', *The Information Society*, 29 (3), 2013, p190.

⁷¹¹ T. Walter, 'The Revival of Death', (London: Routledge, 1994), cited in *ibid*.

⁷¹² Church, *op. cit.*, p187.

As such, the ‘illocutionary force’ of these performative utterances is cumulative; if other members of the deceased’s network are not also interacting with the PD, then it will not satisfy the interaction/activity dyadic, and thus it will not be identified as a ‘living’ Profile. These other members may not experience the PD as the actual deceased transcendent via transmutation, but survivors in a comparable position to our respondents may well do so.

We may consider on reflection however, that if we view PD interactions as the mechanism by which Digital Presence is sustained, are PD interactions best defined as ‘ritual’, or technical acts? Rappaport’s fifth criterion stipulated by his definition of ritual states that a ritual must ‘lack material or physical efficacy’,⁷¹³ i.e. in the words of Homan, rituals do not ‘produce a practical result on the external world’.⁷¹⁴ Leach similarly distinguished between ‘technical and ritual acts... [as] technical acts produce observable results in a strictly mechanical way’.⁷¹⁵

As these communal performative utterances produce effects which in turn activate the animacy system, which contributes to a sense of Digital Presence, might a reductionist claim that these speech acts ‘produce observable results in a strictly mechanical way’? Yes, a reductionist might, but as Goody has noted, in ritual ‘the relationship between means and ends is not intrinsic’.⁷¹⁶

For our respondents, the means by which communication is effective is ineffable, and ‘if ritual does anything at all it doesn’t do it by operating with matter and energy on matter and energy in accordance with physical laws’.⁷¹⁷ Instead, PD interactions can be described as rituals as the sense in which they can communicate a message is ineffable, and our respondents are not aware that such interactions also function as components of communal performative utterances.

⁷¹³ Rappaport, op. cit., p46.

⁷¹⁴ G. Homans, ‘*Anxiety and Ritual*’, *American Anthropologist*, 43, 1941, p172, cited in *ibid.*

⁷¹⁵ E. Leach, ‘*Ritualisation in Man*’, *Philosophical Transactions of the Royal Society of London, Series B, Vol. 251*, p406, cited in T. Ingold, ‘*The Perception of the Environment*’, (London: Routledge, 2000), p317.

⁷¹⁶ J. Goody, ‘*Religion and Ritual: The Definition Problem*’, *British Journal of Sociology*, 12, 1961, cited in Rappaport, op. cit., p47.

⁷¹⁷ Rappaport, op. cit., *ibid.*

Consequently, Walter's claim that 'in a modern society thin on ritual but rich in information and communications technologies, it is perhaps not so much through ritual, as Durkheim argued, but through media-enhanced possibilities of collective remembering that ancestors are called forth', is undermined. In relation to Digital Presence, it is these rituals of PD interactions that 'call forth' the deceased, and make them present on their Profiles.

We can now note how through communal utterance, the Profile becomes what Eliade described as a 'hierophany' for our respondents, i.e. how 'a particular object might appear to be simply a mundane object, but for the believer, it is transformed into something sacred, something set apart'.⁷¹⁸ For through interpreting the resultant interaction/activity through their particular worldview, this dyadic is interpreted as an indicator of persistent vitality.

We can also claim that these interactions reflect Jones' comments on the role of buildings in creating a sense of 'sacred place'. He claimed that 'it is not buildings, which mean nothing in and of themselves, but the dynamic interactions between people and buildings, particularly in the context of ritual'⁷¹⁹ that creates meaning. As between people and buildings through ritual, so too between people and Profiles. Meaning is made through ritual, as communal performative utterances create the conditions in which meaning can be made, i.e. in which indicators of persistent vitality can be interpreted as evidence of the transmutation of the deceased.

Through understanding how Digital Presence is maintained, PDs can be likened to those 'Australian Aboriginal sites... the maintenance of which requires... the performance of items aimed at caring for the spirit housed at it'.⁷²⁰ For like these sites, 'without these maintenance processes the site remains, but it is said to lose the spirit held within it'.⁷²¹ Without the maintenance of Digital Presence through such communal performative utterances, the sense of Digital Presence may well deteriorate, i.e. the PD may lose 'the spirit held within it'.

⁷¹⁸ Jacobs, op. cit., p1105.

⁷¹⁹ Jones (Vol. 1), op. cit., p29.

⁷²⁰ H. Payne, '*Singing a Sister's Sites: Women's Rites in the Musgrave Ranges*', (Ph.D Thesis, University of Queensland, 1988), p72, cited in Hubert, op. cit., p15.

⁷²¹ Ibid.

Conversely, it could suffice that a PD was once the site of a sense of Digital Presence for it to continue to function as an efficacious form of communicating messages to the deceased. Whether this is the case warrants further investigation, possibly through assessing whether our respondents still feel that ‘*messages get through*’ to their decedents if interaction, and subsequently activity, were to decline over time.

A Feeling of Relief – Profile Interactions as Words Against Death

If PDs can be likened to those Australian Aboriginal sites, then this form of ritual maintenance mediates between the substantive and situational approaches to sacred spaces. In agreement with the substantive school, the PD is not an arbitrary symbol: its meaning ‘cannot finally be made or invented, only discovered’,⁷²² as it is the particular features of the SNS which allow a sense of Digital Presence to emerge.

However, contrary to Eliade, and in agreement with the situational school, a PDs sense of ‘sacredness’ does depend on ‘social human choices, even of an unconscious sort’,⁷²³ as the deceased transcendent may vacate the PD without the ‘cultural labour of ritual’,⁷²⁴ i.e. in the absence of communal performative utterances.

Finally, we may consider how this ritual coheres with Rappaport, Tambiah and Leach’s definitions of ritual as ‘communication’; not simply in the sense that ‘performers presumably feel themselves to be communicating with spiritual beings’,⁷²⁵ (or in our respondents’ cases, the deceased transcendent). But also as ‘the participants transmit information concerning their own physical, psychic or social states to themselves and other participants’.⁷²⁶ Or, in the words of Leach, rituals express ‘the individual’s status in the structural system in which he finds himself for the time being’.⁷²⁷

⁷²² Harries, op. cit., p47, cited in Speed, op. cit., p62.

⁷²³ Eliade, 1958, op. cit., p383, cited in Jones, Vol. 2, op. cit., p35.

⁷²⁴ Smith, op. cit., p107, cited in Chidester and Linenthal, p6.

⁷²⁵ Rappaport, op. cit., p51.

⁷²⁶ Ibid, p52.

⁷²⁷ E. Leach, ‘*Political Systems of Highland Burma: A Study of Kachin Social Structure*’, (Boston: Beacon Press, 1954), p11, cited in ibid.

The ‘self-referential’⁷²⁸ message these rituals communicate is that the self is an intersubjective construction. Confirming Silverman and Klass’ claims that ‘individuals are interdependent and living in a web of relationships’,⁷²⁹ Catherine reported how on communicating with the PD, ‘*Erm, I would say, there’s this, sort of feeling of relief*’. Lucy similarly stated how she ‘*felt better*’ having interacted with her PD. These feelings of relief could be interpreted as the satisfaction of what Parkes described as the ‘searching or pining’ element of grief.⁷³⁰

Parkes’ ethological approach to grief posited that such ‘pining’ behaviour was due to an innate desire to reunite with those decedents whom we experience a close bond with, as such bonding behaviour is evolutionarily advantageous. Seale also described how ‘secure narratives of self-identity’⁷³¹ are products of an ongoing intersubjective reflexive process, and as such, continuing a dialogue with the deceased serves ‘as a micro-ritual for the sustenance and renewal’⁷³² of our ‘selves’.

PD interactions then are ‘auto-communicative as well as allo-communicative’.⁷³³ They communicate that the ‘self’ is an intersubjective project, and characteristic of self-referential messages, they do ‘not merely ‘say something’ about the state of the performer. They ‘do something’ about it’.⁷³⁴ For as Rue has noted, ‘a rite is for setting things aright’,⁷³⁵ and Smith has recognised that ‘ritual is a means of performing the way things ought to be in conscious tension with the way things are’.⁷³⁶

Through such rituals, our respondents not only communicate the self-referential message that the ‘self’ is the product of an ongoing process of intersubjective reflexivity including significant others. These utterances also act as ‘micro-rituals for

⁷²⁸ Rappaport, op. cit., p52.

⁷²⁹ Silverman and Klass, op. cit., p8.

⁷³⁰ See C. Parkes, ‘*Bereavement: Studies in Grief in Adult Life*’, (3rd Edition), (London: Routledge, 2001).

⁷³¹ C. Seale, ‘*Construction Death: The Sociology of Dying and Bereavement*’, (Cambridge: CUP, 1998), p193.

⁷³² Ibid.

⁷³³ A. Wallace, ‘*Revitalisation Movements*’, *American Anthropologist*, 58, 1956, p237, cited in Rappaport, op. cit., p51.

⁷³⁴ Rappaport, op. cit., p107.

⁷³⁵ Rue, op. cit., p135.

⁷³⁶ J. Smith, op. cit., p109, cited in O’ Leary, 2004, op. cit., p51.

the sustenance and renewal' of the 'self'. They are thus, to borrow a phrase, 'words against death',⁷³⁷ in that through these utterances, survivors can respond to an existential crisis posed by death. Not the threat posed by the incomprehensibility, or 'terror of death'.⁷³⁸ But the threat posed to the intersubjective reflexive process, as these utterances allow survivors to 'overcome death' by continuing those bonds which sustain the 'self'.

I propose that PD interactions constitute rituals. But are they also evidence of Dawson's claim that 'cyberspace may be inducing a new way of being religious'?⁷³⁹

⁷³⁷ D. Davies, *Death, Ritual and Belief: The Rhetoric of Funerary Rites*, (2nd Edition), (London: Continuum, 2002), p1.

⁷³⁸ Becker, op. cit., p11.

⁷³⁹ Dawson, op. cit., p17.

‘Religiosity’, Worldviews, and Enchantment

Our Father, Who Art on Facebook – The Digital as ‘Religion’

Attempts to conceptualise how the Digital may induce new manners of ‘being religious’ have drawn comparison to a number of traditional religious ‘types’, e.g. as tending toward ‘a kind of functional pantheism’,⁷⁴⁰ and of being understood as a ‘creative cybernetic godhead’;⁷⁴¹ Graham, Gibbs and Aceti have also referred to ‘an emerging online religion’ as a ‘return to animism’.⁷⁴²

To address Brooke and Thomas’ suggestions that the Digital may be perceived as a form of pantheistic ‘godhead’, or as somehow omnipotent and divine in its entirety: while we may make reference to Postman’s ‘god of technology’ this is a metaphoric extension of the ‘god-of-the-gaps’ theory. It refers to the manner in which the Digital is accommodating an increasing range of needs and desires, as opposed to denoting a belief in an actual digital sentience.

As mentioned, not all quarters of the Digital are treated with equal reverence, and there is nothing to suggest that anything of a ‘numinous’ nature has been detected on mundane shopping websites, or even in the profane areas of SNS, such as the Newsfeed. Instead, only some PDs, by virtue of ‘being’ the deceased transcendent, are regarded as ‘sacred’.

As for the suggestion that the Digital induces a ‘return to animism’, Graham, Gibbs and Aceti’s use of the term is ambiguous and un-nuanced to the extent that it is of limited, if any descriptive utility. If referring to Tylor’s basic description, of a belief in ‘living, personal powers behind all things’,⁷⁴³ or a ‘system of belief which allegedly attributes spirits or souls to things, living or non-living’⁷⁴⁴ (in the sense that via Tylor’s speculative inference, ‘all living things’ were believed to possess anima), then

⁷⁴⁰ T. Brooke, ‘*Cyberspace: Storming Digital Heaven*’, SCP Journal, 19 (4), 1995, p16, cited in Groothuis, op. cit., p118.

⁷⁴¹ D. Thomas, ‘*Old Rituals for New Space*’, p41, in Benedikt, op. cit, cited in Wertheim, op. cit., p254.

⁷⁴² Graham, Gibbs and Aceti, op. cit., p137.

⁷⁴³ E.B. Tylor, ‘*Primitive Culture*’, (4th Edition., rev. 2 vols), (London: John Murray, [1871], 1903), p429, cited in D. Pals, ‘*Eight Theories of Religion*’, (2nd Edition), (Oxford: OUP, 2006), p26.

⁷⁴⁴ Ingold, op. cit., p106.

this is hardly an apt description of the dynamics of Digital Presence.

There is no suggestion from our respondents that Profiles possess any form of ontologically independent anima, or ‘soul’, or that individual programs or pieces of software possess anything which conceptually resembles a ‘thin, unsubstantial human image... the cause of life and thought in the individual it animates’.⁷⁴⁵ However, if we consider Davies suggestion that ‘we might update [Tylor’s] enduring concept of animism to remind us of the psychological processes that seem attuned to perceive potentially active forces in the world around us’,⁷⁴⁶ then there may be grounds for such a label to be applied to PD interactions.

To the extent, as described by Gendler and demonstrated by participants in Heider and Simmel experiments and our respondents, that ‘when subjects encounter patterns of motion that resemble genuine intentional actions, they have the habitual propensity to respond as if they were in the presence of an agent with beliefs and desires’,⁷⁴⁷ then we could classify our respondents’ proclivity to perceive ‘potentially active forces’ in PDs as a form of ‘animism’.

Nonetheless, I would suggest that we reject this description, as it fails to recognise variations in the manner in which intention is attributed to PDs, i.e. relative to one’s worldview. As discussed, if the deceased are believed to persist in ‘Heaven’, then there is a sense in which the PD is accessed by the deceased ‘in Heaven’.

If ‘biological’ motion is detected by a survivor with a secular worldview, inculcated in a digital doxa and wishing to continue a bond, then intention is attributed to the deceased, transmuted to their Profile. As the singular term ‘animism’ fails to account for these varying dynamics, and possibly denotes that the Digital possess an independent ‘anima’, it is of no real descriptive utility.

While PD interactions may not correspond to notions of animism and pantheism, we may question whether this ritual could nonetheless be classified as a form of what

⁷⁴⁵ Pals, op. cit., p27.

⁷⁴⁶ Davies, (2011), op. cit., p228.

⁷⁴⁷ T. Gendler, ‘*Alief in Action (and Reaction)*’, *Mind and Language*, 23 (5), 2008, p552.

Graham et. al would describe as an ‘emerging online religion’, with reference to understandings of the multivalent term ‘religion’. In relation to a classical substantive definition, such as Tylor’s ‘belief in spiritual beings’, the issue is not, predominantly, the reference to ‘spiritual beings’; accommodation could be made to include notions of the deceased transcendent in this category, which would thus qualify PD interactions as ‘religious’.

Instead, our primary concern is the condition of ‘belief’. Even examples of ‘functional’ definitions of religion, i.e. those not referring to ‘spiritual beings’, often still contain reference to the condition of ‘belief’, e.g. Rue’s definition of religion as ‘belief in the most explicit and systematically coherent interpretation of ideas about reality and value’.⁷⁴⁸ Or Durkheim’s definition of religion as a ‘unified system of beliefs and practices’.⁷⁴⁹ For it is questionable whether our respondents could be said to ‘believe’ that messages can be communicated via PDs.

As outlined in our methodology, the difficulty with investigating instances of Digital Presence is that respondents are not cognisant of cause or influence; theirs is what James described as an ‘acquaintance-knowledge’,⁷⁵⁰ as a ‘feeling’ derived from experience encompassing ‘sensations, emotions, and vague feelings of relations’⁷⁵¹ similar to Sperber’s distinction between ‘encyclopaedic and symbolic knowledge’ (the latter ‘acquired’ through experience).⁷⁵²

Whilst Sperber later described this distinction as one between ‘reflective beliefs and intuitive beliefs’,⁷⁵³ such ‘intuitive beliefs’ are derived from ‘innate, spontaneous, and unconscious perceptual and inferential processes’.⁷⁵⁴ This description then violates Bailey’s requirements that a ‘religious’ belief be ‘voluntarily adopted [and] not

⁷⁴⁸ Rue, op. cit., p144.

⁷⁴⁹ See E. Durkheim, *The Elementary Forms of Religious Life*, (Oxford: Oxford Paperbacks, 2008).

⁷⁵⁰ W. James, *The Principles of Psychology*, (Vols. 1 and 2), (NY: Henry Holt and Co, 1890), p221, cited in Rappaport, op. cit., p375.

⁷⁵¹ Ibid.

⁷⁵² D. Sperber, *Rethinking Symbolism*, (Cambridge: CUP, 1975), cited in Davies, (2002), op. cit., p11.

⁷⁵³ D. Sperber, *Intuitive and Reflective Beliefs*, *Mind and Language*, 12, (1997), cited in T. Tremlin, *Divergent Religion: A Dual-Process Model of Religious Thought, Behaviour, and Morphology*, p78, in H. Whitehead and R. McCavley (Eds) *Mind and Religion: Psychological and Cognitive Foundations of Religiosity*, (Oxford: AltaMira Press, 2005).

⁷⁵⁴ Tremlin, op. cit., p78.

biologically determined',⁷⁵⁵ which prompts us to question whether such 'unconscious inferences' can be described as 'beliefs' in accordance with the common usage and understanding of 'belief', i.e. as denoting a degree of autonomy and agency, if not necessarily 'rationality'.

The Ultimate Question – Profile Interactions as Lifestyle and Deathstyle

Instead, could PD interactions and an attendant 'feeling' of Digital Presence be defined as examples of what Eliade referred to as 'crypto-religion',⁷⁵⁶ 'implicit religion', or 'religiosity'? Bailey described 'implicit religion' as 'anything present in lives that was comparable to religion, in any of its various dimensions and manifestations',⁷⁵⁷ which would 'probably not be perceived by its actors as religious'.⁷⁵⁸ This concept has been developed by a number of cognitive anthropologists, with Tremlin defining 'implicit forms of religiosity'⁷⁵⁹ as 'popular forms of religion practiced by regular people in everyday life',⁷⁶⁰ which deviate from 'official beliefs and behaviours maintained by institutions'.⁷⁶¹

Ultimately, both 'types of religiosity', i.e. 'official' and 'implicit' are 'simply one outcome of faculties of thought common to all normal brains',⁷⁶² and Day has similarly described all forms of 'religiosity' as 'a predictable side effect of the human cognitive engine's performance'.⁷⁶³ But what Bailey refers to as 'religion, in any of its various dimensions and manifestations' is by no means definitive or even certain, and it is unclear what Tremlin and Day are referring to. If they are referring to ritual, then we can ask why we need reference 'religion' at all.

As Davies has noted, 'implicit religion has, essentially, nothing to do with religion,

⁷⁵⁵ E. Bailey, 'Implicit Religion', *Religion*, 40 (4), 2010, p273.

⁷⁵⁶ Eliade, 1957, op. cit., p24.

⁷⁵⁷ Bailey, op. cit., p271.

⁷⁵⁸ Ibid, p272.

⁷⁵⁹ Tremlin, op. cit., p80.

⁷⁶⁰ Ibid, p70.

⁷⁶¹ Ibid.

⁷⁶² Ibid, p69.

⁷⁶³ M. Day, 'Rethinking Naturalness: Modes of Religiosity and Religion in the Round', p86, in Whitehead and McCavley, op. cit.

but everything to do with being human as a member of a particular society'.⁷⁶⁴ Herein lies the problem: even if we accept that 'religion is simply one outcome of faculties of thought common to all normal brains', it is not the only possible outcome. Simply 'being human' entails attempting to make sense of the world as meaning-making animals, and 'religion' is but one type of meaning-making.

Therefore, instead of drawing comparison between our respondents' attitudes and behaviour and 'religion', it is more appropriate to view our respondents' responses as the products of a worldview grappling with some of the fundamental questions humans ask about themselves and their place in the world. I use the term 'worldview' in accordance with Droogers and Harskamp's usage of the term, as 'analogous to culture, understood as both a human capacity and the result of exercising that competence'.⁷⁶⁵

That is, both our intrinsic capacity to 'link persons, social relations, objects, events, time and space',⁷⁶⁶ and the collection of values and emotional repertoires different individuals employ to make meaning, as expressed in 'the variety of answers given in religions, secular worldviews, ideologies and spiritualities'.⁷⁶⁷

As noted, our respondents' responses are the product of a very particular, secular worldview, and these responses are best understood as products of their worldview grappling with what Hijman and Smaling claim is one of the five 'basic and ultimate questions that humans universally ask about themselves and their world'.⁷⁶⁸ Namely, one concerning ontology and eschatology: how is meaning to be made of death?

This question is addressed by our respondents' worldview in the form of transmutation to the Profile. In Smart's typology of a worldview's expression of an

⁷⁶⁴ D. Davies, 'Implicit Religion and Inter-faith Dialogue in Human Perspective', *Implicit Religion*, 2 (1), 1999, p17.

⁷⁶⁵ A. Droogers, 'The World of Worldviews', in A. Droogers and A. Harskamp (Eds), *Methods for the Study of Religious Change: From Religious Studies, to Worldview Studies*, (Sheffield: Equinox Publishing Ltd, 2014), p20.

⁷⁶⁶ Ibid, p20.

⁷⁶⁷ Ibid, p23.

⁷⁶⁸ E. Hijmans and A. Smaling, 'Over de Relatie Tussen Kwalitatief Onderzoek en Levensbeschouwing. Een Inleiding', in A. Smaling and E. Hijmans (Eds), *Kwalitatief Onderzoek en Levensbeschouwing*, (Amsterdam: Boom, 1997), p17, cited in *ibid*, p22.

answer/solution to an ‘ultimate question’, which includes ritual, ethical, and institutional responses, I would posit that as well as this worldview’s response expressing itself through ritual, there is also a moral obligation inherent in these rituals.

In my undergraduate dissertation study, I discovered that survivors were attempting to communicate messages such as *‘sorry I haven’t wrote on here in a couple of days,* and their claims that *‘I try to talk to you everyday’* exhibited a sense of obligation to interact with PDs. Similarly, Catherine stressed that she wanted to *‘keep his presence there’* through interacting with the PD, and Lucy reported how members of the deceased’s network felt compelled to *‘post things... to try to keep her alive’*. Again, this relates to the recognition that *‘selves are no more single existences than are atoms and molecules’*,⁷⁶⁹ i.e. that reflexivity is intersubjective by nature, which consequently affirms the value of community.

In agreement with Durkheim, this worldview acknowledges as an ‘eternal truth that outside of us there exists something greater than us, with which we enter into communion’,⁷⁷⁰ and that this is society. This worldview does not, however, attempt to dress society in the guise of god. Therefore, there is a sense of obligation in maintaining that community of significant others, a community that is palpable on SNS. Indeed, if we omit the ‘belief’ condition of Durkheim’s definition of ‘religion’ as given in his ‘Elementary Forms’, then these rituals of PD interactions and their corresponding sense of moral obligation to maintain community, till death shall not part, adhere to it.

Although, reference to the term ‘religion’ is not necessary if we recognise that the term ‘worldview’ encompasses the meaning-making process, be it religious or secular. Thus, it is more useful to think of this aspect of worldview (the ontological/eschatology), and these expressions of it (both ritual and moral), as the ‘death-style’ (or rather, deathstyle) of this particular worldview. By ‘deathstyle’ I refer to Davies, admittedly artificial distinction between the ‘degree of distance

⁷⁶⁹ M. Jackson, *‘Minima Ethnographica’*, (London: UCP, 1998), p6, cited in Droogers and Harskamp, op. cit., p28.

⁷⁷⁰ See Durkheim, op. cit.

between issues that pre-occupy our everyday life activities and those that concern us as far as death is concern'.⁷⁷¹

We can observe then that this worldview's deathstyle is not what Bauman and Lévi-Strauss would describe as 'anthropoemic', wherein the deceased are 'segregated, and separated'.⁷⁷² Contrary to claim's that Western societies can be characterised by 'the development of a physical, and symbolic, separation between the living, and the dead',⁷⁷³ the deceased are not 'secluded from society'.⁷⁷⁴

Instead, the lifestyle of maintaining a community of significant others who contribute to the intersubjective reflexive process is not just reflected by the deathstyle. The deathstyle is the lifestyle, as the place of the deceased within a community of significant others is actively maintained, (integrated and un-sequestered) in the same manner in death as it was in life.

Pay No Attention to the Man Behind the Curtain – Preserving Enchantment

However described, these interactions discredit Weber's prediction that the world 'is en-route to a disenchanted future'.⁷⁷⁵ Our respondents experience a sense of enchantment, i.e. they are faced with something 'uncanny, weird, mysterious or awesome',⁷⁷⁶ where 'neither science nor practical knowledge seem of much utility'.⁷⁷⁷ They are 'confronted by circumstances or occurrences so peculiar and so beyond our present understanding as to leave [them] convinced that, were they to be understood, [their] image of how the world operates would be radically transformed'.⁷⁷⁸

There are indications that such a transformation is occurring in Lucy, who did not

⁷⁷¹ Davies, D and Eaton, D, 'Lifestyle, Death-style, Internet, and Life-Meaning Paradox', Death Online Research Network Conference, Durham, 2014, p2.

⁷⁷² Z. Bauman, 'Mortality, Immortality, and Other Life Strategies', (Cambridge: Polity Press, 1992), p131.

⁷⁷³ E. Hallam, J. Hockey and G. Howarth, 'Beyond the Body: Death and Social Identity', (Routledge: London, 1999), p127.

⁷⁷⁴ T. Walter, et. al., op. cit., p285.

⁷⁷⁵ M. Weber, 'From Max Weber', (Eds) H. Gerth and C. Mills, (Oxford: OUP, 1946), cited in M. Schneider, 'Culture and Enchantment', (London: UCP, 1993), p. ix.

⁷⁷⁶ Schneider, op. cit., p3.

⁷⁷⁷ Ibid, p.x.

⁷⁷⁸ Ibid, p3.

'believe in anything' but as a consequence of her experiences of Digital Presence, is more inclined to entertain the possibility of some form of post-mortem persistence; she is *'starting to change... I definitely believe more now in her, sticking around somewhere, than I used to'*. Indeed, Lucy stated that *'I was interested in what you emailed [because] I'm an atheist... which again is why I was interested'*, as she wanted to attempt to understand something so peculiar, that it could radically transform her image of how the world operates.

There is also the accompanying *'tincture of unease'*⁷⁷⁹ induced by the phenomenon's *'uncanny flavour'*,⁷⁸⁰ an unease that *'derives from the assault upon our prior sense of how the world works – and thus upon our practical competence in dealing with it'*.⁷⁸¹ As noted, this sense of unease is evident as both respondents visibly struggled to comprehend their experiences. However, if Schneider is correct in claiming that *'successful explanation domesticates the uncanny by revealing the engines behind it, like Toto in the Wizard of Oz, demystifying events by drawing back the veil that obscured their causes'*,⁷⁸² then far be it from us to draw back the veil.

If attempts to reveal the mechanics of Digital Presence could be deleterious to a PDs ability to function as the sole means of continued contact and communication with their beloved decedents, then I should prefer that Catherine and Lucy remain enchanted.

⁷⁷⁹ Ibid.

⁷⁸⁰ Ibid.

⁷⁸¹ Ibid.

⁷⁸² Schneider, p4.

Conclusion

We are now in a position to return to our initial concerns, as detailed at the outset of this study.

I propose that some survivors experience Digital Presence because of the manner in which they interpret a confluence of neurological processes, i.e. contact comfort, ‘biological’ motion detection, and coupled system recognition. The cumulative effect of these processes stipulates that an intention (reading Facebook messages) must be attributed to the deceased. However, a secular worldview in a digital doxa does not allow for the deceased to read messages ‘on Facebook up in Heaven’⁷⁸³ as some religious worldviews do. Instead, it allows (and requires) the deceased to be present on their Profiles via the transmutation of their consciousness/‘ontic substance’.

Subsequently, the prospect of Profile memorialisation is met with such hostility because a memorialised Profile is ‘deceased’, as opposed to ‘living’. Therefore, a memorialised Profile can no longer function as a viable conduit for the transmuted ‘ontic substance’ of the deceased, which would negate any sense of Digital Presence and the potential to communicate with the deceased. The phenomenon is not best described as a form of ‘religiosity’. Instead, it is best understood as the lifestyle, and the deathstyle, of a secular worldview in a digital doxa.

Of course, more research must be conducted to verify this hypothesis. Future studies must determine whether other survivors who have experienced Digital Presence have also interacted with ‘living’ Profiles of deceased users; indeed, such studies must establish whether the binary ‘normal/living’, ‘abnormal/deceased’ classification is evident in other survivors’ accounts. They must also note whether respondents share Catherine and Lucy’s secular worldview and have also been inculcated in a digital doxa; they could test for the latter by establishing the frequency and overall duration of a respondent’s engagement with the Digital.

⁷⁸³ Hieftje, op. cit., p144.

A future study could then conduct a series of fMRI scans on respondents whilst they engage with ‘living’ Profiles of deceased users, e.g. by accessing Facebook on fMRI compatible devices whilst they are scanned. Then, degrees of STS/mPFC stimulation could be noted and compared with baseline levels to test our hypothesis.

It would also be interesting to examine the prevalence and character of Digital Presence in other cultural contexts. For example, is Digital Presence more prevalent in Hindu societies, where the concept of the ‘Avatar’ has far deeper historio-cultural roots than our current British context? This is one of a number of questions which could be explored in future research.

Although, we may well question whether Facebook will still be relevant for future studies of DPMC. I fully concur with Brasher’s claim that ‘forecasting the future... is a pastime equivalent to bungee-jumping off a bridge using a badly frayed cord. Bodies lie broken on the rocks below’.⁷⁸⁴ Nonetheless, convention dictates that we consider possible future developments and their impact on our topic, and there are a plethora of innovations which could contribute to technology’s ‘abolishing the conception of death which now prevails in the world’.⁷⁸⁵

Services such as ‘Liveson’ already promise that we can ‘keep tweeting even after we’ve passed away’.⁷⁸⁶ With their company motto, ‘when your heart stops beating, you’ll keep tweeting’, Liveson’s AI software can analyse a Twitter account to discover a user’s ‘likes, tastes and syntax’.⁷⁸⁷ Once initiated, the service accesses the deceased’s Twitter account, and tweets as though the deceased were commenting on events from beyond the grave.

AI software is also being developed to allow us to ‘become virtually immortal’⁷⁸⁸ in more interactive forms. The ‘Eternime’ platform, currently in its beta testing phase, ‘collects your thoughts, stories and memories, curates them, and creates an intelligent

⁷⁸⁴ Brasher, op. cit., p17.

⁷⁸⁵ Stead, op. cit., p301.

⁷⁸⁶ <http://liveson.org/connect.php>, accessed 14/09/15.

⁷⁸⁷ Ibid.

⁷⁸⁸ <http://eterni.me/>, accessed 14/09/15.

avatar that looks like you'.⁷⁸⁹ This avatar 'will live forever... and people could interact with it as if they were talking to you'.⁷⁹⁰

By answering questions about themselves and allowing the platform to access their social media accounts, individuals can create avatars; upon their demise, their survivors can converse with these avatars as though conversing with the dead on Skype. Different neurological processes may be operant from those that generate the sense of Digital Presence found on Facebook. But we might imagine that the prospect of not only being able to '*get hold of*'⁷⁹¹ our decedents, but to have them get hold of us might invoke a powerful sense that the deceased are present in these new digital avatars.

New immersive forms of virtual reality and advances in digital scanning technology also present opportunities for those seeking to conquer death. The Oculus Rift, a virtual reality company bought by Facebook in July 2014 for \$2bn allows users to enter fully immersive virtual worlds via a VR headset. In the words of Scharf, the founder of the world's largest virtual reality conference: 'you will be able to go inside the internet; the internet will become a place'.⁷⁹²

Digital scanning and graphic processing capabilities have now reached a degree of sophistication whereby an avatar in these virtual worlds is a near-perfect representation of its user's physical body. Two users on opposite sides of our planet can meet face-to-face in vast virtual worlds, and given the recent development of teledildonic technology, they can remotely have sex too.

Teledildonic devices allow two remote parties to have a form of digital intercourse. Companies like Kiiroo have created wearable devices which transmit motions and actions performed on one device, through the internet to the corresponding device. Such haptic peripherals allow us to not only see and hear people in virtual worlds, but

⁷⁸⁹ Ibid.

⁷⁹⁰ Ibid.

⁷⁹¹ Sam, respondent in my undergraduate dissertation study, Durham, 2013.

⁷⁹² Vice, op. cit.

to touch them as well.⁷⁹³

The potential applications of these technologies are already apparent. In the course of a life, a person could be scanned, and they could upload their avatar into an Oculus Rift virtual environment. They could use haptic peripherals like Kiiroo, which could record data about their bodies. And they could create an Eternime account, programmed to synchronise with their Oculus Rift avatar upon their demise.

An avatar that looks like them, talks like them and feels like them would live online for any and all to interact with in perpetuity. We have accounts of 20th century spiritualists who claimed to have had ‘sex with the spirits’⁷⁹⁴ of their deceased spouses. With the technologies either currently available to us or in their final testing stages, we need only replace ‘spirits’ with ‘avatars’ and the same might be true of some survivors in the not so distant future.

Again, forecasting the future is a fool’s errand. Facebook has continuously altered its policy on PDs. From automatically deleting them, to leaving them, to memorialising them. It changed its policy during the course of this study when it introduced the ‘Legacy Contact’ feature in February 2015. Ultimately, we cannot know what might become of PDs. Or whether Facebook, as central as it may be to the lives of 1.49 billion people at present, may be a dormant repository of forgotten memories in 10 years time.

What we do know is that the human animal’s capacity to pursue the transcendence project is limitless, and the possibilities afforded by digital technologies portend to a future in which for some survivors it will continue to be Online as it is in Heaven.

⁷⁹³ Timmermans, cited in Ibid.

⁷⁹⁴ C. Kernahan, ‘*Black Objects: Plain Speaking and Painful Facts about Spiritualism*’, (London: R.T.S, 1920), cited in Waters, op. cit., p426.

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- David
- George
- Joan
- Julia
- Lucy
- Sarah
- Thomas

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