The London School of Economics and Political Science

The Rise and Fall of Online Immortality Services and the Mediation of Mortality in the Digital Age

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Declaration

I certify that the thesis I have presented for examination for the MPhil/PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

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Abstract

This thesis considers how digital communication mediates mortality in contemporary western societies by examining online services geared towards dealing with one's future death. The study's point of departure is society's fundamental role in mediating mortality, understood as humans' awareness of their own inevitable future death. I consider the mediation of mortality as a negotiation of an annihilation-continuity dialectic and establish a conceptual and practical link between media practices and practices of symbolic transcendence.

Specifically, the thesis examines the following questions: (1) What practices of leaving traces do online immortality services construct and facilitate? (2) What posthumous relationships between the future-dead and future-survivors are constructed and facilitated by online immortality services? (3) What digital media myths and social imaginaries are evoked by and underlie the practices constructed and facilitated by online immortality services?

To address these questions, the thesis employs a multimodal analysis of forty-six online immortality services and analyses twenty in-depth interviews with the founders of these websites. The analysis shows that online immortality services promise their users extensive control over their symbolic posthumous endurance. Yet the thesis argues that online immortality services ironically fail to 'live up' to their promise in the face of the very same technological, social, and commercial conditions and imaginaries that led to their emergence. As online immortality services are themselves dying (i.e. failing commercially and going offline), this project becomes one of preservation and conservation of unsuccessful contemporary attempts to thwart death through media. Thus, it highlights the significance of studying failed technologies and vernacular media histories.

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Chapter 1: Introduction Mediating Death between Annihilation and Continuity

> Death destroys a man; the idea of death saves him.
>
> - Edward Morgan Forster, *Howards End*, 1910

> The dream of the elixir of life and of the fountain of youth is very ancient. But it is only in our day that it has taken on scientific, or pseudo-scientific, form. The knowledge that death is inevitable is overlaid by the endeavour to postpone it more and more with the aid of medicine and insurance, and by the hope that this might succeed. (Elias, 1985, p. 47)

When I was about nine years old, my older brother told me something that was new to me at the time. He told me that the sun would one day burn out. “It’s like a roll of toilet paper,” he explained. “If toilet paper catches fire, it will keep burning until it is all consumed and nothing is left to burn. When that occurs, the fire dies out.” I vividly remember the immediate knot I felt in my gut. That terrible realisation that everything would one day come to an end. Including myself.

Roughly two decades after discovering life’s finality, I heard for the first time about a Facebook page that remained available online after the death of its user. I wasn’t a Facebook user then, nor did I fully understand what this meant, yet I remember that strong feeling in my gut again. Unlike the unalloyed horror that the awareness of death triggered in me, this discovery simultaneously terrified and fascinated me. The possibility that one’s online traces could outlive one’s demise seemed simultaneously creepy and comforting.

Over the past few decades, digital media and online communications have become virtually ubiquitous across social domains. With their increased diffusion, the default storing of all digital traces has also become ubiquitous. Echoing earlier visions of perfect memory machines (e.g., Bush, 1945), individuals can now create abundant collections of countless photographs, videos, social media posts and other records of their daily lives (Mayer-Schönberger, 2009; O'Hara et al., 2008; Van Dijck, 2005).

This capacity of digital media to keep such comprehensive records of one's lifetime was part of the inspiration for projects like *MyLifeBits*. Launched in 2002 by Microsoft engineer Gordon Bell, the *MyLifeBits* project experimented with the possibility of creating a comprehensive tool for documenting and storing one's entire life. Bell used small microphones, location trackers, and cameras to generate and save texts, images, videos, and other documents to record the minutia of daily life for posterity. These records would then be organised to make them retrievable, in the hope they would afford individuals perfect memory (Bell & Gemmel, 2010). By providing such 'perfect memory', *MyLifeBits* (and eventually digital media more generally) would resolve human anxieties of forgetting, or so they hoped. Importantly, they would also resolve human anxieties about *being forgotten* (Van Dijck, 2005, p. 323).[1]

Bell and Gemmel envisioned such comprehensive digital memory as a form of "virtual immortality" (Bell & Gemmel, 2010, p. 139). They compared this virtual immortality to the immortality that was historically only accessible to great historical rulers and influential artists. They predicted that:

[1] Of course, the idea that such machine-made memory prosthesis could exist precedes the digital era. For instance, in the essay As We May Think (1945), claimed to be one of the most influential descriptions of such perfect memory machines. In the digital age, however, there are repeated attempts for materialising these visions and hopes (Mayer-Schönberger, 2009, pp. 37-38).

> With such a body of information, it will be possible to generate a virtual you even after you are dead. Your digital memories, along with the patterns of fossilised personality they contain, may be invested into an avatar (a synthesized persona) that future generations can speak with and get to know. Imagine asking your great-grandfather about what he really loved about your great-grandmother. Your digital self will reach out to touch lives in the future, allowing you to make an impact for generations to come. (Bell & Gemmel, 2010, p. 6)

Similar ideas and visions of technological immortality have been repeatedly reproduced and rearticulated in contemporary culture over recent decades. Post-humanist discourse (Rothblatt, 2014), popular media texts (Daniels, 2020; Moggach, 2013), philosophers (Jandrić, 2020; Stokes, 2021), scientists (Kurzweil, 2005) and entrepreneurs (Ursache, 2015) have been advocating and speculating about different versions of virtual immortality via digital media. However, the prospects of virtual immortality had tantalised writers and pundits long before digital media use became widespread.

In *Speaking Into the Air*, John Peters observes: "Two key essential facts about modern media are these: the ease with which the living may mingle with the communicable traces of the dead, and the difficulty of distinguishing communication at a distance from communication with the dead" (Peters, 1999, p. 149). The possibility of obtaining a posthumous digital presence, such as through Facebook or Twitter accounts that remain online after their users die, seems to be a realisation of Peters' words. Digital media increase the pervasiveness of the dead in everyday spaces (Meese et al., 2015; Walter, 2018), further blurring the boundaries between the living and the "communicable traces" of the dead. Moreover, visions of digital immortality, as articulated, for instance, by Bell and Gemmel, seemed to suggest new avenues for symbolically extending one's life through contemporary

media. The promise made by digital technologies is that the online dead would not merely be present but also be able to control their own memorialisation and even initiate interactions with the living.

In the first decade of the 21st century, as social media platforms achieved prominence and financial success, another type of online service emerged: online immortality services. While the core service of social platforms such as Facebook and Twitter was sharing life experiences, the online immortality services focused on providing users with new and controllable forms to symbolically transcend death. Specifically, they offered users an opportunity to plan and control their online posthumous presence (or absence).

The first immortality online service I encountered in 2013 was the website deadsoci.al. It enabled individuals to compose messages to be delivered after their death, even several decades posthumously, to specified recipients of their choice. With services such as deadsoci.al, not only could the living come upon the traces of the dead in online spaces, but the dead were afforded the possibility of initiating contact and engaging in online interaction with the living.

Deadsoci.al was not the only website providing services dedicated to the future-dead. By 2013, at least twenty-five online immortality services offering users ways to control their online posthumous presence emerged. Intellitar.com, launched in 2010, invited users to create a virtual avatar of themselves to communicate on their behalf when they are gone. PlannedDeparture.com, launched in 2011, enabled users to bequeath their digital assets if they wished to do so, and IfIDie.net, launched in 2008, allowed users to create a farewell message to be sent after their death to the recipients of their choice. These services not only promised future-dead users to have their traces mingle with the traces of the living but also to control how, where, and when this mingling occurs. Yet despite their ground-breaking

promises, from posthumous messaging to virtual avatars, not many people were keen to subscribe to these services and engage in preparing their own posthumous online activities.

In 2012, seeking to increase their popularity and subscription numbers, IfIDie.net launched a campaign titled: “If I Die First.” The campaign involved a competition: it invited participants to upload their to-be-sent-posthumously messages to the service. Then, of those who registered in the competition, the first person to die was promised to gain “global exposure estimated in 200 million people” (ifidie1st.com) by having their posthumous video message posted not only on their Facebook profile but also on Mashable and other media platforms. As IfIDie.net humorously describes in its video: “This is a contest you don’t want to win, but you can’t afford to miss” (ifidie1st.com). Ironically, the first one to die was the online immortality service itself. Although its founders promised to provide individuals with everlasting “world fame,” the company ended the campaign within a few months. In 2014, it stopped providing services, taking to its virtual grave the messages its users had prepared for posterity.

Other online immortality services suffered a similar fate, including, for example, Deadsoci.al, DeathSwitch.com, MyGoodbyeMessage.com, Leg8cy.com, Remember-Me.co, and PlannedDeparture.com. While promising an enduring channel for communication and control over one’s posthumous online presence, these websites never expanded beyond an obscure niche service and never gained popular or commercial success. When I first embarked on this research project in 2014, I was excited to study these newly emerging services that held the promise of becoming a widespread phenomenon. But as the project unfolded, my research turned into a historical study, documenting a short-lived and unsuccessful form of digital communication.

Despite their fleeting existence and failure to deliver their promise, this thesis argues that studying online immortality services is essential to understand the mediation of mortality in the west[2] in the early 21st century. The potential of such novel forms of symbolic transcendence of death is significant as it speaks directly to the long-lasting and fundamental entanglement between media technologies, death and beliefs in posthumous survival, ghosts and spirits (Hill, 2011). Thus, this thesis argues that studying this seemingly obscure and short-lived phenomenon is essential for understanding contemporary media and their role in the mediation of death as they are an attempt to materialise the circulating contemporary visions of immortality embedded in and evoked by the affordances and the social imaginaries of the digital age. Furthermore, online immortality services embody the paradoxical relationship between digital media and immortality: they promise eternity and transcendence but are themselves not only mortal but profoundly ephemeral, possibly more fleeting than other practices and technologies of continuity.

Moreover, I argue that studying online immortality services links directly to one of the most fundamental roles of society: mediating mortality. By mortality, I refer primarily to managing human awareness of death and its inevitability. This thesis proposes that understanding the available modes for managing the knowledge of human mortality is a helpful and important avenue for understanding the society in which these modes exist and the historical moment in which they emerge.

[2] By 'west' I refer to the cultural category also referred to as the 'global west', to describe a group of countries sharing similar practices and ideologies such as capitalism, democracy, individualism and others. Thus, the project refers specifically to North American, Britain and western European countries which share similar death-related as well as technological practices and imaginaries. While I use the term 'west' as a proper noun to mark a specific cultural context that does not claim any form of universality, I choose not to capitalise it given the high visibility of the global west in culture and in academic research.

Examining how emerging technologies mediate mortality in the early 21st century and the paradoxical relationship between immortality (characterised by stability, continuity, and conservation) and digital media (characterised by malleability, ephemerality, and innovation), this thesis focuses on online services that offer users supposed control over their posthumous digital life. I argue that while online immortality services promise their users extensive control over their symbolic posthumous endurance, they ironically fail in the face of the very same technological, social, and commercial conditions and imaginaries that led them to emerge. As online immortality services are dying, this project is one of preservation and conservation of unsuccessful contemporary attempts to thwart death through media.

In what follows, I first explore the mediation of mortality as one of society's fundamental roles. Then, I provide a brief historical overview of the role of communication technologies in the mediation of mortality. Next, I outline the distinct ways in which digital media mediate mortality and make the case that studying online immortality services is a particularly conducive avenue for understanding the contemporary mediation of mortality. Consequently, I discuss digital immortality and its specificities, outlining the emergence of online immortality services, their stakeholders, and business models. Finally, I present an overview of the structure of the thesis.

1.1) Taming the Horror: The Social Mediation of Death

Humans know their mortality: they know that their time on earth will, sooner or later, inevitably come to an end. This awareness causes tremendous fear: "The horror of death," writes Zygmunt Bauman, one of the most influential social theorists of the 20th and early 21st centuries and a prominent critic of modernity, "is the horror of void, of the ultimate absence,

of ‘non-being’. The conscience of death is and is bound to remain *traumatic*” (Bauman, 1992, p. 13, italics in original). At the same time, human awareness of mortality is also a great motivator for creating, constructing, and generating ways to imbue life with meaning in the face of death (Bauman, 1992a, p. 3; Kellehear, 2007, pp. 105–107; Scheffler, 2014).

Some scholars argue that sustaining meaning in the face of death and providing continuity are culture’s primary and most fundamental roles (Bauman, 1992a; Michael Hviid Jacobsen, 2017b, pp. 3–4; Kellehear, 2007, pp. 105–117). Bauman saw the mediation of death as fundamental to society. He observes: “Without mortality, no history, no culture – no humanity. Mortality ‘created’ the opportunity: all the rest has been created by beings aware that they are mortal” (Bauman, 1992a, pp. 6–7). Culture tames death’s threat of absolute annihilation by rendering life, although finite – meaningful, thus turning death’s destructive potential into a substantial fundamental force (Bauman, 1992a; Blauner, 1966; Gore, 2001; Mellor, 1993; Scheffler, 2014; Seale, 1998). Importantly, Bauman refers to mortality as the awareness that humans are mortal (rather than how societies deal with the aftermath of a specific death), and it is this definition that informs this thesis.

The mediation of mortality, then, refers to the traditions, practices, and myths in a given society that are oriented towards managing the undeniable knowledge of death and providing ways for individuals to imagine themselves symbolically transcending death. It entails accepting that everything must come to an end but sustaining a promise and hope that some things will never end. The specific ways this continuity is imagined and practised vary across societies and over historical moments. Lifton and Olson, the proponents of symbolic immortality as a psycho-social and historical theory, make a similar yet much more provocative claim in their book *Living and Dying* (1975):

> One way to understand human history is to see it as *the effort to achieve, maintain, or reaffirm a collective sense of immortality under constantly changing conditions*. For the modes of immortality to be meaningful, they must relate to the particular kinds of experience characteristic of a given historical period (Lifton & Olson, 1975, p. 79, italics in original).

It would be far-reaching to argue that the entire human history is reducible to those moments in which social modes of imagining one's posthumous continuity go through a transformation, and that is not the case I wish to make. Nonetheless, when changes in these modes do occur, they often speak to other significant social shifts. As Bauman also proposes:

> Most, perhaps all, known cultures can be better understood (or at least understood differently, in a novel way) if conceived of as alternative ways in which that primary trait of human existence – *the fact of mortality and the knowledge of it* – is dealt with and processed, into the major source of life's meaning. (Bauman, 1992, p. 9)

Therefore, researching the potential emergence of new practices of symbolic transcendence would be valuable for understanding contemporary society, its technologies, and their practices of use.

Underlying the mediation of mortality is the fact that death cannot be forgotten: During one's lifetime, sooner or later and in different ways, one will face death (first of others, and eventually of one's own). Thus, societies seek to provide meaning and a sense of continuity after a death occurs while also containing the knowledge of death's inevitability. Societies need to mediate mortality to enable living a value-laden life, trusting there will be continuity while knowing that everyone's existence will end one day (Scheffler, 2014). Thus, in

mediating mortality, societies seek to manage an unresolvable tension between annihilation and continuity.

In the literature on the sociology of death, the mediation of mortality during modernity – especially most of the 20th century – is often explained as reflecting either denial and sequestration of death or obsession with death. Both narratives focus predominantly on mediating mortality through dealing with events of a specific death (i.e., when a corpse is present). Conceptualising the mediation of mortality as a dialectic of annihilation-continuity allows moving beyond the debate on whether western societies are death-denying and exploring phenomena that do not necessarily focus on disposal, grieving, or memorialisation practices. Instead, it enables an exploration of the constant negotiation of death's presence and mortality awareness.

Although the thesis focuses on the mediation of mortality, understood as the awareness of death and social promises of continuity (these are practices separate from and different to dealing with the aftermath of a death), it is fundamental to begin by understanding practices of sustaining the symbolic presence of those already deceased. The sustained symbolic presence of the dead is crucial not only for managing grief but also for mediating mortality: preserving the presence of those who have passed away serves several significant functions for the living, including offering them the promise of continuity after they, too, pass away by sustaining practices and rituals of commemoration. Thus, while the continued presence of the dead poses a reminder of mortality and death's horror, the complete exclusion of the dead from society would evoke anxiety in other ways. Therefore, a central aspect of western societies' mediation of mortality is making space for the presence of the dead and death within "safe" constraints.

The annihilation-continuity dialectic is thus helpful to understanding how western societies treat their dead. The dead are constantly excluded, removed, and disavowed while simultaneously cherished, honoured, and protected. Put differently, the living simultaneously reject the dead and are drawn to them (Kellehear, 2007, p. 42), seeking to let them go while maintaining their memory. The dead's sustained memory contributes to how the living imagine their own future continuity.

Communication technologies play a key role in sustaining the symbolic presence of the dead. At their core, communication technologies shape and negotiate practices of absent presence (Peters, 1999). They afford different forms of presence at a distance over time or space. Since the 19th century, there has been a significant and rapid change in the development and diffusion of new communication technologies, from the photograph to the personal computer. These technologies facilitated the emergence of different practices of communicating at a distance, storing, and circulating the traces of the dead, and in so doing, they inspired hopes of posthumous communication and provided avenues for imagining one's own future posthumous existence.

To contextualise the current study of the contemporary mediation of mortality through digital media, I now turn to provide a brief historical overview of paradigmatic shifts in the mediation of death during modernity. I use this overview to describe the co-constitutive dynamic between communication technologies, practices of memorialisation and mourning, and hopes of posthumous endurance in modern western societies.

1.2) The Modern Mediation of Death in the West: From Exclusion to Pervasiveness

Drawing upon theorisations in media and communications studies, I understand mediation as a non-linear, multifaceted process of meaning-making involving both mass media and interpersonal communication technologies (Couldry, 2008; Gumpert & Cathcart, 1990; Kember & Zylinska, 2012; Lievrouw, 2009; Silverstone, 2005). Notably, the mediation of death does not refer only to something that happens in or through media. Rather, I consider communication technologies as one among other social mediators of death (Krajina, Moores, & Morley, 2014; Morley, 2009). This section will briefly explore some of these social mediators before focusing on the role of media and communication technologies.

Human societies have long utilised technologies, rituals, myths, practices, and symbols to delineate a barrier between life and death, negotiating the presence and absence of death according to the cultural, social, and historical context of their time. This barrier, like all barriers, is both a form of separation and connection: Keeping death's horror at bay on the one hand while maintaining the knowledge (and experience) of death's inevitability on the other.

Some argue that modern western societies are death-denying, as manifest in the emergence of sequestration practices mainly during the 20th century (Ariès, 1974; Elias, 1985; Gorer, 1955; Mellor, 1993; Mellor & Shilling, 1993; Stanley & Wise, 2011). However, other scholars suggest that the sequestration narrative omits other significant modern practices, such as public regulation of death and the presence of death in mass media, which make death's presence nearly ubiquitous (Sumiala & Hakola, 2013, pp. 74–75; Walter, 1991).

Thus, instead of characterising western societies as either excluding death or accepting it, I apply the perspective of an annihilation-continuity dialectic and look at how both (annihilation and continuity) are managed simultaneously through *controlled-presence practices*. Controlled presence allows me to capture both practices of exclusion and inclusion of death in everyday life, thus opening a space to explore not only *if* the dead are present or not, but crucially also *how.*

In modern western societies, massive urbanisation, increased secularisation, individualisation, and the rise of rationalism and science (Bauman, 2000; Giddens, 1990; Thompson, 1995) contributed to a process of excluding the materiality of death from everyday life. Public health improvements increased life expectancy during the first half of the 20th century. In addition, the medicalisation of death rendered personal encounters with the bodies of the dead extremely rare (Ariès, 1974, 1982; Goldberg, 1998; Kearl, 1989; Mellor & Shilling, 1993; Walter, 1994). This disappearance of the materiality of death increased social anxieties and fears around it. Given that the complete elimination of death and the dead is impossible, these practices of exclusion were paralleled with more inclusionary practices through symbolic representations of death (Goldberg, 1998).

During the 20th century (mostly its second half), due to changes in disposal practices and social understandings of grief, the symbolic presence of death and the dead has become increasingly pervasive in everyday life. The rise of hospice and palliative care movements, the practice of road-side memorials, the growing popularity of cremation and ashes-scattering practices, and the paradigmatic change in the psychology of grief and representations of death on mass media have all contributed to an increased symbolic presence of death and mortality

(Kwilecki, 2011; Stroebe & Schut, 1999; Valentine, 2008; Vickio, 1999; Walter, 2017).[3] According to Walter, this is a paradigmatic shift from exclusion towards a pervasiveness of the dead, culminating in the early 21st century (Walter, 2017, 2018).

Notably, the period described in this short overview was also a period of significant turbulence and historical changes, including the American Civil War, two World Wars, the Cold War and its aftermath, increased globalisation and the expansion of neoliberal ideology and economic logic. These were also the years in which western societies achieved significantly longer life expectancies due to scientific and medical research and public health regulation. All these processes have shaped both the social construction of death and mourning as well as the design and use of media technologies.[4]

During the 19th, 20th and early 21st centuries, communication technologies have played a key role in this shift towards the pervasiveness of death. As explored above, earlier communication technologies have afforded different forms of presence for the dead as part of an ever-changing dynamic between the social construction of death, mourning practices, available technologies, and historical contexts. Importantly, this overview is not a comprehensive historical account of these co-constitutive relationships between media and

[3] The scope of this chapter does not enable to cover the historical transition in disposal practices and care for the dying. In both cases a similar process of exclusion and later growing pervasiveness unfolds over the 20th century. For further reading on the emergence of cremation as a common practice and its context in further processes of secularisation, environmental concerns and financial incentives see: Jupp, P. C. (2006). *From dust to ashes: cremation and the british way of death*. Palgrave Macmillan. , Walter, T. (2017). *What death means now*. Policy Press. For further reading on the emergence of hospices and palliative care and their role on re-incorporating the dying in their communities, and more recently through the use of online media in this process see for instance: Doka, K. J. (2003). The death awareness movement: description, history and analysis. In C. D. Bryant, P. M. Bryant, & D. L. Peck (Eds.), (pp. 50-56). SAGE Publications Ltd.

[4] Given the scope and the purpose of this chapter, it is impossible to provide a comprehensive history of the deeply entangled relationship between communication technologies of the 19th and 20th centuries and death. This historical overview will exclusively focus on the role of these media in blurring boundaries between the living and the dead, inspiring hopes about keeping the dead symbolically alive, practices of controlling their posthumous presence, and ways of imagining the continuity of the self and/or one's community (family to nation). For further readings on this relationship, see for instance: Peters, J. D. (1999). *Speaking into the Air: A History of the Idea of Communication*. University of Chicago press. , Walter, T. (2013). *Communication media and the dead: From the stone age to Facebook*.

mortality but rather serves to tease out the main themes in this long-lasting relationship which help understand the phenomenon under investigation in this study.

1.2.1) Communication Technologies and the Symbolic Survival of the Dead

Communication technologies function as "both means for communication and of memory, of remembrance" (Jones, 2004, p. 83). They enable the circulation of news about the occurrence of death, means of sharing grief, and produce traces that symbolically allow the dead to 'live on'. For this reason, there has been an ongoing and co-constitutive dynamic between mourning practices and technological practices of design and use.

Since the 19th century, western societies have experienced significant changes in their mediated communication technologies and practices. This period has seen the emergence and widespread adoption of the telegraph, telephone, radio, home photography, television, cinema, home video, and most recently - smartphones, computers, and other digital media. Each of these widely diffused technologies allowed for the emergence of practices of controlled presence of the dead.

To unpack this, I briefly explore how earlier media – specifically photography and telegraphy – have been formative and constitutive of the technological mediation of death by blurring the boundaries between the living and the dead and inspiring enchantment and hopes of post-mortem survival and ways of imagining one's own posthumous continuity.

1.2.1.1) Recording and Eternalising Traces

Emerging in the 1830s, photography has been associated with death since its inception. Photographed referents are eternally motionless and soundless, thereby infusing all photographs with connotations of death (Barthes, 1981; Bazin, 1960; Doane, 2007;

Mulvey, 2006; Sontag, 1973). Due to their direct causal connection to the photographed referents' presence and given their stillness, photographs are seen as capturing a moment in time for eternity but also providing a reminder of the 'death' of this moment and symbolically 'killing' its referents (Mulvey, 2006; Sontag, 1973).[5]

Perceptions of photography and its relationship with the dead were co-constitutive with the Modern Spiritualism movement whose popularity in Britain and American societies increased throughout the 19th century. Paranormal interpretations of the technical function of the camera in absorbing light imbued the photograph with supernatural connotations, and many believed that photography could capture the spirits of the dead. Photography was also incorporated into spiritualist practices. Spirit photography was claimed to make visible the ghosts that the naked eye could not see. In this way, photography was conceived as a technology of illusion and of evidence, magic and science (Hill, 2011, pp. 34-35). This ambiguity is deeply interwoven with the history of media (Gell, 1988; Hill, 2011). I further elaborate on these themes of enchantment, ambiguity, and hopes for technologically mediated posthumous communication when I discuss telegraph in the next section.

Aside from Spiritualism, early photography practices were fundamentally linked with death. In 1940s Britain, an outbreak of deadly and infectious diseases made death (especially of young children) ubiquitous. Photography was used to capture the likeness of recently deceased loved ones (Mulvey, 2006, p. 59; Ruby, 1995, pp. 26-47; West, 1996). Although expensive, this *memento mori photography* was accessible to less affluent families compared

[5] Early days of photography, and specifically practices of memento mori photography also inspired magical discourse, contextualised with the rise of Spiritualism. The technology of photography was enchanting in its capacity to freeze a moment and to capture one's likeness, leading also to fears and anxieties about the consequences of photography, such as removing layers of one's soul. For further reading see for instance: West, N. M. (1996). Camera friends: early photography, death, and the supernatural. *The Centennial Review*, *40*(1), 170-206.

to earlier death portraiture paintings, increasing its popularity among the upper and middle classes in Victorian Britain and the United States (Bell, 2016; Ruby, 1995, p. 43). Memento mori photography was a symbolic attempt to defy death. At a time when individual lives were "tenuous, their image at least could endure" (West, 1996, p. 172). As it grew in popularity in the UK and the USA, post-mortem photography also grew in profitability. Photographers began advertising memento mori photography and additional products such as albums and display cases, monetising on death and mourning (Stanley & Wise, 2011, p. 956).

Early photography was also fundamental in documenting the American Civil War. These battlefield pictures were very different from the alive-like or asleep-like representations of the dead in memento mori photographs (Ruby, 1995, p. 13). Nonetheless, they also epitomise the tension of photographs as inescapable reminders of death and loss as well as a way of keeping the dead symbolically alive (Ruby, 1995, p. 174).

During the 20th century, memento mori photography became uncommon and socially unaccepted (Ennis, 2011; Ruby, 1995).[6] Improved public health and the sequestration of death made it less prevalent and highly medicalised, making it technically harder to obtain photographs of the recently deceased who were isolated in hospital beds. Those who did manage to obtain such photographs kept them secret as such explicit photos of death became a taboo (Ennis, 2011).[7] Moreover, the launch of affordable compact cameras enabled individuals to capture other precious moments of their life rather than their death, leaving records of all sorts of life events (Barthes, 1981; Hirsch, 1981, p. 44). It instead became a

[6] According to Ennis (2011), when expressing today interest in post-mortem photography, people assume interest in other practices that are socially judged as distorted.

[7] It is important to note that post-mortem photography did not completely disappear, but rather changed. In many ways, the emergence of digital photography afforded a resurgence of the practice in a different form. Nonetheless, they are far less prevalent than they were in the 19th century. For further reading, see: Ennis, H. (2011). Death and digital photography. *Cultural Studies Review*, *17*(1), 125-145. , Stanley, L., & Wise, S. (2011). The domestication of death: The sequestration thesis and domestic figuration. *Sociology*, *45*(6), 947-962.

custom in the west to use earlier photographs of the deceased as part of funerary practices commemorating them as healthy and usually younger than at the time of death, separating the memory of the deceased from their death (Ruby, 1995; Walter, 1994).

Using photography to maintain the presence of the dead in the world of the living also implied that one's own traces would be immortalised in a similar fashion when the day came, contributing to the deep entanglement between photography and mortality. Companies selling cameras and printing services marketed cameras as memory and nostalgia devices (Paster, 1992; Shevchenko, 2015).[8] The epitome of this was the 'Kodak moment,' marketing photography as a technology for keeping a record of precious life moments for posterity (Paster, 1992). These photographs would then be curated in a family photo album or displayed around the house, mixing the traces of those still living and those already dead. [9] Blurring boundaries between the living and the dead in the family album and the potential that any of these photos would be used in death rituals were a reminder that every photographed referent is a future-dead individual.[10] In this way, the practice of family photography also informed how individuals would imagine their own future posthumous presence, as a part of the family and its history, immortalised in its photo albums. [11]

[8] The phonograph in its early days was also marketed as a device for curating the voices of loved ones to become a future loving memory. Unlike photography, it did not become as popular as a technology for remembering the family dead. Edison, T. A. (1878). The phonograph and its future. *The North American Review*, *126*(262), 527-536. , Gelatt, R. (1956). Talking tin foil. In (pp. 1-13). Cassell and Company LTD.

[9] For instance, Hirsch (1981) explores in detail family photographs where young referents (toddlers or adolescents) are photographed next to pictures of deceased relatives, thus making the deceased present in the moment of picture taking. The new picture taken, includes the old pictures of the deceased, implying the future transcendental capacity of the picture just taken as well.

[10] This also resonates with Susan Sontag's reflection about the use of the camera to "shoot", replacing cameras with guns (Sontag, 1973, p. 10-11). The camera doesn't only stop time, but also motion, making its referents perfectly still, and in that sense, 'killing' them.

[11] Similar arguments have been made in relation to cinema as a death mask (such as Bazin). As for the phonograph, Kittler (1986/1999), Peters (1999), and others, have noted its construction as a device for the preservation of the voices of the dying.

1.2.1.2) Media and Spirits: Breaking Limits of Communication

Emerging in the 1840s United States, within the context of the emergence of photography and modern Spiritualism, the electric telegraph was the first electronic technology for instantly mediated interpersonal communication at a distance. By 1866, telegraphy enabled instant communication across the United States and overseas to England and beyond (Sconce, 2000, p. 21). The telegraph was seen to offer the promise of overcoming all limits to human communication, from national borders to geographical distance, and even the limits to communication imposed by death (Jones, 2004, p. 86; Marvin, 1988, p. 195; Prescott, 1866, pp. 119-120; Sconce, 2000, pp. 12-13, 21-26).

At a time of enchantment with electricity and electric machines, the telegraph challenged fundamental notions and experiences of distance, consciousness, presence, and absence (Sconce, 2000, p. 7). This ground-breaking technology contributed to new understandings of the permanence of the human soul and beliefs in technology's ability to contact the dead, as articulated by Modern Spiritualism.[12]

The telegraph, connecting the minds of bodies separated by geographical distance, so was the claim at the time, would also enable connecting the minds of those separated by death (Braude, 2001, pp. 2-3; Peters, 1999, pp. 100-101; Sconce, 2000, pp. 28-30).[13] Inspired by popular pseudo-scientific and religious doctrines of the time, spiritualists saw the telegraph as a model to explain how otherworldly communication with the dead would work. Moreover,

[12] The hopes of otherworldly communication were also coupled with anxieties about unleashed spirits haunting the world of the living. These were articulated not only through the spread of Spiritualism but also through frequent reports by individuals of being haunted and interrupted by the presence of ghosts (Sconce, 2000, pp. 22–23) as well as popular culture texts such as the Frankenstein novel (Sconce, 2000, p. 32). These are all reflective of the basic tension between survivors' being drawn to deceased loved ones on the one hand but rejecting them and fearing them on the other.

[13] Interestingly, scientists enchanted with magnetism and electricity, were the ones conducting research and experiments in the quest for a technology for communicating with the dead. These practices emerged at a time of rationalisation and increasingly secular perceptions of death, and the promises of communicating with the dead seemed at first as technologically plausible.

many believed that telegraph technology was invented in the afterworld and delivered to the living so that they could communicate with the dead (Sconce, 2000, p. 12).

Modern Spiritualism grew in popularity during the American Civil War as so many families lost their loved ones on the battlefield and desperately searched for comfort (Faust, 2008, pp. 181-185). Importantly, communication with the dead, it was claimed, could only be possible by those naturally gifted and skilful mediums with the ability to speak to the spirits (Sconce, 2000, pp. 20, 56-57). The concept of the medium itself, popularised in this period, epitomises the ambiguity of media, standing both for technologies of technically mediated communication at a distance and for those gifted (mostly) women[14] able to connect with the dead (Hill, 2011, p. 11). This ambiguity of 'medium' carries to later media as well, fostering both visions of technical provision of mediated communication and enchantment and hopes of supernatural capacities, specifically transcending death.

Spiritualism's scientific and technological articulations contributed to its popularity and profitability. Many attended and eagerly participated in séances, and just as many attended and eagerly participated in shows and spectacles performed to reveal spiritualist fraud and illusions (Hill, 2011, pp. 26-27).

Towards the end of the 19th century, and especially during the 20th century, Modern Spiritualism saw a decline in its popularity. Individuals associated with Spiritualism increasingly became socially marginalised and regarded as charlatans (Walliss, 2001, p. 131). Nonetheless, similar desires and fears of the presence of the dead through electronic media and beliefs in a magical or occult side of media re-emerged with later technologies (Hill, 2011, pp. 35-36).

[14] Gender played a crucial role in the rise and fall of telegraphy. See for instance Sconce (2000).

For instance, in the early days of television, reports of haunted televisions and screen-inhabiting spirits were not uncommon (Sconce, 2000, pp. 1-4, 124-126). More generally, the diffusion of television into family homes from the 1950s onwards in the west brought a ghost-like presence into everyday domestic life through the disembodied likeness, voices, and motion of those broadcast on TV.

The prospect of communicating with the dead was comforting, not only because it reassured survivors[15] that deceased loved ones continued to exist somewhere but also because it implied that the living would be able to communicate past their own future death. This hope, deeply entangled with enchantment with electricity, was rearticulated in different ways through all electronic media (Sconce, 2000).

Thus, one way of thinking about media technologies and their history is their contribution to the repeated re-negotiation of controlled-presence practices. Mortality (awareness of one's future death) cannot be forgotten, partly due to the continuous presence of the dead, which is simultaneously desired and unwanted. While each medium affords different forms and practices of making the dead present, these were also paralleled with practices controlling this presence. The photographs of the dead were contained in their frames. The living decided if, when, and where to open a family album. Telegraphic communication with spirits was only possible with skilled gate-keeping mediums. Even on television, on which death seems ubiquitous, representations of the dead are controlled

[15] I use the term *survivor* in its original meaning, referring to individuals "who remain alive after another's or others' death" (Orgad, 2009, p. 133). For further discussion on the concept of the survivor in contemporary culture see: Orgad, S. (2009). The survivor in contemporary culture and public discourse: a genealogy. *The Communication Review*, *12*, 132-161.

through aesthetical conventions, formal regulations, and informal codes, limiting the presence of the dead, thus keeping death at bay.[16]

With the increasing use of digital media and online communication in recent decades and the emergence of death-related practices online, controlled-presence practices are being reshaped in ways that are arguably distinct compared to earlier media.

1.2.1.3) Digital Media, Online Communication and The Pervasive Dead

The close of the 20th century and the first two decades of the 21st century has seen the rise and wide diffusion of digital media. Computers, the World Wide Web, smartphones, and other technologies have become ubiquitous across social domains, including death. In his 1945 essay, *As We May Think,* American scientist and head of the USA Office of Scientific Research and Development during WWII, Vannevar Bush, envisioned a machine of perfect memory. This machine would enable storing large volumes of information and make them easily retrievable (Bush, 1945). Bush's essay is considered by many to be influential in the later development of digital media and the World Wide Web.[17] These visions of perfect and enduring memory remain central in the contemporary social imaginaries of the digital age. It is perhaps not surprising that visions of memory preservation machines were articulated

[16] Representations of death both in fiction and on the news are central to television practices. While seemingly making death ubiquitous, it also developed strict codes for controlling the presence of death, keeping its horror at bay. This account is left outside the scope of this chapter. For further reading about television and representations of death, see for instance: Bourdon, J. (2004). Old and New Ghosts: Public Service Television and The Popular-a History. *European Journal of Cultural Studies*, *7*(3), 283-304. https://doi.org/10.1177/1367549404044784 , Campbell, D. (2004). Horrific blindness: Images of death in contemporary media. *Journal of Cultural Research*, *8*(1), 55-74. , Gerbner, G. (1980). Death in prime time: Notes on the symbolic function of dying in the mass media. *Annal of the American Academy of Political Science*, *447*, 64-70. , Gibson, M. (2001). Death scenes: ethics of the face and cinematic deaths. *Mortality*, *6*(3), 306-320. , Weber, T. (2014). Representations of corpses in contemporary television. In L. Van Brussel & N. Carpentier (Eds.), *The Social Construction of Death* (pp. 75-91). Palgrave Macmillan. , Zelizer, B. (2010). *About to die: How news images move the public*. Oxford University Press.

[17] One can see, for instance, how such imaginaries of a memory machine are echoed in the visions articulated by Bell and Gemmell in their *My Life Bits* project discussed earlier in this chapter.

towards the end of WWII, a time of such great destruction when so many and so much was lost.[18]

By the third decade of the 21st century, digital media and online communication have become practically ubiquitous in the west. In part, this fast diffusion can be understood in the context of greater flows of globalisation and growing migration, increasing demand for mediated communication at a distance (Madianou & Miller, 2012, p. 170). Using digital media today, individuals create abundant records of their lives – from photographs to documents, creating an archive of significant moments and important documents as well as records of the mundane (Mayer-Schönberger, 2009). The emergence of digital media and online platforms and their practices of use were co-constitutive of a culture of connectivity in which individuals constantly document and share their everyday lives (van Dijck, 2013a). The vision of recording one's life, as articulated in the *MyLifeBits* project mentioned at the opening of this chapter, became almost a reality through digital media. Notably, documenting ordinary individuals' lives more than ever before is not only enabled but also engineered by these platforms (van Dijck, 2013a).

The increasing diffusion of digital media and online platforms gave rise to an unforeseen consequence: the lingering presence of the dead online. As social platforms such as Facebook, Twitter, LinkedIn, Instagram, WhatsApp, and Gmail became increasingly popular worldwide, it was inevitable that some of their users would die. A user's death, however, does not erase their data or online accounts. This posthumous presence informed newly emerging death-related practices of online grief and memorialisation. They also further informed and inspired aspirations for obtaining digital immortality.

[18] More generally there is a close connection between the early days of computing and the Internet and WWII and the post-war era and more generally military context of development in its early ARPANet days.

Digital photographs, message exchanges, smartphone voice messages, and even one's mobile phone number or email account have become artefacts with which survivors remember and commemorate the dead (O'Connor, 2020). Accounts that remain online after the death of their users are often transformed into memorial sites as survivors continue to post on them and share their grief (Ebert, 2014, pp. 25, 37).

Indeed, the use of digital devices and the internet has become pervasive and incorporated into practically all domains of life, including death and mortality. Digital and Online media are now part of virtually all aspects of dealing with an event of death.[19] For instance, social media platforms allow for new grieving practices, such as the emergence of bereavement communities and new forms of grief-sharing (Brubaker et al., 2013; Gray & Coulton, 2013; Lingel, 2013; Nager, 2004; Walker, 2007).[20] Many of these practices also involve the online circulation of digital traces of the dead. Like earlier inscription media (such as writing, gramophone, and photography), digital media and online communication users leave posthumous media traces but in a larger volume than ever before.

[19] The focus of this chapter does not allow for a detailed overview of all the ways in which digital and online media have become intertwined with death-related practices. From funerals to memorialisation and grief sharing – individuals make use of digital and online media across all aspects of dealing with death. For further reading, see for instance: Allen, S. (2014, 2014). The humanist funeral practicioner's perspective. First International Death Online Research Symposium, Durham, Arnold, M., Gibbs, M., Kohn, T., Meese, J., & Nansen, B. (Eds.). (2018). *Death and digital media*. Routledge. , Cann, C. K. (2013). Tombstone technology: Deathscapes in Asia, the UK and the US. In C. Maciel & V. C. Pereira (Eds.), (pp. 101-114). Cham Springer Internation Publishing. , Cann, C. K. (2014). Tweeting death, posting photos, and pinning memorials: Remembering the dead in bits and pieces. In C. M. Moreman & A. D. Lewis (Eds.), *Digital death: mortality and beyond in the online age* (pp. 69-86). Praeger. , de Vries, B., & Rutherford, J. (2004). Memorializing loved ones on the world wide web. *OMEGA: Journal of Death and Dying2*, *49*(1), 5-26. , Gotved, S. (2014). Research review: Death online - alive and kicking. *Thanatos*, *3*(1), 112-126. , Nansen, B., Arnold, M., Gibbs, M., & Kohn, T. (2014). The restless dead in the digital cemetery. In C. M. Moreman & A. D. Lewis (Eds.), *Digital death: mortality and beyond in the online age*. Praeger.

[20] These online grief communities challenge the "disenfranchisement" of mourning and grieving typical of the 20th century. This is particularly important for bereaved individuals who lost a loved one in deviant circumstances from the common 'good' death, such as suicide or the loss of a child Segerstad, Y. H. A., & Kasperowski, D. (2015). A community for grieving: Affordances of social media for support of bereaved parents. *New Review of Hypermedia and Multimedia*, *21*(1-2), 24-51. , Walter, T., Hourizi, R., Moncur, W., & Pitsillides, S. (2012). Does the internet change how we die and mourn? overview and analysis. *OMEGA: Journal of Death and Dying*, *64*(4), 275-302. .

However, contemporary digital remains[21] are distinct from earlier media traces of the dead on several accounts. First, the online traces of the dead (such as their social media profiles) are considered part of the user's identity and management of self. Rather than a representation of a conversation or other communicative exchange, these are the spaces in which aspects of one's identity are performed and in which those conversations take place (Bollmer, 2013; van Dijck, 2013b). The persistence of the online presence of the dead, thus, creates an illusion that a part of the deceased's identity is *still* alive (Bollmer, 2013, p. 145; Kasket, 2012, pp. 65-66). This illusion becomes significant given contemporary online presence practices based on the long-term accumulation of asynchronous message exchanges (Licoppe, 2009; Miller, 2008). It is because of this illusion of continued presence that some scholars argue that the SNS profiles of the dead can be so precious to the bereaved. Blocked access or deletion of digital traces of the deceased can cause significant distress for the bereaved, which some might experience as a second loss (Bassett, 2021, p. 819; Stokes, 2015).

Recent research has explored the use of digital media and specifically SNSs, by bereaved individuals seeking to continue their bonds[22] with the dead. For instance, some grieving individuals write emails or social media posts directly to the dead, updating them on recent events or just expressing their feelings (Akinyemi & Hassett, 2021; Irwin, 2015; Staley, 2014; Walter, 2018).

While contemporary expert understandings of grief view the practice of continuing bonds as beneficial for those grieving (Akinyemi & Hassett, 2021; Stroebe & Schut, 1999,

[21] While the term 'digital remains' refers to the accumulation of different digital media traces one creates over her lifetime (including, digital photographs, online banking accounts, comments on websites, browsing history, emails, etc., as well as personal meta-data mined by corporates), much of the research on digital remains focuses on SNSs and specifically Facebook as the epitome of these new types of traces and practices.
[22] Continuing bonds is the term used to describe the contemporary understanding of grieving processes according to which maintaining relationship with deceased loved ones to a certain extent is beneficial for the bereaved.

2010), communicating with the dead using the same online spaces and devices as when they were alive (such as the dead's lingering Facebook or Twitter accounts, sending SMSs to the deceased's phone) seems to be another form of blurring the boundaries between life and death. Such blurring of boundaries makes the presence of the dead: "quite common and not particularly unique nor removed from ordinary online life. In short … in our contemporary digital culture, relationships between posthumous and living persons may not be dramatically different from existing online friendship practices" (Meese et al., 2015, p. 417). This description resonates with Peters' quote to which I referred earlier, describing the indistinguishability between communication at a distance and communication with the dead (Peters, 1999, p. 149).

Another way digital traces are distinct from earlier media traces is that continued access to online traces requires access to technology and infrastructure maintenance. Access to some online traces requires passwords that the bereaved might not possess. All online traces require at least a digital device, electricity, a working internet connection, and software to support the online content's format. But more importantly, these online traces are owned by private corporates, which may not only deny the bereaved access to the traces of the deceased but can also delete those traces altogether. Moreover, as these companies own the data of the deceased, they can also continue to use them to make a profit. I return to this point later in the chapter as I further explore the commodification of online immortality and online immortality services.

Finally, digital and online traces of the dead are distinct not only due to their pervasive presence but also because they seem to shift the control over the presence of the dead. Through their digital and online traces, controlling the presence of the dead seems to no longer be predominantly in the hands of the bereaved. Such uncontrolled presence can

happen through the unintentional traces of the dead that one might unexpectedly encounter, for instance, when the Facebook nostalgia feature reminds you of a picture your deceased friend uploaded to their profile a few years ago.[23]

The pervasive and uncontrolled presence of the dead online has inspired the emergence of a new type of online service explicitly dedicated to enabling future-dead[24] individuals to manage their *own* posthumous online presence. Such practices potentially further blur the boundaries between the living and the dead, supposedly *shifting the control over the presence of the dead from survivors to the dead themselves (and contingent on the corporations that own their traces)*. This thesis focuses on these online services and the practices they afford. In the following section, I briefly define these services and discuss their contribution to the commodification of online immortality.

1.3) Online Immortality Services

Online immortality services are web-based companies offering a ground-breaking idea: to extend individuals' online agency beyond death and control *their own* posthumous presence by enabling them, for instance, to send posthumous emails, prepare future self-memorials, and create digital avatars. The prospect of such self-controlled online immortality seems to appeal to investors looking to fund new, innovative enterprises that might become

[23] This was a major problem that Facebook hadn't anticipated and had to deal with when releasing their *Reconnect* feature. Aimed to encourage users to extend and sustain their networks by reaching out to contacts with which they haven't interacted for a while, the feature also suggested users get in touch again with deceased friends and family. As a response, Facebook released a memorialising feature enabling individuals to change the categorisation of a profile of a deceased loved one. See: Bunz, M. (2009). *Facebook asks users to reconnect with the dead*. The Guardian. Retrieved 14th April 2023 from https://www.theguardian.com/media/pda/2009/oct/27/facebook-dead-reconnect-memorialise.

[24] Of course, we are all 'future-dead'. I use the idea of 'future-dead' here to emphasise that the services are offered to individuals who want to plan their own posthumous presence rather than to bereaved individuals who wish to commemorate others.

a financial success (Nansen et al., 2021, p. 13). For instance, this appeal can be seen in the venture capital invested in digital estate planning companies, such as 3.45 million USD invested in Everplans.com and 6 million USD invested in Passwordbox (Öhman & Floridi, 2017, p. 645).

Notably, online immortality services are not the first to attempt to monetise mortality, as I have touched upon earlier. The traditional death industry,[25] including, for instance, funeral homes, undertakers, and crematoria, is estimated at sixteen to twenty billion USD annually in the USA and about two billion pounds per year in the UK (Arnold et al., 2018, p. 2). Ensuring one's own future legacy is also part of this traditional industry with profitable services such as estate planners, financial advisors, will writers, and insurance providers. Nonetheless, the emergence of online immortality services is more closely linked to developments and practices in media technologies rather than changes in the traditional death industry (Arnold et al., 2018, p. 3). That is, while the traditional industry has incorporated the use of some digital media (e.g., the use of digital photographs in funerary services), the online immortality services discussed in this thesis are not funded, designed or promoted by traditional death industry actors, and are instead the independent initiative of individuals (Arnold et al., 2018, pp. 2-3) inspired by and working within contemporary social imaginaries of continuity and of technology.

It is worth pointing here the fundamental contradiction between what online immortality services offer and an essential feature of the economy in which they emerge. Very few start-up companies become successful, and most of them vanish just as rapidly as they appeared (Nansen et al., 2021; Wajcman, 2018). For this reason, investors intentionally

[25] By traditional death industry I refer to the industry emerging and growing over the 20th century, including a variety of professionals providing death-related services dealing with all aspects of funerary practices.

finance multiple projects, knowing most of them will fail. This tension (far-reaching promises and financial resources for start-ups likely to vanish) fundamentally links to the annihilation-continuity dialectic explored in this project.

I use the term online immortality services, then, to refer to web-based companies providing products designed to manage one's future posthumous online presence. In what follows, I unpack this definition and locate these services in the larger field of the Digital Afterlife.

1.3.1) The Digital Afterlife

I use here digital afterlife as a blanket term referring to all phenomena of posthumous online endurance and presence. In this section, I position online immortality services in this broader field. Fundamental to my definition of online immortality services is that these companies are intentionally created to offer a service *geared towards dealing with one's own future posthumous online presence*. This definition distinguishes these companies from other providers of posthumous endurance. For example, while a bereaved individual sharing on social media a post with a picture of the deceased or any social media profiles of the dead that remain online may provide the dead with a posthumous presence, these are not the *purpose* of the service. Therefore, firstly, drawing on Lagerkvist's (2018) typology of the digital afterlife, I distinguish between spontaneously occurring practices (such as individual grief expression on SNS) and purposefully designed services.

Secondly, I distinguish online immortality services from other digital afterlife phenomena based on intended users: services designed for bereaved individuals dealing with the death of a loved one (such as online graveyards) are not part of the corpus. Instead, I focus on services whose intended users are the future dead who wish to deal with their own

mortality online. Table 1 summarises the mapping of the field and online immortality services as part of it.

Design	Spontaneous Practice		Purposefully Designed Services	
Practice	Unplanned encounters with the unintentional traces of the dead.	Spontaneous memorialisation, mourning, continuing bonds.	Memorialisation and bereavement services.	Digital estate planning, posthumous communication.
Imagined users	Not specific to death-related practice or experience.		Bereaved	Future-dead

Table 1: a typology of death online

Thus, the web-based companies in the focus of my research provide online services to users who wish to manage their *own* online posthumous presence. I use the term 'manage' to encompass a host of possible arrangements and actions offered by websites and their creators. These can range from long-term sustaining posthumous presence to a single farewell message. Alternatively, they may involve instructions to delete one's online profiles or, more generally, diminish one's posthumous online presence. I further explore the specific features and practices enabled and constructed by different websites in Chapter Four. For now, suffice to say that the services offer various forms for managing one's posthumous online presence (or lack thereof) and that all features provided by these services are only executed after the death of the user.

Providing the service only after the user's death implies that the companies are not likely to be held accountable for their service's quality or for having provided it at all. Moreover, the business models of these companies are also detached from the actual posthumous provision of their service. Online immortality services rely on users' payment for revenue. For instance, for some services, users pay a yearly subscription, while with others, users pre-buy a limited number of posthumous messages. They can later purchase additional messages if they so wish. Most online immortality services provide some free features and

additional ‘premium’ paid-for features. These vary across providers but range on average between ten to fifty USD per year (Öhman & Floridi, 2017, p. 646) or between fifty and one hundred USD for a single upfront payment. The point of profit, thus, is the moment the users purchase their product or subscription. Therefore, the companies’ revenue does not depend on the actual posthumous provision of their service.

This separation between revenue potential and the actual provision of posthumous services is ethically ambiguous. On the one hand, this detachment implies that there are no financial incentives to make sure the posthumous services are indeed provided, which is particularly concerning given the many companies that have closed after potentially having charged their users but before delivering the promised service. On the other hand, in the context of the culture of connectivity, a business model that is subscription based rather than users’ metadata accumulation-based might be more ethical in the context of posthumous remains and using them for additional profit. To unpack this idea, I first characterise the stakeholders of these services.

1.3.2) Stakeholders and the Economy of Speculative Value of Data

Online immortality services have three main stakeholders: *users* (future-dead), *recipients* (future-bereaved), and *third-party corporates* (platforms owning digital traces or such as recipients’ email providers). *Users* are ‘to-be-dead’ individuals and are the direct customers of the websites. The future-dead users sign-up, pay the subscription, create and manage content, and use the specific features available on the website. Upon the users’ death, the companies would supposedly execute specific features as the users specified in their account (e.g., send an email to a specific recipient or delete an account).

I define *recipients* as all the future-bereaved or future-survivors individuals linked to an account by the user. Therefore, recipients are those who will obtain access to the digital traces or posthumous messages as specified by the (by then) deceased users. This category also includes those authorised by the users to activate their accounts by notifying the website of the user's death.[26]

Finally, *third-party corporates* are any other company or platform that is linked to the account by the user. These include, for instance, social media platforms owning the profiles that the user might want to bequeath (e.g., Twitter) or the companies providing the email accounts linked to future-bereaved recipients.

No reliable data are currently available for the numbers of subscribers to these services[27] or their revenue. The fact that most of the start-ups explored in other studies as well as the current thesis closed over the years might suggest that none of them, to date, has proved to be sustainably profitable.

Öhman and Floridi (2017) emphasise the revenue potential of online traces and claim that the *Digital Afterlife Industry*[28] encourages the continued posthumous online presence of the deceased because of their continued profit potential. One of the most compelling examples they provide is that it is significantly easier to 'memorialise' a deceased person's Facebook profile than to delete it. The incentive for this setting, they argue, is that the

[26] Some call the category of recipients "inheritors". I find it more useful to regard to them as recipients as it describes them as being on the receiving end of a communicative act, and not necessarily the heirs of a an object.

[27] Some scholars quote the numbers 100,000 users on Eterni.Me and 50,000 users on Eter9 (for instance, Öhman and Floridi, 2017, p. 646). These, however, are problematic as these were numbers mentioned by the companies themselves on their homepages, stating the number of people registered to participate in their beta once it opened (which at least for Eterni.Me, it never did and eter9 moved from beta to beta, then changed its name several times). It remains unclear how accurate this number ever was given how it was published, clearly aimed to motivate more individuals to subscribe.

[28] In this definition, Öhman and Floridi refer to all forms of posthumous presence online, including unintentional remains as well as mourning and memorialisation websites, all of which are related to but outside the focus of my thesis.

enduring presence of the dead on the site allows their data and their connections' data to continue to be mined (Kneese, 2019, p. 300; Öhman & Floridi, 2017, p. 641).

As described earlier, however, the business models of online immortality companies rely on user payments rather than data mining (which also means there are no features such as commenting, sharing, or advertisements typical of the Web 2.0 economy). This is a highly atypical model in the contemporary practice of social platforms, which rely on collecting users' data assuming that future value will be produced given a specific query that may arise (Raley, 2013, pp. 122-123). In this context and given the future speculation inherent to the product the services provide, their choice of subscription-based business models is particularly striking.

While the financial stake for third-party companies seems straightforward, it is less so for users and recipients. Some of these companies claim it is financially prudent to put one's digital traces in order. For instance, according to some websites, the average worth of digital assets accumulated by North American individuals over their lifetime is approximately $37,000 - $55,000 (Kneese, 2019, p. 319; Öhman & Floridi, 2017, p. 645). In the face of such claims, the financial stake for individual users of online immortality services might seem obvious. However, the basis of these calculations is unclear. Moreover, while the financial value of some digital assets is clear (such as online banking accounts), the value of other digital assets, such as one's collection of photographs or SNS accounts, is not straightforward or easily measurable. Furthermore, this estimate of digital assets' value is probably in terms of the potential profit of platform owners rather than the users.

To a certain extent, therefore, online immortality services work against the economic logic of accumulating data using connective media (van Dijck, 2013a, p. 13). Their business models do not require mining their users' data for revenue. The future endurance of users'

posthumous traces or lack thereof does not directly impact the profitability of the service providers.

However, online immortality services are not external to the economic logic of the speculative value of data but rather perpetuate and naturalise it. The very act of planning for one's digital traces imbues them with both financial and affective value (Kneese, 2019). Notably, most online immortality services emphasise the sentimental value of posthumous online presence. By highlighting the affective and social significance of one's online assets, their financial worth is obfuscated and with it, so is the unpaid labour done by users having created these traces. This, in turn, feeds back to the ideals of connectivity.

Moreover, while some companies offer to delete profiles, this does not delete the data already accumulated, which can still be used by the corporates earning them future revenue. Finally, to successfully deliver their services, most of these companies depend on the continued endurance of third-party companies. For instance, to posthumously send an email, the corporate providing email services must remain active. In this way, online immortality services contribute to naturalising the use of media platforms and the accumulation and ownership of the corporates providing these platforms over their users' data – whether dead or alive.

Online immortality services, thus, have a multifaceted relationship with the future. On the one hand, they are based on promises of future endurance, working in the context of a speculative economic logic of future value. At the same time, they detach their own success and profitability from such future-orientedness. Finally, their short-lived existence is in stark contrast to the fundamental service they promise to provide. All these factors contribute to making online immortality services a fruitful field of study and the multifaceted ways in which they epitomise the subject at the core of this thesis.

Studying online immortality services enables access to a technology purposefully designed to offer explicit and specific practices dedicated to dealing with one's future death while evoking contemporary social imaginaries of continuity in a digital age. Thus, the current research of online immortality services, as argued in this thesis, provides access to the contemporary role of communication technologies in the mediation of death from a less explored perspective. Rather than investigating the places where the dead are present, using online immortality services, this thesis explores specific spaces where the *potential* of death is made present.

This thesis, then, asks: how do digital communication technologies mediate mortality in contemporary western societies? I explore this question by asking three sub-questions:

1. What practices of leaving traces do online immortality services construct and facilitate?
2. What posthumous relationships between the future-dead and future-survivors are constructed and facilitated by online immortality services?
3. What digital media myths and social imaginaries are evoked by and underlie the practices constructed and facilitated by online immortality services?

1.4) The structure of the thesis

Having introduced my interest in immortality and the significance of studying online immortality services, Chapter Two provides the theoretical and conceptual framework for this thesis. It distinguishes between actual death and potential death as two sides of the social mediation of mortality and demarcates the focus of interest of this thesis in mediation geared towards potential death. The chapter then explores the concept of immortality and its history,

followed by a discussion of symbolic immortality as a specific perspective for thinking about and studying the social mediation of mortality (potential death) separately from grief and mourning. I specifically draw on the work of Lifton and Olson (1975), who developed symbolic immortality as a psycho-social and historical theory, and Zygmunt Bauman's (1992) work on mortality and immortality in times of liquid modernity. The chapter then extends the theory of symbolic immortality and establishes the role of communication technologies as fundamental for practices of *symbolic immortality* oriented towards potential death. Next, drawing on Mansell's (2012) work on the social imaginaries of the digital age, I explore the concept of social imaginaries as essential to understanding both symbolic immortality and the role of contemporary communication technologies in the mediation of mortality in the current moment.

Having established the purpose of the study and its conceptual framework, Chapter Three presents the methodological approach and research design used in this study to answer my research questions. The chapter positions the thesis in the tradition of cultural studies. Then, the chapter discusses websites as essential for this research, explores websites as an object of study, and reflects on how they inform this study conceptually, empirically, and methodologically. Next, the chapter discusses the study's role in conserving this digital phenomenon and how this conservation effort speaks to the topic under consideration. Drawing on my interest in the social imaginaries of digital media and of continuity, as explained in the theoretical chapter, the chapter establishes the need to interview the individuals engaging with the services studied. Subsequently, the chapter describes the methods used for data collection and analysis, reflecting on challenges, decisions made, and the study's limitations. The chapter also explores the ethics of this research and, more generally, of studying mortality. Finally, it provides a brief overview of the corpus.

Chapter Four is the first of three analytical chapters. This chapter examines the concept of posthumous traces and how online immortality services offer users to manage and control their traces posthumously. The chapter shows how these services attempt to construct a practice of closure, allowing individuals to accept their mortality and plan for their posthumous online presence (or absence). The chapter also shows how the practice of closure is repeatedly undermined on several accounts. Instead of closure, the chapter argues, online immortality services create a practice of perpetual liminality, never allowing for closure to be completed. Such ongoing practice, the chapter argues, is rooted in contemporary design practices. Moreover, the chapter suggests this perpetually liminal position and non-closure is typical of and deeply embedded in the contemporary culture of connectivity and the post-mortal liquid-modern society.

Chapter Five picks up the discussion on managing traces within the neoliberal culture of connectivity from the previous chapter and explores the idea of agency as articulated by online immortality services and as rooted in the context of neo-liberal society and digital culture. The chapter examines the notion of agency, the imagined relationship between the future-dead, future-survivors, and social institutions as articulated by the services. The chapter examines how the services construct and negotiate several agencies, which are often in conflict with one another and with the promise of controllable digital immortality. The chapter discusses how these conflicts of agencies reveal the inevitable dependency of the future-dead on future-survivors and social institutions. The chapter highlights the conflict between individual agency and collective solidarity, between undermining institutions while depending on their transcendental continuity. These tensions, the chapter argues, although inherent to the relationship between the living and the dead, are further exacerbated due to

the neoliberal ideology of a modern liquid society, wherein private corporations challenge social institutions and pervasively mediate the relationship between the living and the dead.

Chapter Six focuses on the potential cost of the mediation of mortality by private corporations and digital media. It examines the social imaginaries that underlie online immortality services and their promises for controlled online immortality, as explored in chapters Four and Five. The chapter first highlights the concept of technosolutionism ingrained in the services explored in this project, turning the problem of transcendence into a technological issue. The chapter then examines the myths of digital media that circulate across the services and how these myths both enhance the promise of controlling one's posthumous presence while simultaneously rendering the very same technology uncontrollable. The chapter then explores the social imaginaries that emerge from the services, arguing that there are two dominant and contradictory social imaginaries of continuity: innovation and conservation.

Chapter Seven concludes the thesis by providing an overview of the thesis and reinforcing its main argument. Drawing on the discussions in the analytical chapters and circulating back to Lifton and Olson's historical claim, the chapter highlights the fundamental tensions between the promise of controllable digital immortality and the characteristics of contemporary culture rooted in post-mortality, neo-liberalism and technosolutionism. The chapter highlights the importance of studying online immortality services to understand the contemporary mediation of mortality. Reflecting on the posthumous endurance of the failed services, the chapter proposes reflecting on the meaning of vernacular media histories for understanding the role of the larger and more dominant forms of mediation in the 21st century. The chapter also emphasises the importance of studying failed technologies to understand technological innovation.

Chapter 2: Theoretical Framework

Death's sword in time cuts down each individual, but with respect to the social order, it is double-edged. The very sharpness of its disintegrating potential demands adaptations that can bring higher levels of cohesion and continuity. (Blauner, 1966, p. 394)

Reflecting on death and its significance doubles as an illuminating way of reflecting on life. (Scarre, 2007, p.2)

2.1) Between Annihilation and Continuity: Mediation of Actual Death and Potential Death

One of society's fundamental roles, as explored in the previous chapter, is to mediate mortality. This mediation requires managing an annihilation-continuity dialectic. In the introduction, I have already unpacked some practices encompassing this dialectic, mainly through the dual relationship towards the dead, making them both present and absent.

Using the perspective of an annihilation-continuity dialectic to study the social mediation of death enables considering a slightly different set of practices which do not necessarily stem from an occurrence of death. Put differently, the mediation of death is not concerned solely with dealing with the events of death and the presence of the dead. Negotiating annihilation and continuity also involves institutions, imaginaries, and practices that imbue life with meaning, rendering the knowledge of death's inevitability tolerable. The mediation of death, although crucial in moments of facing the death of others, does not end there. It also involves dealing with death as a concept, with the *idea* of mortality: the undeniable knowledge that life will come – at some point – to an end. This knowledge requires

mediation regardless of whether or not one has experienced the loss of a loved one. It is the mediation of the *idea* of death that this thesis aims to explore.

Therefore, as implied in the historical overview in the previous chapter, this thesis distinguishes between mediation of, what I refer to as *actual* death and of *potential* death. Figure 1 summarises these analytical categories.

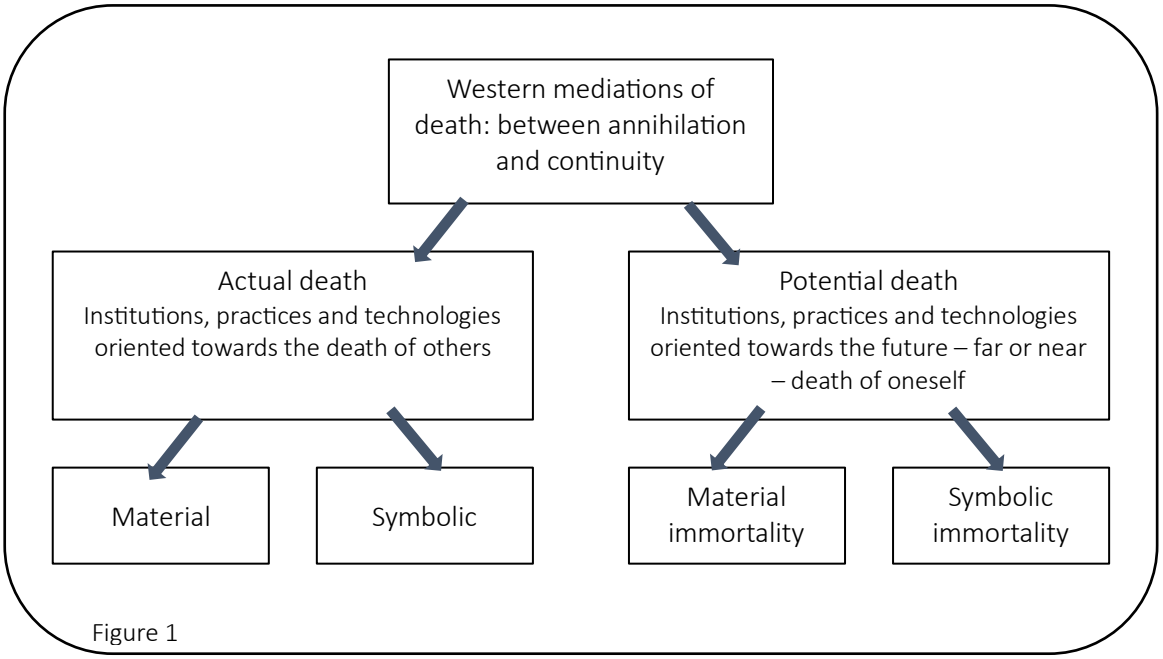

Figure 1

By *actual death*, I refer to the ways in which society mediates an occurrence of death of another person, both in terms of dealing with the material manifestation of death (caring for the body, funerary rituals etc.), as well as maintaining the memory and symbolic presence of those deceased (as briefly explored in the previous chapter). These are actions, regulations, and practices triggered by an event of death, and acted mainly, but not exclusively, by those bereaved. Actual death, simply put, refers to the aftermath of a death – the events ,actions, rituals etc., that take place *after* (or close to the moment of) an individual's death. Actual death is at the core of much of the scholarship in the sociology of death.

By *potential death*, I refer to the ways in which society mediates mortality, that is, the *knowledge* of death, the awareness of human beings of their own inevitable end. Potential

death encompasses both material aspects of mortality (for instance, attempts to postpone the moment of death) and symbolic continuity. Unlike actual death, these are not triggered by an event of death, but rather they take place *before* a death occurs (in fact regardless of if a death occurs), and these are the actions taken by future-dead individuals. The focus of interest of this thesis is the mediation of potential death.

It is important to note that both categories (actual and potential death) are essential to the mediation of mortality. Moreover, the two are often entangled together. For instance, funerary rites are both geared towards managing the aftermath of a person's death, but also function to provide survivors with a sense of continuity through the reaffirmation and perpetuation of a long-lasting tradition. Nonetheless, these categories (actual and potential death) provide a helpful analytical distinction for isolating and exploring practices that are primarily geared towards meditating mortality which is the focus of the current study.

Bauman, was also concerned with this role of society. As he writes in *Mortality, Immortality and Other Life Strategies*:

> Death makes its presence in human life weighty and tangible not necessarily (and not mainly!) in those selected places and times where it appears *under its own name.* (…) The impact of death is at its most powerful (and creative) when death *does not appear under its own name*. (Bauman, 1992a, p. 7)

Bauman makes a similar distinction between mediating actual death (when death "appears under its own name") and potential death (when death "does not appear under its own name"), and stresses how both are fundamental to the social mediation of death. Unpacking the practices through which death is present but not under its name, Bauman

refers to institutions, technologies, and practices that are “altogether different, unrelated to the preoccupations normally scrutinised in studies dedicated to the ‘history of death and dying’” (Bauman, 1992a, p. 2).

Bauman first demarcates the scope of potential death, or the knowledge of mortality, by elimination, by what it is *not* (which is all that relates to an actual event of a person dying). As Bauman writes, the mediation of mortality it is *not* about:

> The ways we treat people about to die and commemorate those already dead, the way we mourn the beloved and cope with the agony of bereavement, the rituals we device to prevent the dead from disappearing from the world of living too fast or without a trace. (Bauman, 1992a, p. 1)

After clarifying where it is *not*, Bauman points to the kinds of practices that *do* mediate mortality (which I have defined above as potential death). These practices, according to Bauman, provide “formulae for defusing the horror of death through hopes, and sometimes institutional guarantees, of immortality. The latter may be posited as either a collective destiny or an individual achievement" (Bauman, 1992a, p. 9).

This chapter provides the conceptual framework for locating the mediation of potential death as managing the knowledge of mortality via the hopes and promises of immortality. Following a general reflection on immortality, the chapter will then discuss and explore Lifton and Olson’s theory of symbolic immortality. The chapter will establish the essential (yet not articulated) role of communication technologies in practices of symbolic immortality, and will make the case that communication media and their practices of design and use are a fruitful site for studying the contemporary mediation of mortality. Finally,

drawing on Mansell's work it will present the concept of the social imaginary and its usefulness for conceptually linking the study of contemporary media and practices of symbolic immortality.

2.2) Immortality: From the Fountain of Youth to the Post-Mortal Society

To demarcate the focus of this thesis and locate it within the literature linking death and digital media, and to explain my understanding of *online immortality,* I distinguish here between three main concepts: post-mortality, afterlife (and digital afterlife), and symbolic immortality. Common to all these forms of thinking about the mediation of potential death is that they describe some pursuit of continuity in the face of death. The specific form (how one continues), scale (how long does one continue), and perspective (who or what continues) of continuity is how they differ.

Modern western societies have mediated mortality by sustaining the desire to somehow not die. Either through the telling and re-telling of magical stories about the possibility of eternal life, embarking on quests hoping to materialise these hopes, or through the emergence of practices meant to extend life, hopefully forever, the drive to defy death has been prominent in western societies (Kearl, 2017, p. 217). These myths, stories, and hopes are millennia old and continue to thrive in contemporary western societies (Cave, 2013; Jacobsen, 2017b).

Earlier myths of obtaining eternal life and defeating death continue to circulate today in popular culture to different extents. During the past century, these stories and quests for immortality, are increasingly told using the language of medicine and science. In recent years

the prospect of immortality has gained increasing popularity in the west. Rather than a philosopher's stone or fountain of youth, however, it is science and digital media that bear the promise of eternal life.

In popular media, this is a recurrent theme. In the book *Never Let Me Go* (Ishiguro, 2005), cloned humans are carefully grown to extend the life of their 'originals' by having all their organs harvested. The protagonist of *Transcendence* (Pfister, 2014) is brought back to life as an all-mighty computer. Two episodes in the acclaimed British TV drama *Black Mirror* depict different ways in which technology allows transcending death: in *Be Right Back* (Harris, 2013), a deceased husband is digitally resurrected using his accumulated digital footprint; and in *San Junipero* (Harris, 2016) dying individuals are uploaded onto a simulation where they live forever. The movie *Self/Less (Singh, 2015)* depicts a world where the dying (and the rich) can transfer their consciousness to a healthy young body indefinitely extending one's life. The series *Upload* (Daniels, 2020) presents a digital heaven onto which the dead's minds are uploaded allowing them to live on and continue to interact with the living using digital media.[29]

Also circulating in popular culture are books and lectures written by experts, offering advice on the best practice to achieve eternal life. These individuals, advocating for and explaining the very near feasibility of living forever, abolishing ageing, or uploading your mind, are not from the fringe of society but rather belong to the mainstream, hegemonic group of western, educated, heterosexual, cisgender, white men.[30] For instance, Aubrey de-Gray,

[29] It is worth noting that other types of immortals also inhabit the television and cinema screens such as Zombies (Santa Clarita Diet, 2017), and demons (such as Lucifer, 2015, The Good Place, 2017-2020), which also bring up other versions of the dream of eternal life.

[30] It is important to mention the one well known exception which is Martine Rothblatt, a famous and vocal post-humanist advocating for mind-uploading, who is a transgender woman. At the same time, her work and public advocacy in many ways perpetuates hegemonic American values, especially in relation to entrepreneurship and neoliberal markets.

British, author of several books on ending ageing and who has made several TED appearances on the same theme, holds a PhD in biology from the University of Cambridge. David Sinclair, Australian, author *of Why We Age and Why We Don't Have to* (2019), is a professor at Harvard Medical School. Ray Kurzweil, American, author of several books on diet and longevity and famous advocate for human-machine singularity and mind uploading, is director of Engineering at Google.[31] Thus, dreams and hopes of immortality are seriously debated (and funded) by individuals who occupy hegemonic positions in the tech industry and academia.[32]

The hope to ultimately obliterate death is the subject not only of fantastical stories and popular culture but also the focus of academic research. From medical research into specific methods of life extension and their feasibility (e.g., Kirkwood, 2002; Rando, 2006; Weiner, 2010), social research on the potential consequences of such a society of extremely-long living individuals (Brown, 2017; Cetron & Davies, 1998), and philosophical reflections on the feasibility of digital media to indeed extend the life of a specific self-aware and coherent individual (Jandrić, 2020; Reader, 2020; Stokes, 2021).

The quests for and promises of immortality also underlie more mundane, everyday medical practices typical of late modernity. These practices are what Zygmunt Bauman describes as the *deconstruction of death* (Bauman, 1992a, 1992b). Since the 20th century, medicine increasingly enables deconstructing death into small specific causes that can be treated. The more medicine advances, the more causes of death it will be able to solve. The

[31] Most recently (May 2022), Andrew Steele who holds a PhD in physics from the university of Oxford, gave a lecture about ending ageing at the Royal Institution in London, a traditional scientific institution that takes pride in its long scientific heritage and thus prestige. This, again, demonstrates the legitimacy and seriousness with which these ideas and hopes are publicly discussed. https://www.rigb.org/explore-science/explore/video/getting-older-without-getting-old-andrew-steele

[32] Reflecting on the historical overview provided in the previous chapter, it is worth noting the role of pioneering scientists advocation for Modern Spiritualism and exploring the use of the electronic telegraph for communicating with the dead. Importantly, scientists were also involved in the effort to disprove spiritualism and reveal fraudulent claims made by mediums.

hope is that, ultimately, medicine will be able to solve all causes of death, granting individuals a never-ending life. This deconstruction of death is what gave rise to the contemporary *post-mortal* society (Lafontaine, 2009) in which death must be fought at all costs. A post-mortal society is one in which medical screenings, health and fitness practices, and radical medical treatment when needed (and sometimes when not unambiguously needed) are pervasive in everyday life, making death practically forbidden. So much so that individuals who die are seen as failing (Ehrenreich, 2018; Gianfranco, 2007, p. 178). Thus, the post-mortal society, or the post-mortal condition as Lafontaine refers to it, is characterised both by an approach to death as something forbidden or unacceptable that must be fought against, as well as the circulation of myths of new forms of eternal life.

Although medical advancements in the past century have indeed prolonged life expectancy in the West, and while recent medical research does seem to offer ground-breaking innovations that could in the future increase longevity, such developments have also inspired pseudo-scientific theories and practices, blurring the boundaries between science and fiction in the hope of living forever (Lafontaine, 2009). Perhaps the most prominent example is cryonics which claims to enable freezing (or "suspending") a person in the moment of death in a state that would allow, at some point in the future, to bring them back to life. Cryonics advocates insist it is scientifically grounded, and the companies providing cryonics services rely on scientific discourse to market their product. In turn, the pseudo-scientific claims of cryonics repeatedly trigger scientific discussions and speculation (Lafontaine, 2009; Moen, 2015; Romain, 2010; Sheskin, 1976; Van de Kamp, 1993).

However, beyond specific imagined solutions to the problem of individual mortality, cryonics and other such myths and practices make an important claim about our collective future- specifically, that western societies *have* a future and not just any future, but one that

maintains continuity of the medical and scientific progress which will enable the delivery of the promised solution (Bennett & Huberman, 2015, p. 345; Bonifati, 2017; Lafontaine, 2009, p. 156). This claim also underlies all other narratives of immortality in the west (Cave, 2013). In the *future* awaits immortality: in the future heaven after death, in the future resurrection of all the dead; in future medical solutions to all causes of death; in the future discovery of the fountain of youth. And until that future comes, there is a society that comes together to allow that future. That is, in addition to providing specific ways in which individuals can hope to extend their lives, these stories and myths also reaffirm the continued ever-lasting existence of society, an immortal society. This idea is the essence of another form of immortality that societies promise to their members. While the immortality discussed thus far refers to the wish to not die by becoming post-mortals (what some refer to as 'biological immortality'), there is another essential way in which societies promise transcendence to mediate mortality. This is explored through the framework of *symbolic immortality*.

2.3) Symbolic Immortality

The theory of symbolic immortality, primarily developed by psychiatrist and pioneer in the field of psychohistory, Robert J. Lifton, emerged in a period of WWII aftermath, during the years of the Cold War, when the world was in an on-going state of a threat of nuclear destruction. It elaborates on the idea that when one faces death, comfort is found in the thought that a part of them will continue to live on. Symbolic immortality therefore accepts that one's life will come to an end, but qualifies that end as being non-absolute: it will not end the world, and it will not be the complete annihilation of one's existence (Lifton, 1973, 1979; Lifton & Olson, 1975). As Lifton and Olson write:

> We can see the sense of immortality as reflecting man's relatedness to all that comes before him [*sic*]. This relatedness is expressed in the many kinds of symbolisation that enable one to participate in ongoing life without denying the reality of death. (…) When people believe in such cultural projects and expressions, they feel a sense of attachment to human flow, to both their biology and their history. They feel a *sense of immortality* which enables active, vital life to go on. (Lifton & Olson, 1975, p. 60, italics in original)

Symbolic immortality, then, captures what Lifton and Olson describe as an attempt to obtain a sense of continuity in the face of the awareness that all humans will eventually die. The 'sense of immortality' is achieved by engaging in practices that connect individuals to others and, through these connections, also to their past and future. It involves acceptance that one will die, but promises that in some way it will not be one's end.

Moreover, the quest to create this connection to human history itself and to obtain a sense of immortality gives meaning to human existence (Vigilant & Williamson, 2003, p. 173). Each society, in each historical moment, has its specific available modes of symbolic immortality. These are the specific paths or groups of practices that provide this sense of continuity. This sense of connectedness and the available modes of symbolic immortality are so essential that according to Lifton and Olson, as discussed in the previous chapter, times of significant historical change can be characterised by changes in the available modes for symbolic immorality (Lifton & Olson, 1975).

Lifton and Olson are not the only ones to attribute such significance to the modes of symbolic immortality that each society provides. In fact, some argue that it is vital to explore this aspiration for immortality not only because it is central to human societies but because it is fundamentally what makes us human:

> These never-ending quests for immortality, whether actual or symbolic, are … a very human thing – perhaps that which definitively separates us from our animal ancestry. Apart from biological procreation, humans are the only creatures, presumably, that are concerned with immortalising themselves by projecting their lives, identities and ideas into the future through the production of lasting pieces of work, fame and fortune or through carefully preparing and nurturing their self-images for memorialisation after their deaths. (Jacobsen, 2017b, p. 6)

Lifton and Olson describe the modes of symbolic immortality as ways for "mastering" the anxiety created by the knowledge of death. Specifically, they argue that practices of symbolic immortality give a sense of continuity and affirm "the life imagery of connection, movement, and integrity" (Lifton & Olson, 1975, p. 71). By contrast, death is characterised as an imagery of separation, disintegration, and stasis. Thus, as one grows and gradually develops a comprehension of death, she also absorbs and practices comforting forms of continuity. These dichotomies – separation/connection, disintegration/integration, and stasis/movement as imageries of death / life – will resonate in my empirical chapters as I explore different aspects of online immortality services.

Symbolic immortality refers to experiences, practices, and institutions that allow maintaining a meaningful life in the face of awareness of human mortality. Lifton and Olson describe specific modes of symbolic immortality that they find typical of late 20th century western societies. They categorise these into five types of symbolic immortality practices: bio-social, natural, religious, creative, and experiential. Common to all of these, is the experience

of the individual as being part of something eternal through which they gain a sense of transcendence.

For instance, having children and being part of a family that sustains one's memory (and genes), engaging in academic research that becomes part of the history and future of human knowledge, religious practice providing both transcendental rituals as well as ideas of an eternal soul, and participating in transcendental experiences induced by drugs (Lifton, 1973, pp. 6-7; Lifton & Olson, 1975, pp. 60-71) are all ways in which individuals can obtain that sense of immortality. In all of these practices, individuals engage to "*affirm life in the face of death"* (Lifton & Olson, 1975, p. 79). Thus, these are not practices triggered by or geared towards managing an occurrence of death but rather towards giving meaning to life so that knowledge of death is tolerable by imagining some form of continuity.

The practices of symbolic immortality are both individualised and collective: they involve a specific imaginary of the continuity of the specific individual (leaving a specific trace of one's own in the world), along with a sense of belonging to a culture, a community etc., which are themselves transcendental (have existed and will continue to exist long before and long after an individual life). Bauman characterised similar practices: "it needs to harmonize individual self-constitution with the constitution of society" (Bauman, 1992b, p. 13). Indeed, social institutions such as the family, academia, and nation states have an important role in symbolic immortality (although this does not mean that all practices of symbolic immortality are institutionalised or formalised).

Finally, the principal subject of focus in Lifton and Olson's symbolic immortality is the to-be-dead. More accurately, they focus on the specific venues that are commonly available to individuals who know of their mortality to imagine their own continuity. These are widely, even if not explicitly, shared ideas of continuity. To emphasise this point, symbolic immortality

is about the *practices that provide a commonly shared imaginary of how one will continue after one's own death.*

I want to clarify, at this point, that the focus of this thesis is not the feasibility of defying death. The focus is instead on practices that make it possible to face death. Social practices that make it possible to bare the knowledge that death awaits all living beings, and yet, allow for life to still go on and be meaningful.

Thinking of symbolic immortality necessitates a dialectic between annihilation and continuity, death and transcendence, encompassing both the awareness of the finality of life as well as the desire to endure beyond one's lifetime. The two are often part of the same practice and go hand in hand: thinking of and imagining one's continued posthumous endurance demands also accepting one's end of life. For there to be an afterlife, there must be death. Symbolic immortality allows exploring how culture and society enable its individuals to negotiate, imagine, and create continuity, despite their awareness of their future, inevitable, annihilation.

Drawing on this discussion of symbolic immortality, then, I understand *online immortality* as the *imaginaries of symbolic continuity articulated through online communication practices*. By this definition, the word *immortality* itself epitomises the annihilation-continuity dialectic at the heart of this thesis. The conception of Im-mortality encapsulates both acceptance of human mortality and the aspiration for transcendence, somehow overcoming it. The term online immortality also demarcates the focus of this thesis in the context of other research in the field of death online and specifically, the digital afterlife.

2.3.1) Digital Afterlife and Online Immortality

Scholars studying digital media and death use the term Digital Afterlife as an umbrella term for all forms and practices of posthumous endurance of digital and online remains of individuals (Öhman & Floridi, 2017; Savin-Baden & Mason-Robbie, 2020). Thus, the Digital Afterlife can refer either to the intentional or unintentional digital or online remains of an individual, as well as to memorialisation or bereavement practices that take place using online media. Thus, a Digital Afterlife is more similar to Scheffler's (2014) articulation of afterlife, referring to anything and everything that happens in the world after someone dies. Thus, although akin to the idea of immortality, it involves a broader scope, and often leans towards the study of bereavement.

One of the reasons that some see the Digital Afterlife as a preferable term (rather than immortality) is the ephemerality of digital objects (Bassett, 2020, p. 80; 2021, p. 814). Digital Afterlife, they argue, refers to everything the digital remains of a deceased individual undergoes, without assuming long, or in fact any particular length of endurance. However, immortality, according to them, necessarily implies an eternal endurance of digital remains, which, as will be elaborated upon in this thesis as well, is not feasible.

Nonetheless, for the purpose of my study, I find online immortality to be more suitable to describe the phenomenon under examination. Following the theory of symbolic immortality, the current study focuses on the continuity of life *imagined during one's lifetime*, and the practices undertaken by living individuals *before* they die in the hope of obtaining such imagined continuity.[33] That is, symbolic immortality in this thesis, drawing on Lifton and

[33] Of course, this does not mean that events taking place after death will not be discussed in this thesis at all, or that they do not impact the available imaginaries of continuity, but rather this is an attempt to clearly demarcate what leads the exploration done in this project.

Olson and on Bauman, focuses on practices and actions that take place during life, by the living, *regardless* of their actual eventual posthumous endurance.[34] In fact, Bauman, as will be further elaborated in this chapter, refers to these practices as "life strategies". Thus, I find the term symbolic immortality more conducive for the study of the mediation of potential death precisely because it separates the hopes and images of continuity (and the practices reaffirming them) taking place *before* death and *during* life, from events that take place after a death occurs. The hopes and practices of symbolic immortality take place *during* life and not *after* life.

Finally, immortality (rather than 'afterlife') is a helpful term for linking Lifton and Olson's theory to Zygmunt Bauman's work on immortality, both of which are central to this study. Although Bauman uses slightly different terminology,[35] his reflections on immortality are compatible with and complementing of the notion of symbolic immortality put forward by Lifton and Olson.[36] Specifically, it is Bauman's capture and analysis of the historical moment (liquid modernity) and its connection to practices of immortality that I find particularly helpful for the purpose of my research.

2.3.2) Symbolic Immortality and Liquid Modernity

Lifton and Olson (1975) argue that modes of symbolic immortality are embedded and shaped by their specific socio-historical contexts. Writing in the 1970s, their work (and mostly

[34] For instance, to take an example given by Lifton and Olson, creative work such as academic research is considered a practice of symbolic immortality. The individual engaging in this practice experiences a sense of immortality whether or not their research eventually does endure or has any lasting impact.
[35] Bauman uses the term 'survival strategies' to refer to practices that are with some variation, very similar to those explored as symbolic immortality. Bauman also uses the term ambiguously, using it both to refer to the biological extension of life as well as to the symbolic continuity through fame.
[36] Bauman also quotes Lifton and Olson's Living and Dying to exemplify some of his survival strategies, thus directly equating some of his survival strategies to their modes of symbolic immortality.

Robert J. Lifton's work who continued to develop the theory later using it to inform new theories of the self and the field of psychohistory, see for instance: Lifton, 1976) is deeply embedded in the context of the post WWII world and the experience of surviving repeated threats of world-wide catastrophe. In the decades since then, many changes took place in the west, including the end of the Cold War, the visible risks of climate change, the rise of neoliberalism, global financial crises in 2008-2009, and the wide diffusion of digital media and its impactful political economy. In this historical context, the recently emerging death-related digital and online practices might, perhaps, be the harbinger of new or modified modes of symbolic immortality, as some are already beginning to suggest (Bennett & Huberman, 2015; Huberman, 2018). Making this link between historical context and the available modes of symbolic immortality makes Bauman's work on immortality particularly helpful.

Bauman's discussion on immortality is intertwined with his historical analysis of late modernity, which he characterises as liquid modernity. In fact, his reflection on immortality serves for further unpacking and reflecting on the characteristics of liquid-modern society.[37] Fundamentally, Bauman argues that liquid-modern society is characterised by a deconstruction of immortality.

Liquid modernity, according to Bauman, is characterised by constant change, unpredictability, and irregularity. It is a society characterised by short-term experiences and endeavours, constant shifting, replacing 'solid' institutions and traditions with the ever-changing flow of 'liquid' constructs and practices; the durable and the long-lasting are replaced by recycling, replacement, and change (Bauman, 2000). In this context of speed and

[37] As briefly mentioned earlier, Bauman uses slightly different terms in his discussion. Nonetheless, in the sake of clarity and consistency, I will be 'translating' Bauman's work into the terminology I have already presented. Where necessary, Bauman's terms will be mentioned explaining how they fit or differ from my understanding of immortality.

ongoing changes, cultural heroes are instantly born and instantly forgotten, not before claiming their short-lived 'eternal' fame (Bauman, 1992a, pp. 87, 172; 2000; Jacobsen, 2017a, pp. 66, 71-73).

Therefore, immortality in a liquid society becomes "as transient and evanescent as the rest of things" (Jacobsen, 2017a, p. 66). Immortality is 'almost' achieved every single moment (almost obtaining eternal fame or almost becoming immortal through self-care), making it always there but never there at the same time. According to Bauman, constant changes in liquid modernity deconstruct the possibility of anything lasting forever. Liquid-modern society encourages being in the moment, taking risks, and participating in extreme experiences rather than delaying gratification or working towards a promise of forever that will only materialise in the far future, which according to Bauman, contradicts the essence of immortality (Bauman, 1992a).

Another way in which Bauman claims immortality is deconstructed in liquid modernity is through its democratisation and individualisation, which in his argument go hand in hand. Immortality, according to Bauman, was traditionally a stratifying construct as "bids for immortality are not – and never have been – equally distributed in society" (Bauman, 1992b, p. 65). Greater wealth and higher social status increase the probability that one will be remembered longer after their death. But in times of liquid modernity, Bauman argues, there is a democratisation of access to immortality as anyone can claim their moment in the sun (Bauman, 1992a, pp. 171-172). This democratisation means that instead of national heroes or great artists, any ordinary individual can claim immortality. As a result, there is "an overcrowding of the bridges leading to immortality" (Jacobsen, 2017a, p. 71). This overcrowding deconstructs immortality by making it meaningless: if everyone is immortal (and the symbolic rather than the material sense), no one really is.

Despite Bauman's critique on the stratifying function of immortality, his description of the democratisation of immortality seems to imply immortality *should* not be for all. For instance, Bauman writes: "It is not the great deeds which are immortalized; the deeds become great the moment they are 'immortalized' by having been forced – for a brief, elusive, but never fully erasable moment into the centre of public attention" (Bauman, 1992a, p. 172). Drawing on Bauman's argument, Jacobsen links these ideas to contemporary culture:

> From Hollywood celebrities, sports stars and reality television participants trickling down to quite ordinary people with their thousands of posted 'selfies' on Instagram, Snapchat, or Facebook, everybody is now laying claim to their 15 minutes of fame and to being 'noticed'. 'Post it online or perish' seems to be the new mantra. Publishing one's memoirs or novels is no longer reserved for truly famous or capable writers. Everybody now wants their story to be told and read. (Jacobsen, 2017a, p. 71)

Indeed, there is today, more than before, greater accessibility to ordinary individuals to creating an abundant record of themselves seemingly for posterity. Bauman, and later Jacobsen, criticise this accessibility, implying that there *should* be a judgement of which deeds and biographies merit memorialisation, and which do not (implying some deeds and biographies merit such memorialisation, more than others). Whether or not one agrees with this standpoint,[38] it emphasises the relationship between the individual and society for the purpose of transcendence. This relationship is also impacted by liquid modernity.

[38] Arguably, ordinary individuals wanted their stories to be told long before mass media and online social platforms. An example that comes to my mind, is the so many stories of Jewish victims of the Holocaust during WWII who have put themselves at great risk just for the purpose of leaving a trace of their stories and their communities' stories such as through lists of names or hand drawn portraits of concentration camps prisoners. See for instance the history of the Oneg Shabbat Archives:
https://www.yadvashem.org/yv/en/exhibitions/ringelblum/index.asp

In liquid modernity, individuals put effort into creating their own unique identities and finding their life trajectories. These personal life projects make the prospect of death even harder to face. Individualisation creates a paradox: The life project of one's individuality makes one care more for the continued veneration of their own memory by future survivors. This need for veneration, in turn, requires collectivity rather than individualism, a collectivity that would remember these unique individuals, a collectivity to which this individualised society does not lend itself (Bauman, 1992b, p. 25). According to Bauman, in this utopia of individualised, liquid modern immortality, self-care and individual survival become the primary goals, jeopardising social solidarity (Bauman, 1992b, p. 74; Jacobsen, 2017a).

Against this deconstruction of immortality, Bauman describes what he refers to as *strategies of survival* (Bauman, 1992a, 1992b), which, with some variation, are mostly comparable to Lifotn and Olson's modes of *symbolic immortality*. As forever is no longer possible, and nothing is permanent or eternal, according to Bauman, these symbolic immortality practices (survival strategies) are flawed but necessary:[39]

> In order to make life in the shadow of mortality livable [*sic*] (which they can do), they must lie that they allow us to conquer mortality (a promise on which they cannot deliver). They are ultimately frustrating; yet the disappointment comes after their work has been done. (Bauman, 1992b, p. 21)

[39] These 'survival strategies' according to Bauman are flawed either because the symbolic survival they allow is non-individualised, short-termed, and non-biological, thus not 'truly' making individuals biologically or symbolically eternal. Importantly, while he sees them as flawed in the sense of 'actual-forever', he nonetheless finds that they do provide comfort through a *sense* of continuity, which is another key link to Lifton and Olson's theory.

This highlights a key characteristic of symbolic immortality. The *feasibility* of each mode of immortality to truly eternalise one's memory is separate from the *comfort* individuals might find in the *sense* of immortality. That is, symbolic immortality (Bauman's survival strategies), is the *hope* of individuals that they *could* symbolically transcend death to some extent. Symbolic immortality, or Bauman's life strategies, are about the experience of a *sense* of immortality. Whether or not one indeed symbolically transcend their death, does not impact their having experienced a sense of immortality, of connectedness through which they imagine themselves 'living on'. This is what Bauman refers to when he describes these strategies as only disappointing "after their work has been done."

Based on the discussion so far, then, three aspects are at the core of symbolic immortality. First, symbolic immortality refers to the idea of partial continuity: I will die, but something of me (the specific individual me) will transcend my death. Importantly, the emphasis is on the *possibility* of such transcendence. Second, symbolic immortality refers to practices that enhance one's experience of belonging and connectedness to others. This sense of connectedness is key to posthumous continuity. Finally, the ideas or imaginaries of transcendence are commonly shared and differ between societies and historical moments, and are linked to the imagined perpetuation of society itself.

While Bauman refers to the role of television in the undoing of immortality, communication technologies, more generally, are mostly absent both from Bauman's as well as Lifton and Olson's thinking on symbolic immortality. This is striking given that some of the core characteristics of media and their use are key in enabling the practices of symbolic immortality, not only for public figures but notably, for ordinary individuals. I argue that through the provision of record-making technologies that allow leaving traces of the self, through ways of connecting and coming together, sustaining small and large communities, and

through embodying modern visions of innovation and progress, communication technologies are fundamental in this essential role of society (mediating mortality). I now explore this link between these characteristics of mediated communication and symbolic immortality.

2.4) Symbolic Immortality and Communication Technologies

Communication mediated by technology constructs the speaker, listener, and content as distinctive components of the communication process. Once separated, these components can then be spread over time and space. Different media afford different forms of presence (and absence) over small or large temporal and spatial distances (Thompson, 1995, pp. 125-126). The written word, for instance, can potentially be read at any time in the future, regardless of the author's or intended reader's presence (or even existence) (Ong, 1977). The telephone enables one's voice to instantly travel from one side of the world to the other, allowing proximity in time over vast geographical distances. Mass media allow the simultaneous dissemination of messages to large groups and their engagement. These affordances of technologically mediated communication are key in practices and imaginaries of symbolic immortality. Specifically: leaving traces, sustaining relationships, and embodying modern visions of progress. I now provide an overview of these media characteristics and explore how these are articulated in contemporary digital media practices.

2.4.1) Leaving Traces

As mentioned earlier, symbolic immortality refers to the hope that some aspects of the individual will continue to exist after their death. Thus, it involves leaving specific traces that are associated with a specific individual. One example of such a trace, according to Lifton

and Olson, is one's genes that live on through their offspring or one's values that are carried on by their family. As explored in the introduction, in recent decades, the emergence and widespread of a host of media provide individuals with more avenues than before to leave a trace of themselves. The notion of indexicality is helpful to further establish the significance of media affordance to leave traces for symbolic immortality.

An indexical sign has a causal connection to its referent. The index is the trace created and left by the presence of the represented referent (Peirce, 1965). For instance, footprints are indexical signs. Footprints in the sand are a representation of the animal that walked there earlier. Such a footprint necessarily depends on both the presence of its referent *and* the referent's absence: the footprint can only form if the animal walks on the sand, and it can only be seen once the animal is no longer standing in that spot. Thus, the indexical characteristic of media traces not only epitomises a dialectic between presence and necessarily absence but also creates a strong link between the referent's presence in a moment in time, and her symbolic representation (Doane, 2007a, 2007b; Mulvey, 2006).

This indexicality is why the recorded traces of the dead can trigger such an uncanny feeling, as they can create a sense of misplaced presence due to this causal connection (Mulvey, 2006). At the same time, this is also why media traces have such a strong pull in imagining one's posthumous endurance. To give a specific example, a voice recording of a deceased loved one can only exist if that person had indeed spoken into the recording device at some point when they were still alive. When listening to their recording after their death, their voice in that specific moment of recording is made present again. Potentially, when creating such media traces, as discussed earlier in the context of photography, individuals engage in a practice of symbolic immortality.

Digital media challenge the indexicality of media traces, as they enable creating representations of individuals and moments which may have never taken place.[40] At the same time, however, the digital and online media use practices maintain a strong causal connection between an individual and the media traces she leaves behind. The strong connection between SNS practices and one's identity, as discussed in the previous chapter, is a useful example of this (van Dijck, 2013b). Moreover, one's saved messages on their phone, digital photo albums, records of online chats and so forth are all media traces that have a strong causal connection to the individual user. Therefore, I argue that the idea of indexicality as a causal connection between an individual and her media traces remains helpful for understanding the fundamental role of media in practices of symbolic immortality.

2.4.2) Connecting Individuals and Sustaining Communities

In addition to leaving traces, mediated communication affords various forms for maintaining relationships and sustaining small and large communities thus allowing a sense of connectedness. With the increased popularity of photography, for instance, as touched upon in the previous chapter, family pictures and photo albums became an important part of how families sustained themselves across generations (Hirsch, 1981). Family photography, thus, is an example of how media afford practices for maintaining a sense of connectedness to one's family across time. This is practised not only through curating the photos of the family dead but also through the practice of picture taking during one's lifetime. Taking a picture, in part, is also creating a potential for posthumous endurance (potentially providing a sense of

[40] This is becoming a greater issue given the more recently developments of deep fake, CGI, and recent AI features combining visual design programs, where entire worlds, people, and animals can be created and details of any pictures can be quickly and easily manipulated.

immortality to use Lifton and Olson's terminology) and of experiencing transcendental connectedness.

On a larger scale, mass media provided societies with new forms of coming together and imagining being part of a long-lasting and transcendental society. For instance, during the 20th century, radio and television played an important role in the maintenance and cohesion of mass societies and national communities through the transmission and construction of national symbols, discourses, and rituals (for instance: Blondheim & Liebes, 2009; Bourdon, 2000; Caldwell Thornton, 1995; Couldry, 2004).

Media death rituals, for instance, providing national rites of passage upon the death of public figures, are not only crucial for the maintenance of social cohesion in the face of a public figure's death but also in reaffirming individuals' sense of connection and belonging to society (Coman, 2008; Dayan & Katz, 1992; Sumiala, 2013). Drawing on Lifton and Olson, one could argue that media events in general and their role in the perpetuation of national communities fundamentally enable a sense of symbolic immortality. Moreover, the ritualised practice of habitually watching television also reaffirmed this sense of connection, forming part of an imagined audience community and sense of social cohesion. In this way, mass media afforded institutional practices providing individuals with a sense of "relatedness to all that comes before him [*sic*] and all that follows him [*sic*]" (Lifton & Olson, 1975, p. 60). As explored above, this perpetuation of the idea of an enduring society and avenues for reaffirming one's belonging to said society are at the core symbolic immortality.

In recent decades, with the emergence and wide diffusion of online communication, including emails, instant messaging apps and SNSs, new forms of coming together have emerged. These also afford additional ways of reaffirming one's connectedness to others and belonging to small and large communities. Social media platforms, for instance, gave rise to

new visions and illusions of coming together as a group for the purpose of social action (e.g., the Arab Spring). Through such actions individuals reaffirm their sense of belonging and connectedness to a larger group. In the face of these new technologies for coming together, it is paramount to maintain a critical perspective as to the commercial nature of the platforms allowing such social action and to what such platforms allow and to who and what types of sociality emerge from these platforms (Couldry, 2015; van Dijck, 2013a).[41] These will be discussed further in this and in following chapters.

Inherent to these new forms of sociality is the accumulation of brief asynchronous messages through various media which creates a sense of permanent presence (Licoppe, 2004). This is what Miller (2008) describes as phatic culture: the constant transmission of signals whose primary purpose is 'keeping channels open,' maintaining a constant potential for engaging in communication. Individuals in the digital age use a variety of media, thus increasing their possibility to "be connected permanently and wherever you may be" (Hepp, 2020, p. 86). Such constant presence is characteristic of how contemporary media enable a sense of coming together in a seemingly constant connection.

2.4.3) Embodying Modern Visions of Progress and Innovation

As explored in the previous chapter, the ongoing developments and emergence of communication technologies has repeatedly fostered hopes for overcoming all boundaries to communication. Like the enchantment with earlier media, contemporary technologies have

[41] Importantly, earlier media also had commercial motivations and influenced forms of sociality. Therefore it is not the monetising of coming together and imagined communities that is distinct or new, but rather the specific ways in which the relationship between individuals, media, social institutions, and private corporates shape the forms of sociality, and how these inform the available practices of symbolic immortality.

also sparked the popular imagination with new hopes of overcoming communication boundaries (Sconce, 2000, p. 201).

The on-going innovation in communication technologies sustains a narrative of future progress. The promise implied by media innovation and boundless communication is a specific case of the more general modern promise of progress. This promise of progress entails an imaginary that depends on the endurance of human culture and society well into the future. Thus, while the circulation of the traces of the dead provides a sense of connectedness to the past (and imagining one's future traces), the continued innovation in media technologies provides a specific imaginary of connectedness to the future, not only through one's traces but through the imagined continued prosperity of society and its technology.

In this way, the idea of innovation in media technologies and the myth of ever progressing and ever improving interconnectivity so dominant in the contemporary west, is not only related to the specific technologies and their available or imagined affordances, but also to symbolic immortality. The perceptions and myths of media technologies as always progressing is another way to imagine being part of a transcendental and eternal society. Like social institutions such as the legal system, the nation state, or the family, which play a key role in what Bauman refers to as survival strategies (Bauman, 1992a), in contemporary western societies the myth of technological development has become central to perpetuating an eternal society.

These visions of innovation and progress are particularly fitting to a liquid modern society in which the only constant is change. This link between myths of on-going innovation and an imagined transcendental society further substantiates the role of technological progress as a form of symbolic immortality. As argued thus far, for symbolic immortality ideas and practices to succeed they must be consistent with the characteristic experience of their

time. Perceptions, experiences, and myths about fast pace of technological change and innovation are central to contemporary western societies, also characterised by their ever-changing 'liquid' condition.

Inherently, then, communication technologies and their traces embody a dialectic between presence and absence, between the durable and the transient, past and future, simultaneously enabling both annihilation (absence) and continuity (presence). Communication technologies enable maintaining of social relations over time and space. And finally, through a promise of constant innovation, communication technologies foster and sustain hopes of an enduring future society characterised by technological progress. All of these, as explored above, have a key role in practices of symbolic immortality.

Contemporary communication technologies[42] have re-shaped to varying extents these roles of media. For the purpose of exploring and understanding the consequences of these media changes for contemporary symbolic immortality practices, I find the idea of social imaginaries useful. The idea of social imaginaries provides a conceptual link between the practices of symbolic immortality and the practices and meanings of contemporary media. In what follows I explore this link.

2.5) Social Imaginaries, Symbolic Immortality, and Digital Media

The social imaginary, according to Charles Taylor "is that common understanding that makes possible common practices and a widely shared sense of legitimacy. … This

[42] By "contemporary communication technologies" I point to the fact that in the current moment, online media are not the only technologies used. Earlier media are still in use (such as broadcast TV and print) and continue to play a role in practices of symbolic immortality (although they are not the focus of the current study).

incorporates some sense of how we all fit together in carrying out the common practice" (Taylor, 2002, p. 106). These underlying expectations are not only the knowledge of how "things usually go", but they are also a normative expectation, of how things "ought to go" (Taylor, 2002, p. 106).

Taylor emphasises the link between social imaginary and practice (to which he mainly refers as action). The imaginary is this underlying understanding that enables individuals' engagement in certain practice. These understandings are commonly shared even though they are often implicit (Taylor, 2002, p. 111). Symbolic immorality, then, can be understood as based on *available imaginaries of continuity* that are shared and that allow sustaining of certain practices. Taylor argues that western modern society has its particular social imaginary. This idea of a distinct imaginary of modern society echoes Bauman's analysis of the modern-liquid society, in which the shared social imaginary is that of fluidity. The changes Bauman explores in the practices of immortality are inseparable from the changes in the social imaginary of the liquid society in which everything constantly changes. Changes in the dominant social imaginaries, thus, could have significant implications for the available imaginaries of symbolic continuity.

In his thinking about social imaginaries, Taylor draws heavily on Benedict Anderson's *Imagined Communities* (Anderson, 2016/1983). This link strengthens the association of social imaginaries with the ideas of symbolic immortality. As explored earlier in the chapter, it is precisely this shared idea of an imagined larger and transcendental group to which one imagines a connection that is key in the modes of symbolic immortality explored in this chapter. Social imaginaries, at the core of symbolic immortality and of the meanings of media technologies, then, can be a helpful way of thinking about the emergence and design of online immortality services. That is, the emergence of online immortality services would encompass

the contemporary available imaginaries of continuity *and* the contemporary available imaginaries of digital media. Put differently, social imaginaries are key for understanding symbolic immortality (understood as a social imaginary of continuity) and for understanding contemporary media practice and design, and thus, provides a helpful conceptual tool for exploring online immortality services.

In her book, *Imagining the Internet*, Robin Mansell (2012) establishes the usefulness of using the social imaginary for understanding digital media and its governance. Particularly, Mansell argues that exploring the social imaginary allows to understand the "the way people in the information society make sense of their visions and practices and how this is influencing the communication system that is so central to people's lives" (Mansell, 2012, p. 9).

Mansell draws on Taylor's work, and sees the social imaginary as the "ethos that enables people to make sense of developments in society" (Mansell, 2012, p. 32). Understanding the social imaginary that underlies contemporary media, means to understand the deeper "notions and images of how things go between" individuals in a given society, and the "rights and obligations" individuals and collectives are expected to have towards each other (Mansell, 2017, p. 43). Social imaginaries of the digital age, according to Mansell, "influence the way digital technologies are used and the way they permeate and mediate people's lives" (Mansell, 2012, p. 33). Therefore, social imaginaries of the digital age as well as imaginaries of continuity are particularly conducive for understanding online immortality services.

In the purpose of understanding the political economy of the information society and how its governance institutions are imagined, Mansell shows how conflicting social imaginaries function together in shaping digital networks' governance. Mansell (2017) describes different models of diffusion of technology in the information society, differentiating

between how authority and individual agency are located and revealing how these competing models create a contradicting interplay between empowering and disempowering (Mansell, 2017). The questions of imagined agency and how it interrelates to institutions, corporates, and collectives are key to exploring online immortality services, which claim to provide agency to the future-dead. Online immortality services and their social imaginaries, in this sense, also provide an additional avenue for exploring questions of empowerment in the digital age.

Social imaginaries are also consistent with the Social Shaping of Technology approach, on which I draw, that sees society and technology as co-constitutive (MacKenzie & Wajcman, 1999). Technology, in this approach, is seen as internal to society, and a result of a reciprocal process between available techno-scientific capacities or knowledge, and social norms, values and trends. Technology is never external to the society in which it emerges. Technological innovation is shaped not only by technical work and engineering, but also by social structures, power relations, practices of use, and circulating meanings and imaginaries (Hutchby, 2001a, 2001b; Lievrouw, 2010; MacKenzie & Wajcman, 1999; Oudshoorn & Pinch, 2003).

Online immortality services are grounded in imaginaries that are specifically concerned not only with continuity, but continuity in the context of expected and desired techno-scientific developments. This is particularly key in contemporary society in which technology, and specifically communication technologies, are ubiquitous and central to how individuals conduct their everyday lives, their political institutions, corporate function, and world politics and economy.

Imagined continuity and imagined technological innovation are both geared towards a desired future. This position between how things are *and* how they ought to be, is what makes the social imaginary particularly helpful as it generates a “discursive space which oscillates between imagination and reality” (Jewitt et al., 2019, p. 104). It is because of these

both available and desired technological and normative practices, that social imaginaries are particularly useful in studying technologies and technological practices in their moment of emergence (Egliston, 2022; Jewitt et al., 2019; Woodall & Ringel, 2020). In the case of online immortality services, the social imaginary will also enable understanding their on-going decline by exploring the imaginaries evoked by the services. Given the centrality of connectivity to the idea of symbolic immortality and to the circulating imaginaries of the digital age, it would be useful at this point to provide a brief overview of the centrality of connectedness to digital culture.

2.5.1) Online Immortality, Connectedness and Connectivity

Contemporary western societies are characterised by high saturation of media. Over the past century, and increasingly so in recent decades, multiple media have diffused into everyday public and private life. Digital media, especially, have become increasingly ubiquitous, resulting in different forms of dependencies on media for everyday life activities (Fornäs, 2014; Jansson, 2015; Wajcman, 2018). Most significantly for the purpose of the current discussion, the emergence of software, computers, smartphones, and the Internet, enabled the emergence of new forms of inscription, ways of maintaining personal connections, and forming communities and visions of continued technological progress (Baym, 2010; Couldry, 2015). Importantly, these contemporary practices and perceptions are a product of a co-constitutive process between technology and society as suggested earlier through the idea of social shaping of technology.

A dominant social imaginary circulating through contemporary media and key for the idea of symbolic immortality is an imaginary of connectedness. The practices of continuous and constant connection, and potential for communication described earlier in the chapter

are one way in which this imaginary of connectedness is circulated. This connectedness is imagined across space as well as across time. The media traces individuals create are imagined to continue and circulate indefinitely online where they can have "far-reaching and long-lasting effects" (van Dijck, 2013a, p. 7).

This imaginary of connectedness through media, of course, resonates much earlier ideas and ideals related to technology and technological progress such as encompassed by McLuhan's global village (McLuhan, 1966), and the utopian visions of a united world based on international perfect communication (Peters, 1999, p. 24; Sconce, 2000). This is a social imaginary of connectedness with no boundaries: no boundaries between nations, no boundaries between minds, no boundaries between the living and the dead.

Importantly, these ideals of constant connection and communication are encouraged and engineered by the corporates providing online communication platforms whose interests deeply influence contemporary technologies, their use practices, their perception, and their imaginaries. Among others, these companies not only perpetuate ideals of connectedness, but also their business models are directly linked to creating connections. It is this idea of enhanced and limitless connectedness that is at the core of the culture of connectivity (van Dijck, 2013a). The more connected one is, that is, the more one engages in networked sociality and engages in exchanging information across these connections, the greater the revenue for the platform owners (as explored in the previous chapter).

Imaginaries of connectedness, of course, are also central in the idea of symbolic immorality as discussed earlier in this chapter. Ultimately, with variation perhaps in practice and meanings, symbolic immortality is essentially about this sense of connectedness. A sense of connectedness over time, constantly reaffirmed by making connections throughout one's lifetime (Bauman, 1992a, p. 40). But where connectedness is central to the imaginaries of

contemporary media, a question that arises, then, is how to explore the ways in which the imaginaries of connectedness are evoked specifically in the context of symbolic immortality?

As portrayed in this chapter, studying online immortality services is an attempt to understand the mediation of potential death, where – to paraphrase Bauman's quote – it is not death itself that is explicitly present, but rather the awareness of its inevitability. Online immortality services are useful for this task as they make symbolic immortality explicitly present. These companies make a specific and explicit attempt to create online practices oriented towards one's own future continuity. In this sense, mortality (rather than death) is made to appear 'under its own name'. In doing so, and as a product of their time (and as for-profit companies aiming to reach large audiences), they also provide access to the practices and imaginaries of online media that would enable these products and services of symbolic online immortality and to their cultural encoding.

2.6) Conclusion

In this chapter I have presented the concept of immortality and Lifton and Olson's theory of symbolic immortality as a conceptual framework for exploring potential death and specifically online immortality services. Exploring symbolic immortality as a socio-historical theory, I used Bauman's work on immortality in liquid modernity to conceptualise the historical moment in which online immortality services emerge (and disappear) and the perceptions of immortality (and its deconstruction) in this moment. Then, I have argued that communication technologies, although absent from symbolic immortality theories are in fact fundamental to ideas and practices of symbolic immortality, and specifically grounded it in three roles of media: creating traces, maintaining relationships, and sustaining visions of

continued progress. Linking the two, I suggested, would allow to both explore online immorality services as well as contribute to the theory of symbolic immorality.

Having argued for the centrality of communication technologies for ideas and practices of symbolic immortality, I presented the concept of the social imaginary as particularly helpful for understanding symbolic immortality and contemporary media. Symbolic immortality, I suggested, can be understood as specific social imaginaries of continuity. I have drawn on Mansell's work to establish the usefulness of the social imaginary for understanding digital media. I have specifically highlighted the question of agency and empowerment as key in social imaginaries of the information society, and for exploring online immortality services.

Having presented my conceptual framework linking symbolic immortality, with key features of media technologies and with the concept of social imaginaries, I now move to present my research design and explain how I've studied online immortality services.

Chapter 3: Research design and methodology

In this chapter, I present my methodological approach, research design and specific methods used to carry out this study. I first unpack my research questions and explain my research approach drawing on the tradition of cultural studies. I explain my research design and its rationale, reflecting on the specific sites chosen for the research (websites and interviews with designers) and how they draw on my conceptual framework. Then, I explain my data collection methods, reflect on the challenges in this process, and on what the failures in collecting data reveal about the object of study itself. Then, I describe the procedure applied for data collection and analysis, and for combining my two data sets. Finally, I briefly provide an overview of the corpus, and conclude with reflection on the study's ethics and my own positionality as a researcher.

Looking into the mediation of death and mortality as means to access a fundamental role of society has a long theoretical tradition. Influential thinkers in sociology such as Émile Durkheim, Max Weber, and Zygmunt Bauman, considered death to be "a powerful element in the constitution of social life" (Sumiala, 2021, p. 6). Moreover, according to Bauman (as explored in the previous chapters) mediation of mortality is a fundamental pillar of societies if not the primary reason for their existence. Therefore, studying the mediation of mortality, opens a conducive space for studying and understanding "the nature of social life" (Sumiala, 2021, p. 5).

Looking at death and mortality for understanding and theorising communication technologies and their use also has a long tradition (e.g., Barthes, 1981; Mulvey, 2006; Peters,

1999; Sumiala, 2013). Given the strong link between symbolic immorality practices and their historical context, and given the centrality of communication technologies to symbolic immortality practices, this thesis sets out to explore the consequences of the significant changes contemporary media for symbolic immortality. Therefore, the overarching research question of this thesis is ***how do digital communication technologies mediate mortality in contemporary western societies?***

In the previous chapters I highlighted three characteristics of media technologies that are central for symbolic immortality practices: record making (enabling symbolic continuity by leaving traces of oneself); provision of ways of coming together (sustaining relationships, central to the idea of connectedness and the 'sense' of immortality); and finally, embodying modern visions of progress and continuity through technological development (assuming the prosperous existence of a transcendental society). Digital technologies inform and sometimes re-shape all these media roles, thus potentially also reshaping contemporary imaginaries and practices of symbolic immortality.

Thus, in order to unpack my overarching research question, I break it down into three sub-questions. Each sub-question examines one of the three links described above between media technologies and symbolic immortality practices in the specific context of online immortality services. The first sub-question explores the link between digital media traces and symbolic posthumous continuity. The second sub-question investigates the link between media's affordances for connection and connectedness as a key feature of symbolic immortality. Finally, the third sub-question delves into the link between technological imaginaries and imaginaries of continuity as articulated by online immortality services. I therefore divide the overarching question into these three sub questions:

1. What practices of leaving traces do online immortality services construct and facilitate?
2. What posthumous relationships between the future-dead and future-survivors are constructed and facilitated by online immortality services?
3. What digital media myths and social imaginaries are evoked by and underlie the practices constructed and facilitated by online immortality services?

3.1) De-familiarising and Locating the Digital Mediation of Mortality

As this is a mediation study, I am concerned with meanings, their construction and circulation (Silverstone, 1999, p. 13). These are at the core of the cultural studies tradition (Barker & Jane, 2016). Drawing from this tradition, I draw on a qualitative research approach and epistemology that stresses the "socially constructed nature of reality" (Denzin & Lincoln, 2005, p. 10). As a cultural study I apply qualitative methodology as an interpretive practice that aims to make 'visible' the social world and make sense of it (Denzin & Lincoln, 2005, p. 3). The role of the researcher in this approach is to "defamiliarize the familiar" (Bauman, 1990, p. 15) in the attempt to make 'visible' and thus accessible social phenomena.

Qualitative interpretive research for the purpose of cultural analysis, attempts to render social phenomena which are often experienced as obvious and self-explanatory, into visible objects of inquiry. This is particularly challenging when the phenomenon at issue is so fundamental to society (as established so far), and more so given that it is not 'under its name' as Bauman claims. That is, focusing on and unfamiliarising the mediation of *potential death* (rather than actual death) holds a twofold challenge: first, unlike actual death which is triggered by a specific occurrence of death, making it possible to trace its aftermath (e.g.,

managing the corpse, locating funerary rituals etc.), potential death deals with the *possibility* of death. A possibility which may come to pass at any time and to any person (and which is ultimately defined by the absence of death, as if a death occurs it is not longer 'potential death'). Secondly, once located, the researcher is required to unfamiliarise herself from her own experience, perceptions, anxieties, hopes etc., related to her own need to manage the knowledge of her mortality.

The methodological approach and the research design of this study address these challenges first by locating a site of study that itself allows making visible the mediation of mortality (potential death) via online media. Secondly, by applying a formal and technical protocol for generating and analysing data as well as a reflexive approach to each step of this process and the decisions made during it.

As explored in the previous chapter, online immortality services provide a fruitful site of study as they are explicitly and purposefully designed for the possibility of one's future death. By providing services explicitly geared towards future death, online immortality services make explicit the link between digital media and potential death. This explicit link is helpful in the process of making the social phenomenon under investigation visible, providing access to different aspects of the phenomenon such as practices of digital media design, and use, the available semiotic resources for signifying and communicating this link, and the contemporary commonly shared understandings of both digital media and symbolic immortality that enable the emergence of such practices.

Online immortality services materialise through websites. Websites, which are "unique expressions of contemporary culture" (Pauwels, 2012) are a key cultural space through which the mediation of mortality materialises and circulates. These are the spaces where online immortality is mediated, marketed, and potentially consumed. Therefore, the websites

created by online immortality services were chosen as the first line of inquiry for the purpose of this study. In addition to providing access to specific types of data conducive for the study of the mediation of mortality, websites are central to my research design conceptually, empirically, and methodologically and hold a core position. I now unpack the significance of websites for my research design.

3.2) *Websites as Objects of Study*

A Website is a specific site in which the World Wide Web phenomena occur. It is one of the fundamental components of the Web (Brügger, 2007, p. 75; Rogers, 2013, p. 63) and provides access to both macro (e.g. organisation of the Internet) and micro levels (everyday activity online) of such phenomena (Brügger, 2007, p. 75). Websites are multimodal, combining a variety of modes including, for instance, written language, pictures, videos, animation, colours, layout, sounds, and hyperlinks all of which work together in making meaning (Adami & Kress, 2014; Jewitt, 2013; Kress, 2010). As socio-technical artefacts, websites are embedded in a specific historical context not only in terms of the available technologies but also of their use practices and available meanings and meaning-making practices (Baldry & Thibault, 2006, p. 119; Djonov & Knox, 2015, p. 173; Pauwels, 2012). Therefore, websites allow access both to the circulating meanings in which they are embedded and how these are commonly articulated and culturally encoded. Websites, therefore, are important sites for cultural expression (Pauwels, 2012).

Crucially, and despite the popular conviction that online data endure forever (Eichhorn, 2019; Mayer-Schönberger, 2009), websites are *fundamentally ephemeral* objects. Websites are ephemeral in more than one way. First, a website is ephemeral because it gets

locally reconstructed on an internet browser each time it is loaded. Additionally, websites require regular updating. When updating, designers overwrite the earlier versions and may sometimes replace them completely with the new version making the earlier version obsolete (Ankerson, 2011, p. 387; Schneider & Foot, 2004, p. 115).

Websites regularly disappear. The average 'lifespan' of websites is 100 days (Barone et al., 2015, p. 1).[43] They are "notoriously unstable objects. It is far easier to find an example of a film from 1924 than a website from 1994" (Ankerson, 2011, p. 384). This ephemerality is why Barone et al. (2015) raise the concern that "there may be instances of culturally valuable Web sites [sic] which are no longer online and whose disappearance represents a major public or social loss" (Barone et al., 2015, p. 2). The ephemerality of websites informs my research project in several ways.

3.2.1) Websites Ephemerality as an Epitome of Annihilation-Continuity

Website ephemerality is significant for this research as it speaks directly to the dialectic that motivates this project oscillating between annihilation and continuity. To an extent, websites epitomise this recurrent effort to create and make meaning where awareness to an inevitable end always threatens to deprive meaning altogether. The fact that a technology that is fundamentally ephemeral is used to stake a claim on permanence epitomises the focus of this study, which is the role of digital media in mediating potential death and hopes of continuity.

[43] The term 'lifespan' used by Barone et al., as the reference of the closing of websites as death (websites "die") is of course particularly fitting in the context of this research, perhaps already speaking to some of the fantasies and tensions epitomised by online immortality services and the discourses it produces as will be discussed in the following chapters.

Of course, the perception that data lasts forever online is not unique to immortality services or their providers: rather, it is deeply grounded in circulating discourses about digital and online media. For instance, according to Chun (2008), the perception of the digital in general as enduring is rooted in the early days of computing and its marketing discourses (Chun, 2008, p. 154). Other scholars have raised concerns about the permanence of online records and the consequences of such endurance for individual lives (Eichhorn, 2019; Mayer-Schönberger, 2009). The public criticism behind "the right to be forgotten" and the policy changes following it in the recent decade are also rooted in this idea of digital endurance (Mantelero, 2013).[44]

In this context, increasingly common experiences of individuals encountering the unintentional online traces of the dead, especially traces that remain untouchable and cannot be edited or deleted, not even by next of kin, (See for instance: *Facebook ruling: German court grants parents rights to dead daughter's account*, 2018; McCallig, 2013; Pennington, 2013) also get thrown into the mix of experiences and discourses of the permanence of things online. At the same time, just as common as these ideas and experiences of endurance are, so are experiences and encounters with the 'loss' of websites and online content (such as no-longer available links with the all too common '404 not found' error message), epitomising the annihilation-continuity dialectic. It is this dialectic that is at the heart of the mediation of mortality and therefore of what this thesis aims to understand.

[44] Interestingly, in these examples the concern about the internet not forgetting does not regard the data of the dead but rather the consequences of the living re-encountering their own enduring data from the past. Data, which for different reasons, would be preferable for them to have deleted.

3.2.2) Websites and Public Archiving

Another implication of websites' ephemerality for this research concerns its potential contribution to the historical archiving of the internet. As I have already touched upon in the previous chapter, over the course of this project, the majority of the websites I was studying closed. Most of the examples used in my analysis are no longer available online, transforming this study, notwithstanding other aims, into an unplanned historical archiving project.

It is often the case that a by-product of academic research is a small archive of a specific website or group of websites (Barone et al., 2015, p. 19). Of course, as the archiving process in this study was based on my research purpose and interest, my own specific focus, perspective, and archiving decisions inevitably also become an inherent part of this historical record (Ankerson, 2011, p. 389). Nonetheless, my research preserves some record (even if by no means a comprehensive one) of a small corner of the internet, a snapshot of online immortality services, in a specific moment of in time.

Importantly, this snapshot is not only of these services but also of their ephemerality: as many of the websites recorded and analysed during this research are no longer accessible online, the network of actors surrounding them is inaccessible too. The disappearance of so many websites emphasises the uniqueness of this research as a project that could have only been conducted at this specific moment (now gone) and over this duration.

As this is a cultural study concerned with mediation and with social imaginaries, it requires data from various perspectives and different forms in which this phenomenon is constructed and represented. Mediation is a multifaceted process that takes place across sites of production and interpretation. Similarly, exploring the social imaginary also requires access to multiple sites of construction and circulation of meanings. As Mansell writes, to explore the social imaginary it is necessary to access: "the repertory of images, stories, and actions

selected by those whose lives are interdependent with the technological system" (Mansell, 2012, p. 33). Therefore, in addition to the websites, in order to understand the historical and cultural moment which enables the emergence – and apparently, demise (Nansen et al., 2021) – of online immortality services and to access the constructed meanings and available imaginaries in which they are grounded (of future technology and transcendental society), the research design also included interviews with the individuals engaging with online immortality services: their providers and their users.

3.3) Interviews with Stakeholders

Society and technology are co-constitutive (Kline & Pinch, 1999; MacKenzie & Wajcman, 1999) through a process in which both designers and users play an essential and co-dependent role. Different technologies have different affordances which lend themselves to a range of meanings and formulations allowing for interpretive flexibility by users and designers. This means that technologies are not seen as holding inherent characteristics that necessarily force or guide specific meanings or uses. Instead, users and designers interpret and configure the use, design, and meaning of each technology. Through use and design, technologies and human actors mutually constitute each other (Hutchby, 2001a, 2001b; Oudshoorn & Pinch, 2003).

Therefore, I see online immortality services as a site of construction and circulation of meanings and technologies. That is, available meanings are evoked and mobilised while additional meanings are constructed and circulated. Those who engage with the technology, both designers and users, are essential to this process.

3.3.1) Interviews with Designers and Founders

I view the design process of the websites as a "social process of negotiation and consensus" (Lievrouw, 2010, p. 247), oscillating between change and continuity, involving idealised visions about future technologies, as well as the already available affordances and meanings of contemporary technologies.

Interviews with designers and founders provided access to the circulation of meanings between sites: the websites and the design process. The interviews also allow analysis of additional forms of constructing and representing meanings which are potentially different to the ones available on the websites (Bauer et al., 2000, p. 5). Importantly, interviewing designers also allows access to a sphere of imagination, of the vision and design ideals as well as to technical aspects involved in the websites' design, which would have not been accessible through analysis of the websites alone. Interviews with designers and founders also provide access to their imagined ideal users and in some cases a glimpse of the experience of use, as designers/founders sometimes share their experience as they presume the position of (ideal) website users.

The purpose of interviewing 'the people behind the websites' is twofold. First, the interviews enable insights into the motivations and reasons of the founders in creating these websites. In this sense, these are expert interviews insofar as they provide access to special knowledge and information that isn't otherwise accessible (Meuser & Nagel, 2009, pp. 24-25). This information includes not only different aspects related to the development process but also data such as the locations of the companies, the background of their founders, economic constraints, technical considerations, design choices, as well as early reception, and user demographics. The interviews enable studying "the conditions under which technologies come to be the way they are" (Hine, 2017, p. 23).

Second, in addition to information about the websites and the design process, the creators of the websites are a specific group with unique properties. Not only in the sense that they are situated in a specific time and place, influenced by circulating discourses, practices of technology use etc., (Brinkmann & Kvale, 2014, p. 3), but also through their specific interest, reflection, and action in the mediation of mortality through digital media. Put differently, the creators of immortality services are a group of individuals that has reflected upon the relationship between contemporary media and mortality, and have taken action in the context of the available technologies and imaginaries of symbolic immortality, to form a specific practice of digitally mediating mortality.

Finally, linking back to the discussion on website ephemerality, interviews with designers also form part of the historical archive produced by the current research, enriching its historical context (Ankerson, 2011, p. 391).

3.3.2) Interviews with Users

My initial research design also included speaking to users to learn of their own experience and understand how they were actually using the services. Moreover, in contemporary media, the role of users in shaping a specific product is explicitly articulated through the idea of beta phases which rely on feedback from users (Neff & Stark, 2004), thus again making it valuable to speak with users in order to understand the range of perceptions and imaginaries that were informing the design of these technologies.

In the two-way relationship between technology and users (MacKenzie & Wajcman, 1999), interviewing users could reveal both the ways in which they were putting the specific websites to use and also how the specific available designs were informing their perception of the digital mediation of mortality. In engaging with technology, users might modify,

reconfigure or resist a specific use, while at the same time, also being constructed as users by the technology itself (Oudshoorn & Pinch, 2003, pp. 1-3). Moreover, potential gaps between how users were interpreting online immortality services compared to designers, the actual uses they are putting the services to, gaps between the identity of ideal users envisioned by designers and those using the websites and other tensions in perspectives, expectations, and practice, could also reveal additional facets of the available imaginaries of contemporary technology and its role in the mediation of mortality. As the next section will describe in detail, interviews with users did not materialise in this study, which, although disappointing, was also very much revealing about the object of study itself. I now turn to describe the methods used for generating, analysing, and combining the data, and subsequently proceed to consider the ethics of this research.

3.4) Generating Data

The mediation of mortality is a complex and multifaceted phenomenon and therefore requires deployment of "a wide range of interconnected interpretive practices," each making this phenomenon of the social world "visible in a different way" (Denzin & Lincoln, 2005, p. 4). This process resembles that of a montage, bricolage, or quilt maker: the work of the researcher is to combine different 'pieces' "into a meaningful whole" (Denzin & Lincoln, 2005, p. 5).

The task of combining different pieces is particularly important for a study of mediation, which is a process that "does not begin or end with a singular text" (Silverstone, 1999, p. 15) but rather takes place across technologies, institutions, groups, words, and images. Thus, where the aim is to understand complex social phenomena, qualitative research

is “inherently multimethod in focus” in order to add “rigor, breadth, complexity, richness, and depth to any inquiry” (Denzin & Lincoln, 2005). For such research, the first task is to generate analysable data.

Generating data is crucial as it is what renders a social phenomenon visible for the purpose of investigation. Generating data (rather than ‘collecting’ data) refers to the process of transforming a phenomenon in the social world into recorded data that can be studied (Bazeley, 2013). In this study, in order to analyse online immortality services, I’ve used two methods for generating data: multimodal analysis of online immortality websites, and in-depth semi-structured interviews with designers and founders. I begin by exploring the building of the corpus of websites, the decisions made around the archiving of websites, the multimodal analysis of the websites and their pivotal role in accessing data for this study.

3.4.1) Building the Online Immortality Services Corpus

As online immortality services were rather niche when I began my data collection (and have remained so throughout), finding immortality websites required several forms of searching and the use of a reiterative process going back to search results and using them for additional searches. I first learned about the existence of such websites from a few academic papers that made reference to them (e.g., Jones, 2004 - afterthoughts.com; Sherlock, 2013 - IfIDie.net). I then followed these websites’ URL, and if available online, I added them to my corpus.

These initial websites were leveraged to locate additional websites. First, I used the names of the websites as a search phrase on Google, which often resulted in links to online magazine articles and news pieces about these websites (e.g. Coldwell, 2013; Miller, 2013). Such magazine articles would usually reference additional such websites, which I would then

sequentially search in the same fashion (both to locate the websites themselves and use the websites' names as a new search phrase). The websites also provided additional search phrases such as 'digital legacy' or 'digital assets' that enabled generating additional results (Dolowitz, Buckler, & Sweeney, 2008). Such search phrases mostly led to additional magazine articles such as those mentioned above (that were then also searched for additional websites).

Another important source for websites was the blog *The Digital Beyond,* which in addition to providing information on how to "plan your digital death and afterlife and memorialise loved ones" (thedigitalbeyond.com), also features a list of death-related services from which I was able to locate additional online immortality websites.[45] This process of following the trails of websites and monitoring TheDigitalBeyond.com's services list was repeated over the years. Whenever I came across a new website in the literature, media coverage, or TheDigitalBeyond.com, I added it to my corpus and used it as a search phrase.

Being active within the death online research community, attending conferences and events on the topic, and presenting my project in different public spaces, has also resulted in access to additional websites, for instance, through designers reaching out to me upon launching new websites.

Although when I started compiling my corpus I was concerned there might be too few cases for such research project, I was able to compile an initial list of 64 websites through this long-term reiterative method of collection.

[45] The Digital Beyond became a popular and well-known resource of information, sited by scholars studying the field, journalists interested in it, and also, as I've come to know during the interviews, among founders of online immortality services. On August 2022 it is still accessible online but seems to be 'deserted': some of the pages don't load properly, the blog page has been last updated in 2019. Their list of services has not been updated, thus not featuring websites launched later than 2016, and still featuring many websites which are no longer accessible online.

To focus on practices geared towards potential death, I applied two exclusion criteria. First, websites must be oriented towards future death. That is, the service they offered must require users to consider their *own* future death. Therefore, websites offering services oriented toward the death of another (such as grief sharing websites or spaces for publishing death notices) were excluded from the corpus. Second, websites had to be the provider of the service, on their platform. Thus, for instance, a website offering to schedule a meeting with a lawyer for the purpose of will writing would be excluded from the corpus as the service itself was not delivered online by the website.

Applying these criteria narrowed my list to 46 websites. Most of the websites in my corpus were added to it between the years 2015 and 2017, with the exception of one website launched in 2019 (which was a new generation of a website already in my corpus). Importantly, all these websites were collected before the break of the COVID-19 pandemic in March 2020.[46]

As discussed earlier in this chapter, websites are inherently ephemeral, a fact which also has methodological implications for my research as I had to ensure I would have access in order to analyse them. Out of the 46 websites in my corpus, only 16 remains accessible online. Within these remaining 16 it remains ambiguous if they are still active.

[46] Even though much of the writing of this thesis took place during the COVID-19 pandemic, this research is a pre-COVID project, foremost because the data collection was completed before its outbreak, but also because it provides a useful benchmark and point of comparison to the mediation of mortality before the outbreak of a world pandemic. The current thesis, in the context of COVID, provides an important reminder to the complexity of change, and thus while COVID is likely to have had a significant impact on the mediation of mortality (yet to be fully understood), this thesis helps maintain the knowledge that such change would have been in a context where digital death-related practices were already in motion.

3.4.2) Accessing and Archiving Websites

As websites often become inaccessible, I had to archive copies of the websites. In fact, as most of the websites in my corpus closed and were no longer accessible online during the research period, it would have been impossible to complete the study without such archiving. However, unlike other media such as newspapers, TV programs, or Films, archiving websites is not straightforward. Creating copies using screen-captures of the websites would ensure access to its static visual content (e.g., written language, layout, colours) but not to any hyperlinks or animated features. In cases where content frequently changes (such as news updates or ads), one screen capture would be different from a screen capture taken just moments later. For this reason, each such copy would be a specific unique copy rather than an exact record of an original (Brügger, 2008, 2009).

Thus, for the purpose of my study, in the process of building my corpus, I used various archiving methods. First, I took screen captures of each website added to my corpus. I've only worked with websites that I was able to access online during the time of research.[47] Specifically, I kept screen-captures of the homepages, and where applicable, also 'about', 'Q&A', and pricing pages. As the entirety of a website page does not fit a single screen capture, I took several shots of each page, scrolling down, making sure to have continuity between images in order to be able to reconstruct the page design later on. I kept regularly monitoring the websites. When a website's design changed, I took screen captures of the new design. In

[47] The single exception was Intellitar.com which had closed before my research had begun but I had access to screen-captures taken by a colleague who had subscribed to the service before it closed. I nonetheless chose to include Intellitar.com in my corpus because of the rather ample traces it had left after closing both in terms of media coverage as well as academic research. Moreover, this was a website offering users to create digital avatars to interact in their behalf after their death. As there are only five such websites in my corpus, I decided it would be more useful to keep this example to allow for more variation.

addition, for each website, I have also downloaded its introductory videos if such were available.

Importantly, some elements of the websites are lost in such a form of record keeping. This is a record which privileges content and visual design over other elements such as hyperlinks or frequently alternating content. Rogers (2013), for instance, writes that in this form of archiving, the website is stripped of important features: “In a sense, the ‘new media’ elements (cookies, embedded material, recommendations, comments, etc.) are eliminated for posterity, and a traditional content container, looking somewhat broken for its missing pieces, remains as the ‘archived website’” (Rogers, 2013, p. 64).

Having said that, the consequences of such missing features, are significantly reduced within the current study as these web 2.0 or ‘new media elements’ do not play a central role in these websites which are closer to the dot-com design. In addition to having subscription-based business models, these websites do not offer public commenting, discussions, or ads, there is no publicly available user-generated content, no sharing, no news feeds, and no regularly changing features. Moreover, as these websites offer subscription-based services, they rarely link to external websites but rather are designed to orient the users to stay on the website and subscribe to its service. As I later detail in my transcription protocol, I have nonetheless kept a record of features such as hyperlinks in the form of transcript drawing on Adami’s (2015) model for analysis of interactivity and on the walkthrough method (Light et al., 2016). My transcription process is informed by a multimodal analysis approach to websites and therefore also captures these interactive elements that become unavailable through screen-capture.

3.4.3) Multimodal Analysis

Multimodal analysis has gained new popularity in recent years with the advent of digital media (Flewitt et al., 2011; Jewitt, 2011a, 2013; Kress, 2010). Websites as discussed earlier, use multiple modes in the process of meaning making, including image, video, sound, and layout (Jewitt, 2013; Lemke, 2002). Multimodal analysis draws attention to the different modes of communication and how these different modes are jointly used to convey meaning in the communicative process.

Specifically, websites don't only make it easier to use several modes simultaneously, but also allow for new modes to be created and used. For example, hypertext and link buttons are unique texts and they have their own modal affordances (Adami, 2015; Adami & Kress, 2014; Jewitt, 2013; Lemke, 2002). Thus, multimodal analysis affords careful exploration of the various communication modes used on these websites. In what follows I describe the process of data generation, challenges, and decisions made for collection.

While still building my corpus, I ran a pilot analysis on three websites to understand if and how my protocol was generating "analysable data that are relevant to [my-PK] purpose" (Bazeley, 2013, p. 55). For the pilot, I used the principle of maximum variation (Dilaver, 2014, p. 1218; Flyvbjerg, 2001, pp. 79-81) in the choice of websites: as the pilot focused on very few cases I wanted to allow for a variety of modes, affordances, and meanings. Therefore, the three websites I chose for the purpose of the pilot were each taken from a different group from my typology (which I delve into in chapter 4): PlannedDeparture.com which emphasised managing one's accumulated digital traces, DeadSoci.al which focused on creating new messages to be sent posthumously, and Eterni.Me which offered creating a digital avatar to posthumously communicate in the user's behalf. Qualitative research seeks to "enhance the data, to increase its bulk, density and complexity" (Gibbs, 2007, p. 4) and indeed the pilot

analysis generated a massive volume of data from only three websites, necessitating a protocol for managing such a large volume for the analysis of the entire corpus. For this purpose, I've adjusted my transcription protocol and decided, first, to focus on websites' homepages for the core of the multimodal analysis, and created a separate protocol for recording specific additional features that were not always available on the homepages (such as the subscription details).

Homepages, as the websites' 'gate', reflect the purpose of the website and provide access to the meanings and structure of the entire website. They accordingly window case information considered by designers to make the website most appealing to users (Baldry & Thibault, 2006, p. 118; Djonov & Knox, 2015, pp. 176, 188). As the marketing gateway to the website, homepages therefore provide helpful access not only for the ideas encoded into them by designers but also for how they conceived that these could be best articulated for their audiences. The second aspect of managing the data volume was through following a strict protocol for transcription and description.

To transcribe the websites (for a full list of websites analysed, see Appendix E), I used a multimodal framework, which interrogates the assemblages of several communicative modes which work together to make meaning (Adami & Kress, 2014; Bezemer & Mavers, 2011; Flewitt et al., 2011; Jewitt, 2011b, 2013; Kress, 2010; van Leeuwen, 2011). Specifically, I draw on Pauwels's (2012) protocol for multimodal analysis of websites as sites of cultural expression with some modifications. Similarly to Pauwels's protocol, my procedure moved from more general and descriptive procedures toward in-depth analysis and interpretation, incorporating elements from the walkthrough method (Light et al., 2016) and Adami's (2015) framework for analysis of interactivity as mentioned above. Based on all of the above, I followed a three steps protocol.

The first step was primarily an exploratory means to familiarise myself with the corpus as a whole. To do so, I surveyed each website and collected general and comparative information: the main technical features offered, types of traces emphasised by the website, the business model (including different subscription plans and prices specified, when specified), the terms used to refer to the main actors (such as users and their recipients). This step allowed me to gain an overview of the corpus, grasp the range of services offered, and identify common features across the corpus. The data for this general survey was gathered from any page of the website in which it was made available. Steps two and three focused exclusively on the homepages of the websites.

The second step was a descriptive overview, surveying the specific modes on the websites (which modes were being used and in what form, and what was the relative salience of each mode). For this, I created a table with a list of possible modes based on my findings in the pilot, including: written language, photographs, graphics, video, animated video, colour, sound, and interactive signs. For each mode used, I noted its overall salience, and its specific manifestations (e.g., the mode I called 'graphics' can have specific manifestations such as geometric shapes, arrows, computer-drawn cartoons etc.). This stage also included paying attention to notable absences and writing overall comments about the homepage and my experience visiting it. The comments were written in the order in which the elements referred to appeared when scrolling down on the homepage. All descriptions and comments were written in a dedicated word document per each website. Going through this process provided a systematic and thorough look at each website. This step also functioned as a first reading to familiarise myself with the experience of visiting the websites, paying attention to the main modes used and noting similarities and differences across the corpus.

The third step was producing a thick description of the homepage drawing on the walkthrough method (Light et al., 2016), on steps 3-6 from Pauwels' model (Pauwels, 2012) and on Adami's work on interactive sign/sites (Adami, 2015). I have described in detail every element on every homepage, paying attention to colours, layout, words, images, shapes and any other mode used. Moreover, as discussed earlier, archiving through screen captures does not enable capturing interactive features. To keep a record of the interactive features, I created a transcript of these features, following Adami's model for analysing website interactivity (Adami, 2015) systematically recording interactive features, accounting both for their aesthetic design as well as the actions they enable and how, or to use Adam's terminology: form (what the specific feature looks like), actions (what action can be acted on it, e.g., click or hover), and effects (what is the result, e.g., accessing a new page). Such thick description is an essential tool for enabling in-depth analysis (Bazeley, 2013, p. 374).

To generate this thick description, I've divided each homepage into clusters. These clusters function like visual paragraphs. Each forms a coherent unit, which forms part of the larger 'text' (the homepage). Image 1 shows an example of the clusters division on GoneNotGone.com. I then transcribed each cluster, exploring each of the specific modes used and the relationship between them. First, I described in detail the overall layout of the specific cluster noting the modes used and their specific materialisation (e.g., if written language and an image were used together – I've referred to the specific image used, how the text was organised, what colours were used, what were the relations between the image and text etc.). Then, each of the elements in the cluster was explored in detail in a table, describing each element on the left, and writing memos on the right including comments about the specific language used, symbols used and their connotative and denotative meanings, use of metaphors, intertextualities etc.

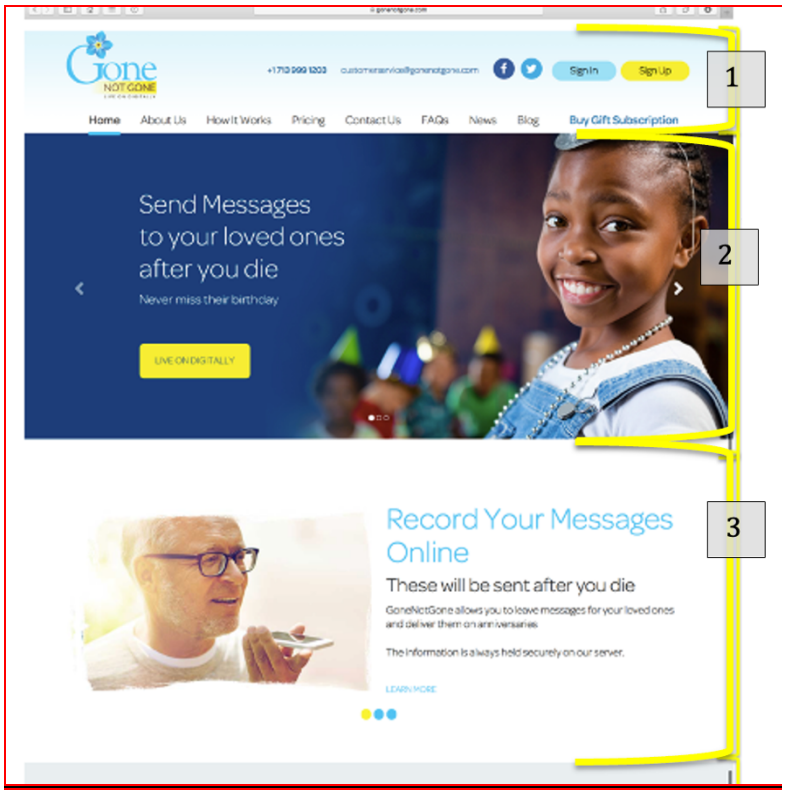

Image 1: GoneNotGone.com Division into Analysis Clusters

For analysis, data needs to be transformed into some form of transcription that can then be analysed. Working with multimodal data presents specific challenges as to how to transcribe them. Specifically, the translation of different visual and audial modes (such as layout, images, music) into written language may seem problematic given the variety of meaning-making modes in multimodal data and disputed possibility of capturing all such variety through written text (Bezemer & Mavers, 2011, pp. 191-192; Flewitt et al., 2011; Rose, 2001, p. 10).

Creating a transcription is necessarily a work of 'translation', in the sense of transforming a social phenomenon into data, and in the sense of transforming different types of meaning-making modes into analysable data (Bezemer & Mavers, 2011, p. 196). I found 'translating' different modes into written language helpful for the purpose of this project for several reasons. First, describing in words every element in every cluster as well as the

relationships between them, required me to provide detailed attention to each and every mode I was exploring. Second, it provided some form of consistency in transcribing across my data sets. Having created a written transcript does not mean that other modes were not represented in it. In addition to describing all modes, the visual division into clusters guided the structure of each transcript, and the units of analysis.

I now describe the process of generating interview data. A process in which the websites were also key as they allowed accessing interviewees.

3.4.4) Contacting Designers and Founders

Before contacting designers, I obtained permission from LSE's ethics committee to conduct interviews for the purpose of my research (see Appendix A). As part of this process, I gave careful consideration to who the possible participants might be, their potential motivation for creating such websites, and considered the potential benefits and harms for designers participating in my project. I also wrote an informed consent form (see Appendix B) detailing my commitment to participants, protecting their anonymity and making fair use of their data for the purpose of my research only. Once my research was approved by LSE's ethics committee, I started approaching participants. I used the websites communication forms to send invitations to designers to participate in an interview. Where possible, I opted for sending a direct email when an email address was available.

Reaching out to designers and founders required several rounds of sending messages and reminders. Before the interviews I sent participants my interview agreement and asked them to read and sign it. Regardless of whether or not they had done so, I opened every interview by making reference to the form and to my commitments and asked for participant's explicit spoken consent to participate and be recorded.

In total, I conducted 20 interviews with founders and designers. I refer to them as founders and designers since most of them were the people 'behind' the websites (they envisioned them, raised funds, marketed them etc.), but only 9 of my interviewees had a background in computing or web design (thus not those technically designing it). The others came from various backgrounds, mostly young (only four participants were over 50) educated professionals who had to turn to another person to design their envisioned website for them. Nonetheless, they all participated in the design process. Of this group of twenty participants only three were women. Only one participant was an employee hired by the founders to manage and run a website. Interviewees were from dispersed locations (including: USA, UK, Netherlands, Greece, Israel, Germany, Mexico, and Switzerland), so most of the interviews were conducted via Skype.

Although not as common as in the post-covid world, video interviews were already in use during 2018 when I conducted most of the interviews. Especially in projects such as the current one, where participants are globally spread, video interaction enables the researcher to overcome spatial limitations (appropriate for a research so concerned with different forms of presence at a distance). While there are limitations to conducting interviews over skype, such as unexpected technical interruptions and, more importantly, significantly reduced access to subtle non-verbal cues, conducting interviews via Skype ultimately allowed me to interview designers across the world, something I would not have been otherwise capable of.

Furthermore, conducting the interviews via Skype also had advantages, such as providing participants with a greater sense of control over the time and location of the interview, choosing a place where they feel safe and comfortable to speak and the best time of day (Deakin & Wakefield, 2014). This was particularly important given the potential sensitivity of the interview and the personal experiences designers would share. Thus, from

an ethical perspective, Skype interviews potentially benefited interviewees by providing a greater sense of control over the interaction. Only three interviews took place in-person as I could offer to commute to the location of participants. In these three cases, participants chose the time and place of the interview. I didn't find there was much difference in building rapport with interviewees online as compared to the few face-to-face interviews I conducted.

Importantly, doing Skype interviews also allowed me to choose the location that would make *me* feel most comfortable. Rather than being a guest in the interviewee's space (such as an office or frequented café), I was able to conduct the interviews in a place familiar to me, where I felt confident and at ease and thus able to fully focus on the interaction. While my focus of ethical considerations was on the needs and potential vulnerabilities of participants, more than once I was myself surprised to be confronted with my own strong emotional response to the study of mortality and to the conversations I had with participants.

Interviews generally took 45 minutes, with a few interviews extended to nearly 90 minutes. Three interviews were *not* conducted in English. In reporting about my data in later chapters I made the decision to mention when quoting interviews not originally conducted in English as I thought it was important for the sake of the analysis, transparency and accuracy. However, quoting an individual and mentioning their native tongue could render them identifiable given the small pool of designers within such a specific category of online services, therefore, I don't disclose the specific languages in which non-English interviews were conducted. Out of the 17 interviews conducted in English, for seven participants English was not their native tongue. Reflecting on my own experience in this study, in a sense, conducting the majority of interviews in a language which is not my own mother tongue, contributed to my ability to keep a critical distance from the so-personal subject, both analytically and emotionally.

The interviews were semi-structured in-depth interviews, meaning I used an interview guide (see Appendix C) to structure the conversation but also allowed flexibility for interviewees to express what they deemed important and for me to follow-up on issues they brought up (Brinkmann, 2013, p. 21). The websites informed the interview guides, as they were used for soliciting data from interviewees.

Some of the questions were descriptive regarding events and experiences, while other questions were questions of interpretation where interviewees were invited to reflect on why they did things the way they did or why they thought events unfolded in a certain way. Interview questions were divided overall into three themes:

- First theme, 'before': interviewee's self-introduction, as well as accounts of and reflection on what led them to create their website. This included, for instance, how they came up with the idea, what happened between thinking of the idea and realising it, who were the people involved in the early stages and how, how did they deal with challenges presented in these early stages, etc.
- Second theme, 'during': the materialisation of the specific website including design considerations and choices, beta phases and their conclusions, challenges, reflection on discrepancies between vision and realisation, reflection on timing and context of website creation etc.
- Third theme, 'after': Bigger questions about the field and its future. For instance, imagined future of the websites and of the field more generally and potential for development, imagined personal future of designers, and offered a space for any additional comments.

I transcribed all the interviews myself, making sure no one else had access to the original records which I kept securely on a digital recording device which was not connected to my computer and thus could not be accessed through the Web or by anyone other than myself. Transcriptions were made in the original language of the interview. I transcribed the interviews verbatim, following the common practice of keeping all dialects and grammatical expressions but without capturing actual sounds, thus for instance, without capturing strong accents (Gibbs, 2007, p. 14). Transcribing was already part of the process of analysis as the careful listening to recordings helped me familiarise myself further with my data. Moreover, while transcribing, I started taking notes of specific moments in the interviews which linked with my theoretical framework, resonated with other interviews, or seemed significantly at odds with either of these. While transcribing I also highlighted places where interviewees provided technical data such as company location, numbers of subscribers, and demographic data about their users.

While original transcriptions contained some identifying data such as names of individuals related to the speaker or the names of their websites, all such details were redacted from transcript excerpts quoted in the thesis. I have assigned pseudonyms to each interviewee and have used these consistently in referring to the interviews.

3.4.5) Contacting Users

Unlike approaching designers and founders in their capacity as designers and founders of online immortality services, approaching users required a more nuanced reflection on who these individuals might be, what might be their motivation to use online immortality services, what might be the harms and benefits of having them participate in the study, and whether

or not this justified approaching them. This was particularly challenging as there was no prior information as to who such users might be or how many users there are.

Online immortality services, as aforementioned, are geared towards dealing with future death. Thus, the motivation for design and use of its products is *not* experiencing the loss of a loved one, but rather a tentative approach to one's own mortality. On the one hand, thinking about one's mortality isn't necessarily triggered by negative feelings or events. For instance, having a baby or buying a house often leads individuals to write a will, which, by definition, is geared towards their own future death. Yet, none of these examples (having a baby or buying a house) refer to vulnerable individuals or to people struck by grief, even though they are taking an action related to their future death.

At the same time, however, it would be irresponsible and unethical not to carefully consider and acknowledge the fact that thinking about one's mortality *could* be triggered by death, such as the painful experience of bereavement, dealing with life-threatening illness or suffering from suicidal ideation. All these options would make individuals highly vulnerable, and including such individuals in any research needs to be carefully considered.

Studies involving vulnerable individuals, specifically, bereaved participants and participants suffering from suicidal ideation suggest that participating in research interviews does not trigger mental health issues. In fact, in some cases the opportunity to participate in research, be given a voice, and feeling a sense of competence having contributed to research, were beneficial for such individuals (Beck & Konnert, 2007; Cook, 1995; Cook & Bosley, 1995). Interestingly, in the context of the current study, these ideas of contributing more largely to society or human knowledge through participating in research strongly resonates with the ideas of symbolic immortality and giving meaning to life in the face of death. At the same time,

in order to conduct such interviews with vulnerable participants, specific skills and settings are recommended (Lakeman & FitzGerald, 2009; Sque et al., 2014).

After soliciting guidance and approval from LSE's ethics committee, my research was approved for contacting users with the intension to first attempt to create a small corpus, gain additional insight as to who these individuals are, what are their circumstances, and how vulnerable they are. Thus, in parallel to contacting designers, I also tried accessing users. This was a much greater challenge than I had anticipated.

For several months, using multiple strategies in parallel My efforts came to naught. I asked designers to tell users about my research and invite them to contact me, also asking if they could put me in touch with specific users they were already in direct contact with. I attended death-related public events (e.g., *Death Café*,[48] *Dying Matters Awareness Week*, and *Digital Legacy Conference*) and with the permission of the organisers spoke to attendees about my project and provided information brochures (see Appendix D) inviting potential participants to contact me. I directly contacted journalists who had published interviews with users to put me in touch with them. I have also attempted to create a public presence to my research through online media, including giving a TEDx talk that had reached over 10,000 views.

After all these efforts, I had only managed to obtain the contact details of two users. One of them, did not show up for our Skype interview, and never replied any of my additional emails. The second user, after several email exchanges, had set a time to speak with me, and

[48] Death Cafes are events organised by volunteers in the Death Café movement, where anyone is welcome to join in for a conversation about life's finality. I was hoping that among those who are interested in talking about death, there might also be some who would be interested in using online immortality services. Before attending I contacted the organisers and asked if it was all right to come and talk to other participants about my research. The two Death Café evenings I had joined were a very special, moving, and yet emotionally draining experience for me. As they didn't yield any participants, I needed to take a break from attending them. To find out more about Death Cafes see: https://deathcafe.com/what/

asked that we talk over the phone. I called on the date and time that we had scheduled, and a man answered the phone. When I asked to speak with the user, he said they were unable to speak. He said that the 'user' was not doing very well. That it was a "bad day" and that overall it seems that they have gotten worse. The user had mentioned an illness when we exchanged emails but I wasn't aware of how severe their condition was. Knowing they were eager to speak (based on their words in the emails) I emailed them again several times after this day, extending my invitation to talk at any time, but never got a reply.

Following this experience, I decided to cease pursuing interviews with users for both technical reasons and ethical reasons. First, within this process, and while interviewing designers, it started to crystallise that there was a reason I was finding it so difficult to find and make contact with the users. This became particularly evident as my research progressed, and designers seemed reluctant to share basic general information about their users or to put me in contact with users even though they could also benefit from gaining insights about the perspectives of their users. As websites started closing one after the other, I also realised that the failure to find users, turns out, was not only mine, but was one of the fundamental challenges of the industry. Not being able to find participants, was very much revealing about online immortality services themselves and their failure.

From an ethical perspective, this felt like the responsible choice. Given that considerable investment of effort resulted in only two contacts I was not confident I would be able to find enough interviewees to be able to generate analysable data from the interviews. Given this situation, vulnerable individuals, such as the user I described above, might invest tremendous effort into speaking to me, but I would risk not being able to use their input.

3.5) Data Analysis

Once all the data was transcribed, I read and re-read my transcripts, approaching each of my data sets separately. I began by reading and re-reading the websites' transcripts. Reading these transcripts was done next to a printed hard copy of the homepages' screen captures. While reading I highlighted and took notes both on the written transcripts as well as on the printed screen captures, noticing commonalities, salient visual features, and labelling clusters, identifying recurrent themes across the corpus, and paying attention to the specific forms of meaning-making such as specific symbols, use of metaphors, intertextual features etc.

I then read and re-read several times the interviews transcripts while highlighting repetitions, particular use of expressions and metaphors, and identifying ideas that resonated with my theory. While reading, I labelled each sentence to highlight the main idea articulated so to identify recurrent themes and ideas.

In both these processes, the identification of themes was done both inductively and deductively. I looked for the specific articulation of pre-defined categories defined by my theoretical framework (such as specific traces and their management, the construction of the imagined user, references to technology, imagined recipients, and references to or re-articulations of traditional modes of symbolic immortality). At the same time, I also allowed for themes to emerge from the data.

When interpreting the themes that I have identified in my two data sets, I found that putting them in context with one-another enabled making sense of them more than when looked at separately. Only when I started looking at both data sets together was I able to integrate my findings into a meaningful whole that could help me answer my research

question. In the process I drew on the concept of triangulation and specifically the combining of data sets in the stage of interpretation that claims that “more can be known about a phenomenon when the findings from data generated by two or more methods are brought together” (Moran-Ellis et al., 2006, p. 47). It was in looking together at the different ‘pieces’ (both data sets), that it was possible to make sense of the phenomenon of online immortality services as a meaningful whole (Denzin & Lincoln, 2005, p. 5). This is where the metaphor of the qualitative researcher as a quilt, montage or bricolage maker is particularly apt in explaining how I worked with my two data sets putting in conversation the themes that emerged from both sets, and then bringing them together into a single explanatory framework (Moran-Ellis et al., 2006, p. 55).

Interpreting the data and looking at both sets together enabled noticing and explaining “meaningful connection within the data” (Pratt et al., 2022, p. 225). In this process of combining the data, I did not necessarily look for themes to be consistent with one another or complement one another, but rather for different ways in which they fit together and related with each other to provide a deeper understanding of the phenomenon (Flick, 2007, p. 47). For instance, the myth of digital media immunity and robustness predominated on all websites. At the same time, the interviews revealed a sense of deep mistrust of things online and digital media more generally. It was only when these themes were put together in conversation that a larger theme of the dialectics between storage and accessibility could emerge.

Thus, it was interpreting both data sets together, combining them into a unified explanatory framework, that enabled me to “identify, understand, and illuminate the patterns in the data and connections to the research question” (Pratt et al., 2022, p. 219). Inherent to this process of combining the data was the process of writing. Trying to explain in writing how

the themes related to one another and what they reveal about the digital mediation of mortality, enabled me to engage more deeply with the data and allowed me to understand how these different relations I was finding between the two data sets enabled understanding the phenomenon I was trying to understand.

The presentation of data analysed in this way, also involves a form of bricolage. Thus, the empirical chapters that follow, are based on this integrated interpretation of both data sets: multimodal analysis of websites and interviews with designers. The analysis in the chapters, then, uses both data sets as explained above. The specific examples I present in the chapters are the ones that were the most illustrative (both from interviews and websites) for the purpose of showing to the reader the dialectics of control I found and for providing the reader with additional familiarity with the data. Thus, for instance, while the dialectic around closure explored in chapter 4 emerges from both data sets, the detailed description of founders of how they envision a regular, continuous, and enduring relationship with their users was particularly illustrative of the undermining of closure, and how it is inherent to the design of the services.

3.6) Overview of the data

Having provided a general overview of the interviewees participating in this study, I now provide a brief overview of the websites in my corpus. As mentioned earlier, after applying my two exclusion criteria I compiled a list of 46 websites (see Appendix E). Technically speaking, all the websites provide a service of making specific information that belongs to the user available after their death, according to users' specification. The websites vary in the type

of information they encourage users to make posthumously accessible and in the specific form in which this information is made accessible or delivered to recipients after the user's passing.

3.6.1) Type of posthumous information

The websites vary in the type of information that they encourage users to upload to their account to be made posthumously accessible. This range includes:

- Uploading digital copies of formal documents (such as wills)
- Filling in forms specifying the location of important documents or information necessary to access banks, deposit boxes etc.
- Storing digital photographs
- Creating a self-memorial web page
- Storing passwords and other information linked directly to an online account (such as online banking for instance) or platform (such as Facebook or Gmail)
- Text messages written on the website, these can sometimes include an attachment such as video or photo
- Video messages created on the website
- Information about a user's personality gathered through questionnaires and answers to questions asked by chatbots "trained" by the users.

Upon the user's death, the information stored on their account becomes accessible to recipients. There are two aspects to providing access: websites learning of their user's death, and ensuring data reach its recipients.

3.6.2) Protocols for Accessing Posthumous Information.

Most of the websites, require users to nominate two or more individuals of trust, who will have authority to notify the website of their death, whenever it may come. Some websites enable users to add additional specification to validate the user's death (for instance, requesting a death certificate). Some websites attempt contacting the user after a request to release information was made. If the user does not reply, the information is made accessible to recipients according to the user's specifications.

Some of the websites, use a protocol of automated notifications. If users fail to respond to a notification sent from the website, their information is released to recipients according to the user's specifications.

Once the website confirms the user's death, information is made accessible to recipients. This is done either by providing recipients with a unique password to access the user's account, or by automatically sending out messages. On some websites all created messages are released together soon after being informed of the user's death, and on other websites, messages are sent up to decades after the user's death based on the specific dates or events specified by the user.

3.7) Additional Personal Reflections on Studying Online Immortality

When I embarked on this journey I was fascinated by the phenomenon I was investigating, and inspired by all the ways in which it triggered my personal and academic curiosity. Myself somewhat enchanted with the prospect of immortality, and focusing on death as a distant possibility I underestimated the challenges I might come across in studying this subject. But, as I have already quite well established by now, it is impossible to reflect on transcendence without accepting that there is also death. As a future-dead individual, I am

never truly unfamiliarised with mortality, which was challenging personally if not methodologically. As a researcher, I gave significant attention and time for reflection over the potential sensitivities and vulnerabilities of my interviewees. But it is important to remember that researchers should also reflect on their own positionality with relation to the object of study when exploring the ethics of their work.

And in this context, it is also important to note as part of my own positionality as it relates to this research, as my "previous and current personal, social, and cultural experience" (Bazeley, 2013, p. 4) necessarily form part of this process. And while I am not untouched by the horror of death it is also crucial that I acknowledge my privileged position, as a white, middle class, cis-woman whose experience in the world is not characterised by daily explicit threats to her life. This privileged position allows me to approach and refer to death theoretically and calmly, outside the context of life-threatening experiences.

Chapter 4: Negotiating closure: What will you leave behind?

An animated cartoon shows a man driving a car. Suddenly, he collides with a tree and dies. A halo appears over his head as he begins floating up to the sky. Logos of online platforms and digital media start hovering around him as the narrator asks: “Have you ever wondered what will happen to your online assets when you’re gone?” This description is from Perpetu.co’s introductory video introducing the service to potential users. The narrator continues:

> What if your online content gets locked from access, deleted, lost, or even disclosed to others? Your loved ones would need to jump through hurdles to recover your online content. And let’s face it, do you really want them to read all your online stuff? Even those you kept private? (Perpetu.co)

Perpetu.co promised users to posthumously control their digital accounts and online posthumous presence. For instance, the website enabled posthumous management of one’s Gmail account: creating autoreply messages to be activated after death, posthumously forwarding selected emails to recipients, or deleting specific emails after passing. The users specify and store their preferences on the website, and upon their death, Perpetu.co would execute the wishes of the deceased user. With a “forever free” account, users could specify their preferences only for Facebook and Twitter. For $10 per year or a single payment of $99, users could set their preferences for six additional online accounts and multiple accounts on each platform (e.g., two different email addresses on Gmail). “Be remembered and leave a digital legacy with Perpetu,” the website promised.

Unfortunately, Perpetu.co's users, so it seems, won't be posthumously deleting social media accounts or sending any posthumous emails. Perpetu.co closed in 2016 and ceased providing any services. Some of its remains are still available online, such as the video described above.[49]

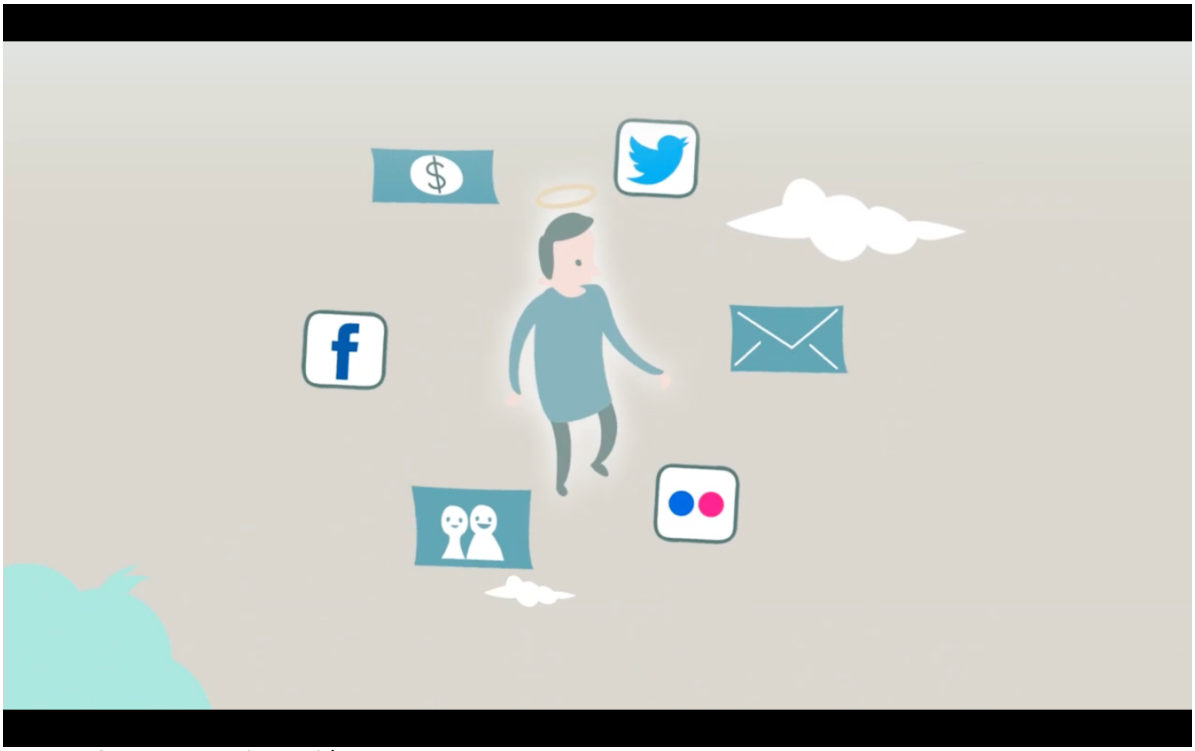

Image 2: Perpetu.co intro video

In this short introductory video, Perpetu.co provides a helpful introduction to online immortality services and contextualises them within contemporary practices of online communication. According to the video, everything you do online is saved and archived. This perception that *everything* is archived is why the imagined protagonist is advised to make a plan: while the video describes the risk of one's digital traces being forgotten, locked from access, or deleted altogether, it also implies the risk of what might be revealed through such an abundant digital record.[50]

[49] Perpetu.co continue some degree of online presence, like many other websites, through its online remains such as many magazine articles written about them, or their introductory video which can still be watched on YouTube: https://www.youtube.com/watch?v=n_4awUtVCpM.

[50] This is reinforced with the animation showing a bereaved and crying wife who is literally shown jumping through hurdles on her way to court, to obtain access to her deceased loved one's online traces. When she

According to Perpetu's video, one's digital traces are significant and valuable (economically, emotionally and socially), have an essential role in posthumously representing aspects of the self, they endure after one's death, and, importantly, are controllable and can be planned for.

Perpetu.co provides a helpful entry point to the focus of this chapter which is digital media traces and how they inform practices of online immortality. The theoretical chapter established that creating traces is one of the ways in which media are essential for symbolic immortality. In this chapter, I explore the specific traces-management practices that online immortality services construct and facilitate. In the introduction, I argued that online immortality services promise their users extensive control over their symbolic immortality but fail to provide it. In this chapter, I begin to unpack this argument by focusing first on the imagined digital media traces and their management.

I begin by describing the three main forms of managing traces that I identified in the data: putting order to existing digital media traces, creating new traces for online farewell, and creating new traces for self-memorialisation via long-term online posthumous presence. By exploring these features of managing traces, the chapter also serves as an additional introduction to online immortality services.

The chapter argues that online immortality services promise users to control their digital traces by constructing a practice of closure. At the same time, the analysis reveals that the ways in which the services construct traces-management also undermine the feasibility of closure altogether. Moreover, the chapter argues that the undermining of closure is inherent to the websites' design, the historical context of the post-mortal society, and the

finally received an envelope that says 'court order' she also received an envelope that says: "to mistress" to which she responses with shock.

contemporary culture of connectivity and its economic practices. Ultimately, this chapter argues that online immortality services, rather than facilitating closure, create a perpetually liminal practice of preparation for closure that can never be completed.

4.1) Online Immortality Services and Digital Traces Management

One of the categories that guided my analysis was that of digital traces and what future-dead users could do with them. While designers have also reflected on digital traces and their management, given that this section explores the specific features and functions offered to users and their construction, I find it more helpful to focus in this section on the multimodal analysis of the websites.

Using multimodal analysis of the websites in the corpus of this study, I identified three categories of managing traces: 1) putting order to existing digital media traces (by sorting, storing, bequeathing, and deleting already accumulated traces), 2) creating new traces for online farewell, and 3) creating new traces for self-memorialisation via long-term online posthumous presence. In what follows, I first present an overview of these forms of managing traces and how they promise users to control their posthumous media traces. Then, I discuss how these forms of managing traces attempt to construct a practice of closure.

4.1.1) Managing Existing Digital Media Traces: Sorting, storing, Bequeathing, Deleting

The first category of managing traces I identified in the data was the management of *already existing* digital media traces that users accumulate over their lifetime. In this section I explore this category, how it is constructed on the websites, and how it articulates control.

Pre-existing trace management mainly involved users making an inventory of their accumulated traces, assessing their significance, and deciding on what they wished done with these traces after their death. Thus, while traces can be stored, deleted, or bequeathed, the most dominant practice of managing one's existing traces is their sorting and classification.

The websites refer to digital traces as objects that have value (financial, sentimental, social, or other) and thus encourage users to plan for the disposal of, and access to these traces following their death. The significance of planning for these traces is articulated, for instance, through the fear of having them deleted or locked (as in the Perpetu example above) or by literally describing such traces as "important" and "precious" (PlannedDepature.com).

Notably, the significance of managing existing traces is also based on an imagined endurance of such abundant collections of digital traces of one's lifetime. I elaborate on this myth of enduring digital archive in Chapter 6. But it is important to note, that the perception of such traces enduring posthumously is part of how the websites explain the need to manage them in the first place.

To an extent, this type of managing traces can be thought of as a digitally mediated will as it mainly entails creating a digital record that specifies what should be done with one's (digital) possessions after death. Everplans.com[51] provides a helpful and illustrative example for further characterising this form of managing traces. Everplans.com enables users to upload documents and files containing important information (such as a formal will, attorney's contact details, digital photographs, passwords to online accounts and more) and store it on the website. After the user's death, the information stored becomes available to recipients pre-specified by the user. Image 3 displays Everplan's homepage.

[51] In the time since conducting this analysis, the EverPlan.com's design and focus has changed, again a reminder of the challenge in studying such ephemeral media.

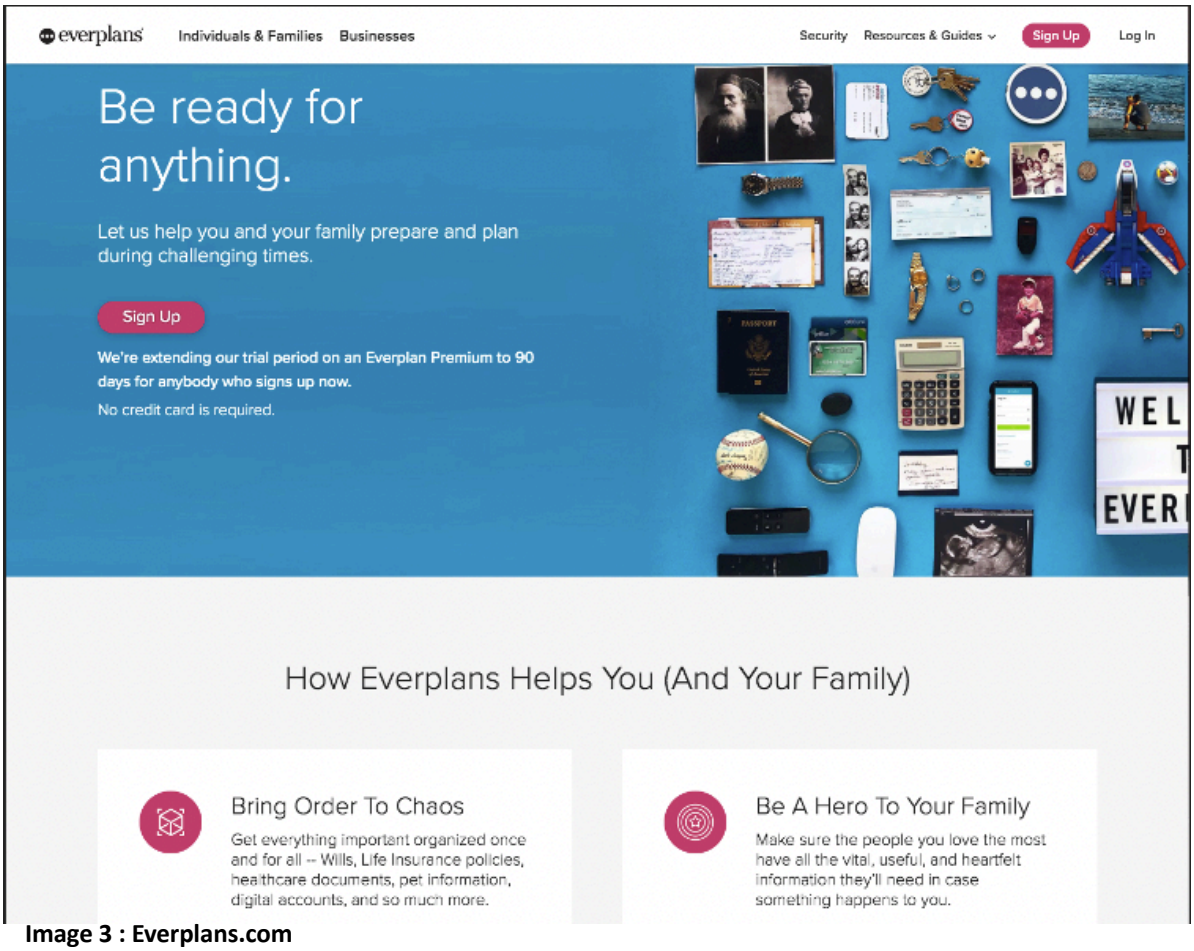

Image 3 : Everplans.com

The large background image at the top of Everplan's homepage shows a collection of items carefully and orderly placed. Although there is a mixing of types of objects (e.g., a watch, old photographs, a passport, rings, an ultrasound image), their careful positioning creates a sense of control and order.

The layout of the website reiterates this sense of control. Using contrasting background colours (blue and white) visually divides the homepage into separate sections. The use of geometric shapes provides frames for containing written texts, the consistent styling of paragraphs with recurrent patterns (large-font title, smaller font 4-line sentence; same-sized pink circle to the top left of each paragraph containing a white minimalist symbol) all contribute to the sense of order, clarity, consistency, and control. Such design patterns are illustrative of most other websites offering to manage existing traces (for instance, AfterVault.com, MyWishes.co.uk, knotify.me, PlannedDeparture.com).

The textual description on EverPlan's homepage reiterates a notion of control and order: "Bring Order To [*sic*] Chaos: Get everything important organized once and for all – Wills, Life Insurance policies, healthcare documents, pet information, digital accounts, and so much more." This quote describes the same idea represented in the top image: sorting and ordering a diverse collection of traces (from legal documents to pets and digital accounts, from photographs to credit cards).

These representations (in the header image and the text quoted) portray the abundance of digital traces that individuals might own and that require management. In contemporary culture, individuals accumulate a large volume of digital traces, from important documents or pictures of special moments to everyday and mundane records such as email exchanges and chats (Kneese, 2019, p. 306). As one accumulates such an abundant collection of traces of all sorts, the idea of classifying and planning for them and "bring order to chaos" generates a sense of control.

Everplans and other websites use legal jargon in describing their services. For example, to refer to the individuals designated to activate users' accounts after death, websites use terms that connote legal vocabulary such as "guarantor" (AfterVault.com), "trustee" (AfterNote.com, Capsoole.com), or "beneficiaries" (AfterVault.com, Eterniam.com). Some websites liken their services to formal legal constructs such as "insurance policy" (DeadMan.io). Using legal discourse establishes the website as a legitimate and trustworthy service provider. Moreover, it connotes values and norms culturally associated with the legal system and its practice, such as regulation, order, and accountability, all of which are linked to the idea of control.

Importantly, managing one's digital traces is not only a technical or administrative act but also an attempt to contain the awareness and horror of death. As Perpetu.co warns its

prospective users: “What if Twitter deletes your feed as if you never existed there?”. This question epitomises both the fear of death and the perceived significance of digital traces in managing this fear.[52]

The act of sorting and bequeathing traces requires creating an inventory of digital assets, as well as classifying one’s social connections. The websites require that users specify the recipients of their traces. To that end, users must reflect on their relationships, and determine which trace they want to leave for each person. This form of inventory and sorting serves a technical as well as a symbolic function. Technically, users specify who gets what. Image 4 from Knotify.me’s introductory video exemplifies this social classification.

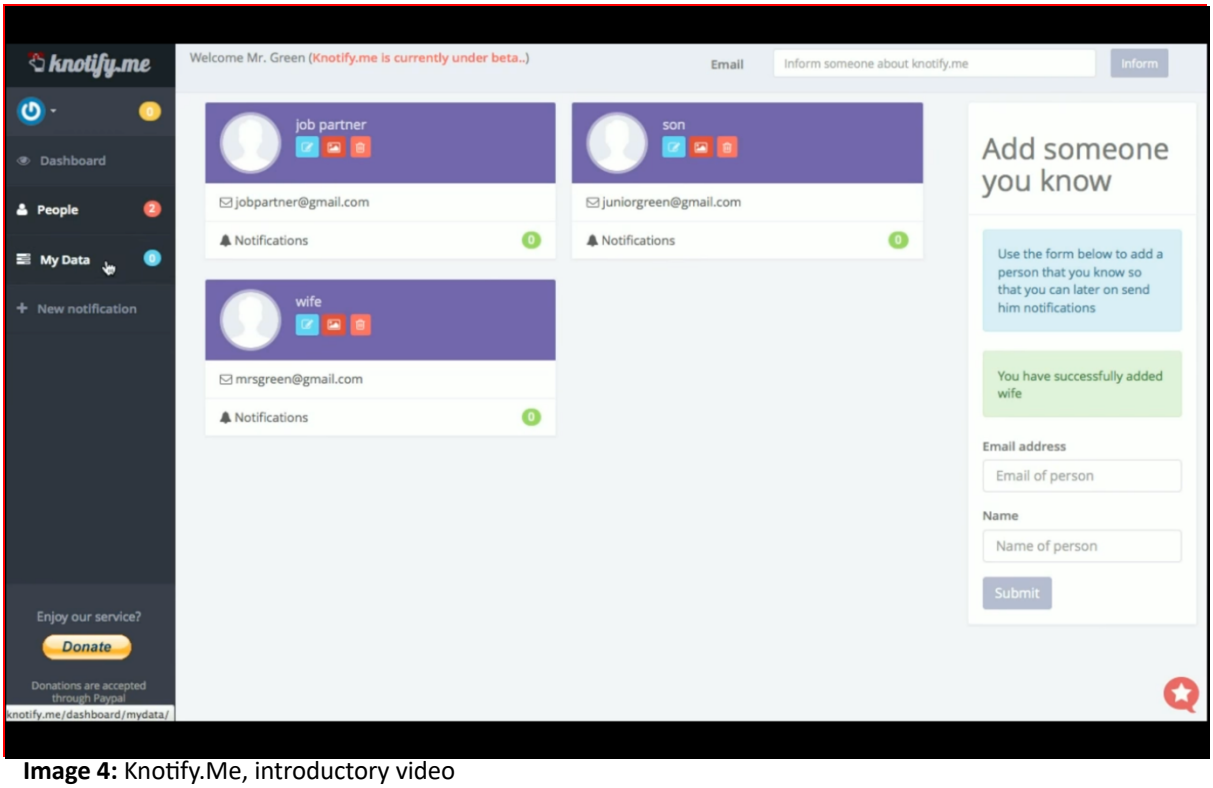

Image 4: Knotify.Me, introductory video

This frame, taken from Knotify.Me’s introductory video, shows the account of an imagined user (“Mr. Green”). Each future recipient is visually contained in a box. The title of

[52] It is important to note that these emerge within a legal context in which nation states and their legal systems were confronted with bereaved individuals asking to access the digital remains of deceased loved ones, but without legal precedents or formal regulation for such cases. I further elaborate on this in Chapter Five when I discuss the competing and sometimes contradicting interests of all the stakeholders.

each box defines the type of relationship with the user: “job partner”, “son”, and “wife”. The categories for sorting the user’s traces are his social connections. The specific traces and how to manage them may vary, but the classification by recipients and their specific relationship to the user are recurrent on many of the websites. Thus, in addition to holding an inventory of one’s traces, each time users log on to their account, they can also see an inventory of their social relations.

Therefore, besides the technical function, the inventory of users’ social relations also serves a symbolic function. Such an inventory of their social status allows users to symbolically reiterate their belonging to a specific social group and their sense of connectedness. By reflecting on the people in their lives and the traces they imagine bequeathing to them, they also reaffirm their sense of belonging and imagine remaining part of their community after death. This sense of connectedness is at the essence of symbolic immortality, as described in the theoretical chapter (Lifton, 1973; Lifton & Olson, 1975).

Hence, managing existing digital traces using online immortality services is done by sorting traces, specifying what shall be done with these traces, and classifying social connections reaffirming one’s sense of connectedness. The act of bequeathing and the use of legal terms associate digital traces management with the traditional will. The conceptual association with institutional practice (such as writing a will) further enhances the ‘sense of immortality’ as it echoes the traditional transcendental role of social institutions (Bauman, 1992a). By creating inventories, sorting, and planning, individuals engage in a practice of closure: reflecting on their life, choosing how to end ‘this chapter’, and imagining how they symbolically live on through their accumulated digital traces, which are seen as significant and valuable.

4.1.2) Creating New Traces: Online Farewell

The second form of managing posthumous traces identified in the data was planning online farewell and *creating new digital traces* for this purpose. These are traces that are explicitly created with the intention of being sent and read *only after the death of their creator* (user), bidding family and friendsfarewell. Users are invited to plan their online farewell by choosing how to end relationships, defining their last words, and confessing secrets.

In planning an online farewell, users are encouraged to bring their relationships to an end and reflect on how they would like to be remembered. Like the classification of social relations for bequeathing traces, the closing of relationships similarly serves a twofold function. First, the act of closing relationships by having "the last word in an argument" (GhostMemo.com) or getting to "say one last 'I love you'" (EmailFromDeath.com) resonates with the assumption that individuals find great value in obtaining a "good ending"; that is, even though one might prefer for a relationship (or life, for that matter) to never end at all, they would nonetheless find comfort in having it end well (Johansson, 2015). That is, when knowing something *must* end, making the ending meaningful provides comfort.[53] Second, as in the case of bequeathing, reflecting on one's relationships and how one wishes to end them reiterates that one has such relationships and that they are meaningful. Remember-Me.co's homepage (Image 5) helpfully articulates the focus on relationships on the websites.

[53] Johannsson makes many assumptions about this idea of a good ending. Especially, as to what makes an ending 'good'. Nonetheless, he does manage to convey the idea that when individuals are confronted with something ending, whether they wish for such end to come or not, that ending becomes meaningful by virtue of its finality, and this meaningfulness is part of the practice of closure.

Image 5: Remember-Me.co

Remember-Me.co enabled creation and storage of messages to be sent posthumously up to a year after one's death. On Remember-Me's homepage, over the background of a picture showing a smiling happy family on a sunny day, the website invites users to prepare their farewell:

> Death is the one thing we have no control over. Thankfully there is now a way to ease the grief, a way to let your **family and friends** know how much they matter to you; the difference they made to your life (Remember-Me.co, bold in original)

Remember-me.co explicitly characterises their service as enabling control in the face of death. Morevoer, here too, symbolic immortality entails invoking of a social institution – the family – representing one's connectedness to an eternal human chain (Blauner, 1966; Brown, 2017; Lifton, 1973; Lifton & Olson, 1975). Notably, the family invoked on Remember-Me.co is particularly apt for representing transcendence.

The picture in the background of the cluster shows six smiling faces of three generations (grandparents, parents, and children). They stand in proximity, physically touching one another, thus visually representing connection across generations. Moreover, this picture is not one that viewers would typically associate with death. Instead, it is more of a general representation of a family, commonly found in a family photo album or any public representation of 'family' as a concept. This type of picture comes up when searching for

'family' in stock photo collections. These pictures have become the contemporary standardised representation of *The* Family (Frosh, 2001, p. 630).

Importantly, this family represents a hegemonic ideal of a white, middle-class, heteronormative family. It is the type of family that can function as an unmarked form, thus timelessly representing any and all families.[54] Through such pictures, users can imagine being part of not just 'a family' but of The Family as a social institution connecting all human families in perpetuity (Lifton & Olson, 1975, p. 79).

The idea of *last words* is central to the online farewell constructed by the websites. While users can create several 'last' messages to be sent to several recipients, these messages are a one-time communicative event that takes place up to a year after the user's death. No matter how many messages users create, once their account is activated, all messages are sent at once, and no additional messages are expected in the future.

Last words have long been central in memorialisation practices (Guthke, 1992).[55] It is mainly their finality that gives them their power: these are the words to end all of one's conversations and arguments, to terminate all the words one will ever say (Guthke, 1992, pp. 49-50):

[54] By unmarked form I refer to the ideology and practices that endow neutrality to hegemonic identity markers. For instance, the masculine having the power to stand for 'human' while the feminine is always specific; or 'whiteness' as a racial category constructed as neutral, or a non-colour, while all other skin colours are seen as specific or deviant cases. Thus, a specific appearance with specific features is endowed with the power of generalisability and representing 'human' whereas all other forms and appearances are denied this power and seen as specific cases. See for instance: Dyer, R. (1997). *White*. Routledge.

[55] The many published collection of last words, including in recent years – either of famous people or ordinary individuals – are perhaps helpful indicators to last words maintaining their attraction and significance in contemporary western societies. A few examples include: Price, S. (2011). *If you're reading this: last letters from the front line*. Frontline Books. , Robinson, R. (2003). *Famous last words: fond farewells, deathbed diatribes and exclamations upon expiration*. Workman Publishing. , Rouse, R. (2008). *Last letters to loved ones*. Metri. , Wood, C. (2021). *Famous last words: confessions, humour and bravery of the departing*. Pen & Sword Books Limited.

> Such serious attention over the millennia to what is said with the last breath, the passing on of such lore from generation to generation, is nothing less than the very idea of culture itself – of its self-awareness, its self-confirmation, and its insurance of its future. (Guthke, 1992, p. 48)

Pre-planning one's last words as an attempt to define one's future memory is not new. The problem, however, is that no matter how well one prepares, the actual utterance of one's planned last words is not always feasible (Guthke, 1992, p. 50). The guarantee that one's last words are indeed uttered is precisely what online immortality services promised their users – not only choosing the last words to leave behind but also ensuring they are indeed 'spoken'.[56]

Finally, the websites also articulate farewell through the idea of saying *everything*, ending all conversations, and revealing all secrets: "Have you said everything you needed to say?" (AfterFect.com), "Leave nothing left unsaid" (SayGoodbye.co), "Some things are too important to be left unsaid" (MyFarewellNote.com), "you might wish there was something you had told the people around you" (DeadMeansSwitch.net), "Don't die with secrets that need to be free" (DeathSwitch.com). The encouragement to say 'everything' connotes a confessional practice. The link between confessing and preparing for death evokes the more traditional practice of deathbed confessions (e.g., Ariès, 1974, pp. 9-12; Walter, 1993, pp. 137-140; 1996, p. 120)[57].

[56] In today's mediated environment in which so many of our everyday communicative events leave records (emails, Facebook posts, Tweets, WhatsApp exchanges etc.), there is likely to be at least one public communicative trace which will be your last (online) words. The problem is, of course, that these words might not be the ones you would have chosen as your last. The practice of mourners going back to the last posts and sent messages after a death of a loved one and cherishing that last documented exchanged is common, and part of contemporary digital-grieving practices.

[57] I regard here generally the rather long history of this practice. That includes earlier religious practice of unburdening, confessing one's sins to ensure the dying person's soul is allowed into heaven, as well as later practices of unburdening including expressions of love and closeness as described, for instance, by Kellehear in The Inner Life of the Dying Person (2014). Similar practice is also popularised in more recent practices of New Age death emphasising ideals such as "letting go" (Walter, 1993). Thus, although changed over time, they all converge together to a long trajectory of revealing secrets, unburdening, and confessing at the end of life, a practice which is now echoed in this mediatised form of confession.

The digital mediation of the deathbed confession (like any mediated communication) separates the sender, recipient, and message across time and space. This fragmentation potentially enables controlling, carefully planning, and editing the content of the final message before transmitting it to its recipients, which can also be carefully chosen, added, and removed. The websites encourage users to return and edit, change, or add to their messages as often as they wish to ensure they have indeed said 'everything'. This ability to repeatedly edit and change one's last words or final confession further enhances the promise of control in the face of death.

Thus, online farewell – either by creating messages to end relationships, finalising one's last words, or being sure to have said all that ever needed saying – constructs a practice of closure by creating new traces. Such closure constructs a sense of control in the face of mortality, through the promise that one gets to say the words that will become their memory. In addition to providing greater control, the repeated editing suggests that online farewell is meant to be an ongoing practice, inviting regular work of reflecting, updating, and editing when facing one's end. Thus, the habitual and perpetual practice of farewell begins to point to the ways in which the same promise of control undermines the practice of closure, as will be explored later in the chapter. First, however, I will review the third category of traces management, which is the creation of traces for self-memorialisation.

4.1.3) Creating New Traces: Self-Memorialisation via Posthumous Ongoing Presence

Online immortality services also invite users to manage their digital traces as a form of self-memorialisation. Like the previous category, this category also entails creating new traces that will only become available posthumously. But unlike the first two forms of managing traces discussed thus far (managing existing traces and creating online farewells) that entailed

a single posthumous communicative event, this form of managing traces is based on creating multiple and recurring forms of posthumous online presence. The services construct three primary forms of such recurring presence: ongoing posthumous messaging, self-memorial pages, and memorial avatars.

The services that enable ongoing posthumous messaging as self-memorialisation encourage prospective users to think about the relationships in their lives and consider what and when to say to them. For instance, websites such as Deadsoci.al, SafeBeyond.com, Meminto.com, EternalMessage.org, GoneNotGone.com, MyFarewellNote.com, and Leg8cy.com allowed users to create and store messages that will be sent up to decades after the death of the user. In a way, this resembles the idea of farewell and 'saying everything' but stretched out over a longer timescale.

Thus, for instance, users who are parents of young children are encouraged to leave messages for when their children are older such as on their 18th or 40th birthday (as suggested by Meminto.com and SafeBeyond.com, respectively), or for life events further away in the future, such as "your grandson's wedding or graduation" (SafeBeyond.com).

Such extended timescales extend the sense of control over one's symbolic continuity and especially its reach into the future, imagining one's future traces being read by future (sometimes yet-to-be-born) individuals. Nonetheless, such long-term planning still requires users to accept their end, and their future absence from their social relationships in order to plan for the specific future moments in which they wish to be remembered. Thus, although it involves long term presence, it is nonetheless a practice of closure, of ending and leaving something behind.

Some online immortality services enable users to create self-memorials that will only become accessible after their death (e.g., Bcelebrated.com, AfterNote.com,

PartingWishes.com, AfterFect.com, Meminto.com). While it has become common for bereaved individuals in contemporary culture to use the existing digital remains of a deceased loved one, such as their Facebook account, for commemoration (Akinyemi & Hassett, 2021; Bollmer, 2013; Brubaker et al., 2013), such practices are initiated and managed by survivors using the unintentional digital remains of the dead. And while managing existing digital traces enables some form of control over which traces remain accessible to loved ones, creating a self-memorial page promises users to choose exactly how they are remembered: which images to use, how to narrate their life's story, and which qualities and deeds to be remembered by. The websites then promise to make these pages available in perpetuity as a "gathering place for friends and family to celebrate your life now and forever" (bcelebrated.com).

Similarly, the third form of trace managing under this category is creating chatbots that represent the user's personality and thus enable their symbolic presence in perpetuity, allowing survivors to interact with their memory. Although different in many ways, they offer a similar function: a long-lasting digital memorial of one's personality that survivors can engage with far into the future.

Eterni.Me,[58] for instance, claimed to enable users to create "an intelligent avatar that looks like you" (Intellitar.com,[59] eter9.com,[60] and LifeNaut.com offered a similar service). Such avatars are described as providing a long-lasting memorial for the future-dead. Although the websites claim the creation of an avatar gives the deceased some communicative agency, the ways in which the websites explain the purpose of these avatars mainly focus on

[58] Closed since 2015
[59] Closed since 2012
[60] While writing this chapter, eter9.com's second Beta closed, and they re-launched under a new name, Dduplicata: https://www.dduplicata.com which recently also closed, and recently re-launched as a new service called Second Self.

memorialisation and legacy. These chatbots are portrayed as enabling users to memorialise their unique selves by preserving "your most important thoughts, stories, and memories for eternity" (Eterni.me).

Users provide information about their lives and personalities to create this unique self-memorial. Then users are told to "train" or "teach" their avatars to become more like them.[61] By training their avatars, users create a unique and individualised record of themselves having exclusive control over the specific traits of this avatar. One can choose, for instance, not to show their bad temper or forgetfulness; one might not include stories about the times they lost their temper or had their hearts broken. In this way, the websites give users greater control over the record they leave about who they were.

Although these last two forms of managing traces emphasise long-term continuity, they are nonetheless practices of closure as they require reflecting on one's life, and accepting its end. Put differently, although these forms of managing traces enable an ongoing presence, they nonetheless require accepting and facing one's mortality, as all these forms of presence are contingent on one's death.

4.2) Digital Traces Management as a Practice of Closure

As described thus far in the chapter, my analysis identified three forms of managing one's online posthumous traces constructed and facilitated by the websites: 1) managing existing digital traces (sorting, storing, bequeathing, or deleting parts of one's accumulated digital footprint). 2) creating new digital traces to be sent posthumously as a single

[61] This is done in different ways on different websites. It is important to say that within the corpus, the websites that use some form of chatbot as self-memorial are very few (eterni.me, intellitar.com, lifenaut.com, eter9.com, liveson.com), most of which have closed and only one has been available and active. They each claim to base their avatars on slightly different technologies, but as all but one have been unavailable it remains vague exactly how this process of creating one's avatar happens.

communicative event of online farewell, and 3) creating new digital traces to be sent or made available posthumously as a form of long-term online posthumous presence for the purpose of self-memorialisation.

I use the term 'manage traces' to reflect that there are different ways in which traces are prepared and planned for, with different forms and extents of posthumous endurance and for various purposes. In this section I suggest that all three forms of managing traces represent an attempt to create a sense of control by enabling a practice of closure. At the same time, I suggest, their specific features prevent closure from being achieved.

Closure, in the context of this chapter, refers to a twofold practice. First, imagining and accepting the conclusion of one's life, and second, imagining and planning one's symbolic 'survival' after death. The two are intertwined, as it is imagining one's symbolic presence after death assists one to accept future annihilation (Doka, 2015; Hunter, 2008; Kellehear, 2000, pp. 151-152; 2014). This understanding of closure (both ending and imagining how one is remembered) is close to the understanding of closure in practices of palliative care (Bingley et al., 2006; Kellehear, 2000) and fits within the theory of symbolic immortality as it entails reassurance of connection, integrity, and movement in the face of death (Lifton & Olson, 1975, p. 48).

These three forms of managing traces echo traditional (and not essentially digital) forms of closure in facing mortality, such as will-writing, deathbed confessions, and self-memorialisation (e.g., memoir writing). At the same time, they are in many ways distinct due to their contemporary context, emerging within digital culture and the specific uses of digital media. These include not only the accumulation of digital traces and their perceived significance but also the contemporary ubiquitous use of digital media in interpersonal communication and maintaining relationships through ongoing asynchronous exchanges

(Licoppe, 2004) and the always accessible, always "on" internet (Lagerkvist, 2018, p. 57). This constant availability is also a key feature of managing one's traces.

This capacity of accessing one's traces from any time and any place is emphasised across the websites. "Update or delete your messages as often as you want" (AfterWords.cc), "update your post-mortem messages and recipients list as often as you want" (DeathSwitch.com) are a few examples.

However, the very features touted as guaranteeing control, undermine the possibility of achieving final closure. For instance, this is how LegacyArmour.com highlight the constant updating and changing as an essential part of their service:

> Legacy planning is not something that you can just do once and forget about. Your estate needs constant updating as your business grows, your family ages, you buy or sell property, and your assets change over time. You can access your LegacyArmour vault at any time in the future to add, remove, or change information, change passphrases, or to add or replace recipients.

In this paragraph, LegacyArmour highlights its availability and the ease of making changes as key for providing users with control over their traces. LegacyArmour defines change and fluidity as essential to their service ("not something that you can just do once and forget about"). Importantly, changes to one's plan can be made "at any time in the future". Rather than a practice of closure which concludes life and imagines posthumous continuity, the emphasis for managing traces is on all that is yet to come and be added, not allowing for a time of conclusion to arrive. More than describing the end of life, this paragraph describes growth and change (aging family, adding to one's assets, changes to one's relationships etc.).

In this way, this description emphasises the many changes that life may continue to bring rather than describing a reflection on a life lived and concluded.

Similarly, in order to create a digital avatar of oneself, users are asked to 'train' their avatar, which requires habitual engagement with the website. This is a continuous and time-demanding process. As explained on the websites: "The more you interact with the new social network, the more your Counterpart will learn!" (eter9.com), "… an interactive Avatar that becomes more like you the more you teach and train it to think like you" (Lifenaut.com).

As these quotes show, not only is regular work required, but this work can never be completed. That is, the extent of the likeness of one's digital avatar can only ever reach as far as one manages to 'teach' or 'train' it. There isn't a time when the avatar is 'ready' or 'complete' but only a contingency – the more it is trained, the better its ability to represent the user after death. In the same fashion, there is never a time in which one's existing traces are all sorted out or a time in which one's farewell messages are ready, as there is always an invitation for updating, changing, editing etc.

Importantly, however, non-closure is not merely articulated by the websites - it is deeply embedded in the design practices.

4.3) Never Achievable Closure: The Permanently Beta Industry

So far, I have explored how managing traces constructs a practice of closure. I have also begun to show how the construction of controlling traces also undermines closure. I now move to explore how the undermining of closure is embedded in the design practices of online immortality services and more generally in the digital media economy.

In addition to the above-described encouragement of habitually changing and updating one's plan, interviews with designers, in particular, are helpful here to unpack this aspect of perpetual non-closure and how it is rooted in the services' design. In their accounts, designers explicitly envisioned the use of their websites as an ongoing long-term practice. For instance, Kevin, the founder of a website in my corpus, referred to the importance of ongoing engagement as part of the website's business model:

> The main thing would be to keep [the website] alive, not just have an app that will help you to plan things in the far future and then forget about it, but to on a regular basis interact with people. ... so we have created a huge catalogue of questions for each kind of life area you can just pick out or just answer them step by step. And so after a period of time, you can create something like a biography of your own … when you use [the website] on a regular basis, so that's the idea of having people using [the website] more regularly.

First, Kevin imagines the users of his website making plans for "the far future", implying users should be young or relatively young, not typically the group concerned with mortality, end-of-life planning or in urgent need for closure. Moreover, the specific feature described by Kevin (several other designers suggested similar features) requires not only regular use but also entails an intrusive presence of the service in the user's life. Answering biographical questions is imagined to occur "on a regular basis" as a perpetual and intrusive activity.

Notably, Kevin links users' active and regular engagement with the *website's survival* to keep it "alive", as he put it. This perception creates a paradox: while he sees users' regular and long-term engagement with his website as necessary to the website's success, what is also essential for him to successfully provide his service, is for the users to die.

This contradiction is evident in the business model of most websites. The services are subscription-based, expecting users to pay a yearly fee. This means that enough users must continue paying (thus not dying) for enough years to make the websites profitable or sustainable. Therefore, users are encouraged to continue re-preparing and re-planning closure to justify the continued request for payment.

Importantly, this ongoing engagement of users is also vital for the websites' development process. As Isaac,[62] a founder of one of the websites, explained:

> We get feedback all the time. You know, we try to call all the time, hear, ask, you know, we have amazing communication with clients all the time. It's the best lesson. They are now helping me develop the product to bring it to its best place, thanks to the crowd's wisdom which I welcome. So the more people use it, we receive more feedback, and that will improve and change the product.

Isaac describes the relationship and exchanges with users as constant ("all the time").[63] By describing how he regularly seeks to listen to users and how valuable their feedback is, Isaac presents himself as respectful towards users and their comments (they have the "wisdom"). In this description, he also reveals how his openness benefits the product. This role of the users is embedded more generally in the political economy of digital media, in what Neff and Stark (2004) define as a permanently beta industry.

Digital industries are characterised by endless testing through the quick release of beta versions of their products. Beta phases enable companies and website designers to release unfinished products quickly, continue testing them under different configurations, and keep

[62] The interview with Isaac was not originally conducted in English.
[63] The Interview with Isaac was not conducted in English.

improving and developing them (Neff & Stark, 2004, pp. 176-177). In this way, designers obtain valuable feedback and information based on the free labour of users using a never-fully complete version, after version, after version (Chun, 2016; Neff & Stark, 2004; Terranova, 2000). Thus, the continued, habitual use of the websites is crucial to keep the websites "alive", as Kevin described, not only in producing revenue but in developing and improving the product itself (and thus producing more revenue in the future). In this sense, non-closure is not only in the specific practices constructed on the websites but also fundamental to their business model, embedded in contemporary design practices of digital and online products.

Online immortality services invite users to update their self-memorials constantly and offer yearly subscriptions with unlimited messages to unlimited recipients and unlimited editing while seeking ways to preserve users' long-term engagement. In this way, they construct a perpetual practice of repetitively planning and preparing for closure. The essence of the practice that the websites construct, so it seems, is not the act of closure itself but rather the *limitless and regular preparation for closure*.

Designers' accounts of themselves using their websites provide a small glimpse into this permanently liminal condition of constant preparation. When designers use their own websites, they materialise their envisioned ideal use. Therefore, when designers share their experience as users of their websites, it provides an additional perspective for their vision of intended and ideal use of their service.

For instance, Tom, the founder of a website in my corpus, talked passionately about having created goodbye videos on his service. Tom described his experience:

> I recorded to date, I think, about 30 messages. I found myself recording on various occasions. … I even had a period when I recorded messages for my entire extended family,

> including my siblings, my parents and so forth, and I found it to be an extraordinary experience, one that you can only experience on your own. You'd normally record at times when no one else is around you. You need to mentally and emotionally prepare yourself and think - what will I say? Who am I going to leave a message to? And you know, we each have issues with our parents, siblings, partners, and children. Suddenly you discover this space where you can speak and say and think. And then after you've done it, you see people in a different light.[64]

Tom describes a recurrent practice. As a user, he recorded videos on several occasions, in different moments of his life and at various locations. Framing that as "to date" reiterates this being an unfinished event: so far, until this moment in time, he has recorded about 30 messages. But the temporality of "to date" suggests he may record more.

His reflection about the moment of recording resonates with separation rituals (Turner, 1967; Van Gennep, 1960): preparing ("emotionally and mentally") as well as physically by isolating yourself in terms of time and space from other people ("when no one else is around you"). He then described how this ritual had impacted him. As far as he was concerned, he had already said his confessions and goodbyes through his recordings. Through this ritual of separation, he shared words, thoughts, and feelings with loved ones, which made him feel differently towards them. But in reality – as of yet – no one else was part of this ritual. His words and confessions haven't reached their recipients yet. Thus, his separation did and didn't take place at the same time.

Notably, Tom seemed to be comforted by the act of recording these videos. Tom's imagined future interactions between his posthumous self and future bereaved relatives had

[64] The interview with Tom was not conducted in English.

impacted his present. He felt relieved for having said the things on his mind and a sense of peace knowing that the videos were there, imagining his recipients watching them someday.

Tom's service had closed a couple of years before our interview. AT the time, he transferred all his messages (and, with consent, his users' messages) to a new service that had just launched. Today, this alternative service is no longer available online either. Traces of both websites remain online, epitomising the fundamental tension between the claim for control and closure vs the websites' inherent inability to provide it. Tom's closure will never materialise. If not due to the constant preparation he continuously engaged in, then due to the websites' ephemerality.

Thus, instead of providing control through a practice of closure, the services construct a practice of constant preparation, a perpetually liminal practice between repeatedly preparing for closure and undermining its feasibility. This condition of perpetual liminality seems to characterise other contemporary digitally mediated death rituals. As Sumiala argues (2021), contemporary digitally mediated mourning rituals make the presence of death uncontrollable. According to Sumiala, "the predictability of ritual practices and their outcomes is weakened; ritual participants may be put into situations of continued liminality with no easy way out of the ritual limbo surrounding them" (Sumiala, 2021, p. 171).

Sumiala's argument rests on the perspective of survivors who face the pervasive, uncontrollable everyday digital and online presence of deceased loved ones. Drawing on her argument, I argue that the closure negotiated by online immortality services potentially creates a similar condition of permanent liminality for the future-dead individual.

This unfeasibility of closure is also embedded in the wider context of contemporary post-mortal society and culture of connectivity, in which the future-dead are encouraged to

repeatedly and regularly engage in a practice of closure that they can never complete for an event (death) they must at all costs avoid. I now elaborate on this larger context.

4.4) Non-Closure as a Defining Characteristic of the Post-Mortal Society

After demonstrating how the practices of managing traces undermine closure, and how such non-closure is rooted in the design practices of online immortality services and in digital media economy, in this section I contextualise non-closure in the contemporary ideals of the post-mortal society and the culture of connectivity.

In the theoretical chapter, I've presented the contemporary prevalence of the post-mortal society ideology rooted in the deconstruction of death, which is the perception of death as having specific biological causes that modern medicine and science can, or soon will be able to, overcome (Bauman, 1992a; Lafontaine, 2009). Such a culture encourages its members to make an effort to overcome all possible causes of death, for instance, by keeping a healthy lifestyle and subjecting their bodies to regular scans and medical procedures aimed at prolonging life (Bauman, 1992b; Ehrenreich, 2018; Gianfranco, 2007). Indeed, in such a society, death is not only avoided but is practically forbidden. In this context, the permanently beta practice and the inability to provide closure can be seen as rooted in such ideology of post-mortality, which fundamentally denies the possibility of an end (death).

Post-mortality is implied by the websites' reference to death (or, better said, lack of reference to death). Even though they deal with facing one's mortality, most websites say very little about death and dying. As facing mortality is difficult (and hard to market, as several designers mentioned), the websites draw on different mechanisms that maintain distance

from death and the horror it could provoke. For instance, many of the websites only briefly mention death. Some use euphemisms like “departure” (Perpetu.co, PlannedDeparture.com), “if something were to… *happen*… to you” [sic] (DeadMansSwitch.net), “case of emergency” (Capsoole.com), “your farewell” (Xarona.com), “shit happens” (Postumo.info).

The websites visually representing dying use humour to keep it light and maintain distance from it (Booth-Butterfield et al., 2014; Lambert South et al., 2020). Image 6 shows some of the causes of death represented on these websites:

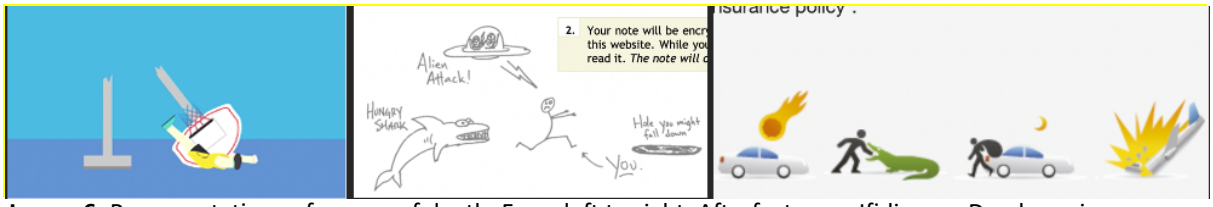

Image 6: Representations of causes of death. From left to right, Afterfect.com, Ifidie.org, Deadman.io

These are extremely rare causes of death: death by alien attacks, being eaten by a crocodile, being hit by a meteor, or having a basketball pole break and fall directly on your head.[65] In addition to humour, using non-realistic caricatures (like stick men or faceless heads) also creates distance from the reality of death. Additionally, the choice of such absurd and improbable causes of death portrays death as a rare and highly unlikely event.

To judge by the websites, it seems that death can only result (if at all) from very extraordinary accidents rather than, for instance, old age or incommunicable disease, which are the primary causes of death in contemporary western societies (Walter, 2017). In this manner the industry symbolically pushes death away, perhaps implying that death might be avoided, thus undermining the need for closure altogether.

DeadSocial.com’s homepage provides a helpful demonstration of the absence of death from most of the websites (image 7). Salient absences in multimodal texts can often be as

[65] Additional examples from other websites include: being beheaded by sward by an English knight (Myfarewellnote.com), having a piano fall over your head (IfIDie.net), direct hit by lightning (afterfect.com).

meaningful as what is made present (Pauwels, 2012, p. 256). DeadSocial.com functions here as the exception that proves the rule. This website started as a service for posthumous messaging on Facebook and Twitter (as DeadSoci.al) and later became a website offering various resources and tools dedicated to end-of-life planning.

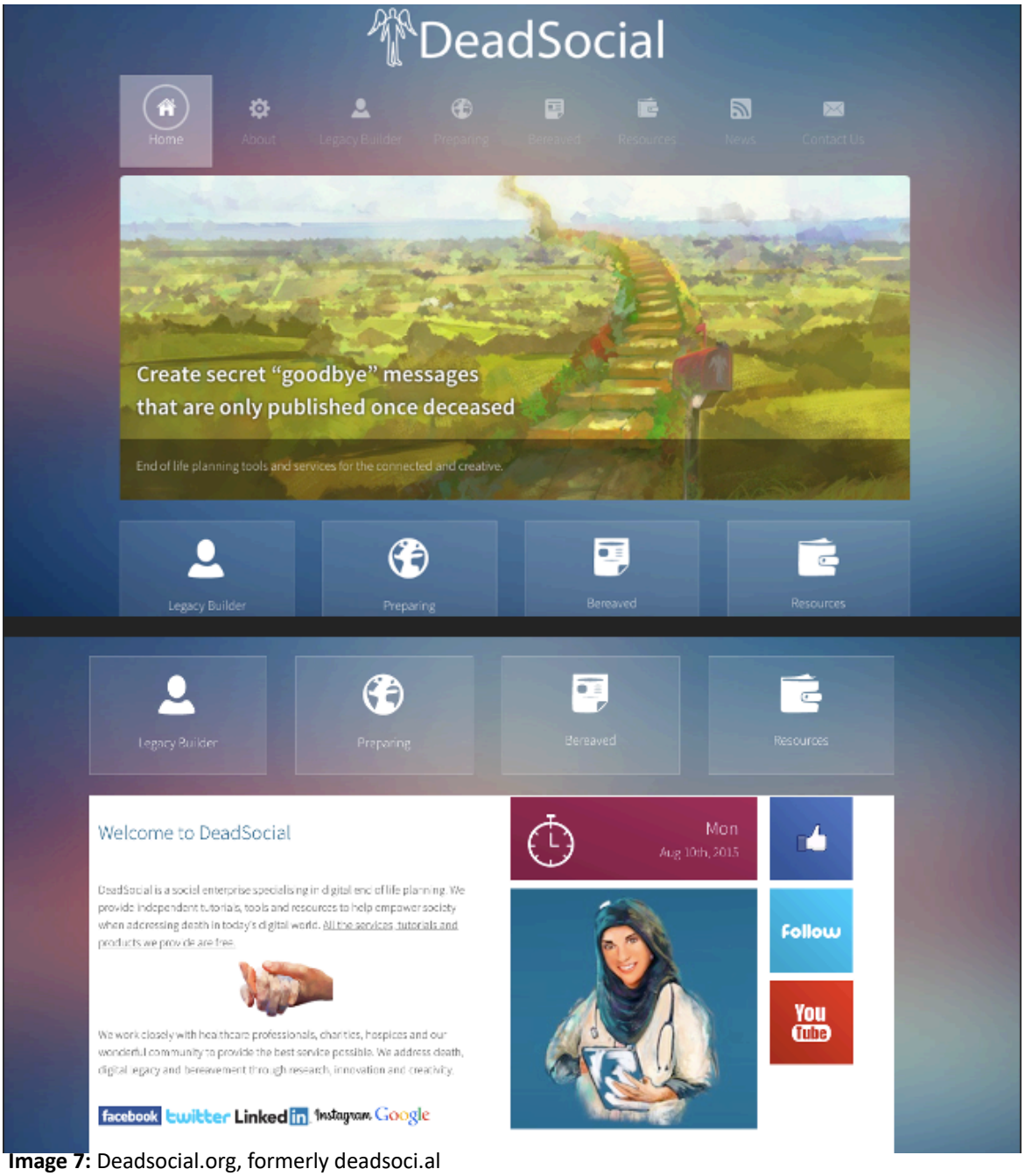

Image 7: Deadsocial.org, formerly deadsoci.al

First, the visual style of this homepage is distinct from most of the corpus. Although it uses drawings (rather than, for instance, photography), the texture and use of detail create 'realistic' looking images, such as the medical practitioner and the hands holding each other.

Death is undeniably present on this homepage. The drawing of the doctor represents medicine and medical care and thus also illness. To the left, the drawing of hands holding each other are of a young person holding the hand of someone old, ill, or perhaps deceased (implied by the extreme paleness compared to the healthy young hand). The holding hands image conveys meanings of suffering, care, support, and death. All of these (along with content categories such as “bereaved” and “preparing”) make death visually present on this homepage and emphasise death’s absence from the other websites at large.

In such a post-mortal society, it is not only death that is unacceptable but endings more generally. A practice of permanently beta in which products are never finalised and are constantly changed through an endless feedback loop between designers and users is consistent with a society in which death and endings are forbidden. Moreover, such undermining of closure and ending is a key feature of the contemporary connectivity culture, perhaps epitomised by the “constant presence of the internet itself” (Lagerkvist, 2018, p. 57). As Lagerkvist describes in her reflection on the feasibility of media closure: “When connective presence takes precedence within our digitally enforced lifeworld, termination itself seems to further dwindle as a culturally sanctioned prospect” (Lagerkvist, 2018, p. 66). That is, undermining closure is deeply rooted in the context of the post-mortal society and a culture of connectivity in a “limitless media age” (Lagerkvist, 2018, p.66).

4.5) Conclusion

In this chapter, I have explored the specific ways in which online immortality services enable users to manage their digital traces. I have shown these practices of managing traces are embedded in contemporary digital media and their practices of use, and I have argued

that online immortality services promise users a sense of control in the face of mortality by constructing a practice of closure.

Having shown how the services construct closure, I then demonstrated how the construction of controlling traces on the websites also undermines the possibility of obtaining closure. Taking a step back, I have argued that this undermining of closure is deeply embedded in digital culture, specifically in the perpetually beta practice typical of contemporary technological companies. Taking another step back, I have contextualised the lack of closure and the permanently beta practice in the contemporary culture of the post-mortal society in which death is presented as near defeated and, until then, must be fought against. The undermining of closure and of ending more generally is consistent with such a post-mortal culture which forbids death. Finally, I have argued that such a lack of closure is also consistent more generally with the contemporary culture of connectivity.

Importantly, connectivity is not only a prevalent imaginary of the digital age, as explored in the theoretical chapter, but also one evoked and used by the corporates designing and profiting from such connectivity (van Dijck, 2013). Thus, the unfeasibility of closure is also deeply rooted in the contemporary commercial logic of digital media and its neoliberal economy. While online immortality services do not profit directly from connectivity in the sense of mining data accumulated through practices of connectivity, the undermining of closure, as I have discussed, is linked to their sustainability and profitability.

In the following chapter, I delve deeper into these ideas by expanding on the notion of agency articulated in the services' promise of control and explore it in the context of the culture of connectivity and its neoliberal ideology.

Chapter 5: The Competing Agencies of the Future-Dead and the Future-Survivors, Responsibilisation and Dependence

In the previous chapter, I explored managing traces practices enabled by online immortality services, and argued that their promise of control ultimately fails due to the unsolvable tension between closure and non-closure deeply engrained in the practices of design, the post-mortal society, and the digital economy of the culture of connectivity. In this chapter, I examine the services' imagined future posthumous relationship between the living and the dead and make the case that online immortality services generate an unresolvable tension between the competing agencies of future-dead users and future-survivors, both of which, I will argue, are constructed as essential for their promise of controllable symbolic immortality.

The chapter demonstrates how the services construct the future-dead user as the typical neoliberal subject. It suggests that the practices the services offer construct a process of responsibilisation through undermining institutions and unburdening which obfuscates the crucial role of future-survivors for symbolic immortality. At the same time, I argue that online immortality services construct symbolic immortality as relational, and therefore highly dependent on the actions of survivors, thus generating an unsolvable tension between individual agency and dependence. I suggest that this unsolvable tension is characteristic of liquid modernity which both contributes to the need for individualised symbolic immortality and undermines its feasibility.

5.1) The Extensive Agency of the Future-Dead

In this section, drawing on the practices explored in the previous chapter, I examine the construction of agency of the future-dead users. For this purpose, I primarily focus on the multimodal analysis of the websites and their explicit promise to prospective users, examining the representations of the imagined users as well as the specific articulations of extensive posthumous control. I show how the future-dead users are constructed as the typical neoliberal subject and how agency is key both for individuals in liquid modernity as well as for the practice of symbolic immortality.

Across my corpus, future-dead users were imagined to have extensive control in planning and preparing their own posthumous online presence. The services construct them as the typical neoliberal subject: taking matters into their own hands, proactively planning and taking action for the future, self-realising, responsible, autonomous and happy (Binkley, 2011; Gill, 2008; Scharff, 2015). The detailed promises for future-dead users made on the websites provide particularly illustrative examples of this imagined extensive agency.

“Control how you’re remembered … you’re able to control exactly what happens to each and every one of these precious memories and make sure they end up in the right hands at the right time” (Vivala.Me), “fear of death is not a new thing… [sic] However one can be prepared!” (EmailFromDeath.com). Indeed, according to the websites, proactive and responsible users can plan for all aspects of their mortality and be prepared for death when it comes knocking. Controlling their mortality is literally at the fingertips of the individual users’ hands, who choose how to use the websites and dominate every aspect of their posthumous endurance as provided by these websites:

> Our motto here at Vivala is to deliver peace of mind, security, and happiness now and into the future and by putting this final control into your hands is why we exist. If you'd like to take control of your future, experiencing peace of mind and security while providing happiness after you're gone, Vivala has three packages for you to choose from. … Vivala welcomes you and wants you to know you now can control your future. (Vivala.Me)

An extensive impact over their future and control over their posthumous endurance is in the hands of the future-dead users, promises Vivala.Me. This emphasis on choice is key in the construction of neoliberal subjects whose agency is expressed by choice and, more specifically, consumer choice (Gershon, 2011, p. 540). By agency, I refer here to "the intentional power of society's individual members to act not just within but also upon the structures of their social world" (Hallam et al., 1999, p. 120). Therefore, in the context of online immortality services, I refer here to agency as the idea that future-dead users can intentionally act, make choices, and have their actions impact their social world before and, importantly, after death.

Such imagined extended agency is also rooted in times of liquid modernity. As identities are not predefined by 'solid' institutions and life trajectories, individuals engage in life-long projects finding and defining their unique individual identities. Such imagined posthumous agency is not only part of such life project of one's individuality, but also a consequence of it as individuals care for continued veneration of their own memory as unique individuals (Bauman, 1992, p. 25; Jacobsen, 2017, p. 70).

The visual representations on the websites of the imagined future-dead users and future-dead survivors are also part of the construction of the neoliberal subject and the

extended posthumous agency promised for users. Image 8 offers two illustrative examples which are representative of the representations across the websites.

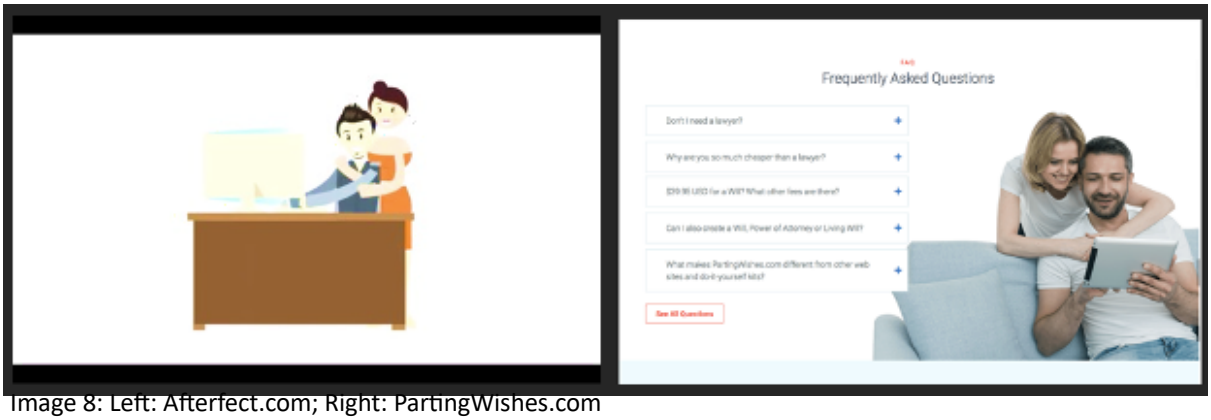

Image 8: Left: Afterfect.com; Right: PartingWishes.com

In both images (AfterFect.com on the left, PartingWishes.com on the right), the imagined users are the white men, sitting and holding/working on a digital device (computer or tablet) supposedly using the website itself. In both images, a woman is standing behind the imagined user, leaning on them, her arms wrapped around the shoulders of the user. Notably, this representation perpetuates old-fashioned gender roles and hegemonic social structure. Such hegemonic representation of the ideal user, I suggest, is key for the construction of agency so central to the promise of control.

To construct such an extended control in the face of death and extend control and agency even after death, the websites need to draw on the social identities that are already commonly associated with being in control. The white, heterosexual, middle-class young man who is imagined to be the user of these websites is not only a default or unmarked form of being human in western societies but also represents the individual conceived as having control in contemporary western societies. That is, For the websites to create a convincing or believable future imaginary of controlling one's posthumous endurance, they rely on the structures through which potential users *already imagine control as possible*. This is why the websites' ideal imagined user *must* be a young, heterosexual, white, middle-class man. The

hegemonic position of such a user lends itself to conveying control. Accordingly, as I will discuss later in the chapter, the future-survivors (here the women who are physically relying on the user), are represented using the social identities traditionally expected to perform memory and care work.

Finally, the construction of agency is also inherent to the idea of symbolic immortality. As explored in the theoretical chapter, Lifton and Olson discuss three dichotomies of life and death imaginaries: connection-disconnection, movement-stasis, and integrity-disintegration. Practices of symbolic immortality, according to Lifton and Olson, affirm "the life imagery of connection, movement, and integrity" (Lifton & Olson, 1975, p. 71). Specifically, the integrity-disintegration dichotomy is crucial here.

This dichotomy relates to the fear of annihilation, where disintegration is the loss of the self, the fear of the disintegration of one's body, one's mind, or one's sense of self (Lifton, 1976, p. 38; Lifton & Olson, 1975, pp. 32, 71-72). Agency, in this context, is a key vehicle for sustaining a sense of integrity. As long as one can intentionally act and impact their world, they can experience themselves as alive, consistent, and whole (Lifton, 1976), especially in Western societies where having agency is seen as a "prerequisite for social being" (Hallam et al., 1999, p. 121). Indeed, the idea of agency as constructed by the websites and expressed by designers was not only key for promising future control, but also fundamentally for maintaining an imagery of integrity which is essential for symbolic immortality.

In the context of neoliberal ideology and contemporary society, users' extended agency, fundamental to the promise of a controllable symbolic online immortality, is also constructed through a process of responsibilisation.

5.2) Responsibilisation of the Future-Dead

In this section, I continue the discussion on the agency of the future-dead, qualifying it also as a process of responsibilisation. I begin by exploring how online immortality services claim to challenge and undermine the role of traditional institutions in symbolic immortality. Then, I use the ambiguous construction of social institutions to begin exploring the tension between individuality and collectivity which undermines the promise of control. Later, I resume the discussion on responsibilisation through the idea of unburdening, to further explore the tensions between the future-dead and future-survivors.

By 'responsibilisation', I refer to the "process whereby subjects are rendered individually responsible for a task which previously would have been the duty of another – usually a state agency – or would not have been recognised as a responsibility at all" (O'Malley, 2009, p. 277). In what follows, I explore two main ways in which online immortality services facilitate this process: undermining of institutions and unburdening.

5.2.1) Undermining the Traditional Institutions of Immortality

The theme of undermining of institutions emerged in both of my data sets. Nonetheless, for the purpose of this discussion, I will mainly focus on my interviews with designers as they provided access to much more detailed and nuanced accounts as to the need to replace institutions and the role of online immortality services in such process.

Key to the imagined agency of the future-dead (as also implied by the traces management practices) is protecting their digital and online remains and making them easily accessible to the future-survivors. Survivors, for different reasons – legal, emotional, administrative, or other – would need to access documents and accounts belonging to the

deceased. The responsibility of ensuring these digital traces are easily obtainable by survivors is shifted onto the future-dead user.

Importantly, this responsibility of the future-dead user is contextualised within a contemporary regulatory lacuna. The problem of accessing digital remains is a new one and was not anticipated by founders of digital communication companies or the legislators. As I have presented in earlier chapters, unlike earlier remains, including media remains such as photographs and personal diaries, digital remains are owned by the private corporates designing and providing the platforms on which such remains are produced and stored, such as Facebook or Gmail. Private corporates owning the media traces of the dead, often holding significant personal and sentimental value for the bereaved, created unprecedented conflicts, often causing significant distress for survivors (McCallig, 2013; Morse & Birnhack, 2020; Sherry, 2013).

Some such cases argued in courts in USA and Europe received significant public attention (e.g., *Facebook ruling: German court grants parents rights to dead daughter's account*, 2018) triggering academic and public debate and contributing to a growing popular action with the attempt to influence policymakers.[66] It is in this context that online immortality services were working and to which their designers and founders were reacting. Many designers had strong feelings following personal experiences dealing with the digital remains of deceased loved ones. For many, this was a key motivator in creating their service.

David, for instance, a founder of one of the services in my corpus, told me how he first envisioned his service while dealing with the aftermath of a loved one's death. He was overwhelmed with all the bureaucracy he and his family had to deal with in the midst of their

[66] There has been some progress in this field in recent years, both within private corporates (such as Facebook's Legacy Contact feature) as well as early attempts at legal regulation. In most of the west, however, these remain unrgulated.

grief. While some procedures were clear and simple to him (such as closing a bank account by showing a death certificate), others, he said, weren't nearly as straightforward. Following this experience, he said: "that's where I've had the very simple realisation that when the world became increasingly digital, the services offered to families in such situations had not yet, they didn't catch up."[67]

This perception of the state and its legal system as lagging behind contemporary developments was expressed by other designers frustrated with and aiming to solve the same regulatory lacuna. Many referred to the legal system and state regulation as old-fashioned and unable to keep up with technology and thus contemporary needs of individuals. This was a theme they often brought up during our interviews. Luke, the designer of another service in my corpus, also expressed frustration on this matter:

> In the will business, the one issue that is slowing everything down is the acceptance of a digital signature and digital signature technology. It is the most ludicrous thing that the only legal document that is accepted currently under law is a printed piece of paper with a signed signature on it.

Luke contrasts between old and new, describing institutions as 'archaic' and an 'old model'. It is not only the lack of solution, but the institutional practice and its old technologies (pen and paper) that is old fashioned and thus unable to address current and new needs. Luke, like David, suggests that contemporary digital technology should replace these old-fashioned institutions and their technologies.

[67] The interview with David was not originally conducted in English. Nonetheless, during our conversation he did use several expressions in English. The phrase "they didn't catch up" was one such expression.

> I don't want to have to make an appointment with a solicitor. They're gonna see you Thurs, next Thursday right, and then I've got to go, oh and make sure your wife can come as we'll have to meet you both. Like what? Ok, we both got to go, and somebody's got to look after our kids. It's just it's an old model and then for that you're gonna charge me 800 pounds?

In offering this alternative, however, designers also undermined the symbolic significance of these actions and procedures for a sense of transcendence, and the broader role of institutions in relation to addressing one's mortality.

5.2.1.1) The Ambiguous Role of Institutions

Luke's criticism reveals how will-writing in what he defines as an old-fashioned manner can be significant for imagining one's symbolic immortality. What he describes as an inconvenience which is incompatible with the speed and instant and constant availability of online services, also contains features of ritual.

In Luke's description of an 'old fashioned' will writing process he in fact describes some key features in rites of passage. Dedicating time that is separated from everyday routine, physically attending a space that one does not frequently attend and engaging in a symbolic act (signing a piece of paper) in the presence of a formal representative of the social institution, are all characteristics of rituals (Van Gennep, 1960). Such rituals reaffirm both one's connection to society as well as the perpetuation of society itself, its structure, and its values, and have traditionally been essential in mediating death and mortality. Thus, while the designers critique the lack of regulation, high fees, and the inefficiency of current will-writing practices, they fail to acknowledge the importance of these specific practices, and the

institutions more generally, to establishing a sense of transcendence (Lifton & Olson, 1975, p. 72).

The websites also presented online immortality services as replacing institutions. For example, DigitalRemains.co.uk, PartingWishes.com, Perpetu.co, MyWishes.co.uk, and LegacyArmour.com all claim that solicitors are redundant for the purpose of planning for one's digital traces (or even for creating a traditional will) and present themselves as the solution to the shortcomings of the legal system. In this process of responsibilisation, private commercial enterprises offer an alternative solution to an institutional lacuna that is to be carried out by responsible individuals (users). The designers enact their agency in creating such services using and calling for technological change as the solution to the problem. The designers also claim to be advocating for users' agency, enabling them to take matters into their own hands as consumers of these new technological companies. Individual designers enact their own agency taking action to ensure "the rights and obligation we have as individuals in regard to each other" (Mansell, 2017, p. 43) in the context of memorialisation and bereavement are sustained.

At the same time, however, following my observation on the significance of social institutions for symbolic immortality, it is important to note online immortality services are in many ways ambiguous towards social institutions (including the legal system). While advocating for replacing its practitioners and protocols with technological means, websites and designers also repeatedly reaffirmed the authority of the law. For instance, claiming to replace the need for a solicitor, websites also emphasised that their service was "lawyer approved" (PartingWishes). Moreover, designers often went into great detail describing how they made sure their websites were compatible with the law.

A similar dynamic was also evident with reference to the family as a social institution. On the one hand, online immortality services are emblematic of a time in which kinship structured are reconfigured, with significant consequences to notions and practices of inheritance (Kneese, 2019, p. 308). Online immortality services enable individual users to control their posthumous online traces in ways that might deviate from traditional kinship expectations. Perhaps the most illustrative example, to me, was Kevin's account (a founder of a service in my corpus), who told me about a friend of his who had unexpectedly died. He hadn't known the friend was registered to his service. After the friend's death, Kevin and his friends received messages from him. The friend's grieving parents, however, did not. They had no claim to the messages that their son had left to his friends, nor to whatever instructions he left to his friends addressing his digital remains, without their knowing.

However, while the actual practice of online immortality services challenge traditional kinship roles in the context of memorialisation and bereavement, they simultaneously evoke the family as a timeless social institution. This ambivalence can be understood as linked to the importance of a social institutions, especially the state and the family, in maintaining social cohesion and enabling imaginaries and practices of symbolic immortality. In fact, this challenging of social institutions more generally characteristic of contemporary society presents a significant challenge to symbolic immortality. As Lifton and Olson write: "In times like our own when these institutions are in flux, the task for each individual of maintaining a sense of immortality becomes vastly more difficult" (Lifton & Olson, 1975, p. 72).

This ambiguity, then, reveals yet another fundamental tension between online immortality services' promise of control and its failure. The challenging and undermining of institutions, characteristic of the current moment of liquid modernity but also to practices of digital culture, where technology and technological companies disrupt and challenge

traditional institutions, poses a significant challenge to the ability to create a sense of transcendence. Society and its institutions are crucial vehicles in creating this sense of continuity. Responsibilisation, though it is key to the promise of controllable symbolic immortality, simultaneously undermines it. I further explore this tension looking at the construction of responsibilisation through unburdening.

5.2.2) Responsibilisation as Unburdening

The potential impact and responsibility of the future-dead towards the future-survivors as constructed by online immortality services is both technical (by making digital traces easily available) but, importantly, also emotional. Online immortality services (both in representations on the websites and designers' accounts) emphasise the role of the future-dead in comforting loved ones after death. "The loss of a loved one can be easier on everyone" promised Vivala.Me; "Record final wishes for your funeral and digital legacy so you don't leave your loved ones with difficult choices to make", says AfterNote.com. The future-dead, according to online immortality services, are held responsible for alleviating the grief of future-survivors. David, based on his own experience, felt very strongly about this responsibility towards survivors. These were his reflections:

> So do you pass on the burden to those who, yes? 'I've prepared a whole list of things for them to do', but who wants to receive such a list? We claim that what we do enables you to take responsibility. You don't drop errands on- you reduce the amount of errands that you leave them. … Only someone who's lost someone and received such a list of instructions knows how annoying it is. Because you want to deal with things on your own and not suddenly feel that your life is held hostage by someone else and his instructions.

David's experience of loss in his family was very painful. Due to the specific circumstances of the death, most of the errands, and specifically those related to online accounts and remains were up to him to take care of and put in order, and this experience left a strong impact on him. It was for this reason that the "burden reduction", as he referred to it, was such an essential aspect of his service. The reduction of burden, according to David was the fundamental feature that made his service unique compared to other available services.

What David describes seems the epitome of rendering an individual responsible for a task previously performed by another or not considered to be a responsibility. He sees alleviating the grief of future-survivors, and the onus of caring for different errands after one's death, as under the responsibility of the future dead. Expressing and documenting wishes is not enough, the future dead must 'do' the errands themselves so that future survivors don't have to.

When survivors are left to care for all the errands, even if the dead had been proactive and specified their wishes, David harshly describes this as taking "hostage" the lives of survivors. Such unburdening calls for shifting the responsibility of dealing with the aftermath of one's death from the shoulders of survivors to the proactive and responsible shoulders of the to-be-dead user. Thus, according to online immortality services, planning and preparing for one's death isn't only for the purpose of choosing and controlling how one posthumously endures but also to assume post-mortem responsibilities, reducing the work that others have to do for them.

This emphasis on future-dead users' agency and responsibility, framed as meant to alleviate the grief of survivors, also implies a diminished agency for survivors in their

posthumous relationship with their deceased loved ones.[68] To make this point it is helpful to look at some of the specific choices that the websites encourage and invite future-dead users to make. For instance: "Decide what goes in your obituary" (DigitalRemains.co.uk), "control who owns and views your memories and possessions forever" (Eterniam.com), "What should happen to all your online accounts? Do you want them removed or given to someone? Do you want your social media accounts to stay active or given memorial status? Decide with Afterfect" (*Afterfect.com*).

While all these options indeed seem to offer future-dead users extensive control over their posthumous online presence, they also have significant implications for the future grieving survivors. Survivors could have a significant stake in each of these options: the future-dead's idea of what they would like to be in their obituary, might be at odds with what survivors prefer. Similarly, the future-dead might have a preference as to who should have access to their digital photos, but survivors might have very different expectations. Users may choose whether or not they wish their online SNS accounts to be maintained or removed, but either of these options could have heart-breaking consequences for survivors (Bassett, 2021; Brubaker et al., 2014).

This diminished agency, I argue, rather than unburdening survivors, burdens them in new ways. It is precisely this form of reduction of burden that in fact takes survivors "hostage" (to use David's words). This re-burdening, I also argue, reveals another unsolvable tension inherent to the promise made by online immortality services, between the agencies of the

[68] Drawing on the work of Hallam et al., 1999 on agency as distinguished from embodiment, and specifically their exploration of the social agency of the dead, and drawing on the contemporary perception of continuing bond as representing current understandings of bereavement and relations between survivors and deceased loved ones, I refer to the ongoing connection between survivors and the dead as a relationship. For further reading see Hallam, E., Hockey, J., & Howarth, G. (1999). *Beyond the body: Death and social identity*. Routledge.

future-dead and future-survivors, and it stems from the moral and ethical obligations that such plans made by the future-dead create for survivors (Stokes, 2015). To make this point, I now turn to explore the role of survivors in online immortality services.

5.2) Dependency by Design

In this section I show how online immortality services construct the role of future-survivors as fundamental for providing their promise of controllable symbolic immortality. I first show how this is embedded in the technical design of the services, and explore the potential administrative, emotional, and ethical implications for survivors. I argue that this construction of the role of survivors undermines the promise of control made to future-dead users.

In emphasising future-dead users' agency, online immortality services obfuscate the crucial role of future-survivors for the materialisation of any form for symbolic immortality. First, while online immortality services offer the future-dead users significant posthumous control over their online presence (such as deleting accounts or blocking certain people from one's photo album), they obfuscate that survivors are crucial for executing these wishes. With the exceptions of Capsoole.com and Perpetu.com, which offered fully automated solutions, all the other services depended on survivors' actions to materialise the promises online immortality services made to future-dead users. Survivors are the ones to click 'send' on the saved messages of users (e.g., AfterNote.com, LegacyArmour.com), and they are the ones to maintain or delete an SNS or any other online account (e.g., Knotify.Me, GhostMemo.com, IfIDie.org).

Importantly, in all these examples (choosing what goes in your obituary, who posthumously gets to view your digital photos, deleting an SNS account etc), the actions

required from survivors are anything but straightforward. For any of these choices, future survivors would have to be the ones who need to print and circulate the obituary left by a loved one, they would have to permit and deny access to digital albums to selected bereaved, and they would have to be the ones to close an SNS account or accept managing it. Sometimes, these actions, specified by the dead, might contradict the bereaved's preferences and needs.

While the preferences, feelings towards, and uses of the accounts and digital objects of the dead may differ among grieving individuals, research has established that these (online and digital remains) are significant and emotionally valuable for the bereaved. Whether they choose to remove or maintain, delete or save specific accounts, survivors have shown strong feelings towards SNSs and other online and digital remains (Arnold et al., 2018; Bassett, 2021; Brubaker et al., 2014; Brubaker et al., 2013; Ebert, 2014; Kasket, 2013; Meese et al., 2015; Morse & Birnhack, 2020; Staley, 2014; Stokes, 2012; Sumiala, 2021). These intense feelings of survivors make any request or action related to the deceased's online and digital remains, at the very least, less than straightforward.

Thus, for instance, a future-dead user instructing their spouse to keep active a blog or a Facebook profile of their deceased partner is not a simple request. Whether the partner acts according to or against this request, it creates different burdens for them (Kneese, 2017). Alternatively, discovering that all online accounts of one's deceased partner have been deleted could also be difficult and create other types of emotional or other forms of burden due to the role of such remains in the grieving process (Brubaker et al., 2014; Stokes, 2015). The working assumption of websites, then, that survivors will obediently enact the plans left by deceased loved ones highlights the conflict of interest between the future-dead and future-survivors and the agency of both. This tension can put the future-survivors in an impossible

position, as in their actions (or avoiding action), they enable or deny the materialising of the future-dead users' choices.

Notably, even before being confronted with the wishes of the deceased, future-survivors are essential for at all activating the accounts of the dead. That is, for the services to provide their promise, it is crucial that they be made aware of the user's death. As users may include sensitive content in their posthumous messages, it is also crucial that this notification is reliable so that accounts are not activated by mistake. While some websites enable an automatic function relying solely on technology for activation,[69] most online immortality services rely on survivors for activation (or a combination of both). Therefore, any form of posthumous agency and any form of responsible posthumous action of the dead, ultimately depends on survivors' notifying the websites. Having posthumous control, then, depends on the survivors' actions.

The tension between dependence on survivors and responsibilisation and how it undermines the feasibility of the services' promise for controllable symbolic immortality is made particularly clear with the emotional work required from survivors, and more generally to the services construction of online immortality as a deeply relational construct.

5.4) Symbolic Immortality as a Relational Construct

In this section I show how online immortality services construct symbolic immortality as a deeply relational construct. In addition to technically depending on the actions of

[69] For instance, on DeathSwitch.com, users would receive regular notifications, requesting them to reply as proof of life. If a user failed to reply to a notification, the website then had a protocol for re-sending a number of repeated notifications at closer intervals. If the user still failed to reply to all notification, the account would be activated, and the stored messages sent to their specified recipients.

survivors for the execution of plans, I show how the services assume and rely on the emotional reaction and engagement of future-survivors with the traces of the dead and their assumed sustained meanings and significance. Going back to Lifton and Olson's dichotomies of life-death imagery and drawing on earlier work on posthumous agency, I argue that the needs of the bereaved, essential to sustaining a loved one's memory, are in tension with the promise of controlled immortality, thus undermining the feasibility of such promise.

As I have shown, while the online immortality services construct a sense of control through the responsibilisation of one's memorialisation, at the same time, they also construct the users as essentially dependent on survivors. I have also argued that the construction of responsibilisation and unburdening, in fact, creates a burden for future-survivors. This tension stems from the construction of symbolic immortality as fundamentally relational, which necessarily means that even if survivors weren't technically required to activate the accounts and materialise the wishes of the dead, the dead nonetheless still fundamentally depend on survivors to maintain the *meaning* and *significance* of their traces.

Inherent to the promise of control made on the websites is the imagined impact on the social and emotional world of the living. According to online immortality services, planning and managing one's future traces is only meaningful *because* there are recipients in the future who are portrayed reading, reacting to, and engaging with these traces. That is, what is fundamentally necessary for providing a sense of continuity, according to these services, is the imagined future moment when recipients react to the traces of the deceased.

When websites claim that "your memories, pictures and videos are precious. Your digital assets such as Facebook or Email accounts are priceless" (PlannedDeparture.com), and "Your life is precious. Your memories are a treasure" (Meminto.com), they refer, of course, to the fact that one's traces are "a treasure", or "priceless" to their owners *and their recipients*.

The imagined desired outcome of proactively planning one's posthumous presence is expressed through the emotional engagement of survivors with one's traces. Survivors will "cherish them" (PlannedDeparture.com) and save their posthumous messages as "valuable memories" (AfterNote.com).

Helpful for understanding this crucial roles of recipients is Peters' (1999) reflections on the Dead Letters Office, which deals with letters that, for different reasons, never reach their destination. Although Peters discusses physical letters lost on the way to their physical destination, his focus is on the communication process not being completed, describing as tragedy the fact that these lost letters *will never be read by their intended recipients*. Even if others read their content (such as Post-Office workers in the Dead Letters Office), this would never redeem the value of these letters. Individuals external to the private and intimate history between the specific sender and specific recipient will never be able to decipher the full meanings of a letter.

One way the websites construct this crucial role of survivors is in the repeated invitation to posthumously reveal *secrets* (e.g., GhostMemo.com, DeadMan.io, IfIDie.net, DeathSwitch.com, AfterWords.cc, DeadMansSwitch.net). Disclosing information that was long kept secret is only meaningful for the specific senders and specific recipients. Only those who are part of the conversation can understand and appreciate the full meanings of the secret, its implications, what is at stake upon revealing it, and emotionally react to its revelation. Without meaningful engagement and the ability to interpret the information within that context, revealed information is just information.

According to Peters, the discrepancy between how valuable communicative traces are to their senders and recipients and how worthless they can be to anyone else creates an analogy between the letters and corpses. Both the letters and corpses are: "objects of

immense value that, when detached from their proper setting, are almost utterly useless" (Peters, 1999, p. 169). This discrepancy between the value and worthlessness of traces (whether one's body or media traces), and the need for specific recipients for traces to retain their value, further emphasises how crucial the survivors' role is for maintaining one's future memory and symbolic endurance.

The role of survivors in interpreting, reacting, and giving meaning to the traces of the dead is essential: in engaging with their traces, survivors symbolically resurrect the dead and provide them with a posthumous social agency (Aronis, 2017; Hallam et al., 1999; Ong, 1977; Walter, 2013). SafeBeyond.com encouraged users to "Be there when it counts", GoneNotGone.com invites them to "live on digitally" (GoneNotGone.com), and MyFarewellNote.com promises that "even if you are no longer with them, your family and friends will know exactly what they mean to you." They all imply a future posthumous social presence and agency for the future-dead. But this agency fundamentally depends on the emotional work of future-survivors and their meaningful engaging with these posthumous traces. Such dependency reveals another way in which the construction of control through responsibilisation is unfeasible. To better explain this, I briefly return to Lifton and Olson's life-death dichotomies.

5.4.1) Conflicting Movement and Stasis

According to Lifton and Olson, perceptions of life and death are understood through three dichotomies of imageries: connection-disconnection, integrity-disintegration, movement-stasis. Particularly helpful here is to look at the third dichotomy. While movement (e.g., change, growth, development) is associated with life, stasis (stillness, cessation, lack of growth) is associated with death (Lifton & Olson, 1975).

As previously explained, in constructing users' extensive posthumous agency, the websites emphasise the *emotional impact* their traces will have (hence the extensive agency of the future-dead). For instance, GoneNotGone.com doesn't only promise users the ability to send messages to loved ones decades after their passing but also to "always put a smile on your grandchildren's faces", and DeathSwithc.com reassures users that "the people in your life will feel better knowing they can expect an email from you after you're gone."

According to the websites and designers' visions, they can enable the future-dead to meaningfully control their traces for generations to come. They claim to enable the future-dead users of online immortality services to leave messages to be sent decades into the future and still be meaningful for recipients and cherished by them. Underlying this claim is an assumption of conservation and stasis. SafeBeyond.com's introductory video provides a particularly useful example to make this point.

SafeBeyond.com was an online immortality service whose primary feature was creating messages for the purpose of long-term memorialisation, allowing users to send messages up to eight decades after their death. Its introductory video on the homepage, provides almost no information about the technical features of the website. Instead, it offers a detailed depiction of the imagined moment in which the future-survivors receive messages from a deceased user.

The video begins with a man sitting at the seaside as his two young children build sandcastles in the sand. While his children play, he picks up a tablet, fixes his hair, and starts recording a message. The video then shows a bride on her wedding day, which the viewers soon discover is the same little girl who was just playing in the sand with her brother, now all grown up. As the video unfolds, it shows a montage of the reactions of each family member (the daughter, son, and widow) as they each unexpectedly receive and watch an individually

dedicated video message sent to each of them from the – by then – deceased father/husband. The messages are personalised for each recipient and are all explicitly dedicated to the occasion of the daughter's wedding.

Through these video messages, the presence of the deceased father/husband is represented as quite intrusive: The timing of the messages was imposed on the recipients with surprise notifications on their phones. Nonetheless, this unplanned 'visit' from their deceased loved one is welcomed. Moreover, the recipients reacted to and engaged with these traces *exactly* as the deceased user intended (almost as predicted, as when the widow is shown clenching her chest just when the deceased user says: "you must be clenching your chest right now").

The video represents the relationship and power dynamic between the future-dead and future-survivors as imagined by online immortality services. It shows the extensive agency of the future-dead user. The video – its imagined characters, scene, and narrative – reaffirms and conserves the hegemonic social order (implying conservation). The protagonist (user) is a white, heterosexual, middle-class man, the survivors are his children and wife. The event in which the video is situated – a heterosexual traditional wedding – a social institution that reaffirms the social order over generations as well as other the authority of other social institutions (such as the family and the nation state) (Freeman, 2002). The content of the protagonist's messages further reaffirms this social order. For instance, in his message for his daughter: "I'm so proud of you, by now you've met the man of your dreams, and you're gonna ride off into the sunset, and you're going to live happily ever after," he tells his daughter, whose great achievement to be proud of is getting married to a man.

As the protagonist speaks through the messages, the main visuals are of the family members' reactions to the video messages. Image 9 shows a few scenes from the video.

Image 9: SafeBeyond.com, scenes from introductory video

The video makes extensive use of close-up shots which enables display of emotional expression by the characters in great detail, thus enhancing their intensity (Doane, 2003, p. 90; Epstein, 1977, pp. 13-15). The close-ups meticulously show the characters' mouths quivering, the tears in their eyes, their surprised and moved expressions. The deceased is represented as being in control of the form, time, and place in which he is made present. Furthermore, he controls the specific traces and meanings with which survivors engage and is able to meaningfully 'take part' in the wedding.

The video reaffirms the social order that the deceased had envisioned and presents it as being sustained into the future – otherwise, the messages of the deceased would not maintain their significance. It assumes conservation and stasis. Interviews with designers further reveal how central is this assumption of conservation for online immortality. For instance, this is how Isaac, a founder of one of the websites, explained his vision: [70]

> I say you can predict. I say that we know, we can each predict, you know, information about what the future holds. I can tell you exactly when my son's high school graduation will be. I can tell more or less when he is likely to get married. I know he will probably go backpacking in South America before college, as this is what everyone in his social milieu do. There are different dates, events, and locations that he is expected to reach in his lifetime. I just don't know if I'll be there. … the idea is to change how you communicate, and this, to me is the evolution and the revolution.[71]

Isaac's vision was to encourage users to think about future conversations that would take place in key moments in the lives of their loved ones and pre-create their part in that conversation. What is Particularly striking is that the only unknown in Isaac's vision is whether he will be present in those bound-to-happen future moments. A problem his website should solve. During the interview, Isaac suggested I could create such messages for my children and even my great-great-grandchildren. In this suggestion, too, Isaac implied how un-changing the future is to him. This assumed stasis reveals the paradox inherent to imagining such an extended control over one's posthumous endurance. For example, if the daughter in the

[70] The interview with Isaac was not conducted in English.
[71] Some potentially identifiable details in this quote have been changed in order to protect the speaker's anonymity.

SafeBeyond.com video were to marry a woman, all these messages would generate very different meanings and feelings than the ones the father had intended.

The promise made by these websites and their designers assumes the ability to anticipate the future life trajectories of survivors (including the existence of survivors yet to be born, as implied by some websites). Conservation and stasis are required to enable such predictions and the long-term sustaining of the meaning of a specific trace, which seems unfeasibly especially when imagined further into the future (Arnold et al., 2018, p. 131). Moreover, such stasis and predictability is associated with death (Lehner, 2019, p. 482). This is where the paradox lies: in order to imagine continuity of life, online immortality services construct future society and survivors aligned with the imageries of death (stasis).

Such stasis further undermines the potential controlled endurance of the dead.

5.5) Posthumous Agencies and Liquid Modernity

In this final section, I explore the role of the bereaved in establishing the agency of the deceased as part of their bereavement process. Change, adaptability, and growth, I argue, are essential for the sustained relationship between survivors and deceased loved ones. The promise for controlled symbolic immortality based on survivors' obedience, reduced agency, and stasis, vs the dynamic needs of the bereaved, epitomises the unresolvable tension between individual controlled symbolic immortality and the dependence on others. Drawing on Bauman's work I suggest that this unresolvable tension is inherent to individuality and immortality in times of liquid modernity.

According to contemporary understandings, bereavement is a long and dynamic process in which, unlike previously thought, the bereaved maintain a social relationship with

the deceased. In this ongoing relationship, the bereaved continue to make present and reconstruct the identities of the dead, endowing them with some forms of social agency. Significantly, this continued presence and reconstruction of identity is interwoven with the changing circumstances and needs of the bereaved. Hallam et al. (1999) explain this, reviewing a collection of studies on widows and their relationships with their deceased husbands:

> The self of the husband is intertwined with the self of the widow. … Far from being static, the relationship between the deceased husband and the widow is dynamic, developing in relation to her needs and changing life style. (Hallam et al., 1999, p. 131).

That is, the characteristic of such an enduring posthumous presence is its dynamic nature. Survivors not only maintain the memory of deceased loved ones, but they do so by changing and adapting it over the years (Bennett & Huberman, 2015, p. 351; Jonsson, 2015; Silverman & Klass, 1996, pp. 16-18; Unruh, 1983; Walliss, 2001, pp. 127-128). These changes are interwoven with the ever-changing personal circumstances and needs of survivors. This understanding of the process of bereavement and memorialisation highlights the potential conflict of interests between the living and the dead, as it means that: “the dead may be remembered as loving, obnoxious, volatile, or scornful, whether or not they viewed themselves as such when they were alive” (Unruh, 1983, p. 340).

There is no room for such a gap, however, on online immortality services and their promise of control. In this sense, online immortality services attempt to renegotiate the control over who makes the dead present, when, and importantly, how.

Understanding how crucial change and malleability are to the memorialisation process puts it at odds with controlled forms of memory facilitated by the websites. The attempt to eternalise a specific social identity to be remembered by (in particular times and places and with specific media) might not be the social identity preferable for survivors and their needs (Hallam et al., 1999, p. 123). The assumption underlying such an attempt is one of stasis: the bereaved are not expected to grow and change nor have varying needs, whereas the practices described by Hallam et al., describe growth and movement both for the dead and the bereaved.

According to Lifton and Olson, life is associated with movement. By movement, they refer, for instance, to growth, personal and self-realisation. Stasis, accordingly, is associated with death and refers to the lack of changes and growth (Lifton & Olson, 1975). Therefore, ironically, to ensure that such control over one's memory is possible, survivors need to (symbolically) die.

A static, pre-created, intrusive future presence undermines the crucial survivors' agency to reconstruct the identity of the dead, choosing when, how, and what to remember them by. This reduced agency could potentially have a negative impact on their continuing to maintain the social presence of the deceased altogether (Francis et al., 2001; Gray & Coulton, 2013; Howarth, 2000; Jonsson, 2015; Kasket, 2012). Put differently, in order for traces to survive well into the future, they must remain significant (Kneese, 2019), and for this, movement, malleability, and the agency of survivors are essential.

Fundamentally this is the gap of which communication is made. Communication is always both a bridge and a chasm. One wants to communicate with others and control the meanings as much as one can. Still, one must accept that there will always be a gap, a room

for a different interpretation (at the risk of misunderstanding) because, in any other situation, there is no communication at all (Peters, 1999).

This unavoidable gap in communication is also the gap essential for the meaningful long-term memorialisation of the dead. Survivors need a gap for interpretation, for reconstructing the personality of the dead, to maintain their memory as meaningful and significant, all of which would be the desired outcomes of the future-dead users. This gap ultimately undermines the promise of controlling one's posthumous endurance through responsibilisation. Ultimately, the dead depend on the survivors' work and agency to maintain their memory.

This unsolvable tension is characteristic of liquid modern society. Symbolic immortality is necessarily intertwined with the sustained continuity of others (institutions, society, individuals, humanity). In fact, hopes and dreams of symbolic immorality fundamentally and perhaps primarily depend on the prosperous and valued continuity of others (Scheffler, 2014).

In liquid modernity, characterised by constant change and breaking of social institutions, individuals engage in life-long journeys of self-search and definition. This leads to a society in which its individual members, so concerned with the creation of their self-identities, find death unimaginable, and act to postpone it or to ensure their immortality (Jacobsen, 2017, p. 70). Under such conditions, individuals seek to regain a sense of embeddedness, of belonging, of connectedness making them paradoxically dependent on communities, institutions, and responsibility for others (Jacobsen, 2017, pp. 73-74). In liquid modernity, thus, hopes for immortality are trapped between constant oscillation between individual autonomy and dependence (Bauman, 1992).

5.6) Conclusion

I opened this chapter by exploring the extensive agency that online immortality services promise to their future-dead users. I showed how users are constructed as typical contemporary neoliberal subjects who proactively act, make choices, and are conceived as holding agency to impact their social world. I have also shown how online immortality services reaffirm a hegemonic social order through the representations of the social roles and identities of the imagined users and argued that such representations are key not only for constructing agency, but importantly, for making their extensive promise of control seem feasible. Using the notion of integrity, I have also argued that the construction of agency is key for conveying hopes for symbolic immortality.

I have then shown how online immortality services, claim to enhance users' agency through a process of responsibilisation, and I have shown how this is constructed through the undermining of institutions as well as the claimed unburdening of survivors. At the same time, I have also shown that this process of responsibilisation generates an unresolvable tension between the promise of control, and future-dead users' dependency on social institutions as well as the agency of survivors.

Ultimately, I argued that these tensions, between users' control and the essential dependence on survivors and social institutions more generally, make the online immortality services' promise of controlling one's online symbolic immortality unfeasible. I have contextualised this in contemporary liquid modernity in which it is the very same process of individualisation that gives rise to both the desire to preserve one's unique self as well undermines the feasibility of such project.

This dependence on institutions and collectives is further exacerbated within contemporary neoliberal culture in which private digital media corporates pervasively mediate social relations and particularly, the relationship between the living and the dead. In the next chapter I take further the issue of dependence and the mediation of mortality by private digital media corporations.

Chapter 6: The Social Imaginaries of Online Immortality Services

The latest bereavement that this man had suffered was the loss of his brother, who had lived in the North-East. 'What,' he asked rhetorically, 'was the difference between his being in the North-East and being dead? It's just a question of communications. (Gorer, 1965, p. 65)

When your heart stops beating, you'll keep tweeting (LivesOn.com)

In October 2021, while working on this thesis, as I had done so many times before, I opened a web browser and entered the URL: SafeBeyond.com (one of the websites in my corpus). To my surprise, after a noticeably long wait, an error message appeared on my screen saying the website could not be reached. The website has been online since 2015, and I repeatedly visited it during my research (including just a few months before it went offline).

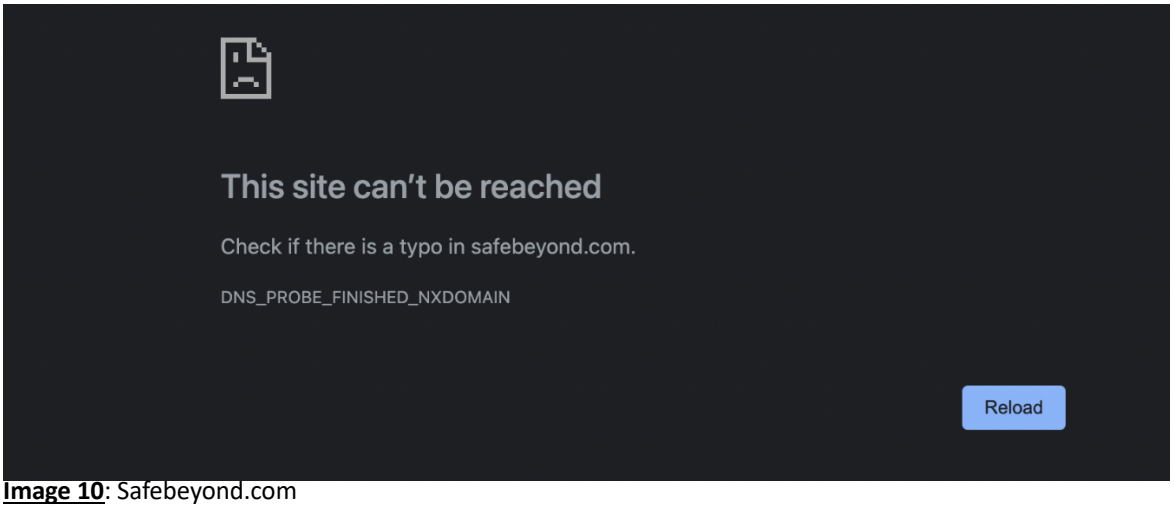

Image 10: Safebeyond.com

Trying to understand whether this was a temporary malfunction, I went on SafeBeyond.com's Facebook page to check if it was still active (recent posts on their Facebook page would indicate that the service is still 'alive'). The most recent post was over 16 months old, announcing the website would soon be changing its URL. The new URL didn't work either. Checking the comments to that post for any additional information, I found a heart-breaking thread of recipients pleading to access their loved ones' messages on SafeBeyond. Although

this Facebook page is publicly available, I feel it is appropriate to quote these individuals anonymously due to the sensitive circumstances:

> Hello, for a week now I have been trying to notify you of my husbands. Death [sic], I have emailed, sent chat messages, tried to phone, filled in numerous things on your website. My husband has left messages on the site for myself and my children. PLEASE PLEASE could someone see this and help.

There was no response from SafeBeyond. Other individuals on the page replied, expressing sympathy, and sharing their own frustration when recently trying with no success to sign up to the service or contact the provider. Several weeks following this post, the bereaved individual posted an update. “It’s not good news I am afraid,” she wrote and then detailed all that she had found out after chasing the company. “The owner’s wife died, so he sold the company,” she wrote, then added:

> The new owner became ill himself (stage 4 cancer) and wasn’t able to maintain the site. I managed to get him to agree to unlock my husbands [*sic*] assets but there is a data base error with the whole site. So even though things are now unlocked I still can’t access them.

These messages, left by deceased users, are now forever locked, buried like a hidden treasure, like an eternally lost pot of gold, under lines of inaccessible code, which no one could fix as obtaining access to the code depended on the new owner, who was now facing a life-threatening illness. Like the cycle of life, a new website for posthumous messaging was ‘born’, and five weeks before writing these words, had posted on that same Facebook thread offering individuals $50 credit upon joining the new website.

Like SafeBeyond.com once did, this new website invited potential users to "create messages and stories to leave for those you care about when you're gone" (mylazarus.app). Expressing sympathy for users and shock at SafeBeyond's closing, after six years online, much longer than the average website, the new website promised potential users, once again, an opportunity to control their symbolic immortality.

SafeBeyond.com was far from being the first immortality website to go under. And yet, a new immortality website soon emerged, offering similar features and making similar promises.[72] Somehow, time and again, designers and founders around the world[73] seem to overlook this ephemerality of websites – and specifically online immortality websites – and keep re-inventing and designing similar products based in a promise of posthumous digital endurance.

In the previous chapters I have argued that while online immortality services promise their users controllable immortality, they simultaneously construct insoluble tensions which undermine their promise. In Chapter 4, I have argued that the traces management practices offered by online immortality services construct an insoluble tension between closure and non-closure. In Chapter 5 I argued that the imagined relationship between the future dead and survivors creates an insoluble tension between their competing agencies, undermining the promise of controlled online immortality. This chapter, explores the myths and imaginaries of digital media that underlie the services' promise of control and its inherent contradictions.

The chapter first explores contemporary myths of digital media and the ways in which digital media are imagined as controllable in the face of mortality. I argue that the ways in which online immortality services construct technology as controllable also render it

[72] Like mylazarus.app additional websites have emerged since 2020, but these are outside my corpus as explained in the methodological chapter.
[73] This specific new website was from New Zealand.

ambiguous and uncontrollable. Specifically, I show how enchantment with technology and its 'magic' functions both to enhance the promise of control over one's symbolic immortality, while at the same time rendering that very same technology uncontrollable. The chapter then explores the social imaginaries that underlie online immortality services. The chapter argues that two contradictory social imaginaries underlie online immortality services: an imaginary of innovation and an imaginary of conservation. Both of these imaginaries, I argue, leave out any form of collective action, and overlook the fundamental problem of ephemerality embedded both in technological and economic practices of digital media.

6.1) Under Control: Digital Media Can Solve All Problems

In this section I begin to explore the myths of digital media that are articulated by online immortality services and specifically by their designers and founders. I first argue that one of the prevalent myths articulated by designers and founders is digital media's ability to solve any problem of any sort. I explore how such techno-solutionism is articulated by online immortality services, and specifically, by designers and founders, by envisioning technology as able to break boundaries not only for communication but also between life and death. I then show how such techno-solutionism is based both on technical capacities and characteristics but also on magical thinking. This magical characteristic of digital media, although inherent to all media (Gell, 1988), I suggest, also necessarily constructs digital media as mysterious and uncontrollable.

A key assumption underlying online immortality services is that any problem (immortality related or not) can be solved using technology, specifically digital media. This assumption resonates with the contemporary ideology of solutionism which assumes that

technology can solve practically any problem, be it recycling, social inequality, or death (Johnston, 1982; Morozov, 2013). Technology is the tool utilised by culture to tame the wild and achieving difficult goals (Gell, 1988; Silverstone, 1999, p. 27). Confronted with an uncertain and uncontrollable world, humans turn to technology to solve their problems, thus gaining control over different domains and needs beyond the limits of the human body (Gell, 1988, p. 6). Online immortality services – the websites and designers – articulated this myth of technology and specifically digital media as breaking boundaries of human biology, extending life, and enabling the impossible.

According to this view, digital media, and technological innovation more generally, are seen in contemporary culture as ground-breaking, making all sorts of previously unimaginable achievements possible. These perceptions of technology's ability to make the impossible possible, are in many ways similar to the 19th century enchantment with the discovery of electricity and the invention of the electric telegraph. As Sconce writes: "Thus was electrical science the quantum physics of its day, a frontier of inquiry bordering science and spirit that raised more questions than it answered" (Sconce, 2000, pp. 35).

For instance, not unlike the telegraph's ability to afford instant communication at a distance, digital media are considered to be able to overcome biological limitations to posthumous communication. Online immortality services promised future-dead users that death will not prevent them from communicating with their loved ones. MyGoodbyeMessage.com (like LivesOn.com, DeadMan.io, GhostMemo.com and others) promised users: "MyGoodbyeMessage will send your words and emotions to your family and friends after you are no longer able to" (MyGoobyeMessage.com), just to mention an example. This resonates with the much earlier idea related to inscription media that sees communication technologies as able to bring the dead back to life by making them present –

bringing their past record into each new present moment over and over (Barthes, 1981; Jones, 2004; Mulvey, 2006; Ong, 1977; Walter, 2013).

This life-giving power of media was articulated in different ways by online immortality services. For instance, by formally defining participation in mediated communication as a sign of life, and lack thereof, a sign of death (e.g., websites activation protocols triggered if users don't reply to an email). Particularly, in the context of contemporary digital and online communication practices, which are ubiquitous, failing to participate in mediated communication is portrayed as inconceivable, thus contributing to the association between communication and life. [74]

Moreover, the websites also resonate the 19th century enchantment with electricity's "divine spark of life" (Sconce, 2000, p. 31). As explored in the introduction, these ideas at the time also inspired members of the scientific community, who were using the principles of the new technology to explain the feasibility of communicating with the dead (Sconce, 2000, pp. 7, 21-43). These myths re-emerge in the current moment of accelerated technological progress and popularly circulating ideas and pseudo-scientific claims regarding the ground-breaking capacities of contemporary science and technology.

Such enchantment with digital media was prevalent in founders and designers' accounts, using scientific terms or referring to imminently emerging technologies to refer to unknown future possibilities and fantastical predictions. For instance, many designers

[74] This is a popular perception in contemporary culture. For instance, in the novel *Kiss Me First* by Lottie Moggach, the premise of the book is based on the association between communication and life. According to the book, in a mediatised world where absent-presence using online communication is so widely used, one could easily take her own life without causing grief to anyone as long as she made sure to remain communicatively active in her absence. Moggach, L. (2013). *Kiss me first*. Picador. This is the same idea expressed by the websites 'Suicide Machine' providing service of deleting one's social media accounts (not-death related). Not participating in mediated communication is so uncommon, that quitting online media is conceptualised as killing oneself.

described their services as enabling not merely future messages planning but even affording the dead the power to 'return' on specific occasions of their choice. For instance, Isaac, a founder of an immortality service, described his service in the following way:

"When someone dies, they stop communicating, unless, again, séances and other stuff which are not real. Here I'm enabling you to continue communicating with the deceased in a manner that can be practically like a dialogue."[75] Later, he added: "I'm not a doctor or a biologist who can create the pill that would extend your life. But I can enable you to communicate from the afterworld. This is currently the only way I can extend someone's life." Isaac contrasts 'real' technology with 'unreal' magic. According to him, by enabling posthumous long-term messaging, services such as his replace magic, allowing the dead to 'really' communicate posthumously.

6.1.1) Technology and magic

Isaac's statement that he is not a doctor or a biologist and thus unable to extend life, echoes the post-mortal ideology as it implies that such 'doctor or biologist' able to extend human life, does or someday will exist. Indeed, Bauman's deconstruction of death (Bauman, 1992) is itself a specific case of solutionism. Moreover, Isaac described his service as literally enabling communicating with the dead (replacing the 'unreal' séances). In his description, there is a 'world-after' in which the spirits of the dead reside and from where they can communicate with the living. In this sense, digital media would enable breaking boundaries not only to human communication (communicating after death) but also this metaphor of

[75] The interview with Isaac was not originally conducted in English

'coming and going' portrays further blurring the boundaries between the world of the living and the world of the dead.

During our interview Isaac reiterated this idea of 'coming back'.[76] Almost as if there were an after-world where the deceased users reside, and it is his service that provides the bridge enabling them to cross over back to the world of the living. Finally, in Isaac's explicit reference to life extension, whether or not he genuinely believes this is a form of extending life, he expresses the perceived all-powerful capacity of digital media (and technological innovation more broadly).

Manuel, also a website founder, likewise compared his website to communicating with ghosts using magic. Reflecting on why people seem to have negative feelings about the possibility of posthumous digital communication he said people felt uncomfortable about communicating with the dead because "In the past … the only way for people to know about their dead were to ask using some kind of sorcery or magic." According to Manuel, contemporary and future technology, specifically once "artificial intelligence becomes more advanced" as he said, communicating with the dead will be more acceptable "because now you can use technology instead of magic."

Manuel explicitly replaces magic with technology. Moreover, he emphasises how magic belongs to the past, and therefore, technology to the future. Such accounts, however, reveal the inherent connection between technology and magic. According to Gell (1988), it is this magical thinking and visions of enabling something not yet possible, that is key for the process of technological innovation. This link is particularly emphasised when Manuel mentions the expected advances in artificial intelligence. But in this dichotomy (past-future;

[76] For instance: "even if you're not there, I will still be able to *bring* you"; "being able to *come*"; "being able to go and then *come*".

magic-technology), Manuel merely replaces one form of magical thinking with another form of magical thinking. In fact, Manuel, like other designers, in spite of his attempt to separate the two, referred to technology as magic, nonetheless. Specifically, Manuel's use of the concept of *artificial intelligence* functions as an umbrella term for an unknown advanced (magical) technology, rather than a technical term referring to a specific technology or technological affordance.

In contemporary western culture truly ground-breaking science often gets mixed up with pseudo-science (Sheskin, 1976) and science fiction (Lafontaine, 2009). Similarly, myths of communication beyond the grave (and thus extending life) harness the language of technological innovation, and its mythical ability to make the impossible possible (see for instance: Keach, 2018; Mazie, 2014). Techno-scientific discourse legitimises these myths, constructing them as scientific developments rather than fantasies (Bennett & Huberman, 2015; Fitch, 2013; Huberman, 2018; Lafontaine, 2009; Mabry, 2015).

'Artificial intelligence' and 'hologram' were two concepts designers and founders repeatedly used. Although these are both technical terms, they were evoked by designers as means to describe a fantastic future in which the dead can easily return and join in conversation with the living. Isaac, for instance, told me I would "come as a virtual hologram that will suddenly be present and say things." Gary, co-founder of another website, said in just a few decades it would be possible to "just think about someone that you used to know, or someone that you'd like to talk to, and that person would show up as a hologram in your house, in your room, in your office and you'll just speak to them." Similar descriptions using the terms 'AI' or 'hologram' were articulated by other designers as well. Importantly, in all these descriptions, designers assume an interest in these futuristic ghosts of the past and

welcome their pervasive peresence. They envision a future society that will be seeking the voices, advice, and presence of their dead. I return to this point later in the chapter.

Contemporary enchantment with holograms of the dead resonates with earlier narratives of resurrection, such as the religious promise of resurrection based on the perceived spiritual immortality of the soul (Sherlock, 2013). These predictions of 'holograms' and 'artificial intelligence' that would provide easy and direct access to the world of the dead represent religious and mythical beliefs (Johnston, 2017) much like the millennia old search for the elixir of life, and the once enchanting promise of the electric telegraph far more than they reflect sober-minded technological forecasts. Thus, digital media (including AI and holograms) are presented as the panacea to any obstacles for posthumous communication (replacing the unavailable 'pill' as Isaac described) providing control over one's symbolic immortality. Simultaneously, the comparison with séance and magic, as well as references to unknowable future technologies (AI, holograms) infuses digital immortality solutions with connotations of mystery, unknowability, and therefore – also uncontrollability.

6.1.2) Digital Media and The Divine Spark

A helpful example for magic and uncontrollability of digital media is a video on LifeNaut.com's homepage. LifeNaut.com enables creating a digital avatar of oneself. Its homepage features a short fiction film produced by the Terasem Foundation, a posthumanist organisation funding LifeNaut.com. In this film, the creation of an attractive post-human clone named Mia is narrated as a modern fairy-tale, with her creator being described as a 'magician' and depicted as engaging in spellcasting motions while equipped with technological accoutrements. As her creation proceeds on screen, Mia's narration transitions into a pseudo-scientific explanation deploying terms such as 'stem cells', 'algorithms', 'genes' and

'accelerated foetal growth rate'. The film depicts a dystopian persecution of Mia and other clones as the unwanted and awful consequence of such a daring and audacious technological feat. Image 11 shows two scenes from the film.

Image 11: LifeNaut.com

The image on the right side shows Mia as she is 'being grown', sleeping in a container filled with liquid (clearly referencing amniotic fluid) as her creator (the magician man) oversees and controls the process. The two electrodes stuck to her forehead glow and flicker, representing the flow of electrical current, which is supposedly her lifeline, replacing an umbilical cord.[77] This representation echoes not only the divine spark of electricity, but also The divine (religious) life-giving spark, both of which are harnessed by digital media in this story. At the same time, however, the film also renders technology uncontrollable. First, through the idea of a magician (mysterious powers, unknowable magic) and second in his specific visual representation. Technology, then, both allows unimaginable ability to control even the creation of life, but is also unknowable, and enigmatic.

[77] Quite explicitly there is also a reference to Frankenstein's monster (Shelley 1818), first in the power of electricity to animate an object, and second, in the imagined social unacceptance of the animated being. For further reading on the contemporary circulation of the Frankenstein myth see: Stern, M. (2006). Dystopian anxieties versus utopian ideals : Medicine from Frankenstein to the visible human project and body worlds. *Science as Culture*, *15*(1), 61-84. https://doi.org/10.1080/09505430500529748

Importantly, although particularly explicit in the examples above, magic is in fact an inherent part of all human technologies. While technologies have specific technical affordances geared towards solving specific problems, they are also a result of some form of magical thinking which is essential to the creative imagination leading to their creation in the first place (Gell, 1988). Therefore, magical thinking is inherent to technology and informs how it is envisioned, designed, and used. Put differently, while visions and hopes for future resurrected holograms of the dead make explicit the role of magic it visions of technology, magic is necessarily also pervasive in the more ordinary descriptions of technological affordances. The next section explores this pervasiveness of magic.

6.2) The Magic of Digital Media's Endurance

In this section I explore a second myth of digital media articulated by online immortality services, the myth of digital media's immunity and endurance. I show how online immortality services construct digital media as exceptionally durable. Although described as a technical property of the specific technology, I show how this perception of digital media is magical as much as it is technical. Notably, immunity and endurance are key selling points in the services' promise for controlled symbolic immortality, I show, however, how online immortality services construct such magical endurance in conflict with accessibility, which is also essential to their promise of controlled online immortality. Moreover, I argue, such imagined immunity is in tension with the deep ephemerality characteristic of digital media.

An experience shared by many of the designers I interviewed was of earlier technology failing to preserve the traces of their loved ones: Turner's only video of his deceased father got recorded over, Jason regretted not having any record of his grandmother's recipes, Anna's

co-founder mourned for not having a record of her deceased brother's voice. Against all these losses, they presented digital media as the solution. This loss was often a key motivator in creating online immortality services. It was an attempt to use digital media to solve these previously insoluble problems and ensure their (and their users') posthumous presence will endure.

Eric, one of the founders I interviewed, shared the following anecdote, which he said inspired him to start his service:

> Her father [speaker's father-in-law, PK], he lives in Queensland, gave her [speaker's wife, PK] a 20-page old-fashioned typed out manuscript of the life story of his mother and my wife's grandmother, about her extraordinary life story. Beautifully typed out in the old-fashioned way. … Amazing story. And then, we flew back home from Australia back to London, and we lost the manuscript on the way back, and we like, oh my God, this is so important. … and now my wife lost her amazing story of her grandmother. Wish we had something digital, a vault just to hand this down to generations.

Eric, like other designers and founders, contrasts the supposed durability and reliability of digital media with the supposed vulnerability of earlier media (print). In this, he seems to describe a technical feature of these media (paper vs digital). According to him, if those precious words and images had only been preserved in a digital format, they would have been kept safe for perpetuity ("generations"). This idea that digital media could protect the traces of the dead and be immune to any harm, predominated on the websites portraying digital media as exceptionally durable in different ways.

For instance, image 12 shows a cluster from AfterVault.com's homepage. The main purpose of this cluster is to reassure prospective users of the safekeeping of their traces:

Image 12: AfterVault.com

"Your vital document and photos are safe from ransomware attacks, hard drive failures, fires, and pretty much every other unforeseen destructive happening" says AfterVault.com's homepage. From forces of nature to malicious human behaviour, there seems to be nothing that can threaten AfterVault's (and digital media more generally) ability to keep the users' traces safe.

AfterVault.com emphasises its advanced security, promising to make users' accounts safe. Users' data are kept in a cloud, making them accessible at any time and from any place using any device. This media availability is presented as adding another layer of security and controllability: it is always within the user's reach to be monitored or managed, "available 24/7 on any computer or mobile device". AfterVault.com subsequently provides a detailed technical description on how they keep data secure ("256-AES encryption" and "SSL for highly secure end-to-end encryption"). To reiterate how safe their technology is, they add, "it's impossible for even our employees to see your data."[78]

[78] Such statements ("impossible even for our employees to see your data") along with the same detail of technological security are repeated almost to the letter by other websites (e.g.: AfterWords.cc, AfterNote.com, DigitalRemains.co.uk, LegacyVault.com, SayGoodbye.co). While it is meant to ensure users of the safety of

This detailed list of safety features, although describing the technical details of the technology in use, serves here predominantly to convey something beyond the merely technical. While some of AfterVault's potential users might find such technical detail comprehensible, these terms are not commonly accessible to ordinary individuals. Nonetheless, it is the use of such technical terms that is meant to contribute to the website's presentation as secure (which is a key aspect of durability). It is the use of technological jargon that evokes its 'powers' of endless and absolute immunity.

To emphasise the idea of security, on the right side of the cluster shown in image 12, is a large image of a metallic padlock. Its large size compared to the text, emphasises 'security' and AfterVault.com's ability to safely store the traces of their future-dead users.

The emergence of digital media, similarly to earlier technologies, raises new hopes and desires for trace preservation, often with the promise to succeed where previous technologies have failed. The idea that digital objects will last forever is common in contemporary culture. First, due to the abundance of digital records individuals collect of themselves, curating their everyday lives (Chun, 2008; Kasket, 2012, 2013; Meese et al., 2015; Walter et al., 2012). Second, this abundance of records coupled with the myth of an internet that never forgets (Mayer-Schönberger, 2009), the thought that we could keep the records of our loved ones forever – and thus, our own – seems more feasible now than ever before.

Indeed, online immortality services construct digital media as immune to practically any harm. As in Eric's quote above, this immunity and endurance is often constructed by contrasting digital media with earlier technologies to emphasise how durable and practically indestructible digital technology is. For instance, digital media was often contrasted with the

their data, it also potentially insinuates that there is indeed a need to keep the service's employees from accessing their data.

vulnerability of paper. Specifically, floods and fires are repeatedly mentioned both by websites and designers, as able to destroy paper but apparently not digital media. Interestingly, this construction of digital media's immunity is based on contradicting imageries.

6.2.1) Contradicting Imageries of Endurance and Immunity

While these competing imageries of endurance and immunity were constructed in founders' and designers' accounts as well as websites, the contradiction is particularly striking when looking at the visual construction of endurance on the websites. Most commonly across the websites (as on AfterVault.com above), was the repeated use of padlocks, safes, locks, and even medieval armour to represent ultimate data security and immunity, as image 13 depicts:

Image 13: Left to right, top to bottom: PlannedDeparture.com, SayGoodbye.com, LegacyArmour.com //AfterWords.cc, MyMoriam.com, Vivala.me // Leg8cy.com, LegacyVault.com, AfterVault.com

All these images convey ideas such as security, safety, protection, endurance, as well as privacy and secrecy. Importantly, these images also convey control. Putting something under a lock or in a safe, would enable fully controlling it and ensuring its secure storage. Ironically, these older, non-digital, technologies are used to represent the immunity of digital

media (which, as explored above, was constructed in opposition to earlier media). This contrast is further emphasised given the underlying myth of durability across websites, is the *immateriality* of digital media. LegacyArmour.com, for instance, contrasted their "digital vaults" with a "physical safe": "Physical safes can be broken into and its [*sic*] content can be destroyed by fire or flood. Save your crucial data encrypted in a secure digital vault where it is kept safe from intrusion or natural disaster" (LegacyArmour.com).

According to LegacyArmour.com, while a physical safe is at risk of being "broken into and its content can be destroyed by fire or flood", the digital vault is "safe from intrusion or natural disasters." The contrast between "physical" vs "digital" implies that what makes the digital vault safer is that it is not "physical". Such ideas are consistent with the most dominant form of imagining and representing enduring digital storage in contemporary culture: the cloud (Peters, 2015, p. 332).

The cloud is also central to how the websites convey the permanence as well as controllability of traces. Through 'cloud technology', the websites promise future-dead users to control their posthumous traces. Users' traces are always under their control as they can be accessed from any place at any time and will endure forever as the cloud, supposedly, makes them immune to harm. Clouds enable safe storage of the users' traces for perpetuity, the websites suggest.

Thus, two dominant motifs are used to represent the idea of immunity and durability of digital media: alongside rigid, metallic padlocks, vaults, and shields, are fluffy, soft clouds. These two motifs are also visually represented sometimes combined in a single image. Image 14 shows a sample of such clouds:

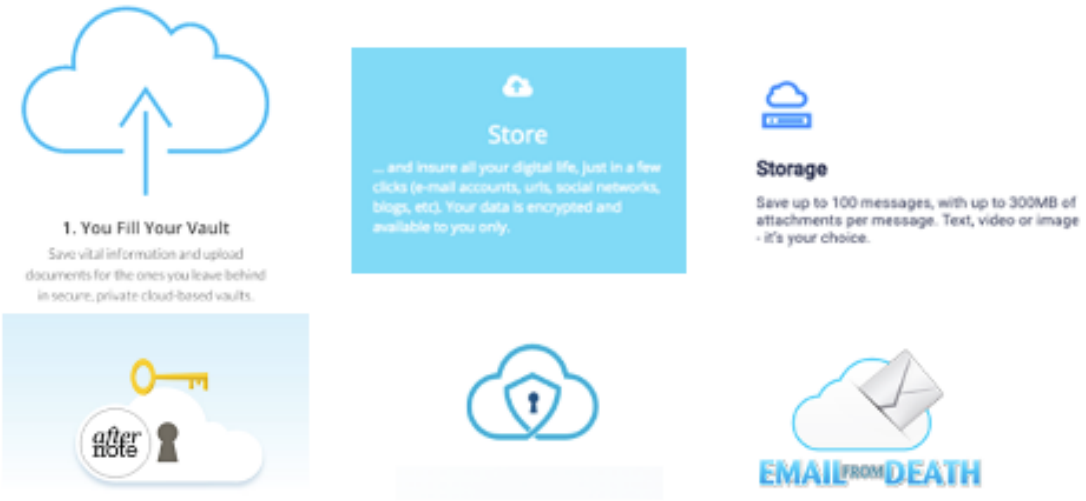

Image 14: Left to right, top to bottom: AfterVault.com, Knotify.Me, SayGoodbye.co, AfterNote.com, AfterVault.com, EmailFromDeath.com

The discrepancy between the material, physical associations evoked by padlocks/vaults/shields and the spiritual, diffuse associations evoked by the cloud is striking. While the items in the first group are associated with concepts such as heavy, strong, cold, smooth, sturdy, solid, robust, and durable, clouds are associated with concepts such as ephemeral, soft, distant, intangible, a "mixture of something and nothing" (Peters, 2015, p. 259). The imagery of the cloud, specifically, although aimed to describe technical properties, explicitly reveals how the perception of digital media immunity is magical as much as it is technical.

Discussing the popularity of the cloud metaphor for online storage, John Peters writes: "The cloud evokes ancient ideas of a heavenly record containing everything ever said and done, a record both worldly and infallible" (Peters, 2015, p. 332). This link between both meanings of the cloud (technical reliable storage but also unknown, out of reach, heavenly afterlife) seems particularly important in the context of online immortality services. The idea of the heavenly record is, of course, closely linked to religious mediation of immortality. Cultural and religious myths and imageries of heaven have historically been key to the

mediation of mortality in the west (as discussed in the theoretical chapter). Some of the websites make this association explicit. For instance, Remember-Me.co (image 15):

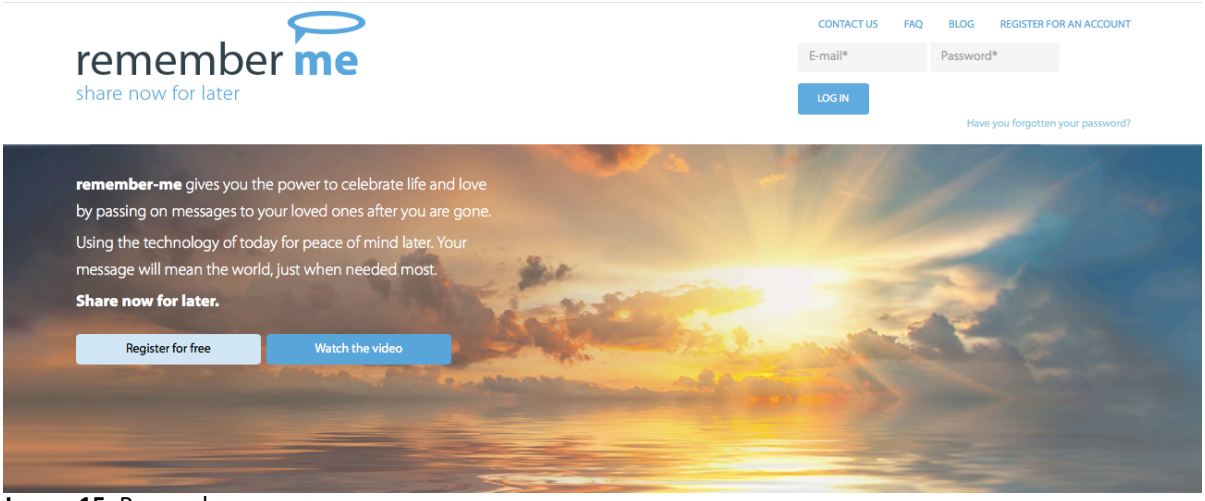

Image 15: Remember-me.co

As the above image demonstrates, the visual representation of the cloud stands both for the digital-storage cloud ***and*** the afterlife heavenly cloud (particularly with the superimposed text referring to "the technology of today" as the "power to celebrate life"). In this context, the representation of the cloud is as something magical and mysterious. It is such association of clouds with a magical all-knowing heavenly cloud which portrays digital media as immune and enabling posthumous endurance. It is also these magical representations of the cloud, which seem to undermine its characterisation as reliable and controllable digital storage. The services use the idea and image of the cloud to connote a technology that is advanced, secure, and reliable tantalising with the promise of control over the eternal endurance of one's traces. However, the images of the heavenly cloud carry additional meanings, as the image above helpfully shows. These clouds connote a place which is out of reach (heaven). Moreover, the heavenly cloud, according to long traditions and mythologies, is not only unreachable but also unknowable, mysteriously unintelligible. Whether seen as a

religious representation of the heavens or as atmospheric phenomena, clouds symbolise things that are out of reach and out of control (Peters, 2015, pp. 166-167).[79]

The cloud, then, is ambiguous: it is the promise of eternal data security, endurance, and accessibility, but it is also remote, forever out of reach. This is also technically correct: the cloud is available from all places but is also 'remote' as it is never local to one's computer or fully under an individual user's control. Moreover, this discrepancy also reveals the ways in which the specific myths of digital media promising control over one's posthumous endurance also render such control unfeasible. This ambiguity of the cloud, as simultaneously a secure, understandable, technology and a magical, mysterious and unknowable force of nature, so central to the visual discourse on the websites, implies the underlying tension between the promise for controlled immortality and actual ephemerality and unreliability of online digital endurance. The ambiguity also reveals the fundamental tension between durability and accessibility.

6.3) Endurance vs. Accessibility: An Unresolvable Tension

In this section I explore the conflict between storage and accessibility articulated by online immortality services. This conflict, I argue, reveals the cultural work that online immortality services *don't* do, which inherently undermines their purpose. I then explore designers' and founders' positions towards this conflict. I further explore their articulation of helplessness as

[79] Peters specifies astronomy and astrology as two scientific traditions for studying the skies and clouds. To him, the first represents predictability and cyclical motion and the latter unpredictability. Nonetheless, both traditions, tell a story of unknowability and uncontrollability: The more we know about the universe the more we realise there are things we will never be able to know, if due to the simple fact of its vastness and the limit of the speed of light. Clouds, for the study of astronomy are a factor of opacity making it impossible to literally see and know the skies. Similarly, meteorology, although it enables knowing and many times even predicting weather phenomena, inherently represent its uncontrollability.

part of the social imaginaries underlying online immortality services. I discuss the social imaginary of innovation (based in progress and solutionism, and designers' agency in creating innovation, shaping technology and having an impact on the world), and the social imaginary of conservation (past-oriented, evoking the old as reliable, and designers as powerless). Both imaginaries, lack a vision of technology as obsolete or ephemeral, which is, I argue, at the core of the failure on online immortality services to 'live up to' their promise.

Helpful to begin unpacking the storage-accessibility tension is an anecdote that Jason, a founder of one of the websites, shared with me. Explaining what inspired him and his co-founder to create their website, he told me the following story of his co-founder's family:

> Her family is Palestinian, from Jerusalem … her great grandfather was a spice-dealer, and he saved a good amount of money, they estimate a little over a million and a half dollars. And with everything that was going on in the Middle East, he did not trust the banks, you know, because he thought 'they're gonna take my money'. Had a big farm, buried it on the farm. Passed away before he could tell anybody where he's buried it. So somewhere on what used to be the family farm and is now, I think, an Israeli settlement which is a whole other concept, there is some big literal pot of gold buried somewhere that has over a million dollars that nobody knows where it is. And we're sitting here saying there's got to be a way for people to leave information to others that they will get someday, but you don't want them to know today.

While the information or traces in Jason's story were safely stored (the gold secured in a pot and safely buried in a hidden location), the deceased was unable to deliver it or make it accessible to survivors after his death. His secure hiding place had radically transformed, making it impossible for his heirs to ever retrieve the buried treasure. The pot of gold is

particularly useful here as a metaphor for how priceless and precious the traces of deceased loved ones can be for survivors, be it a pot of gold, an old family photograph, or a farewell video as explored in Chapters Four and Five.[80] While media traces may not have significant financial value, as discussed in Chapter Five addressing the meaning and interpretation of traces, they can be priceless for specific recipients. Jason's story of the forever lost pot of gold epitomises the conflict between enduring secure storage and ensuring future accessibility. This tension between storage and access is not unique to digital media (Robertson, 2021, p. 99),[81] but is rather a recurring issue for all media.

Exploring the idea of data security across my data sets revealed an intriguing discrepancy. While the websites generally presented digital media as absolutely secure, designers were more ambiguous and more often described digital media as unsafe and unreliable. Compared to the promises made on the websites, designers were much more cautious about the websites' ability to reliably keep information safe. With statements like "It's always hackable" (Sam), "everything gets hacked, everything" (Kevin), and "if people want to hack the system, they always succeed if they really want to" (Anna), founders and designers were constructing an image of a technology characterised by instability, hostility, and uncertainty.

Paul, one of my interviewees, a founder of a website and programmer referred to keeping users' information safe as a permanent battle:

[80] Although a pot of a million and a half dollars' worth of gold has a clear financial value, the specific details of the story within the historical context highlighted in it gives additional meanings to it, as a family history or myth that is passed on from one generation to the next. Regardless of the veracity of the specific details, this story has additional symbolic functions. For instance, the idea of there being such a pot of gold has additional meanings such as proof of historical injustice or hope for overturning the power imbalance between Palestinian and Israeli settlers in that location.

[81] Particularly illuminating is the discussion on the cabinet drawers – essential for the quick and easy retrieval of information, but also the cause of risk to information with drawers falling out or not fully returning to their position upon closing (Robertson, 2021, pp. 77-80, 98).

> So my background is in security, I have tons of, that's why I'm confident in doing this. I was with [name of company] back which is, you know, the first or second [type of company] in the US to have internet services. I was, I led a team of people that did data processing where hacking was a constant. Just daily, it was constantly happening. They never got through when I was there. And there is a lot to it. … I know a lot of people who their job is to break into stuff, ok, that's what they do for a living, not as criminals but as penetration people.

Through Paul's eyes, the threat to digitally stored data is constant. Therefore, safely storing things online requires perpetual work, which demands significant resources in terms of time investment, number of employees and knowledge. Paul uses this detailed description of his experience and expertise to establish his identity as an expert and thus his specific capability to offer a safe service. Through this construction, he also conveys such security as nearly impossible to obtain. In his account, it was him specifically who kept the company secure ("I lead a team", "they never got through when I was there"). In tying his specific qualities to data security, he makes such safety seem near unattainable, as it requires a rare and highly specialised expert such as himself to protect information and keep it safe. Importantly, Paul's detailed description of the effort necessary to keep data secure reveals how much work needs to go into digital and online media in order to make it secure at all.

Paul's account revealed another paradox. According to him, data is particularly vulnerable to hacking when managed by a large company, a "big stumbling behemoth", as he referred to it. Like Paul, David expressed a similar logic:

> You can never have complete security, but we do what we can to make sure. And as long as we're small, we're not a target. You become a target when you start growing, and then, hopefully, you have the funds to take care of it.

Indeed, inability to guarantee secure storage was dominant in designers and founders' accounts. Paradoxically, according to David, it seems the best way to protect and securely store the information of users is by remaining a small company, never becoming too popular or successful. Thus, in a way, this prescribes failure: the best chance to keep users' traces secure is to just not have too many users who need to protect their traces to begin with. Without sufficient users, however, the websites are unsustainable, thus unable to deliver their promised immune durability.

However, the safe storing of information is only one aspect of the promise to control one's posthumous traces. As established in the previous chapter, the promise of controlled online immortality is meaningful only under the assumption that they will not only endure but also be read. That is, in addition to securely and indefinitely storing the documents, letters, pictures, videos and other users' traces, online immortality services also need to make them *accessible and legible* to the future-bereaved (so that they can then meaningfully engage with them as explored in Chapter 5). However, secure data storage and future accessibility are seemingly irreconcilably at odds with one another.

When I asked Jason specifically about the problem of future accessibility on his website, he explicitly established the two as being at odds with each other:

> Quite honestly, there is nothing we can do about that. We do recommend to people that the longer that you want something to be stored we recommend the more simple storage. … store it as just a dot TXT document. I guarantee we'll always be able to read straight ASCII

> code. But if you have some new whiz-bang format, we can't guarantee that's going to be around, and there's nothing we can do. … We have the problem that one of the primary things we built our site on was security. So our vaults are what's called zero knowledge end-to-end encrypted, meaning we never have the keys. We can't see inside of it. So if you want to upload something to our system, you would actually encrypt it on your local machine before it gets sent to us, and the keys don't get sent with it. So we can't help you upgrade things cause we just have a bunch of binary digits. We don't know what it is.

Jason very clearly positions security and accessibility as coming at one another's expense: to keep users' data as safe as possible, his service makes it impossible for anyone except the users and intended recipients (not even Jason and his employees) to read or decode any data uploaded. Thus, even though Jason and his team can store the information safely as a "bunch of binary digits", their effort to ensure reliable future storage *necessarily* means that they cannot guarantee readability in the future. Like burying a pot of gold without telling anyone where or how to find it, like storing things in a safe and misplacing the lock's combination, ironically enough, it is the improvement in safely storing traces for the purpose of their durability that causes reduction (and sometimes loss) of accessibility, accessibility which is essential for their meaningful durability.

6.3.1) Solutionism vs Helplessness

Jason's account also constructs innovation as a risk to endurance. Jason's only suggestion for ensuring future accessibility to one's traces, is by using an older, basic, text file format.[82] In fact, Jason repeatedly states his helplessness in the face of changes in file formats:

[82] This reference again conceptualising an old-new dialectic was repeatedly articulated by designers and the websites in reference to technology. This old-new dialectic articulates at times the magical and fantastic

"there's nothing we can do", "we can't help you." This repetition is particularly striking for two reasons. First, because of its contrast with the promise of control over one's traces (specifically also articulated by him in explaining the purpose of his service). Secondly, and perhaps more importantly, because it is in complete opposition with this initial suggestion that newer technology, and specifically digital media, will do a better job in ensuring the endurance of traces. As Jason explicitly said during our interview:

> There has always been the desire for people to be able to survive past their death. They all say, you know, 'what is everything worth, why is life worth living if it all ends when I die?' We are now at an age where we can actually preserve that better than we've been able to in any other part of human history. We can preserve videos, we can preserve documents, and not only that, now we can make sure that they get to the right people.

This insoluble tension in Jason's reflections, between digital media's amazing capacity to enable symbolic immortality, vs is helplessness in controlling enduring accessibility in the face of changes in digital media, is strongly linked to the inherent obsolescence entailed in innovation, and specifically, digital media innovation. From software updates and upgrades to password updates, change is constant in digital and online media (Brügger, 2007; Chun, 2008; 2016, pp. 1-2) This is the case for software as much as for hardware, not only constantly changing but also often making earlier technologies obsolete, at the cost of sometimes completely losing all access to earlier versions and content. Any hope of long-term preservation of technology, requires active work of migrating formats, adapting files to make

capacities of digital media (new) compared to earlier technologies (old), and at other times, articulates the unreliability of digital media (new) vs the sturdy and reliable earlier technologies (old).

them readable and accessible, and storing file meta-data for future access (Ankerson, 2011, p. 394; Rahm-Skågeby & Carlsson, 2021, pp. 734-735).[83]

Thus while it may be the case that dot-TXT files may be readable for a longer time, Jason in fact highlights a key challenge for the ability of digital media – devices and software – in functioning as long-term storage and accessible media, given that they are likely to become obsolete.[84] Moreover, if the only guarantee for endurance is in avoiding change in file formats, specifically avoiding newer formats, what does it mean in times of frequent technological innovation and what does it require of users?

Designers also articulated helplessness in another way. Several designers shared with me the challenge of marketing their service and getting users to pay for their product. When I asked them how there were planning on dealing with the need to increase their user numbers, many of them again expressed helplessness. While a few had creative idea as to how to market or change the product itself, which I have referred to earlier, most designers claimed that the only solution was time. According to designers and founders, once the tech-savvy younger generations aged, they would both see the need for online immortality services and be prepared and eager to sign up for the services, something they thought was unlikely to happen with the older generations alive today. In this view, designers did not see themselves as holding any significant agency in impacting the world or shaping technology and its use.

[83] As Chun (2016) argues, New Media by definition exist "on the verge of obsolescence" as they are new only just as long as there isn't something newer to replace them, which inevitably sooner or later will come. Thus, in the most fundamental sense as well, new media are bound to change. I don't use the term New Media for this very reason (among others), but it is clear that we both refer to the same technologies and practices of contemporary Western societies.

[84] Importantly, Jason also declared: "I guarantee we'll always be able to read straight ASCII code." While there is technically a good reason for making this specific assumption, it conceals the fact that ASCII code can only read English. Thus, the endurance of ASCII would nonetheless encompass obsolescence, which resonates perhaps, with other politics of memory and preservation. Put differently, who will not be able to leave enduring information using an 'always accessible' ASCII code?

"The young generation, to them everything is digital" said David. And therefore:

> As more time will pass by the younger generation, used to using this medium will come to this stage in their lives, usually around your 30s, when life starts getting complicated, when parents die or when people get married. I assume it is a matter of 10-15 years.

The solution to marketing his services is "10-15 years". On the one hand, David was telling me about his revolutionary idea to control one's digital traces an idea he envisioned after his difficult lived experience dealing with the death of a loved one. A difficulty which made him realise that the regulator and the state hadn't 'caught up' to the digital age, and which motivated him to start his services to change this condition. On the other hand, David did not see a way for him to advance such change in the present, as ultimately, change was dependent on forces external to him, such as the flow of time and demographic changes. That is, he both had a vision aspiring to change current condition, but at the same time, did not see change as something that individuals involved in an initiative such as his, could bring.

This tension between change and stasis reveals not only the technological challenges to endurance, but also the collective work required to enable it (e.g., making sure old formats are readable).[85] It also highlights the type of work that online immortality services do *not* do. While promising a controllable posthumous online endurance, online immortality services do not explore or deal with the fundamental ways in which digital media do not endure. This

[85] An interesting example of this is the practice of 'retrocomputing' where individuals engage in 'retroarchiving', collecting and making accessible older software, a project that requires significant work done by a growing community. See for instance: Rahm-Skågeby, J., & Carlsson, A. (2021). The archive and the scene: On the cultural techniques of retrocomputing databases. *New Media & Society*, *23*(4), 732-749. https://doi.org/10.1177/1461444820954186

tension is rooted in the two conflicting social imaginaries of digital media endurance underlying online immortality services.

6.3.2) Innovation and Conservation: The Conflicting Social Imaginaries of Online Immortality Services

As explored in Chapter 2, social imaginaries are shared understandings of how "we all fit together," and how "things usually go" as well as a normative understanding of how things "ought to go" (Taylor, 2002, p. 106). In the theoretical chapter I've also explored symbolic immortality as social imaginaries of continuity. As such, the social imaginaries underlying online immortality services would entail not only a shared understanding of contemporary forms of continuity via digital media, but also a shared understanding of their desired future affordances. As technology and society are co-constitutive of one another, so are their future entangled imaginaries (Jewitt et al., 2019). That is, the social imaginaries underlying online immortality services refer both to continuity and future society as well as to the future technology and technological practice inherent to such society. Thus, these social imaginaries refer to the trajectories of development of the specific technology and to how these innovations and practices of use are inherent to a specific society and forms of sociality in its mediation of mortality.

Two overarching and conflicting social imaginaries emerge from the myths explored in this chapter analysed through their circulation across communication modes and actors, and mainly the accounts of designers and founders. One is a social imaginary of innovation and progress, and the other is an imaginary of conservation. In each of these imaginaries, technological change, individual agency, and the rights and obligations individuals hold towards one another (Mansell, 2017) differ. I now explore these imaginaries.

To some extent, the social imaginary of innovation and progress is a digital media embodiment of the long-standing progress vision of modernity. It is an imaginary of change and growth. Technology replaces religion and represents ongoing work of development and change. Bauman's analysis of contemporary modern society as liquid encompasses this vision of progress:

> The life of modern men and women is a task, not a given, and a task as yet uncompleted and relentlessly calling for more care and new effort. … progress is no longer a temporary measure and interim matter, leading eventually (and soon) to a state of perfection (that is a state in which whatever had to be done would have been done and no other change would be called for), but a perpetual and perhaps never-ending challenge and necessity, the very meaning of 'staying alive and well'. (Bauman, 2000, p. 134)

That is, progress is not a means towards an achievable end but its own end. This imaginary of progress was articulated through the myths explored in this chapter: the continuous breaking of boundaries, the prediction of newer technologies and new forms of extending life, the imagined ongoing cycle of improving data security (to sustain media immunity) in the face of relentless hacking all are different facets of a social imaginary of innovation and progress. The commercial logic of the start-up culture also informs this imaginary in cultivating and rewarding creativity, disruption, and innovation.

The myth of solutionism is inherent to this imaginary. It perceives of technological innovation as the result of the work of active agents (technology designers, scientists) who act to solve a problem, be it social, environmental, medical, or other. It is this type of agency that designers constructed themselves as enacting when starting their services. This imaginary

sees posthumous endurance as a solvable problem within the power of expert designers who work towards solving it.

At the same time, a second social imaginary emerges from the data, one of conservation. As explored in this chapter, while the imaginary of innovation and progress looks to the future, the conservation imaginary looks to the past, or to the future of its past. By this, I refer to the view of the past as valuable and the desire and attempt to preserve it into the future. Rather than change and innovation, it is an imaginary that reaffirms the old. It is an imaginary of future society that is concerned with and intrigued about its past. For instance, as repeatedly expressed by designers envisioning ordinary daily conversations with 'digital ghosts'. The very need for enduring technology is to sustain the past: preserve the traces of the dead and preserve meanings. It is also a conservative imaginary in how the role of designers is imagined, having little to no agency over social and technological change. This was articulated by designers' helplessness in impacting the social realities they claimed needed changing.

Both of these imaginaries are consistent with the imaginary of connectedness. Endless and ongoing connectedness requires both change, flexibility, and adaptability to enable newcomers to join the complex webs of connection. At the same time, endless ongoing connectedness also demands conservation to sustain the links and threads of such a continuous connection.

These are both imaginaries of continuity. Either the continuity through the ongoing innovation of technology or through the perpetuation of society and the conservation of its past. These competing imaginaries are in between Mansell's suggested imaginaries of the digital. Although the innovation and progress imaginary sees room for individual agency, neither of these imaginaries see collective advocacy as part of future continuity (Mansell,

2017). Memory, endurance, and continuity are imagined as private projects rather than forms of collective action. This, again, points to the cultural work that online immortality services don't do, or the type of problems they do not attempt to solve. Moreover, the absence of collective action in these imaginaries, also obfuscates the consequences of having private corporates as dominant contemporary mediators of mortality.

6.4) The Death of Online Immortality Services

In this section I go back to the example opening this chapter, the consequences of SafeBeyond.com's 'death,' to explore the costs of the mediation of mortality via digital media, specifically, as deeply ephemeral technologies, and as designed and controlled by private corporates. I discuss the changing landscape of online immorality involving both a shift towards platformisation and the disappearance of online immortality services.

In the years since I have embarked on this research, most of the websites in my corpus have closed. Although some new online immortality services emerged in the years after I stopped adding new data, at large, online immorality services remain largely a niche and unknown part of the internet. Table 2 presents the activity status of online immortality services in my corpus.

After Fect	Last Words 2 Love
After Note	Leg8cy
After Vault	Legacy Armour
After Words	LifeNaut
Be Celebrated	LivesOn
Capsoole	Meminto
Dead Man	My Farewell Note
Dead Man's Switch	My Goodbye Message
Dead Social	My Moriam
Death Switch	My wishes
Digital Remains	Parting Wishes
Email From Death	Perpetu
Eter9	Phoenix
Eternal Message	Planned Departure
Eterni Me	Postumo
Eterniam	Remember Me
Ever Plans	Safe Beyond
Ghost Memo	Say Goodbye
Gone Not Gone	To Loved Ones
Heaven Note	Vital Lock
If I Die (net)	Vivala
If I Die (org)	Xarona
Intellitar	
Knotify Me	

Table 2: Online Immortality Services Activity Status

The cells coloured red are of websites that are no longer accessible online. That is, an attempt to load their URL either loads an error message or a 'domain for sale' message. The cells coloured grey are of websites that are technically accessible online but that are either inactive or no longer provide immortality services. For instance, IfIDie.Net is available online, but the company has closed several years ago and longer provides its services. Alternatively, Bcelebrated.com no longer accepts new users or provides services for creating one's online immortality but remains accessible as hosts of the self-memorial pages of users who had subscribed before they closed. The cells coloured green are of websites that remain accessible online. Nonetheless the activity status of several of these services is unclear. While some are active, such as MyWishes.co.uk, others might not be. For instance, AfterFect.com's homepage hasn't been updated or changed at all since I started monitoring it in 2015. This includes the note on the homepage specifying it is under beta. The table above visually tells the story of

the rise and demise of online Immortality services, between the large number of websites and the dominance of the red colour.

Some of the features offered by online immortality services, mainly the management of already accumulated digital traces have been incorporated by contemporary large media corporates as part of a more general shift in the digital landscape towards platformisation (Poell et al., 2019). I elaborate on these features in the next concluding chapter. For now, I want to link the incorporation of some of these features into the big platforms, to my discussion on the social imaginaries and their omission of collective action and media ephemerality, which is driven by technological change but also by economic interests of the companies owning these technologies.

On the one hand, given the public debate and attention around the issue of digital remains, features such as Facebook's Legacy Contact and Google's Inactive Account Manager, can be seen as a case of evolving practices that lead to a transformation of platforms. That is, needs and practices related to managing one's digital traces impacted corporate practice leading them to incorporate features such as Legacy Contact. On the other hand, considering the status of these platforms as the legal owners of the traces of the dead to begin with, the creation of legacy contacts, more than addressing a public issue or a need for to mediate mortality, enable to ensure the corporates' continued control over these traces and under their terms.

This process of platformisation obfuscates another fundamental issue, which is epitomised in the heart-breaking messages brought in the opening of this chapter, following the closing of SafeBeyond, and also missing from the social imaginaries underlying online immortality services. I refer to the ephemerality of digital media. As Lagerkvist helpfully observes, "we lack a sense of technologies of memory as wearing out" (Lagerkvist, 2018, p.

55). Importantly, SafeBeyond's example emphasises that this ephemerality is not only due to the technology itself (which rapidly changes making earlier versions obsolete) but also due to the business models and commercial interest of the private corporates that create and manage them. Any hope for durability, would have to consider both of these aspects of media ephemerality, which are deeply engrained into the contemporary mediation of communication, and thus inevitably, also to the contemporary mediation of mortality.

Thus, in this way, the conflicting imaginaries of online immortality services, and their short history from their emergence to their decline, importantly, sheds light on the core issue of the potential meanings and consequences of having large digital media corporates play such a central role in the contemporary mediation of mortality. I futher explore this idea in the next concluding chapter.

6.5) Conclusion

In this chapter I explored the ways in which digital media are constructed as controllable through an ideology of techno-solutionism that enables to solve any problem thus tame and control uncertainty. Such articulation of technology, I argued, is based both on technical affordances and on magical perceptions of digital media's powers. Then I explored the ways in which magic was pervasive in the construction of the supposedly technical promise for technological posthumous endurance through the myth of immunity. I argued that the magical and technical emphasis of immunity and endurance are constructed in opposition with accessibility, which is also essential to symbolic immortality.

The chapter then showed how the tension between endurance and accessibility, is associated with a tension between two opposing positions of designers and founders between

solutionism and helplessness. These two positions were then explored as part of two contradicting social imaginaries that underlie online immortality services: innovation and conservation. The chapter then concluded by discussing what these imaginaries obfuscate, which is primarily the role of collective work and aspects of ephemerality of digital media, revealed by the failure of online immortality services.

In the next chapter I tie together the themes and arguments presented in the thesis and push forward the discussion on the failure of online immortality services and how it contributes to further thinking about the mediation of mortality in contemporary society and the study of contemporary media more generally.

Chapter 7: Conclusion: The Posthumous Endurance of Online Immortality Services

A hundred billion years from now, any galaxies not now resident in our neighbourhood will exit our cosmic horizon and enter a realm permanently beyond our capacity to see. Unless future astronomers have records handed down to them from an earlier era, their cosmological theories will seek explanations for an island universe, (…) floating in a static sea of darkness. We live in a privileged age. (Brian Greene, The Hidden Reality, p. 141)

My 10 years old son is a digital native. He intuitively masters digital devices in our house and takes for granted having an answer to any question as well as endless information on any topic triggering his curiosity – from the solar system to the best recipe for pancakes – only a short Google search away. But above all, to me, what defines him as a digital native is his perception of memory. A few weeks ago, a friend brought him a beautifully decorated dinosaur-shaped gingerbread biscuit. He asked me to help him unwrap it and put it on a plate. Before he took a bite, he asked me: "mum, can you please take a picture, so that I can remember it forever?" The biscuit is long gone. So are the Arizona-shaped piece of pancake, Lego duck, and the black-hole model made of melted chocolate ice-cream. Their digital remains, however, live on in my digital photos account, randomly scattered among all the other records documenting countless big and small moments in his and my life.

Lifton and Olson describe in *Living and Dying* how children gradually develop an understanding of death. As children grow, they engage in different death-like experiences that contribute to developing their death awareness. In this process, what they refer to as the imagery of death is constructed within a life-death dialectic (these are the three life-deeath dichotomies: connection-separation, integrity-disintegration, movement-stasis). Through this gradual process children develop together a concept of death *and* of continuity, "the idea of

death and ongoing life" (Lifton & Olson, 1975, p. 35). Inherent to containing the developing understanding of death, then, are these perceptions of continuity.

In the face of loss, of things he knows will be forever gone, my son finds comfort in keeping a digital record. A specific moment or a specific object will be gone, but he is comforted in taking a picture that will enable him to remember it forever. He has somehow internalised the practice of documenting the mundane, and the assumption of endurance of these records. Records of which endurance depends on the continued readability of the file format in which they are stored, and the prosperous endurance of the private company that holds and stores my collection of thousands and thousands of photos.

This thesis asked: How do digital communication technologies mediate mortality in contemporary western societies? This overarching question was explored through three sub-questions, each focusing on a different link between communication technologies and symbolic immortality practices articulated by online immortality services: 1) What practices of leaving traces do online immortality services construct and facilitate? 2) What posthumous relationships between the future-dead and future-survivors are constructed and facilitated by online immortality services? 3) What digital media myths and social imaginaries are evoked by and underlie the practices constructed and facilitated by online immortality services?

Each of the empirical chapters focused on one of the sub-questions. Based on my multimodal analysis of websites and analysis of interviews with designers and founders, the empirical chapters reveal three dialectics around the promise of control negotiating unsolvable tensions between closure and non-closure, between responsibilisation and dependence, and between innovation and conservation. Ultimately, this thesis is about

ephemerality: the ephemerality of technology, the ephemerality of life, and the contemporary hope and attempt to control one in order to somehow control the other.

7.1) Social Media Platforms and their Vernacular Histories

The early 21st century witnessed the rise of social media platforms which rapidly spread, growing into the largest media corporates of contemporary society and overdetermining the history of media and communication in the contemporary era. In less than a decade, social media platforms permeated virtually every aspect of contemporary culture, pervasively mediating communication on all levels (individual, community and society) and affording new forms of sociality. Importantly, what drove many users to these sites early on was a need for *connectedness* (van Dijck, 2013, p. 4). It wasn't long before such connectedness would also link the living and the dead, and become key mediators of mortality.

To properly understand media and mediation in the early 21st century, however, this thesis argues that it is not sufficient to examine the history of the large media platforms. Rather, it is necessary also to explore the vernacular histories of smaller services and platforms that emerged around the same time. This thesis unfolds one such history, analysing the emergence and demise of online immortality services. The thesis suggests that the specific 'shadow' history of online immortality services is particularly important as it sheds light on how contemporary media mediate mortality. The mediation of mortality, I have argued, is both a fundamental role of culture as well as key in the development and use of communication technologies.

As is the case for all technologies once they are put into use and especially when so widely diffused, it is impossible to fully predict the specific practices of their use and their consequences for the social environments in which they function. Such was the case for social media platforms. Inevitably, social media platform users, like all human beings, pass away. Though dead, their accounts remain entangled in the active online networks of the living. Thus, pervasively mediating human communication, social media platform growingly, and unexpectedly, also became a space through which individuals deal with death and connect with the dead. In response to this unforeseen need and inspired by the emerging media and their practices, online immortality services began to emerge, articulating symbolic immortality according to "to the particular kinds of experience characteristic of a given historical period" (Lifton & Olson, 1975, p. 79, italics in original).

In this thesis I have traced the history of online immortality services. This study began with the intention of documenting and understanding a newly emerging phenomenon and became its historical archive, documenting its demise. Although a failed enterprise, this thesis has argued that understanding online immortality services is crucial for understanding both the mediation of mortality in the digital age and, more generally, media and mediation in the early 21st century.

This study contributes to current academic scholarship on the sociology of immortality and offers a new way of thinking about and empirically studying mortality (and immortality) from a perspective that is external to grief, bereavement, and dying. Moreover, through this perspective, the study contributes to media studies and specifically the long trajectory of scholarship linking media and death (e.g., Barthes, 1981; Hill, 2011; Mulvey, 2006; Peters, 1999; Sontag, 1973; Zelizer, 2010). The thesis further contributes to contemporary debates

around death and the immortal within digital practice and contemporary culture (Lagerkvist, 2018; Stokes, 2021; Sumiala, 2021).

As online immortality services closed one after the other, this study transformed into a specific record of this fading enterprise. By becoming a historical archive of a fleeting internet phenomenon, this study also contributes to debates surrounding web archiving and preservation (Ankerson, 2011; Barone et al., 2015; Brügger, 2008). Moreover, it provides an empirical example as to the social and cultural importance of failed technologies. Studying technologies, and specifically studying the digital, often focuses on the widely diffused, successful technologies, working on a biased assumption conflating use with significance (Edgerton, 2006). Exploring failed technologies, this thesis argues, is just as important for understanding the technologies that do succeed and the historical and cultural contexts in which they emerge.

In Chapter Two I defined the contemporary mediation of mortality (what I term potential death) as the focus of interest of this thesis and established the fundamental link between media technologies and the mediation of mortality. Each of my empirical chapters explored one of the three key facets that I defined as essential in media's facilitating practices of symbolic immortality: leaving traces (Chapter 4), sustaining relationships (Chapter 5), and imagining technological continuity (Chapter 6). Through analysis of interviews with designers and founders and multimodal analysis of immortality websites, each chapter showed a different aspect of the ways in which online immortality services embody the paradoxical relationship between digital media and immortality.

Through each of the three empirical chapters, the thesis argued that online immortality services promise their users extensive control over their online posthumous endurance. I show, however, that the services fail to fulfil their promise due to precisely the

same social, technological, and commercial circumstances that led to their emergence. The chapters reveal three dialectics around the promise of control that establish unsolvable tensions which undermine the promise altogether.

Chapter 4 showed how online immortality services promised users to control their posthumous memory by engaging in a practice of closure. The chapter argued, however, that the services made closure unfeasible both in the specific practices requiring constant and perpetual engagement and due to the perpetually beta design practices. Moreover, the chapter argued that non-closure was deeply embedded in the culture of connectivity and post-mortal liquid modernity which do not allow either ending or closure.

Chapter 5 showed how online immortality services' promise of controlled posthumous endurance relied on constructing extended individual agency of users as neoliberal subjects. Users, the websites claim, can overcome institutional lacunas and unburden loved ones, all while eternalising their own unique identity. Yet, the chapter demonstrated that online immortality services simultaneously constructed the agency of future-survivors, making them essential for the achievement of symbolic immortality. The chapter argued that these competing agencies create an insoluble tension that undermines the users' posthumous controlled endurance. This tension – between individual and collectives, between undermining institutions while depending on their transcendental continuity – is not only constructed by online immortality services but is deeply embedded in times of liquid modernity and practices of neoliberal digital economy.

Chapter 6 explored the competing social imaginaries that underlie the emergence of online immortality services and their promise of control over one's symbolic immortality. The chapter argued that innovation and solutionism are key to the emergence of online immortality services and their promise of controlled posthumous endurance, constructing

digital media as highly durable, immune, and controllably malleable for any desired purpose. At the same time, however, the chapter showed that online immortality services also constructed technology as mysterious, unknowable and fundamentally incontrollable, thus undermining the promise of controlled immortality. The chapter suggested that these contradicting constructions of technology reveal two competing social imaginaries: innovation and conservation. Both imaginaries, the chapter argued, obfuscate technological ephemerality and corporate commercial interests that undermine any possibility of controlling one's digital immortality.

Online immortality services emerged in a specific moment in history. Yet as reiterated throughout the thesis, these same historical, social, and cultural circumstances undermine the websites' ability to provide the service they offer—that is, to deliver on their promise of controlling one's posthumous online transcendence. For instance, the wide spread of digital media and the culture of connectivity created a need to curate and control one's abundant digital collection of traces, from pictures and videos to online banking and email accounts. They also legitimised the online mediation of death and of relationships between the living and the dead, which were key in envisioning some of the features of online immortality services. Yet it is this very culture of connectivity and value of digital traces that make closure impossible and raises the insoluble tension between the agency of the future-dead and future survivors. Additionally, heightened personal agency, unique individuality, and the undermining of institutions are typical of both neoliberal ideology and liquid modernity, both of which hinder the solidarity necessary for realising the promise of posthumous endurance.

Ultimately, while digital media are perceived as enduring, inspiring different hopes and visions of posthumous symbolic eternal survival, they too are deeply ephemeral. Moreover, their potential for endurance is deeply entangled with corporate profitability, further

contributing to their precariousness. Thus, the life cycle of online immortality services reflects the very topic at the heart of this thesis: mortality and posthumous endurance. I now turn to explore the afterlife of online immortality services, and the significance of their posthumous endurance.

7.2) Online Immortality Services, R.I.P

In their paper on failed technological innovations in the death industry, Nansen et al., eulogise several 'necro technologies' (such as the *CataCombo* allowing to play music inside the buried casket and the *CARL* robot allowing remote attendance at funerals). Although they focus on the funerary industry, they also eulogise two online immortality services. This is their eulogy for Intellitar.com:

> You told us you would live forever
> but you were cut down in your prime
> 'though you had a chance to shine
> we salute your brave endeavour
> (Nansen et al., 2021, p. 10)

Online immortality services may be dead, but they live on through their digital remains, their public memory, and the mark they left in the world.

7.2.1) The Digital Remains of Online Immortality Services

The remains of online immortality services, like those of individuals, are scattered around the internet. For instance, some of the introduction and tutorial videos of online

immortality services continue to 'live on' on platforms such as YouTube and Vimeo. Whenever one misses deadsoci.al's unique sense of humour or SafeBeyond.com's heartfelt demos inspiring potential users of the type of memory they can create, they can watch them on YouTube.

A few services still have their homepage available online even though the company has closed and no longer provides services nor replies to contact attempt via the website. IfIDie.net for instance is one such example. AfterVault.com also remains available online but it no longer provides immortality services. Instead, it is now a blog offering information on estate planning to "adults 50+."

Finally, many online immortality services also owned a Facebook page. As is the case for so many individual Facebook users whose accounts remain online, so is the case for many of the Facebook pages of online immortality services. For instance, AfterWords.cc, Vivala.Me, Eterni.Me still have their Facebook pages available online Even though it has been several years since they've closed. Individuals may sometimes post on these pages, but a reply never comes, as in the very sad example from Safebeyond.com's page.

7.2.1) The Public Memory of Online Immortality Services

Online immortality services also continue to live on through public memory. Around the time of their emergence, online immortality services drew media attention with their promises of posthumous communication. Magazine articles and news pieces either covered the launch of some of these services (e.g., McLaughlin, 2010) or reported about them as part of a more general coverage of the theme of digital remains (e.g., Coldwell, 2013). If anyone were to search today for what happens to their online accounts and digital media in case of death, they are likely to come across some of these older magazine pieces. Unfortunately, the

services they'd recommend including embedded links directing to them, would no longer be of help. In this sense, the promise of online immortality services is perpetuated, but so is their failure to materialise it.

7.2.3) Online Immortality Services' Mark in The World

Aside from their digital remains and public memory, online immortality services also live on through the mark they left in the world. By 'mark' I refer to the ways in which the ideas and affordances offered by online immortality services 'live on' through other platforms. For instance, in 2013 Google launched their *Inactive Account Manager* feature enabling users to decide if their accounts are deleted after a certain time of inactivity or specify a specific individual to be allowed to access a copy of their data (Morse & Birnhack, 2020, p. 10).

In 2015 Facebook introduced *Legacy Contact* which allows account holders to specify an individual who will manage their account in case of death. A legacy contact can either close the account or manage some aspects of it (such as update its profile picture or respond to new friend requests). A legacy contact cannot post on behalf of the dead (they cannot log onto Facebook with the account of the deceased), nor can they access any content that wouldn't have been accessible to them when the user was alive, such as private message history (Brubaker & Callison-Burch, 2016, p. 2912; Morse & Birnhack, 2020, p. 10). In December 2021 Apple released their version of legacy contact, allowing individuals to specify a person who would have access to their Apple ID after they die.

In a sense, certain affordances and intended provisions of online immortality services live on through features such as legacy contact, now incorporated within the large media corporates and their platforms. Indeed, several circumstances and conditions have brought to the development and design of features such as legacy contacts. These include emerging

online grieving practices as well as specific cases which were taken to court,[86] and activists advocating to grant bereaved families, access to the accounts of their deceased loved ones. Among these circumstances and public debates, were also online immortality services who were responding and aiming to cater to that same need, and who put on offer specific configurations for addressing these needs. In this sense, features such as legacy contact are a living legacy of online immortality services, their affordances, and their provisions. This again emphasises the significance of studying such vernacular histories for the purpose of understanding also the larger companies and histories of mediation.

7.3) Living Dead Media

Media live and die. Most innovations fail, but also successful and commonly used media can come to an end. Floppy discs, CDs, iPods, dial phones, are all examples of widely diffused technologies which have become irrelevant with the emergence of smartphones, cloud servers and other forms of digital media. These are also examples of *residual media*, of how media indeed live and die, but then, live on. I still own my old collection of music on CDs, even though I no longer have a device to play them on. Every time I click 'save' while writing these words, I look at a representation of a floppy disk.

Residual media refers not only to the material remains of technologies, but importantly, also to their social and cultural significance and lingering. They are forms of "living dead culture" (Acland, 2007, p. xx), referring to the continued impact of 'deceased' technologies on practices, experiences, values and artifacts. Thus, although online

[86] For instance, the case of Colin Hehir who was denied access to this murdered son's Apple laptop. *Morgan Hehir murder: MP's help sough in Apple laptop fight*. (2016). BBC News. Retrieved 28th May 2023 from https://www.bbc.co.uk/news/uk-england-coventry-warwickshire-37209268

immortality services are by now, quite probably, a thing of the past, their legacy and remains continue to have significance for understanding contemporary technology and its role in the mediation of mortality.

Today, users logging in to their Google or Apple account, setting up a legacy contact or inactive account manager, have no way of knowing that online immortality services have been, to some extent, a part of the history of these features. This suggests that to better understand the contemporary practices of the large media corporates, it is also necessary to know of the media residues or legacies of such vernacular practices that in some way continue to live on in these platforms' settings. Such histories can raise additional questions about the configurations that social media platforms incorporated, as well as about the ones they haven't. This thesis has contributed to understanding the history of one such residual media, a history which would be much harder to access were the study to begin today.

Studying such vernacular histories of disappearing technologies, documenting their circumstances of emergence and demise, understanding their residual impact and significance on other forms of technology and technological practice is inseparable from the effort to understand the larger histories of media and their practices of design and use. Perhaps not unlike keeping record of visible stars and galaxies, in order to understand their impact on the universe, before they dissappear out of sight.

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Appendix A: LSE's Research Ethics Committee's Authorisation Letter

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Research Division

Ms Paula Kiel
Department of Media and Communications
P.Kiel@lse.ac.uk

17th May 2016

Dear Ms Kiel

Re: When the dead are the messengers: Practices of post-mortem digital interaction and the social construction of death

I am writing with reference to the above research proposal and your detailed response to the comments raised by the Research Ethics Committee. I am now satisfied that the ethical issues raised by the proposed research have been properly taken into account and that adequate safeguards have been put in place. I am accordingly able on behalf of the Committee to confirm our approval of the application. I would like to thank you very much for your thoughtful and receptive response to the issues originally raised by the Committee.

Please note that any significant changes to the research design must be reported to the Research Ethics Committee. Amendments to the research design that may affect participants and/or that may have ethical implications must be reviewed and approved by the Research Ethics Committee before commencement (or recommencement) of the project. The Research Ethics Committee may periodically conduct a selective audit of current research projects.

I would like to take this opportunity to wish you well with your research project.
If you have any further queries, please feel free to contact Lyn Grove, Research Division.

Yours sincerely,

Professor John Worrall
Chair of the Research Ethics Committee

cc. Lyn Grove, Research Division

Appendix B: Consent Form

THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

MEDIA@LSE Department of Media and Communications

CONSENT FORM

Interview conducted by Paula Kiel, PhD Candidate, Department of Media and Communications, London School of Economics and Political Science

Thank you so much for agreeing to be interviewed by me about your work at *[Name of service]* as part of my PhD project at LSE. My research is about websites dedicated to digital legacy and post-mortem digital activity.

Please read the form below, tick the boxes accordingly, and sign and date, if you agree.

I agree to take part in an interview for Paula Kiel's research project about websites dedicated to digital legacy and post-mortem digital activity. ☐

I am happy to put forward my views and share from my experience as invited by the researcher. ☐

I understand that my interview will be audio-recorded for purposes of accuracy and later transcribed. ☐

I also understand that if I wish so, I will have an opportunity to review my transcript and correct any inaccuracies, if necessary. ☐

In addition, I understand that transcripts will only be handled by the researcher, who will abide by high standards of confidentiality and anonymity. ☐

I am aware that the integrated findings of this project will form part of researcher's PhD thesis and may also be reported in future research publications, conferences, and presentations. I also understand that anonymised quotes taken from the interview might be used in such reports. The data reported will be anonymous and will not enable to trace my identity and personal information. ☐

I agree to participate in this study. ☐

If you wish to WAIVE YOUR ANONIMITY and you want your full name and position to be used in any publication related to this project, please tick this box: ☐

Name: _____

Signature: _____

Date: _____

Appendix C: Semi-Structured Interview Guide with Designers

The vision and early days

Tell me about the beginning of *[name of website]*. Where did the idea come from? When? Where? How?

- What motivated you? What inspired you to think about this kind of service?

How did you imagine your website?

- What did you think the website would do and how? What functions did you imagine?
- Who did you imagine using it and what for? Did you have an ideal user in mind?
- Can you give me an example of an imagined scenario that you had for using the website?

How did you get the website in motion?

- Who were the first people you shared your idea with? Do you remember what you told them and how did you describe it to them?
- How did people react to your idea? How did you feel with those reactions?

Do you remember your feelings and thoughts as you started spreading your idea to other people and getting feedback from them?

- Was it hard to get people on board? (How did you deal with that? – if it was hard)
- What challenges were you concerned about / did you anticipate?
- Tell Me a bit about the early design process. Where did you start, with who…Did you run a beta phase?...

The existing website

Tell me a little about *[name of website]*

- What functions does it offer and how?
- Do you think differently about what ***[name of website]*** can / should offer users comparing to the way in which you first envisioned the website?

[name of website] is focused on encouraging people to think about their own death. Is that something that is very present in your work? Thinking about death?

- Do you talk a lot about death?
- Does the notion of death come up very often in office conversation? In what ways?

Has your experience of working on *[name of website]* and the field of digital legacy in general, changed the way you think about death or feel about it?

- Can you share your thoughts about this? Has your attitude towards death changed?

Who is the *[name of website]* team?

- How many people are on the team? What are their positions/roles?

- How does a “regular day in the office” look like?

Where relevant: You have recently changed your design – your website used to look very differently. Can you maybe tell me a bit about that process?

- Why did you change the design?
- How did you choose the new design?
- What do you particularly like/dislike about the new design? What do you think it will do better?

Could you tell me a little bit about the users of *[name of website]*? Who are your main users? How many users do you have?

- Do you have any demographic information about your users? How do you understand / would you explain this demographic? How is this in comparison to the users you had imagined?
- Are there people who you think shouldn’t use ***[name of website]***? Who? Why?
- Do users give you useful feedback about using ***name of website]***? Could you give me an example of feedback that you got from users? What was its impact?
- Do users have a specific role in your opinion?
- Are there users who use your websites for unexpected uses? Or for uses you disapprove of? (if yes, what, and why do you disapprove…) What did /will you do about it if at all?

Are you a user of [name of website]? Do you have a profile? Could you perhaps share from your experience as a user of the website?

- How do you feel when using it? Has it changed the way you think about the website?
- Can I ask, Did you ever receive a message from a deceased user? Or did recipients share receiving a message through your site? Would you care to share anything from that experience or feedback?

Contextualisation and future vision

Context

- Do you know of other websites that offer similar services?
- Are there websites that you consider as your competiion? Who is your competition?

Do you now see differently or think differently about the purpose of *[name of website]*?

- Are there any features of the website that you would like to change or would like them to work differently? What would you change about it?
- Are there other things you think it should do?

Many people to whom I tell about your website, or other related websites, react with unease and a sense of creepiness – did you encounter this? Why do you think that is?

- Can you give me an example of someone who reacted to your work that way? What did they say? How did you react?
- Did you ever feel that way about your work or about other projects in the field of digital legacy?
- Do you think this will change? Why? How?

How do you see the future of *[name of website]*?

- What kind of website will it become? Who will be its users in 10 years from today?
- In what ways will it change? What will never change?

In this field of digital legacy and postmortem digital activity, what do you think would be the next development?

- How do you see this field progressing?
- What do you think is missing now and should change?
- Why would you say that websites such as yours are important?
- Where do you see yourself in 5 years? In 10 years?

Appendix D: Information Brochure

Using a website for planning your digital presence after you die? I would love to hear about it!

Hello,
My name is Paula Kiel. I am researching websites for post-mortem digital activity and presence.
These are websites that enable their users to plan and prepare *their own* digital presence after they die. For instance, create email messages that will be sent to loved ones after death or delete specific photo albums from their Facebook profile.

If you are already a user of any website(s), where you, as the user, are explicitly encouraged to think about your own digital presence after you die, and enabled to configure it, I would love to hear about your experience.
Please follow this link for a short questionnaire:
https://goo.gl/forms/9nIclihXSq9sZJ5m2

Or email me at: p.kiel@lse.ac.uk

* Participation is anonymous and participants may opt-out of the research at any point, no questions asked.

** Only individuals over 20 years of age are eligible to participate.

If you have any further questions, please don't hesitate to contact me: p.kiel@lse.ac.uk

You may also find additional information here: onlineafterdeath.weebly.com

Here are a few examples for such websites:

DeadSocial | SafeBeyond | Dead Man's Switch | ifidie.org | Protect your digital life and legacy capsoole™ | AFTERWORD

Who am I?

My name is Paula Kiel. I'm a PhD candidate in the Department of Media and Communications at LSE. My research project is a completely independent study and it is conducted under the research-ethics guidelines of LSE. If you have further questions, please email me: p.kiel@lse.ac.uk

LSE Media and Communications

Appendix E: Websites List

	Name	URL
1	After Fect	Afterfect.com
2	After Note	Afternote.com
3	After Vault	Aftervault.com
4	After Words	Afterwords.cc
5	Be Celebrated	Bcelebrated.com
6	Capsoole	Capsoole.com
7	Dead Man	Deadman.io
8	Dead Man's Switch	Deadmansswitch.net
9	Dead Social	Deadsoci.al
10	Death Switch	Deathswitch.com
11	Digital Remains	Digitalremains.co.uk
12	Email From Death	Emailfromdeath.com
13	Eter9	Eter9.com
14	Eternal Message	Eternalmessage.org
15	Eterni Me	Eterni.me
16	Eterniam	Eterniam.com
17	Ever Plans	Everplans.com
18	Ghost Memo	Ghostmemto.com
19	Gone Not Gone	Gonenotgone.com
20	Heaven Note	Heavenote.com
21	If I Die (net)	Ifidie.net
22	If I Die (org)	Ifidie.org
23	Intellitar	Intellitar.com
24	Knotify Me	Knotify.me
25	Last Words 2 Love	Lastwords2love.com
26	Leg8cy	Leg8cy.com
27	Legacy Armour	Lagacyarmour.com
28	LifeNaut	Lifenaut.com
29	LivesOn	Liveson.org
30	Meminto	Memento.com
31	My Farewell Note	Myfarewellnote.com
32	My Goodbye Message	Mygoodbyemessage.com
33	My Moriam	Mymoriam.com
34	My wishes	Mywishes.co.uk
35	Parting Wishes	Partingwishes.com
36	Perpetu	Perpetu.co
37	Phoenix	Phoenix.com
38	Planned Departure	Planneddeparture.com
39	Postumo	Postumo.info
40	Remember Me	Remember-me.co
41	Safe Beyond	Safebeyond.com
42	Say Goodbye	Saygoodbye.co
43	To Loved Ones	Tolovedones.com
44	Vital Lock	Vitallock.com
45	Vivala	Vivala.me
46	Xarona	Xarona.com

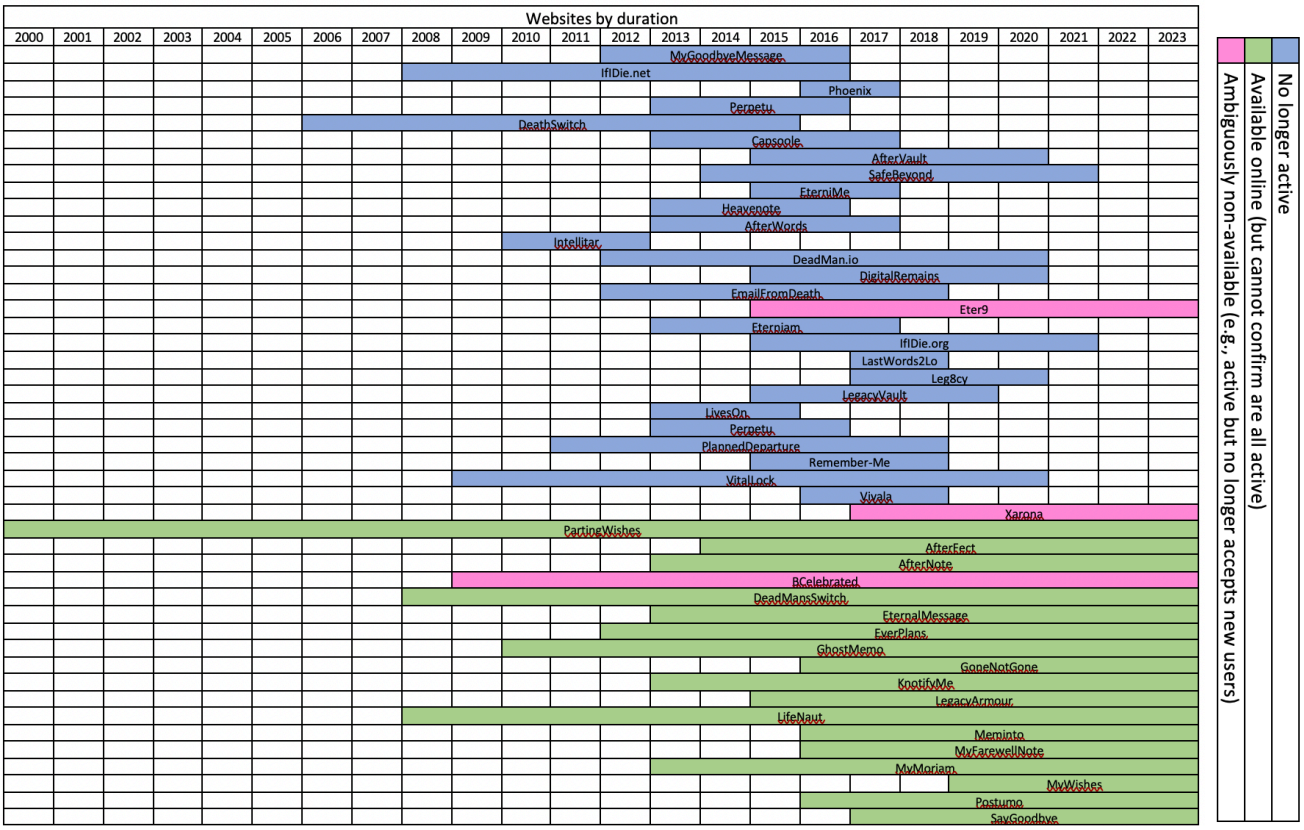
Appendix F: Interviewees list

	Age	Self-identified gender	region	Professional background	position
1	40-45	Woman	Western Europe	Finance	Founder and designer
2	50-55	Man	North America	Computing	Founder and designer
3	55-60	Man	North America	Education	Manager
4	40-45	Man	North America	Education	Founder
5	30-35	Man	Eastern Europe	Computing	Founder and designer
6	30-35	Man	Western Europe	Computing	Founder and designer
7	45-50	Man	Israel	Computing	Founder and designer
8	45-50	Man	North America	Energy	Founder
9	30-35	Man	Western Europe	Entrepreneur	Founder
10	45-50	Man	North America	Computing	Founder and designer
11	50-55	Man	Western Europe	Finance	Founder
12	55-60	Man	Western Europe	Security	Founder
13	30-35	Man	Western Europe	Computing	Founder and designer
14	20-25	Man	Central America	Computing	Founder and designer
15	30-35	Man	Western Europe	Computing	Founder and designer
16	25-30	Woman	Western Europe	Tourism	Founder
17	40-45	Man	Israel	Finance	Founder
18	20-25	Man	North America	Education	Founder
19	30-35	Man	Western Europe	NGO	Founder
20	40-45	Man	Western Europe	Finance	Founder

Appendix G: Websites Timeline

This is an attempt to visually represent the rise and fall of online immortality services. It is important, however, following the discussion in chapter 3 on websites as an object of study, to note that this timeline is a snapshot of the websites that I've studied in this project. Moreover, methodologically, access to the exact date in which a website launches and when it closes is not easily available. For some of the websites, I was able to confirm these dates (e.g., contacting websites owners, access to public announcements of their launch and/or closing, reports in other academic papers). For most of the websites, the timeline is based on my regular monitoring of the websites and thus represents when I no longer had access to them.

The following table shows all the websites in the corpus by duration (from launch to closing). Websites represented in blue are websites that have closed and are either no longer available online or I have confirmed their closing. Websites represented in pink are websites that are inactive, although they may be accessed online. For instance, while BeCelebrated is available online, it no longer accepts new users and is only available for viewing online memorials of already existing users (and users who have died). Finally, websites that are represented in green are websites that remain available online. Nonetheless, it is important to keep in mind that while they may be accessible, I wasn't always able to confirm that they are indeed active. In a sense, then, this timeline is also helpful to highlight some of the methodological challenges of studying websites.



Appendix H: Coding Interviews

As described in Chapter 3 I transcribed all interviews myself. Listening to the recordings was important in further familiarising myself with the data. While listening to the interviews I started taking notes, allowing myself to reflect freely and documenting some of my thoughts and first insights, noting moments in the interviews that resonated in some way or another with my theoretical framework. Then, I read and re-read the interviews transcripts several times and noted repetitions, particular expressions and metaphors, and labelled each sentence to highlight the main idea articulated in it. I also deductively looked for specific categories and themes drawing on my theoretical framework (such as relationships between the living and the dead, traces, imagined futures). Through this reiterative process I've constructed my coding scheme, which provided the themes that were then put in conversation with the outcome of the websites analysis as described in chapter 3 and which revealed the dialectics of control elaborated on and unpacked in each of my empirical chapters.

For instance, first readings produced the following labels and codes which I attempted to group together (these were then re-grouped and refined with each reiteration as described above and in chapter 3):

Interviewee	Earlier media as motivation	Anticipated users
Relationships	Media and the dead	Anticipated recipients
Localities	Media affordances	Imagined impact on recipients
Professional experience	Loss of media	Activation of product
	Mistrust of digital media	Purpose of website
Inspiration	Digital media changing society	Desired uses
Ahead of their time	Everyday media	Misuse of product
Ground breaking	Mind uploading	Death of users
Creativity	Hologram	Monitoring users
Being non-users	AI	Experience as use
Personal learning journey	New technologies	
Leaving a mark	Digital footprint	
Legacy		
Investment	Data security	Start-up
Risk	Hackers	Business
Entrepreneur	Blockchain coding	Outsourcing
Funding	Advanced technology as secure	Funding
Non-use	Secrecy	Google
Marketing	Technical features	Facebook
Competition	Users feedback	Platform limitations
Profit	Storage	Business model
	Cloud	
	Data ownership	
	Privacy	
Death	Legal considerations	Gender roles
Experience of loss	Legal regulations	Social structure
Relationship with the dead	Role of social institutions	Authority
Support for recipients	Solicitors	State institutions
Voices of the dead	Wills	Insurance
Death acceptance	Legacy	Science
Wishes of continuity	States	Technological innovation
Encounters with dead online	Avoiding the law	Family
Funerals		
Funerary traditions		
Bereavement		
Resurrection		
Séance		
Aesthetics of website	Change	Fun
Work process	Future	Easy
Avoiding death references	Un-changing	Technological challenge
Professional jargon (computing)	Making a difference	
Testing features	Non-use will solve itself	
Nostalgia for older media	Generational differences	
Plans for new features	Failure	