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DYING AND BEING DEAD IN XR: IMMERSIVE REHEARSALS OF DEATH; AFFECTIVE ARTEFACTS POST-LIFE

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Introduction

Virtual Reality (VR) and Augmented Reality (AR) mediate experiences in ways that offer unique insights and novel exploration of the rehearsal of death and the remembrance of life. We explore theorisation of two multi-site case studies of dying and being dead in Extended Reality (XR) to investigate immersive death experiences facilitated by these media. Our observations, discussion and critique underscore an emergent and nuanced interplay between spatial technologies and death encounters, their linked cultural constructions, and the emerging industry that channels these phenomena.

Our work began by assisting with “Passing Electrical Storms” (Gladwell, 2023), an interactive exhibit at the National of Victoria’s (NGV) Melbourne Now show, analogous to “Second Chance” (Lava Saga, 2018), first hosted at the Reimagine (End of Life Week) Festival in San Francisco. Participants in this VR experience find themselves in a futuristic ‘med bay,’ lying on a coffin-shaped bed equipped with a VR unit and pulsometer. As their heartbeat “slows” to a flatline, participants witness their own ascension above the bed, traversing the universe—an immersive experience of their demise and rebirth - that playfully challenges conventional notions of death. The Passing Electrical Storms exhibit serves to accentuate the imagined affordances (Nagy and Neff 2015) of VR’s immersive potentials to seemingly physically and viscerally

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capture aspects of the 'dying' process for users who dawn the goggles and lie down to die.

However, XR technologies, and how they mediate physical-digital space are more complex and varied than what lie-down-and-die/fly VR can offer. Simply put, on the whole, XR are media technologies that *mediate* digital data with the physical world in real time (Heemsbergen et al. 2021). This might take users 'out' of their surroundings through VR systems that map-but-hide the physical, and replace it with what programmers desire. Or, XR might add digital artefacts that relate with the physical world via AR systems that have us peering through screens or even hearing spatial cues (Boisvert et al. 2023), that are computed to fool our senses of what is 'in' the real. What – and who – is able to be brought 'in' and 'out' of the perceived world has significant consequences for the growing industry of necro technologies (Westendrop and Gould 2021; Alison et al. 2023) considering changing attitudes toward death via Posthumous Communication Technologies (PCTs) (Morse 2023) and new spectacles of/for the dead, available in emergent mediatisation, commercialisation, re-ritualisation (Sumiala and Jacobsen 2024).

Foci: two phenomenon that extend the reality of death

Our work then, focuses on two multi-site phenomenological cases within the digital necro-industry: the first, is taking users 'out' of the real (usually via VR) to experience death, dying or the dead; and second, bringing death 'in' to the physical world via mediations of the dead, death or dying. As an example of the latter (the former seen in Passing Electrical Storms) consider how in 2021, TikTok introduced the 'picture animate' AR lens (or interchangeably 'filter') that seamlessly blended physical pictures with captivating animations, bringing the depicted subjects to life. Concurrently, a noteworthy cultural trend emerged on the platform, as users leveraged this filter to reanimate images of departed loved ones, offering a distinctive avenue for reminiscence. A compelling instance surfaced in July 2021 when a user, 'emmasamara,' shared three revitalised photographs. The video commenced with the original poster in tears, gazing downward, setting a tone that evolved into a sequence of animated memories of her deceased peers. The initial image shared was extracted from a memorial booklet of a friend's funeral - frozen in time, only to be revived with a warm smile and blinking eyes. The focus then shifted to another photo featuring two more friends, with the filter animating the countenance of a young man on the left who grinned at the camera. The sequence concluded with an image of a young woman lowering her glasses and flashing a smile, as she, too, animated and winked at the camera. The accompanying caption expressed gratitude, acknowledging the perfection of the animated winking moment, and extended thanks to TikTok for providing this unique opportunity to memorialise friends in a novel way. emmasamara's example is indicative of what the paper considers, as it cultivates themes from observed phenomenon towards saturation of emerging practices.

Discussion

Thematic analysis from these experiential cases suggests specific trends in the industry for discussion and critique. First is growing set of 'grief services' such as the Hereafter Institute (see Sisto 2020), or Project Elysium (circa 2015), or from frames of VR-counselling (see Kiros 2023). Second are the 'grief spectacles' mediate, and in some cases reanimate the dead, or death. Here is where Gladwell's (2023) work fits, as does media projects like "I met you" (MBC Life 2021) a project that reanimated a dead daughter for a mother in VR, and for TV audiences' gaze.

We consider the spectacle theme as Debord (1967) might, with the full irony of replacing the impossibility of direct experiences with death, but garnering 'genuine' human interactions with its representation mediated via XR. On the one hand, capitalistic production of death and dying experiences are accelerating and industry that employs novel spectacle via XR, and of late, incorporates generative AI. On the other hand the alienation and passivity that Debord might look for in these markets is juxtaposed by the phenomenological agency (e.g. personalisation) that seems to be available in some of the necrotech XR products. Here the inescapably performative nature of death's rehearsal mediates the spectacle as a social construct, allowing individuals to question its influence while seeking novel authentic communal experiences via the 'direct' engagement with Extended Reality.

Aware of the themes of industry regarding service and spectacle, we turn back to the mediating technologies, to offer a dissection of their capabilities in socio-technical terms. For instance, VR, known for its immersive capabilities, excels in internalising the dying moment, as exemplified by the Passing Electrical Storms exhibit. In contrast, AR, with its lower level of body immersion, excels in representing the deceased to the user, as evidenced in applications where users use AR filters to animate photos of departed loved ones or construct other novel in-memoriums from corpuses of the deceased's data and novel compute (e.g. LLMs leveraging shared correspondence and creating personalized generative memorium). This externalised perspective captures moments after death, presenting a stark contrast to the internalised experience of VR. XR technology type can shape the nature of the 'death' experience for users. VR, exemplified by the Passing Electrical Storms exhibit, elicits visceral and physical responses, allowing users to internally experience the 'dying' process. Conversely, AR, with its lower immersion level, excels in portraying the deceased externally. We note that both AR and VR's *immersivity in these instances is via mediation of time*, bringing the dead back to life, or accelerating one's own inescapable demise.

The paper concludes with a discussion that synthesises our study of industrial trends and phenomenological-technological critique to consider what next steps the 'industry' might take. We view this as an opportunity to consider how stakeholders that have hitherto not been invited to compose cultures of XR death-tech might act. These include, but are not limited to discussion on religious and spiritual mediations and teaching; Medical assistance in Dying (MAID) applications; reconsidering palliative care from frameworks of trauma reduction to skill attainment or digital drugs; and engaging in ante-memoriam experiences. Here we acknowledge how death-positivity (see Nicolucci 2019) offers new ways for XR to contribute to shaping our understanding of mortality over time.

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