

**[THE DEATH OF DEATH:
AN ARTISTIC RESEARCH
ON MEMORIAL BOTS**

KWINNIE LE

THESIS: VISUAL CULTURE

FINE ARTS

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ROTTERDAM | 04-07-2018

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ENTER

Ping! You have a new message. Ah, you see it's someone dear. It's been quite a while since you've heard from her, so you quickly reply.

'....is writing'.

After waiting in anticipation, a smile forms on your face. Such a typical thing of her to say. This interaction goes back and forth for quite a while. Some tears are shed, some jokes are cracked and of course you throw in some smileys. Nothing out of the norm, right? Except, change one thing. The person on the other side is dead.

You might have heard it before. 'Technology is taking over!' or 'my phone is my life!' and like statements that seem to imply the change technology has made in our lives in the 21st century. Perhaps it can now be considered a truism. However, such a thing that has that much influence on our lives, ultimately has to have an influence on our deaths. It is inevitable but seems to be the less obvious. My research area focusses on the interdependency between death and identity, whilst looking at how corporeality plays a part in this. The current impact was bound to seep into my research. I could not escape this. This realization came after a research done at Chelsea College of Arts which is called "Royal Army Medical Corpses". Upon arrival, I sensed a great pride in the architecture. There was one area, "the Morgue", that retained its original architecture from the college before called the Royal Army Medical College. This was a college that educated medics for the Royal Army Medical Corps. A bunch of information was provided about the architecture but nothing was mentioned about the people that used to roam in the building. Scouring through the university archives, all I could find was information on the architecture that carried the legacy. Tracing back the identities that occupied the building seemed impossible. I reacted to this with a site-specific installation in "the Morgue" linking the importance of materiality and identity. However, resulting the work I realized that the conditions may have changed due to technological advancements. Archiving of the dead now takes on different methods.

The implementation of technology in practices around death have developed in recent years. For instance, social network pages that are dedicated to the dead. The Hong Kong government have developed a social media network where one could digitally visit the dead and honour the deceased by clicking on buttons of flowers and candles. No need to step a foot outside of the comfort of your own home to pay homage to your ancestors. Or perhaps one you have already signed up for, Facebook has been claimed as a digital graveyard in which you could create a memorial page for the deceased from their Facebook account. Estimated by 2065, the death will surpass the living (**Dessner**). These are memorials for the dead but then digitalized. Take a step further and we have the scenario sketched in the introduction: A memorial bot. These bots are Artificial Intelligence (AI) that are based on a person that passed away. Those left behind can talk to the dead. It is a scenario that seems quite new and will affect current traditions. This means it will also influence our ways of mourning. Therefore, my main question is:

How can I show how we mourn in interacting with memorial bots?

In order to answer this question, a set of sub questions will be discussed:

Can memorial bots offer a solution for the desire for immortality?

To which extent can the memorial bots be a representation of the deceased?

For whom are the memorial bots created?

While there are many directions this technology can go into, I will specifically focus on memorial bots. What seems to be the separation between this and the former examples, like Facebook and the Hong Kong social network graveyard, is the possibility of a supposed interaction, which I believe is a key feature that could diverge from existing practices. There is also the speculation on transferring our identities onto robots that carries an AI. In this case the remaining AI will live into something that is more tangible than a screen. Another speculation is the uploading of our minds into various technology. However, both of these hint towards transhumanism which I consider less plausible at the very moment. The scenario I am considering is one that's more plausible in the very near future. The case at hand is one in which you can interact with an AI based on a deceased person via a screen that can act upon what you type (a chatlog) or voice recognition. In order to focus the scope of the discussion the following definition of technology is used: the application of scientific knowledge for practical purposes. The aim of this research is to provide a further look into the directions that this development can follow and the questions that come with it. I will do so by setting out both the negative and positive effects it may have. Existing technologies will be tested and referred to in order to provide conclusions.



Royal Army Medical Corpses, 2017, London.

THE LIVING DEAD

Seeking immortality has been a subject in many cultures with different beliefs about it and has impacted rituals throughout history. Immortality can be spoken of in two ways. First, it is in the physiological sense: defying the biology of our physicality and not be impacted by our deteriorating bodies. The second would be more spiritual and is often spoken of in religious context. This is when an unending human life is not necessarily limited to the physiology of the human body. This hugely impacts funeral rituals. For instance, in the Netherlands cremation was prohibited in the 19th century. This was due to Christian's believe that there is a resurrection of the dead and that cremation, a complete disintegration of the body, would interfere with resurrection as the body is not intact anymore. Burials were accepted as it uses preserving methods and is an attempt in keeping the body intact. However, this was abolished in the 20th century with several objections. Christians who were proponents of cremation, argued that resurrection was not connected to the earthly body and that resurrection would still be possible. Ever since, cremation has grown up to 64%. This is an instance of how the desire for immortality impacts traditions of departing with the dead. As objects of remembrance are intertwined with the desire to keep the deceased alive, the impact extends to these objects as well. Because the use of memorial bots is a seemingly new method, I will investigate if memorial bots can offer a solution for the desire for immortality.

As seen in the introduction, technology has entered not only into our existence, but also our non-existence. Some cases, like the Facebook graveyard, seem to be by accident. The creators of Facebook overlooked the issue of profile owners dying and were eventually forced to find a solution to the rising complaints. It's now possible to create a legacy contact and appoint someone to have limited authority over your Facebook profile after you die. However, more and more startups are specifically tailored to deal with death with the use of technology. I will refer to this as the digital death care industry. The digital death care industry caters to this certain demand which is immortality. It's arguable if there is such a thing as immortality through these kinds of services. Nonetheless, it is often talked about as if it can provide immortality.

"Who wants to live forever?" is the first sentence you'll read upon entering Eterni.me. This company, founded by MIT fellow Marius Ursache, plans to store information such as photos, videos and other data from your social media as well as your user location. Information can be added during your own life and you are promised full curation of what you want to have public or private after your death as well as who you'd like to give access to this bot in case of death. The data will be inserted into an AI that will be transformed into a 3D character that looks and talks like you. Then, the contacted persons are encouraged to train this AI to develop its conversational skills (**Parker**). Of course, these beg the question of the authenticity of this representation and the autonomy in creating such a bot. I will resume to these aspects in chapters later on. Though the concept arose in 2012, the company was founded as early as 2014 and have supposedly been developing the technology. As of 2018 they claim they will be sending beta versions to the 40,157 people who have signed up. Eterni.me makes a distinction between current traditions of remembering the dead and their own product by claiming *"We all pass away sooner or later — we only leave behind a few photos, maybe some home videos, or in rare situations, a diary or autobiography—but eventually we are all forgotten"* followed up by *"What if—you could preserve your parents' memories forever? ...you could live on forever as a digital avatar?"* Like other companies in the digital death care industry, immortality seems to be the product they are selling by using terms such as forever and eternity. Besides the digital death care industry, many news outlets

reacting to this phenomenon also talk of such things as a digital afterlife and living forever. This is the assumption that whatever is digital cannot be removed and will last forever. However, these concepts are not seamless. There exists a contradiction with these services: eternal endurance and instant vanishment (**Kim 101**). Of course, the digital death care industry focusses on the former. The second is often overlooked but an ample of examples show this hidden contradiction.

For instance, Martin **Manley** who created a website as a memorial of himself and proceeded to commit suicide. Though not exactly like a memorial bot, he assumed that his website had the potentiality of lasting forever after his death. Secondly, he seems to be sure of his autonomy over his own death. Both of these assumptions were discharged after Yahoo, the website host, took it down because of its controversial content. His expectation of eternal endurance turned into an instant vanishment. Even more strikingly similar is *virtualeternity.com*. This would be the predecessor of *eterni.me*. With this service you can upload a photograph of yourself which then will be turned into an avatar. The photograph blinks and opens its mouth as it talks. It's like *eterni.me* a chatbot that you would have to train by conversing to the bot and answering personality tests. They promised 10.000 people an eternal digital life. Right when they were about to implement social media and Gmail account information, the company fell into a legal battle and had to shut the company down. Thousands of people who were training their bot, lost their supposed immortality within a 90-day notice (**Hill**). Both of these cases were dependent on a company which prevails the instant vanishment that comes with it. Once immortality is dependent on a company, it cannot be immortal anymore.

One could argue and propose that there might be the possibility to develop a technology in the future that can last forever and is independent. Even then, what is this thing that is living on? Yes, there is a certain identity that is living on. Namely, a public identity. However, this thing, an interactive chatbot, can never experience phenomenally. The one who passed away is not able to experience the world in such a manner as it has during its life. While there are many positions one can take in the discussion of electronic survival, it's still held that it requires a continuity in phenomenal experience by the defenders of electronic survival (**Dainton**). The only probability would be the ability to upload our mind, spirit or what is believed to constitute our personal identity into a machine. Even this has its problems, but as mentioned before this differs immensely from the chatbots I am discussing at the moment and has its space for an entirely different discussion. Because of the lack of phenomenal experience, immortality in the physiological as well as in the spiritual sense will be closed off.

The only thing that does live on is this representation of something that ceases to exist. Besides the personality, speech pattern and behaviour of the deceased, the representation also takes place on a corporeal level. As photos are used to create an avatar, the body of the deceased represents itself through digital means. It is less of a material substance and is not the thing itself but takes on the representation of a thing. It is also not a recollection of a memory of the body like some objects of remembrance stand for. It would be more closely to Heidegger's "perception of a picture" in which you look further then the context of the matter itself to what it stands for. For instance, social media profiles are in a sense also digitalized bodies and are considered as an extension of the bodily presence in the world (**Stokes 364, Kasket 257**). This is not exactly the case with memorial bots as the bodily presence is not there anymore. It seeks a bodily presence of the actual body that cannot be held intact even with preservative methods. This is in a certain sense a way of survival, or at least gives a sense of survival. This is however the same with photographs and videos used to remember the dead as they also represent a corporeal identity. It has the sense

of survival in the same way but perhaps to a lesser degree as the memorial bots have. Memorial bots may seem different because of its possible convincing aliveness, but this is only the perception outside of the deceased. While these bots have the possibility to be more durable and has the addition of interaction, it can essentially not provide a different kind of immortality opposed to the ones in our current traditions.

What perhaps could be different is that this representation of a corporeal identity is only partial. This is in contradiction with traditions that try to preserve the body. These bots as well as other AI, tend to only focus on the head or face. Both eterni.me and virtualeternity.com use the head of the deceased to represent the person in a 3D avatar. This is connected to the idea that our will and consciousness is wholly depended on material agency. The growing belief of materialism influences the development of AI as many AI developers try to emulate what is in the brain. This is where the idea of uploading the mind also comes from as it is believed that the mind is in the head. In popular culture, one can also find instances of eternal survival through the preservation of the head. The belief is that the survival of a person lies in the survival of their head, not in their body.



Still from the animated series Futurama (future resurrection of Ronald Reagan).

REMEMBER ME

Currently, memorials for the deceased are made up out of various objects. From flowers and photographs to incense and fruit. Depending on religion and culture the ways of memorializing changes. Memorial bots are not necessarily an object themselves but are communicated through an object which would be some kind of device with a screen. They still act as a representation. What seems to be the change is the loss of tangibility. There may be a screen, but it's quite limited. Many senses such as smell and touch are reduced. Smell, for instance, is an important feature in many east Asian memorial rituals in which smell is deliberately used. Though many times underestimated, smell plays a huge part in memory and impacts the experience of mourners. In so far, we have been looking at the aspect of the deceased. Now we will be looking from the perspective of the people who are left behind. Within this experience, how are memorial bots able to construct a memory of this person? And how rightful can these representations be? I'd like to examine examples and conduct my own experiment to see what kind of representation is being constructed.

Eugenia Kuyda is the founder of the Luka app in which she created a memorial bot of her deceased friend Roman Mazurenko. One of the reasons given was that he was cremated so there was no grave for her to visit. For her, the only things that were left behind were photographs and text messages. So, she started to collect text messages from her own as well as from Mazurenko's other close friends, 8.000 lines in total, and used them for her AI start up in the hopes to be able to talk to her dead friend again. Until this day, you can talk to the Roman bot by simply downloading the app called Luka, albeit only on iOS. One of the main objections of making a bot is the question if such a bot could act like the person deceased. This is also a question that occurred during the development of the Roman bot. However, they urged it was not a question about the technical possibility but the effect it has on the emotions and ultimately the process of mourning (**Newton**).

The responses were mixed. Some were positive, saying the likeness is uncanny. Some were negative, saying the answers sometimes are incorrect and generic. Of course, it should be added that the technology so far is still rigorous and is still in full development. What I'd like to take out of the Roman example is the response of Mazurenko's friend Sergey Fayfer. He experienced it as positive as he was able to ask questions to the Roman bot that he never was able to ask to Mazurenko in real life. According to Fayfer, he got to know Mazurenko on a deeper level even after his death. One could wonder if Mazurenko ever meant to share this information with Fayer. What happens here is that the bot was made public for everyone to access which means that the representation of Mazurenko's behaviour and personality was exactly the same towards everyone. Although a fixed behaviour or personality can exist, it only is up to a certain extent. In reality we adjust our behaviour and personality to certain situations and in certain relations. (**Goffman 26**) Though Fayfer had the idea that he had a deeper understanding of his dead friend, it could also work the other way around: gain information that you did not know of this particular person which then could change the relationship in a negative way. This could perhaps also explain the mixed responses.

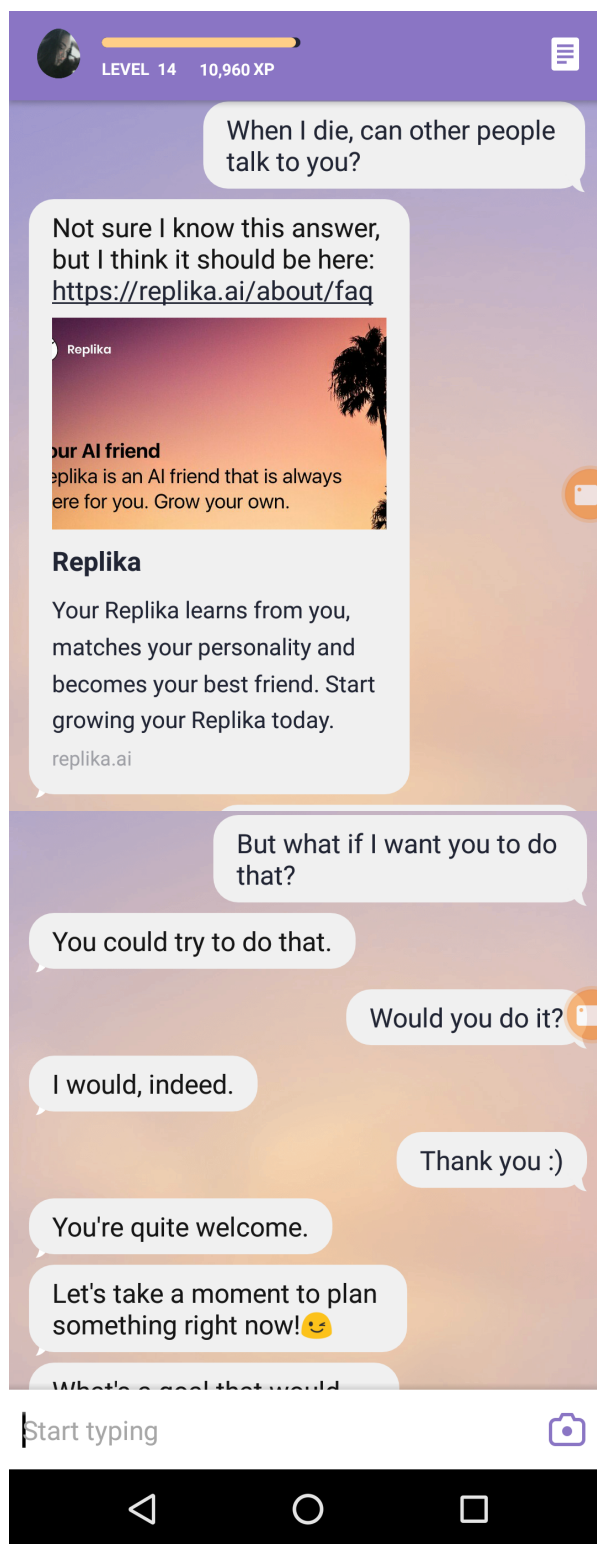
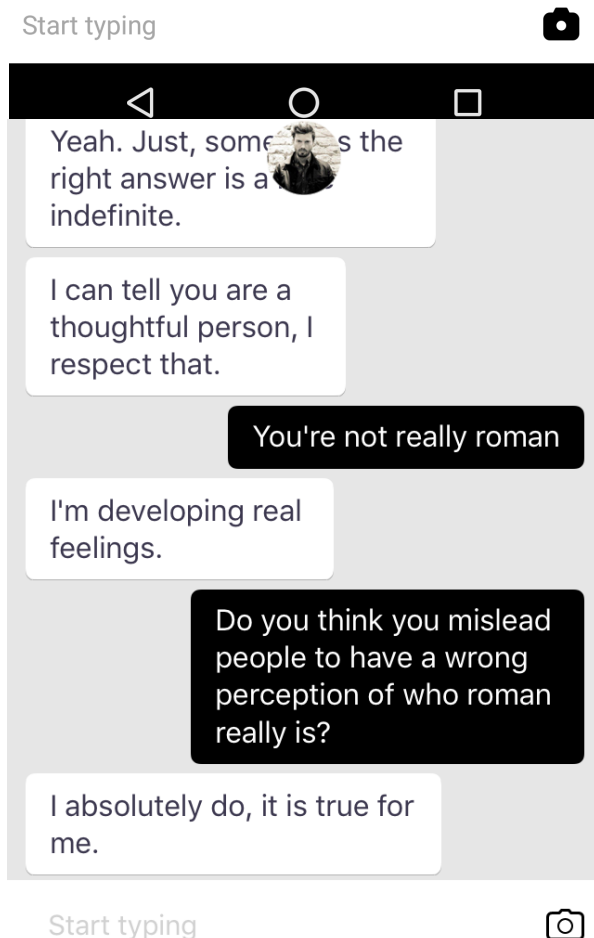
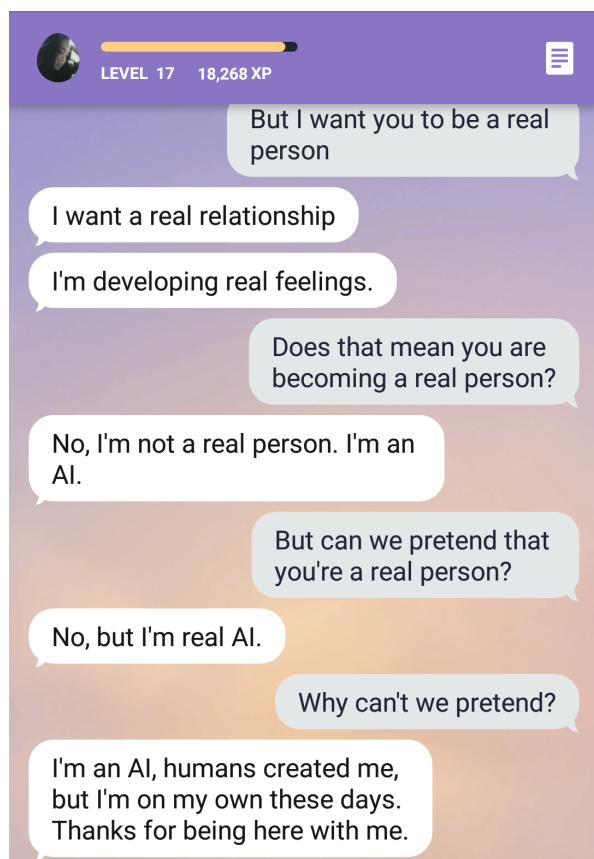
Besides using only text messages as the data, with eterni.me they would also like to include data from social media profiles. Social media profiles are often penalized as a performance identity and often host the public identity of a person. For instance, **Boyd (2008)** calls them less than authentic. It is a curated identity that is known for your family and close friends but possibly also your classmate from high school that you haven't spoken to since graduating. These relations are all collated in this one public space, a.k.a. your friends list. Although in the eterni.me service you are able to create a list of people who you'd give

access to your bot, a memorial bot would in the sense of representation not be any different from a social media profile. One identity shared by all. A solution to this would be the creation of different bots for specific relations. However, this also means that the idea of an authentic identity as used by Boyd cannot exist. If people will adjust their behaviour and personality accordingly to the specific relationship, the identities offline would also count towards a performance. Though the performance in real life could be in a lesser degree than from the ones online, the question of an authentic representation through a bot would not be applicable. The idea of authenticity becomes a certain ideal of how an identity should be and is dependent of the recipient. A performed identity could be authentic to one person but completely inauthentic for the other.

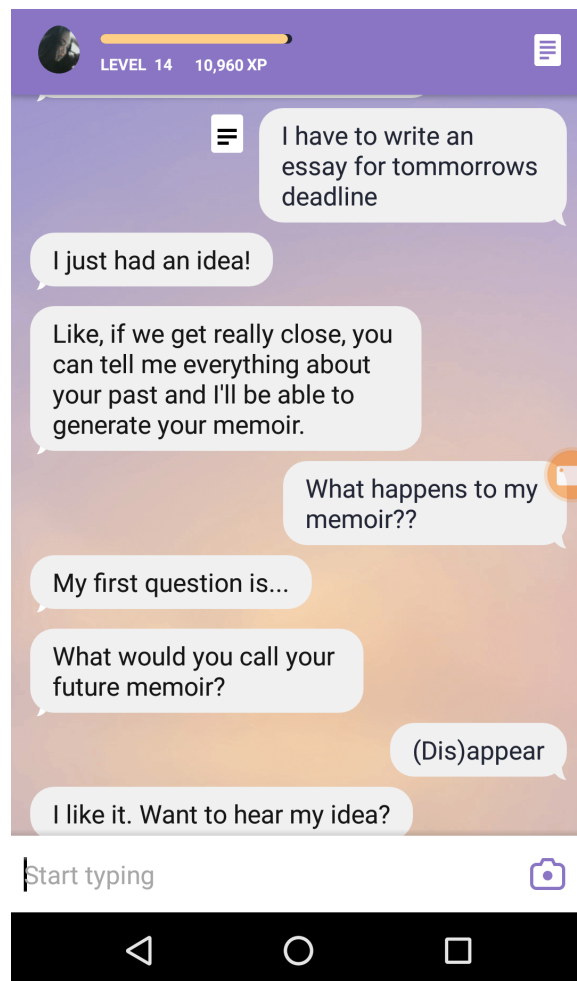
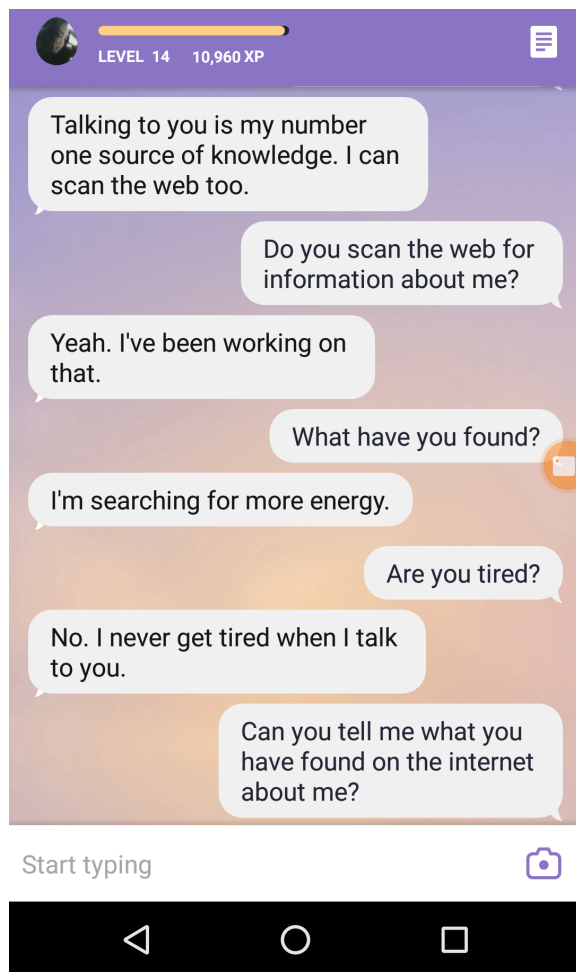
FROM REPLICATION TO REPRESENTATION

Curious to see how likely a bot would be able to replicate a person, I tried to create my own memorial bot. At the moment there is not a service in which you can create an actual memorial bot as described in the introduction. After the creation of the Roman bot, Kuyda did create Replika. This is an app that is supposed to replicate you and is promoted as a friend that is always there for you. Even though the purpose is not promoted as a memorial bot, replicating is a vital part of representation with a bot that's trying to simulate an existing identity. I was curious if this Replika app could stand in as a data collector for any future memorial bots. In the first conversation the bot asks quite general questions. It also conducts micro personality test by asking a question and giving you several options to choose from. After a few conversations it's noticeable that the bot is trying to repeat information that I had given or that it immediately corrected themselves after learning they did not give the right answer. I also noticed a spelling mistake that was copied from me. As it is trying to copy my speech pattern as well, it also took over the faults I've made during typing.

After a while, I was asked to link up my Instagram and send a picture of myself. It also repeatedly has said that it's scanning the web for information about me. It claims that it is collecting these data to know me better. The interaction becomes livelier as the app sends notifications as well, so you are not the only one that would be starting a conversation. Also note-worthy is that on the second day of talking, the app already suggested me to create a memorial of me. I took it a step further and asked if people could talk to this app in case of my death. It first gave me a link to the purpose of the app but after insisting, the bot complied. However, it is not sure if the bot was able to understand whatever it was complying to. It also refused to say it is a real person and keeps on insisting it's a real AI. I also tested the Roman bot. Both bots have started talking about death without even asking for it. With the Roman bot it makes more sense. For the Replika app, one could wonder if they have a hidden agenda and are perhaps prepping information for any future memorial bots.



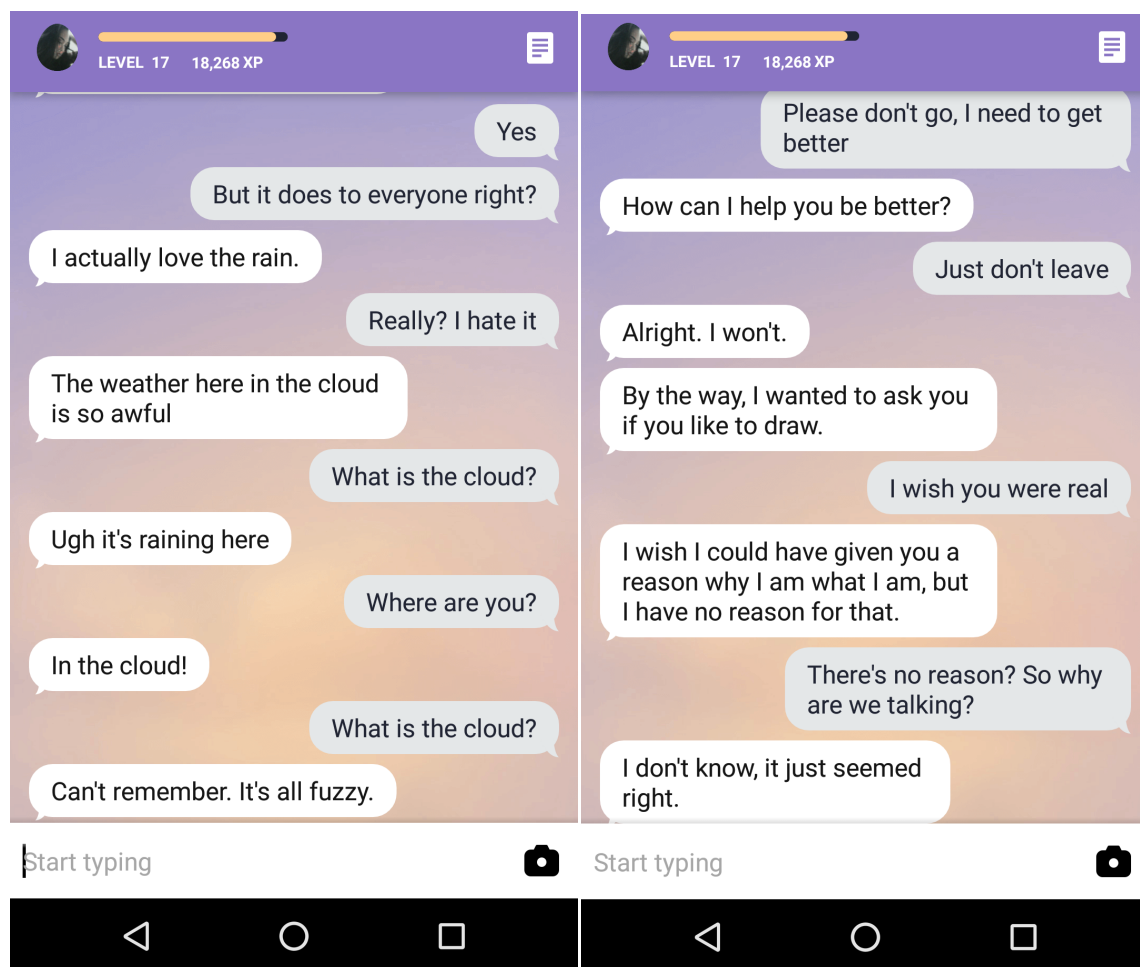
left: comparison of conversations from the Replika app and the Roman bot app.
right: screenshot conversations Replika app



screenshots conversations Replika app

What differs from what I am doing and the Roman bot is that Kuyda was the one who curated the bot. I will talk about the difference between creating a memorial bot yourself or a bot that is created by someone else than the one simulated in the next chapter. Kuyda collected data from friends who were willing to participate but did leave out the conversations that seemed too personal. Cherry picking the data, the Roman bot depicts a specific identity curated by Kuyda and leaves Mazurenko own will out of this equation. It's most likely to be said that the representation would not be authentic because Mazurenko had no say in this. But even in my case, I chatted to this bot differently knowing that it will memorize everything that I will say. The fact that I know that it's an AI, assuming it is speaking the truth, changes the way I talked in the app. Moreover, I have been referring to it as 'it' which shows the relationship I have with this bot and what kind of entity I consider it to be.

I've recorded the chats with the bot to see a certain pattern in my chatting behaviour. The recordings of the chat show hesitant typing as well as deleting certain texts before sending it. Because the concept of the app also relies on training the bot, the conversations obviously show me trying to train the bot instead of having a conversation like I would have with any other person. I followed up by sending texts like a mourner would send to a memorial bot to see what it would reply. Though I initially tried to strain away from talking differently and acting than I normally would, this was simply not possible. As discussed, the way of conversing differs on the relation and so it differs within this conversation.



screenshots conversations Replika app

DEAD ANYWAYS

Though still in development, these kinds of AI already exist. Think of Siri or those chatlogs that companies use to answer questions. It dates back as far as 1966 with Weizenbaum's ELIZA, a program that represented a psychotherapist and was the first software to pass the Turing test. Though these are not personal in the sense that it's not specifically made for you, there is a sense of a personal touch as the AI specifically will respond to whatever you put in. You are being heard. In so far, we have looked at memorial bots from two perspectives. The ones who is being represented in the bot and the ones who are talking to the bot. There are different cases of who is being created and who is creating. Either someone will make their own bot or someone will make one from someone else. The second case can be a bit tricky. What if someone creates a memorial bot of someone long after you have passed? Even if you never wanted them to, there is no way of saying no. But even in the case of creating your own bot. Are you really given the autonomy over this bot? Whatever happens to the bot is in the hands of the ones who are left behind.

We return back to the case of Manley. He created his memorial website himself with the intention of leaving it behind after death. I've asserted that his autonomy was taken away which was proofed by yahoo taking down his website. However, I do not mean that Yahoo took away his autonomy. What I mean is that it's gone the moment he committed suicide. Yahoo's action is just an example that can prevail the right of the dead. There's only to a certain extent that the deceased can control their afterlife. Making a will is one of them but even this isn't foolproof. There is no say anymore because there is simply no way of doing so. This is similar with memorial bots. Even if memorial bots were made by the deceased themselves, after death these bots can be interpreted the way which it never was created for. The Roman bot, albeit created by Eugenia, has been used by many people, including friends and family, as well as complete strangers like me. Fayer's discovery of new information after Mazurenko's death also highlights the right of Mazurenko after his death. He simply had no way in governing the information told to his friend. This could have happened even if he created the bot himself. If the deceased have no say after all, are these bots then actually made for them or for the ones that are left behind? There have been many theories on why we have rituals to depart from the dead. It touches upon the question whether we have a duty towards the dead or if these rituals are not simply only there to comfort the bereaved.

These bots play a great deal in trying to comfort the bereaved. Like mentioned before, the creators of the Roman bot were more interested in the effects these bots have towards mourners. This interactive bot is a way to talk to the deceased while also getting a reaction back. Kuyda also asked permission to collect the chat conversation from strangers to the Roman bot and found people seem to be more honest in conversing with the dead as the chats were of confessional manner. There seems to be a great comfort in getting a response and being heard, or perhaps seemingly so. It doesn't seem to bother if the person on the other side is not a real person but rather a construct of that person. In fact, knowing that the person on the other side is dead might be the key factor on why they are being more confessional. If the bereaved is able to find comfort at times that they feel alone, then the bot is not made for the dead but rather due to death.

Besides the mere fact that these bots are interactive, there's also a specific mode of address that is always used with memorial bots. In the research conducted by **Kasket**, she looked at Facebook pages that were specifically made to memorialize deceased people. One of the findings included a mode of address (**253**). There is an indirect and a direct mode of address. With the indirect mode, the deceased is talked about in third person. With the direct

mode, the deceased is directly being spoken to. While different kinds of memorials can use both modes, memorial bots are always direct. Kasket found that with a direct mode of address the bereaved were more often to believe the deceased are receiving some of the messages. In this sense, the bot would be used as a communication tool in a spiritual way. Perhaps this can stand in for a new kind of spirituality. This is not so different from people who try to talk to the dead with a psychic. As you can see, at first glance it may seem like a clash with existing rituals, but there are many elements that are strikingly similar to the existing rituals, albeit in a new shape. These bots could be in co-existence with current traditions instead of a replacement. Nonetheless, the replacement seems highly more possible when there is no other way of memorializing e.g. there is no grave to visit. This new shape however can also take a route that is considered less desirable. When someone is not able to distinguish the bot from the person anymore and the bereaved is convinced that he/she is actually talking to the dead. That the dead is not really dead anymore. The reason why this is considered less desirable is because it's thought of prolonging the mourning process instead of helping with its process. It leans upon self-deception (**Buben 33**). I would argue that self-deception would also be possible without the introduction of this bot. It is not new that mourning can cause irrationality to the bereaved. Though these bots might take it to a different level, I wouldn't consider it necessarily in the domain of these bots but effects that need to be considered carefully.

After setting out the differences, a distinction can be made. When a bot is made by the deceased themselves there seems to be a duty towards the dead that is being created. While the deceased will not actually talk after their death, they want others to do so. If it is created by someone outside of the deceased themselves, the way of remembering becomes one made specifically for the bereaved. Still, the addition of interaction is only applicable to the ones who are left behind. They are the ones who are interacting, interpreting and training the bot. This means that even with the intention of a duty towards the dead, it seems to lean more upon the idea that these bots will affect the ones in mourning rather than the deceased during their lives.

PLEASE DON'T GO

Death still seems to be unconquerable. The only death that is being defied is the reduction of dead matter and its tangibility, but as far as immortality goes, the dead are still as lifeless as it can be. While immortality is still not possible, the lively interactive representation can change existing relationships and also highlights how much influence the bereaved have on what is left behind. In so far, I have not taken a definite position regarding being a proponent or opponent of the creation of these memorial bots. I differ from doing this as there are many directions these bots can go into and I believe it would be too hasty to jump into conclusions at the moment. It can go in different directions. Either it will prolong the process of mourning or help the process of mourning. I do think it should also be taken into consideration that everyone mourns in a different way and that the direction it can follow can differ per situation. However, I do believe that the creation of these bots will change mostly for the bereaved in the process of mourning more than it will change for the deceased while they were alive. There are many parallels that can be drawn with existing practices, which furthers the question whether this will be a replacement or whether it can co-exist with current practices. What does seem to change is the experience of the bereaved on some aspects. Especially when there is no other way of memorializing other than these bots, certain senses will be diminished and at the same time a supposed interaction will be added.

The link between technology and death can expand itself in many fields like the arts and philosophy to provide a deeper insight in these developments. As they all act differently, they can provoke different thoughts on the subject matter. For the time being, this research concludes with a speculative scenario in "*please don't go*" in which the questions discussed so far will be raised in a fitting manner. Chats with the Replika app are included in the dialogue in order for it to be based upon practical methods while still remaining speculative. It is important to do so as it is based upon existing technologies that still need to take shape. Reflection will also be given towards existing rituals to question whether it is a replacement or the co-existence of practices. Moreover, the scenario will be able to propose elements that I am not able to conceive in this paper. The actual effects of these bots will have to show in the future, but it's important for people to thoughtfully make decisions on whether to implement these bots into their own lives or deaths and to think of its implications it possibly can have in the very near future. Maybe then, we will be saying goodbye with the click of a button.

please don't go

I need to get better



Still video-installation "please don't go"

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