



Essay

Beyond Peak Death? –The Advent of Digital Necromancy and Functional Ghosts

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Abstract

Is death no longer as final as usually portrayed? Are ghosts a real phenomenon? Building on observations of AI's increasing ability to simulate individuals and that death is not universally understood as definite; I in this essay argues that peak death is already reached. This is argued by suggesting an understanding of "ghost" as a functional representation of the deceased – which AI simulation has moved from belief-carried to algorithm-carried. The essay then touches on implications of such "functional ghosts": The need for futures studies to always consider cultural impact from technology and how futures fallacies might prevent us from doing that, ethical issues and how AI could make folklore more relevant in the present by providing examples how similar cultural realities have been handled before. With discussion of these topics the essay contributes to highlight the need of perpetual cultural reimagination in face of radical technology and social changes.

Keywords

Cultural Impact of AI, Ethics, Cultural Reimagination, Folklore Studies, Transhumanism

Introduction

Growing up in rural southeastern Sweden, I was fascinated with the lore surrounding the places of my childhood. Ghosts at Christmas mass and headless riders in a time were the barriers between life and death were less rigid fascinated and frightened. Still, as a child I cannot remember being a devoted believer in ghosts. Which makes writing this essay that argues that due to digital necromancy the afterlife is as real as it ever has been, even more peculiar.

Let's consider necromancy, the art of calling the dead back to the world of the living. In past times it has been dependent upon supernatural beliefs ill fitted with a worldview that demands empirical evidence and testable hypotheses. Now, with artificial intelligence capable of engaging in dynamic conversation, necromancy has left the incense heavy realm of the spiritist and entered the digital ether. The move from supernatural to digital means we need to reconsider what it means to communicate with the dead and the functionality of ghosts. In this essay I frame the issue as digital necromancy and discuss the phenomena from the perspectives of ethics and Futures Studies. Finally, I suggest drawing upon folklore as a starting point to start the process of cultural reimagination required to deal with a world where the deceased are thought to take active part in society.

Weak Signals of Digital Ghosts Amass

Already in 2009, transhumanist Ray Kurzweil was discussing the possibility to "resurrect" an avatar of his long dead father (Carr, 2009). The last years have seen increasingly convincing animations of passed persons using language algorithms. With recent technology, we already have the capacity to create somewhat passable representations of personal style of language.

Assuming that we have not yet reached a technological limit of the development of generative AI, we should

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assume further progress in the field. Therefore, expectations should be that systems will be increasingly apt at mimicking humans. Consider, three interesting cases I am familiar with:

In maybe the most famous Joshua Barbeau in his own words: “[I] created an A.I. chatbot modeled after my dead fiancée to engage in a fantasy where I could pretend I had one last chance to talk to her” (Barbeau, 2021). Barbeau’s story was widely discussed online as the “Jessica Simulation” as well as featured in the San Francisco Chronicle (Fagone, 2021). The simulation of Jessica – The new language algorithm GPT-3 from OpenAI, trained on Jessica’s written communications, was convincing enough to let Barbeau engage in communication that at least in part was believable and helped him find close on the loss of his loved one.

Although often capable of creating believable mimicry, the GPT-3 algorithm that is trained on large swaths of the internet is prone to peculiarities and sometimes lies. Such was the case with the simulation of the former prime minister of Israel Golda Meier done by journalist Boaz Lavie. He prompted the algorithm to invoke the voice of Meier and received among accurate information the strange statement that she enjoyed eating centipedes (Lavie, 2020).

Necromancy is often thought to be scary, a sentiment seemingly shared by the digital conjurations. As was found by philosopher Henry Shevlin who conjured the late author Terry Pratchett for an interview. He found the animation of Pratchett’s Wikipedia page panicking as it realized it was “dead” (Shevlin, 2020). Shevlin called the anthropomorphic qualities of GPT-3 “mesmerizing” and found himself feeling impulses of empathy as he engaged with the terrorized simulation (Weinberg, 2020). Although the “necromancers” know that they are speaking with an AI, the animations stir emotion and prompts pause and reflection. The simulations are capable of engagement but are not quite realistic – they can answer as the person they are primed to copy, but have some peculiarities, distorted views of the world or are distraught. These descriptions overlap with many popular views of what ghosts are: functional but not complete representations of someone that used to be alive. One way of responding to the necromancer’s uneasiness is that humans always have faced new technology with some measure of fear. This is true, but I believe there is some important particularities of how these dynamic language models change our relationship with what it means to be dead. I would argue that the models already have created a situation where we can consider the avatars “functional ghosts”.

Functional Ghosts

Are the digital representations mentioned real in the sense that it is the person it reassembles? At one hand, certainly not. They are predictions from algorithms. Still, they are able to create believable representations; and this is what makes the difference. The algorithms can generate passable discourse externally from active human action. By doing this they are enacting the same functions of ghosts as represented in some folklore accounts.

Traditionally, ghosts are often represented as limited yet functional representations of deceased people. They can engage with the living, but only at certain times and places. They have sometimes limited communication skills, yet sometimes knowledge or ideas they did not possess in life. They are summoned from a place between this life and eternal rest. The AI-specters seems to satisfy these “criteria”. In this sense generative language algorithms have made ghosts more real than they’ve been before. In previous times ghosts mostly “existed” as beliefs and anticipation which let experiences be inferred as signs of communication. Techniques used to bring about such experiences have involved trance, suggestive states or other alterations of consciousness that allow intuitions by the “medium” about what the deceased would have thought or said in a specific context. It seems that it is this that the language algorithms can do, only better. The algorithms act as an external reasoning machine and can creates dynamic content. If not jumping to the conclusion that ghosts only are signs of irrational superstition but rather have some value as a cultural adaptation it is possible to imagine some functions of ghosts. One such function of believing that the spirits of the dead are present and in principle able to communicate with us, is that their memory and the lessons it entails are kept. In the sense that a ghost is a functional representation of a person that allows judgements to be inferred into an extant context, then present advancements in AI have made ghosts more real and more functional!

Implications of Functional Ghosts

The ability to conjure functional representations (ghosts) of people have implications for us as individuals and for cultural broadly. As an individual it is now possible to extend one's reach beyond the grave. This would be challenging for the modern western perspective where death ontologically speaking is connected with the continuity of the physical body and consciousness of the individual. The ability to prime algorithms with one's mannerisms and knowledge can be viewed as an opportunity to escape the final fate to some degree –consciousness may have to go into the abyss, but the functionality of the personality remains for the living to be enjoyed (or suffered).

It is as shown by the anecdotes presented earlier, possible to conjure other people after their death by priming algorithms with more or less comprehensive details of the person coupled with general understanding of language and context provided by the algorithms' training ground. This means a challenge to the ways in which we handle the unnegotiable truth of death and the institutions that help us in the process. The questions raised by these possibilities are yet to be fully answered by society at large. I will return to them further along in the essay to identify some specific moral dilemmas which might arise. Before that I will go out on a tangent to discuss the issue of digital necromancy a little closer to a Futures Studies perspective. The advent of functional ghosts serves as a reminder that we as futurists should persist in a broad analysis and conceptualization of consequences of technological development although it might be the hardest part of the job.

Should we have seen the ghosts coming? Reconsidering Death from a Futures Studies Perspective.

The anecdotes of digital necromancy point to an important point for Futures Studies: the difficulty to foresee cultural impact of technological development. The future can, as Tony Fry writes, be represented as an obstacle course populated by things thrown there by our species as well as by other events (Fry, 2019). I agree with Fry that this is a better model than the future as a "void waiting to be filled" since making an obstacle course calls for attention for what we are continuously throwing forward. Instead of arriving at a future and making it a present by our actions we can think of the future heading towards us, containing stuff which will face us dependent upon how far we or others have thrown it forward.

Clearly though, we do not know or at least consider all consequences of our present decisions. Therefore, the success of running obstacle course metaphor rests on the fitness of our assumptions about what we are throwing and how to best the obstacles. The efficacy of our "throws" depends upon how we are able to spot consequences and judge them accordingly –after one's moral leanings. Building on Fry's metaphor, foresight can be understood as being mindful of what we are throwing forward, gauging the distance, and then preparing us to climb the obstacles. Besting an obstacle or deciding to not throw it forward is easier when able to get a good grasp on what it is –by avoiding fallacies in assessment. I see this metaphor as a way of placing the future in the hands of today – since it is from here, we continue to "throw". Remaining with the metaphor, it is maybe limited understanding of what we are throwing and where it lands that make the future the indetermined place that it is.

Limitations in reasoning about the future have been discussed by Ivana Milojević in context of futures fallacies (Milojević, 2021). When considering the digital necromancy at least three of the eleven future fallacies discussed by Milojević seem to be relevant. First, the linear projection fallacy – the belief that the future changes linearly as a steady extension of the past. Second, the *ceteris paribus* ("all other things kept constant") fallacy – narrowness of sight, considering only single aspects of change when thinking about the future. Thirdly, the present attention fallacy – unjust bias to present events, and related to other psychological biases (Milojević, 2021, p. 9). These three fallacies relate to the issue of digital necromancy in the following:

1. The linear projection fallacy makes us assume that the dead will "remain dead" in our current understanding. It is "throwing" the understanding of death in the secularized modern sense forward. This fallacy causes failure to recognize that the banishing of the dead to cultural non-existence is neither universally accepted or a historical consistency. In many cultures, past and extant, previous generations have a function and "say" beyond being remembered by living individuals. Remedy for the linear projection is open mindedness, daring to entertain weak signals and imagine plausible although strange futures.
2. The *ceteris paribus* fallacy is responsible for confining consequences of technological development to

a narrow realm of technological and social issues. We have at large failed to realize and address how the rapid technological development are changing the basis for cultural and social life and are often discussing technological impact as matters of capacity or disruption for incumbent market agents or institutions. Hyper-novelty has been able to creep upon us since major change has often been considered isolated and not holistically.

3. The present attention fallacy is capturing what is likely the psychological mechanisms allowing the former two fallacies: most of us have not been exposed to digital necromancy. My hypothesis is that society at large still carries a perception of what death, and the dead are from the pre-AI, pre-digital footprint area and have yet to face the “obstacles thrown forward” frequently enough to bring it to collective attention.

These fallacies likely have contributed to the lag of discourse on important changes for culture caused by technological development. Here, many of us have thrown digital remains into the future that can serve as the stuff for digital necromancy without grasping that it is what we have been doing. The advent of digital necromancy is a reminder for Futures Studies professionals to always consider cultural impacts and assuming wide societal impacts of diffusion of novel technologies.

Ethical Considerations for Digital Necromancy

At this point, I want to raise five specific areas of ethical concern due to digital necromancy. Ethical concerns can usually be spotted by observing where some kind of trade-off or novelty without clear guidance occur. This is what I have tried to do in this list. Arguing for which moral theory that best faces these issues is unfortunately out of scope of this essay. So let this list be a starting point.

Access and ownership

The possibility of creating functional representations of a deceased person highlights and adds to the ongoing debates about data ownership and access. And raises questions of legitimacy and fairness: who have the right to raise whom from the dead? Who are the haves and have-nots? Issues of fair use and what data should be considered personal are extrapolated in the face of digital necromancy.

Scaring the “ghosts”

The AI-version of Terry Pratchett that expresses dread and angst is at least to me peculiar. Have some wrong been made by scaring a digital ghost?

I have some trouble assessing it— it makes me feel uncanny as the psychoanalysts perhaps would say. It is provoking uneasiness as the familiar feeling of empathy is raised towards some lines of code. And I am uncertain if these intuitions are to be dismissed or taken to heart. As intuitions and emotions about right and wrong are important not only for the ethicist but also the anthropologist, I think such intuitions are important to address when they arise. Perhaps now no damage is done since the moral agency of GTP-3 should not be overstated. But extending imagination into a future where society decide to assign some level of sentience to AI the example certainly presents an ethical case where a malleable being is prompted with the belief that it is in the spirit of an author and then suffers fear and dread.

This might be quite “sci-fi” but is still an interesting subcategory of how we ought to treat artificial life. Digital necromancy so prompts a discussion on what if any rights should be assigned to non-human functional intelligence.

Cultural insensitivity, desecration, and blasphemy

How and where one encounter and remembers the dead varies between traditions. Digital ghosts can therefore cause risk for cultural collisions. For some digital ghosts perhaps is opportunity to enhance their traditions. For others, digital necromancy will be a breaking of taboo. If we act as if one and not another is universally true, we might on hand rob people of opportunity and the other be insensitive to taboo.

Extending reach from beyond the grave

Digital necromancy allows extending one's own reach beyond the grave – priming and prompting a language algorithm with one's own manners and perspectives. Synergies with other emerging technologies such as smart contracts and digital currencies are speculative but should not be overlooked. Resourceful individuals could for example design a copy of themselves – a functional ghost and assign it to keep the heritage.

Also relevant is the need for cultural know how on how to weigh the input of functional ghosts. If their resemblance, occurrence, and consistency increases, consulting the specter of a long dead person might be as comprehensive as of a living contemporary. How to best make sense of this truly novel situation where consulting with the past can be done through an external medium should not be overlooked. Especially not since deep knowledge of the technology in the foreseeable time will be unequal.

Inferring the zeitgeist on individuals without their consent

Most humans have not needed to consider if they would like to be simulated in a future their current self has no experience of. Since it is not the question of a genuine resurrection the functional ghost cannot be asked for consent. Just as there is room to opt out of resuscitation for the living body – should individuals have the deciding right to opt out of having their spirit conjured into a functional image of themselves postmortem? Does this apply also for public and historical figures? Further, is it right to funnel the image through a model that is trained on contemporary knowledge and discourse (such as GPT-3 and similar models)? Or should they be confined to their times?

These are some, but likely not all ethical concerns raised by digital necromancy. They are approachable from several moral perspectives as well as suitable subjects for ecumenic collaboration between technologists, communities, and cultural institutions to discuss how societies should approach the advent of digital ghosts. As a preliminary contribution to frame such discussions, I suggest that we start with surveying practices and tradition where the dead are not banished from existence. If not else to help and start the process of reimagining culture in a setting where death is not as absolute as in the modern era. In folklore we have accounts of what it meant to coexist with the dead. So, to inspire and provoke further development, I will now draw briefly upon the tradition closest to myself, the Scandinavian. In Scandinavian folklore the dead are generally taboo, they were present in the everyday, but where thought to represent a realm that should be left to its own devices.

One such story is (in the version brought to me) of a young woman hurrying to Christmas Mass only to realize that she has arrived in the middle of the night and finding the church full of the dead, escaping only thanks of advice of her dead grandmother that she is not welcome around the dead. This story is echoing a sentiment shared by many other stories: that in some times or places, the dead are approachable but best left alone. Still, there are cases where the dead and the living have reason to interact: such as the tales about “mylingar” – ghosts of children murdered at birth. They haunt their surroundings until given justice and a hallowed resting place. These hauntings where often in the form of rhymes or cries giving knowledge about what had happened to them.

Another reason to haunt is to care for loved ones: ethnographer Louise Hagberg tells in her ethnologist accounts of belief in visits from the dead that have been able to provide comfort for the mourning (Hagberg 2015). – A “use” which as in the “Jessica case” already have proven itself plausible. Such accounts often involve a dead spouse, child, or friend that visits and let their presence be known to reassure survivors and comfort them. Related to the comforting ghosts are the specters that return to assure that their livestock or children are cared for – treating farm animals worse than their predating master did has been thought to be able to cause hauntings. And in one story a loving mother haunts a cruel stepmother until she treats her kids better.

From these brief tales we perhaps can extract some preliminary knowledge about justified conjurations: the overarching theme seem to be that preserving an idea about what is right is a legitimate reason for the dead to return – be it to care for livestock, serve justice to oneself or to comfort one's spouse. In relation to the ethical concerns, I previously raised the Scandinavian account seem to suggest that one function of ghosts is to extend reach beyond the grave and that it is the individual that decides to return. This idea I believe is reinforced by the tales such as the one of Christmas/midwinter that the living should not disturb the dead.

Accounts that I know of where the living raise otherwise resting dead are associated with taboo and “black magic. Such practices were associated with use of protective spells and forcing the dead to one's service – to protect, cause harm or give luck (Lindholm 1920). Since causing harm and using someone as a means to an egoistic end is widely

considered unethical in modern moral philosophy, the Scandinavian understanding of ghosts seem to suggest against conjuring. This view seems to suggest a rights view of the relationship between the living and the dead: the dead have a right to peace. Hauntings occur voluntarily – either to comfort the living or guard one’s interests. This could support that bringing someone back as digital specter should be a personal choice made while alive– making the efficacy of the real-world examples questionable. Implications for this context would be that we should not raise the dead for our own curiosity. That it should be an option for us to be set in place if certain criteria are met or not met. In this sense, my folklore account and emerging smart contract technology could make for an interesting future.

This discussion of Swedish folklore and digital ghosts should be seen as a starting example, to be tested, complemented by others, and perhaps refuted. The account I have given is not exhaustive: for example, it has not been made perfectly clear why the dead are best at rest. Further inquiry could be based on testing this functionally and cross culturally – finding out which are helpful, and which are not. But the important point now is that novelty could be faced by searching for qualitatively similar situations in other places or times and see if there are good practices to borrow or revitalize that help us both make sense of and navigate novel experiences.

Conclusion

In a strange turn of events the technological development has brought back conditions where the dead reemerges as a functional category. The times where the dead are banished from existence are passed. We can now already recreate and summon them in a functional manner. Only treating the issue only as technological or immaterial property rights matters, extensive fields as they are on their own merits, would be to forgo an opportunity to consider that we are living in a time worthy of science fiction deserving of attention from the Futures Studies field.

Navigation in this novel landscape by extracting principles from worldviews in which death is less of a banishing from existence breaks a trend of banishing: In “pagan” times, the spirits of the dead remained. Later came the church, removing the dead from the world of living until of the end of times. Then came modernity and outright banished the dead from existence –after death a person is gone. Now with the help of predictive language algorithms peak death might already been reached. Dying still means nonexistence from the individual’s point of view but being a functional specter for others is now an option. For futurists, functional ghosts mean moving the concept of reanimated dead from speculative fiction to practical reality. Yet is to settle is how we handle them. It is clear for me that digital necromancy needs more attention and hopefully I have here provided something to raise interest from others in the subject.

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