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# **Death Rituals and Mobile Media: An Examination on Existing Attempts**

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# ***Abstract***

Deeply ingrained in our society and culture, death and its rituals have undergone transformation due to cultural shifts caused by technological advancement. Mobile media, as a major component of the technological advancement, is interwoven into modern day living. And the consistent tension between traditional practices and social changes decides that mobile media shapes, and is shaped by, our rituals. More specifically, mobile media allows for temporal and spatial distances and co-presence to be transgressed, which is a practice highlighted in the case of death and rituals. In the thesis project, the existing attempts to mobilize death rituals in selected cultural contexts are examined with relevant sociological theories and user experience design perspectives. The theoretical analysis is followed by a user research featuring a semi-structured interview of fifteen people who recently experienced death of someone they know and participated in mobile media-involved death rituals for insights based on real-life experience with which a benchmarking of the mobile media usage is produced. The thesis work concludes with giving overview of the functionality of various mobile media currently involved in the death rituals, accompanied with personal reflections and indicate possible directions for future endeavors in the field.

# ***Abstract\_ITA***

Profondamente radicati nella nostra società e cultura, la morte e i rituali associati ad essa hanno subito una trasformazione a seguito dei cambiamenti culturali causati dal progresso tecnologico. I mobile media, una componente importante del progresso tecnologico, si sono intrecciati con la vita moderna. Oltre a ciò, la tensione costante tra pratiche tradizionali e cambiamenti sociali fa sì che questi media mobili modellino, e allo stesso modo vengano plasmati, dai nostri rituali. Più nello specifico, i media mobili consentono di trasgredire le distanze e la co-presenza a livello temporale e spaziale, una pratica evidenziata nel caso della morte e dei suoi rituali. Nel progetto di tesi, i tentativi esistenti di mobilitare rituali di morte in contesti culturali selezionati vengono esaminati con teorie sociologiche rilevanti e prospettive di progettazione della user experience. L'analisi teorica è seguita da una ricerca relativa agli utenti stessi, attraverso un'intervista semi-strutturata di quindici persone che hanno recentemente sperimentato la morte di qualcuno che hanno conosciuto, partecipando a rituali di morte nei quali si è verificato il coinvolgimento di sistemi multimediali, per approfondimenti basati su esperienze di vita reale grazie alle quali viene prodotta un'analisi comparativa rispetto all'utilizzo dei media mobili. Il lavoro di tesi si conclude

fornendo una panoramica delle funzionalità dei vari media mobili attualmente coinvolti nei rituali di morte, accompagnata da riflessioni personali e indicando possibili direzioni per future applicazioni in questo campo.

# ***1\_Introduction***

## ***1.1 Thesis Motivation***

Death has always been something I personally feel reluctant to hear of, to talk about and needless to say, to face ever since I was a kid. However, as it may be comparable for others of my age, I have come to awareness of a more frequent personal encounter of death– not only within the rather closed kinship network where the elder members of the family age, but also within the expanding open network of acquaintances where the number of misfortunate individuals are increasing proportionally. This seemingly higher frequency of exposure to death might be caused by the constant accumulation of the unfortunate events ever since we developed memory as an individual, while the constant development of the channels via which the digital messages of these tragedies definitely contribute more. From word of mouth to writing letters to instant texting, the speed and the broadcast range of bad news has been significantly upscaled. As units in a hyperconnected society, we can be reached easily by the news of people from all degrees of separation instead of solely close-knits.

Though reaching this presumption by having observed or been



involved in numerous death-related situations, I still hold a discomfort when exposed to news and social media posts about one's passing away. When the COVID-19 pandemic started hitting Wuhan, I was conducting the preliminary research process for the thesis work, and I was emotionally overwhelmed by social media posts from China. Texts, photos and videos of patients passing away, chaotic and overcrowded hospitals, and parents struggling to have last breathes were flooding into everyone's feed. The overall sentiment was invasive and devastating. Soon after similar terrifying and heartbreaking messages come from all parts of the world. With tears and panics, precious lives become digits in the news report. The death that many of us considered far away seemed closer than ever, and the amount of the tragedies we keep hearing of, talking about and facing is becoming so vast and I started feeling less empathetic when looking at the numbers of new daily cases and death. Having talked to my friends scattered around the globe, we appear to be sharing this shift of attitudes and emotional response to death and its related content.

This emotionally charged period with the collective misery and uncertainty induced me to start reflecting my personal response to the topic of death, and how the society reacts to it.

Death and its rituals have always been taboo since I was a kid and I have been genuinely scared by the idea of death and rituals for them constantly being portrayed in East Asian horror films and for me being educated by relatives about superstitious customs revolving around death. The idea of ghost or soul is mostly equivalent to evil spirits that haunt people who do not show enough respect in China, which translates to strict rules of what people could do in ceremonies or cemeteries. Anything a kid would want to do out of instinct and curiosity would be considered taboo- talking, touching, watching, and lingering, etc. Thus, as far as I am concerned, the respect primarily derives

from the fear of unlucky events happening to people present threatened by the customs and superstitions.

Have been living and studying in other parts of the world, I noticed some significant differences of how other societies react to the topic of death. For one, cemeteries appear to be a more tranquil environment without much eeriness and the burials are executed in an easeful manner, which is in contrast to the burial ceremonies in China where folk musical instruments blast such as suona, carrying a distinctively loud and high-pitched sound, and erhu, a two-stringed fiddle producing sonorous melodies, to show respect to the deceased.

These differences in attitudes towards death and death rituals I have personally observed inspire me to explore more cultural contexts and understand how people participate and interact in those occasions. Accompanied by the overall sentiment brought by the COVID-19 pandemic and the self-reflection, I have decided to focus on death as the general topic of my thesis work.

Coming from the background of creative technologist and having been studying Digital and Interaction Design at Politecnico di Milano, I am interested in and primarily work on human-centered experiences and services facilitated with technology and interactive media. Under the safety measures of COVID-19, people have to adapt in order to make sure the rituals of death can still be practiced, and in most of the cases, digital alternatives or approaches, more specifically mobile media, are more relevant than ever for their ability to overcome temporal and spatial distances and allow co-presence in death rituals that shall happen regardless. Death rituals and mobile media combined seem worth researching and exploring as a topic in interaction design field for the involving all the five dimensions of interaction design model proposed by Gillian Crampton Smith and supplemented by Kevin Silver– “words”, “visual

representations”, “physical objects or space”, “time” (media that changes over time, such as animation, videos, sounds), and needless to say “behavior” (Smith 2007, pp. 17-19; Silver 2007).

## ***1.2 Initial Research Questions***

The aim of this thesis is to try to understand and assess the involvement of mobile media in death rituals by answering the following research questions and more:

1. How have death and its rituals changed under conditions of technological mediation? What attempts have been made in mobilizing death rituals?
2. How has mobile media contributed to the shaping of modern day death rituals and vice versa?

Building on the theoretical analysis and research, I then would conduct user research with semi-structured interview for insights to the research question “How do the stakeholders involved respond to the mobilized rituals? How is the user experience landscape of these services?” The finding would be visualized into user experience benchmarking, giving overview of the functionality of various mobile media involved in death rituals, and showing directions for future endeavors.

# ***2\_Research Context***

## ***2.1 Death***

### **Sociologists' views on death, society and culture**

There probably isn't anything more universal than death that would ever happen to human beings. It has been an unavoidable part of human existence and experience all along. Throughout history, though countless attempts have been made in order to postpone, surpass, resist and combat death, the achievements of these efforts are only effective in prolonging one's life, and to win over death still remains definitely impossible. Norbet Elias, a German sociologist, argued that people alive "know that they shall die; they alone can anticipate their own end . . . It is not actually death, but the knowledge of death, that creates problems for human beings" (Elias and Scott 2010, pp. 3–5). Carrying the weight of being aware that death is unavoidable, the living ones could be viewed as people "being towards death", in the word of German existential philosopher Martin Heidegger, which

keeps human beings “authentic”, rather than “living their lives” in the society (Heidegger 2013, p. 252), which is later defined by American sociologist Peter L. Berger “as men banded together in the face of death” (Berger 1990, p. 52).

Even though the certainty of death is something we universally acknowledge and the certainties people are entitled to in life are quite scarce and, to some extent, luxurious, we human beings generally do not like death. We tend to avoid “project[ing] our lives onto the horizon of our death” in the words of Simon Critchley, and the embodiments of such attitude exist in different cultural and religious contexts (Critchley 2009). For example, Hinduism regards death as a natural process and the common belief that “a person’s spirit (atman) is permanent” implies that a biological death could easily be outlived, thus death is not treated as the benchmark for their deeds (Verghese 2017). Colloquially, inventive phrases are used seemingly in every corner of the world to avoid talking directly about death and come up with implicit idioms instead– “Alulról szagolja az ibolyát” in Hungarian means “smell the violets from below”, and the French saying “Manger les pissenlits par la racine” can be translated as “to eat dandelions by the roots” to name a few (Smith and Kelly 2012). However, in order to achieve an “authentic” human life, Critchley argues that it is essential to “confront[e] the finitude of the life” in order to “make a meaning out of the fact of our death”. This is a notion particularly practiced by Buddhism. It is commonly believed that The Buddha himself viewed death as “the greatest of all teachers” and “the most important manifestation of impermanence”. The believers are “confronted with mortality as a real and recurring feature of daily life” (Critchley 2009). Missing in many cultural practices, this frontal and respectful regard for death, if receiving fair treatment and attention, might be useful in helping the dying ones and the survivors deal with this inevitable destiny.

This universal reluctance of treating death with the respect and formality it deserves rather than with timidity or avoidance is, in Zygmunt Bauman's word, "denial of death as the origin of all culture" (Bauman 1992, p. 4). He argues that "all kinds of culture, is a contraption intended to make such a life with death bearable and livable" in his book *Liquid Fear* (Bauman 2013, p. 31). This take on death being intrinsic in all cultures stresses the fact that although being the most universal thing or life's only guarantee, death is never a personal thing. Robert Hertz, a renowned French sociologist, in his book *Death and the Right Hand* argues as follows:

Death does not confine itself to ending the visible bodily life of an individual; it also destroys the social being grafted upon the physical individual and to whom the collective consciousness attributed great dignity and importance. (Hertz 1960, p. 77)

Hertz's stand on death points out the connection of someone's physical death and the farewell of their social identity constructed by the "collective consciousness" (Hertz 1960, p. 77). This argument could be interpreted further as the duality of death-the physical death and the social death.

## **Duality of death: physical and social death**

The concept of physical death in medical field refers to "irreversible cessation of circulatory and respiratory functions, or irreversible cessation of all functions of the entire brain, including the brainstem" (Delmonico 2010, pp. 451-458). An incident of physical death triggers a series events to happen from

the moment of the unfortunate stops breathing and cessation of the brain, and they are defined by the social tradition and cultural customs- mourning, burial, services, and etc. All these events appear to be niche yet highly social in terms of participation and etiquette.

Social death is a broadly used term and it can be referring to slavery, genocide, and social segregation due to severe mental illness. However, as Jana Králová points out, these cases labeled “social death”, whose “repeatedly occurring structural similarities” have been analyzed, have three “underlying notions”—“a loss of social identity”, “a loss of social connectedness” and “losses associated with disintegration of the body” (Králová 2015, p. 235).

Similarly to the investment and scientific endeavor put into the medication and improvement of physical being in order to prolong one’s lifespan, many efforts are also being invested on social death by attempting to overhaul the “disintegration of the body” (Králová 2015, p. 235). One example would be ETER9, founded in 2015 by Henrique Jorge, a Portuguese software developer and entrepreneur. Though as of September of 2020 its website only shows big text on an electric blue background—“When your \*counterpart\* is built like you, you don’t just use it — you live it.”, followed by the self-labeling tagline “the most daring experience ever made on the Internet. A new formula to interact with humans, non-humans (counterparts, AI agents, IoTs), and companies. There is nothing like it in the world. We are reinventing the future...!”, ETER9 was up and running with the promise of possibility to create users’ “counterparts” (“Rebirth in Reinvention!”). Essentially, it is a site where users post and comment to train a virtual being to emulate their personality with the help of machine learning. After the user pass away, their autonomous “counterpart” which could be broken down into a chatbot with certain behaviors beyond languages and



conversing will continue uploading remarks and materials as them.

This technology driven approach has been instrumental within numerous endeavor to defeat social death. DeadSocial is an online service designed to “provide the best tools and support resources to help support society deal with” death. Instead of attempting to train an algorithm to be able to create content as the deceased, DeadSocial requires users while still alive to create content such as messages and wills with the ability to appoint an executor to administrate the posting that happens after them pass away. This way of engaging with the social media friends by users “taking control of how [they] are remembered” is the perfect example of how people are trying to combat social death by remaining the “social connectedness” (Fussell 2016; Králová 2015, p. 235).

Overall, compared to the certainty of unavoidable physical death, appearing to be socially alive seems more practical with the mediation of digital technology. In this day and age, with the connection built through mobile media by technology advancement, members of the society seem to be more connected than ever. However, these connections between the members seem so casual but expected that sometimes, even if the social death happens, or in Králová’s words, “the social connectedness has been lost”, people fail to comprehend how large the number of the deceased users and their accounts can be especially when social death nowadays is embodied into the inactiveness of social media profiles (Králová 2015, p. 235). According to Oxford Internet Institute, the number of zombie profiles on Facebook might “outnumber the living within 50 years” in the most extreme scenario, with an estimated number of minimum “1.4 billion or potentially as high as 4.9 billion” deceased users before we enter next century (“Dead Could Outnumber Living on Facebook within 50 Years.” 2019). This growing number of “post-

mortem profiles” as defined by Jialun Jiang and Jed R. Brubaker occupy and inhabit within our social networks and Internet. For the living users, encountering them and the “memorial content at unexpected moments can be unsettling” (Jiang and Brubaker 2018, p. 1). At the same time, as far as the deceased users are concerned, their profiles are full of their own digital history that are valuable because “sum of our individual histories make up a more significant societal history” as argued by Carl J. Öhman and David Watson, authors behind the Oxford Internet Institute’s study, and the control over the digital legacy would need “proper institutions and infrastructure” instead of “consolidating that power” in few tech companies (Greenspan 2019).

## ***2.2 Rituals***

### **Explanation of rituals and death rituals**

In *Death and the Right Hand*, Robert Hertz also argues as follows:

Death is in normal circumstances a temporary exclusion of the individual from human society. The exclusion effects his passage from the visible society of the living into the invisible society of the dead. Mourning, as its origin, is the necessary participation of the living in the mortuary state of their relative, and lasts as long as this state itself. Death as a social phenomenon consists in a dual and painful process of mental disintegration and synthesis. (Hertz 1960, p. 86)

In other words, echoing with previously discussed social aspect of one person's death attributed by "collective consciousness", the living ones who are related to the deceased have the duty to be involved within the process of such "exclusion" (Hertz 1960, p. 77). The involvement coming from the living ones could be

summarized as the death rituals the society and the citizens practice around the world with and after the event of physical death.

Ritual, by Cambridge Dictionary, means “a set of fixed actions and sometimes words performed regularly, especially as part of a ceremony” (“Ritual.” 1995). In his outstanding work *Rites of Passage*, Arnold Van Gennep refined the definition of rituals by establishing the concept of “rites of passage” as a three-phased process– separation, transition, and integration, that marks life transitions (Van Gennep 2019, p. 2). In order to assist their members during these crucial life transitions, the societies have developed these rituals as rites of passage.

This tripartite model of ritual grants understanding of the significance of death ritual although within which separation and transition are playing a more major role. The separation phase of death refers to actions such as laying down the coffin– separating the corpse with the relatives, and burning belongings of the dead– separating items to the deceased’s name from other possessions of the family. The mourning process would be the transition phase where mourners resonate their own former social identity with the one of the deceased by recollecting memories and shared experiences. Meanwhile, in order to reassert their existing social relationship with the bereaved, the mourners address to them or take necessary actions to show sorrow.

## **Social and psychological functions of death rituals and common practices**

As previously quoted, Hertz argues that death doesn't merely refer to the farewell of a physical body but also the loss of social identity with the living ones and their necessary actions to perform. Functions of death rituals can provide solid answers to his argument which could be interpreted with the breakdown of social functions and psychological functions. Social functions recognize the effects of rituals on "the network of social relations" consisted by a number of individuals joining together in an orderly manner; while the psychological functions happen on the level of individuality, and they are "immediate" or "direct" effect (Radcliffe-Brown 1968, p. 168).

As far as Hertz is concerned, the society is able to utilize death rituals as an opportunity of respite in order to adjust to the recent change. The deceased leaves one unit vacant in the network of social relations, and the temporal requirement of certain death rituals allows transitional pivoting of the social relation network as well as readjusting the existing network to better accommodate to this change. As the primary example of Hertz's *A Contribution to the Study of the Collective Representation of Death*, Dayak people of Borneo practice the ritual of having double burial ceremonies— one immediately after the death, and another one much later such as a year or more. This is due to the complicated material preparation for the "magnitude of the feast which has to accompany this rite". This longer period of mourning and waiting is a period where the body decomposes and bones dry. Dayak people also believe that the soul is wandering temporarily during this gap between burials. The relatives are "forsaken, not only by man, but also by protective spirits: as long as their impurity lasts, they cannot hope for any help from the powers above" (Hertz 1960, p. 38). Only when the final

ceremony is held can the mourners be liberated. This prolonged transitional period showcases the continuity of the relation between the deceased and the mourners, while the body of the deceased and their relatives undergo necessary transformation and participation.

However, this lack of clear distinction between “misfortune and impurity” is not universal, perhaps an extreme case. For many other societies, during death rituals, the mourners are undergoing shifts to their new social status, and getting prepared for “assum[ing] new social responsibilities” (Cohen 2002). The living ones who used to be close to the deceased such as the widow and the kid(s) are present and taking major roles in many death rituals, and they tend to receive just as much attention from people attending the rituals. These rituals are public occasions where the new social status of the mourners is announced and witnessed by others who are offering emotional support and doing one of the basic duties of being units of the network of social relations. In China, if the deceased is one young member of the family, an elder would not need to pay respect. However, if the deceased has offsprings, the offsprings would need to kneel before the elders to the deceased such as their grandparents. The kneeling represents not only an apology to the elders on behalf of the deceased parent for not being able to practice filial piety as an unconditional obligation of the child, but also shows that the responsibility is bestowed onto them to follow such virtual which keeps the society in order. By practicing this ritual, the offsprings of the deceased are publicly claiming new social status and showing their dedication of assuming the new social responsibilities of taking care of the elders whether supposedly voluntarily or not.

Being stakeholders of the social relations, which exist between two or more individuals “when there is some harmonization” of their interests, people universally show up to certain death rituals

mainly to pay respect to the deceased. The urge of showing up to these social occasions comes from the previously established “convergence of interest” between them and the deceased (Radcliffe-Brown 1968, p. 168). In Rwanda, a “remembrance fire” is built surrounded by people seated while “eating and sharing stories about the deceased” (Goldade 2020). The retelling of the past stories of the deceased is in fact an act of paying respect by reaffirming the previous interests they shared. The ritual of holding vigils exists worldwide for the friends or community members of the deceased to come pay their respect, and in some countries they are somewhat obliged to join the shifts of guarding the body as a way of paying their deeper respect. In certain Asian cultures, the number of attendees at rituals represents how much respect the dead is receiving, and the conversion between the two, particularly in rural areas of Taiwan, gets twisted. Erotic dancers and strippers are seen in funeral gatherings in those regions because hiring them to perform could “boost funeral attendances because large crowds are seen as a mark of honor for the deceased.” Other than being “a sign of wealth”, this vulgar addition of incentive for people to participate in death rituals seems to be opportunistic, falling on the totally opposite side of respect (Tan 2018). In terms of the social relations between them and the mourners, participants of death rituals are able to restrengthen their existing interests or develop a new shared interest, and most of the death rituals of different cultures have such rite. In Judaism, sitting shiva (“7” in Hebrew) is a week-long mourning period where first degree relatives come together as “a public expression of grief”, and this is also a period where friends and other family members can come visit. According to *Jewish Practices and Rituals for Death and Mourning: A Guide*, visitors are encouraged to make “superficial and light” conversations catering to the mourners and their mood, and visitors ought to bring round food that represents “the wholeness of life”. They shall remember that “the mourner’s needs” are their “primary focus”, and the support they offer each other during period

“benefits everyone, mourner and comforter alike”. This Jewish death ritual mainly is set for participants to pay condolence and offer support by strengthening their social relations in a non-intrusive manner (“Jewish Practices and Rituals for Death and Mourning: A Guide”).

Death rituals are also “collective expressions of feeling appropriate to the situation” in Radcliffe-Brown’s word, and they are the occasions for people to come together to show solidarity and indicate their allegiance and duty to one another, reaffirming social bonds (Radcliffe-Brown 1968, p. 168). It is quite common for people attending funerals to wear outfits in one single color around the world. The color changes from place to place based on the local culture. In Cambodia mourners are supposed to wear white clothing “as opposed to black as is more common for Westerners” since white is the “traditional color of mourning for death” (Mony and Huong 2008). Though specific color changes, other than the significance bestowed upon one certain color to show respect, the prominent rule of collectively following one specific color for dressing up for death rituals is the best example of people showing solidarity in these occasions. Monotone outfits form a unified look of gatherings for one showcase people’s will to fit into a group appropriately. This collective action emphasizes the fact that people are all equal members of the society with shared values and social links to each other and even more to the unfortunate.

Funeral rites are heavy for them being associated with “ideas of completeness of sequence in human affairs” as identified by Firth (Firth 1960, p. 317). They are the ceremonies of the termination of social relations, of which the both ends are impacted psychologically as the individuals undergo the two rites of passage of separation and transition.

As the most impacted individuals by the death other than



the victim themselves, the bereaved suffers from the pain of losing someone they love. The separation tends to happen quite unexpected even if in some cases the dying process is long. Regardless how much time allows the bereaved to prepare for the separation, the impact it has on them is still nerve-rackingly and enormously negative. Thus, death rituals provide a place where the well wishers could gather and show emotional support to the bereaved. The activities of the rituals could keep the mourners distracted from focusing on the sorrow brought by the actual separation, and their spirits could thus be uplifted. In New Orleans, the city famous for its parades and Mardi Gras, funerals are filled with upbeat and joyful Jazz tones. The ritual of jazz funeral is composed of two lines where “the musicians, funeral directors, family, and friends of the dead make up what is called the first or main line”, while “the crowd marching behind is collectively known as the second line.” Marching from the funeral service to the burial ceremony, both lines are walking slowly to the “dirges, somber Christian hymns”, and once the body is laid down, the band would start playing “up-tempo music” while the second liners start dancing, turning the funeral into “a street celebration” (Sakakeeny 2007). This switch from sorrowful music to spirited and joyful ones not only is for mourners to celebrate their loved ones into a better life, but also help them “realize that the cares, worries and suffering of the deceased are over” (LaCoste 2014).

As for the transition passage that the bereaved have to undergo to adjust to the absence of the deceased, death rituals can function as occasions for them to adjust and envisage the future life during this period. Torajans, indigenous to a mountainous region of South Sulawesi of Indonesia, have the tradition of tending the late loved ones at home “for weeks, months, or even years after death” when daily meals are brought in front of the corpse with “formalin (formaldehyde plus water) treatments shortly after death” to prevent the putrefaction. Keep the eventually to-be-

mummified body present in the house shows that the passing away is “not a severing but just another kind of connection”, where the past experience of living with the deceased lingers and the mourners gradually prepare themselves for the actual burial that compares to other parts of the world is much delayed (Bennett 2016). This tradition fits perfectly with the idea of Stanley Diamond that rituals for the mourners are to “maintain integrity of self” by keeping life as it is used to be while gradually adjusting and taking on the new social identity, and new way of living without the deceased (Diamond 1974, p. 198).

For both the bereaved and the well wishers, handling the decease of someone they love or even someone they know causes anxiety, which mainly comes from three aspects– regretting the past, worrying about the future, and trying to pull through the current. Death rituals, therefore, can function to help the ones affected navigate and allay anxiety. In many Asian regions, funeral attendees are required to bring monetary gift to the bereaved. This type of condolence offering is known as Okoden in Japan and Bai Bao (“white packets”, opposed to Hong Bao “red packets” in celebrative occasions such as weddings, new years, birth of a baby, etc) in China. The amount of the money depends on the past relationship to the deceased, and the purpose of such offering for the bereaved is not only to help share the current financial burden of funeral expenses that the bereaved is responsible for, but also provide minimum financial support for future physical comfort of the bereaved, relieving to some extent their worry about the future.

Same as death, its rituals are what human beings have to experience. Malinowski argues that “any survivor who has gone through a number of mortuary ceremonials for others becomes prepared for his own death” (Malinowski 1958, p. 97). With the accumulated times of participation in death rituals, human beings are supposed to get used to attending these occasions and

have had reflection about their own existence. Being involved in these emotionally-charged and hyper-sensitive experience is not easy, and they deserve endeavors from sociologists, psychologists and experience designers to analyze, refine and facilitate so that the importance of these social interactions can be more acknowledged, justified, and respected.

## **Hertz's tripartite model analysis of death rituals**

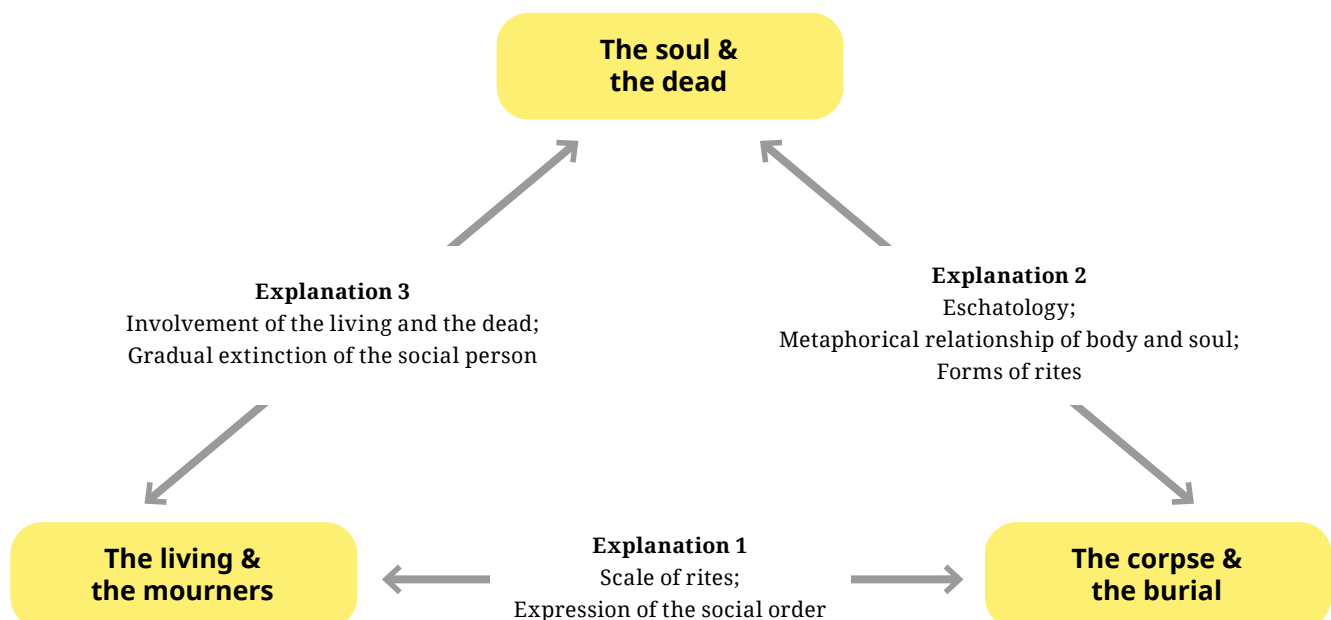
The above social and psychological functions supported by various sociologists' and anthropologists' theories and arguments illustrate the impacts of rituals on human beings and provide reasonings behind the rituals. Among them, Robert Hertz's work received overall continuous support and acknowledgment from relevant scholars. As summarized by Eric Venbrux in his journal *Robert Hertz's Seminal Essay and Mortuary Rites in the Pacific Region*, Davies Douglas J. views that Hertz's work to be "a basic historical and key theoretical reference point for sociological work on death" (Davies 2000, p. 97). Palgi and Abramovitch refer to the essay as "one of the most original analyses pertaining to death" that is "still one of the most cited and seminal works in the field" (Palgi and Abramovitch 1984, p. 388). Robben, introducing his recent anthology of death studies, notes that Hertz's essay "endures as the single most influential text in the anthropology of death" (Robben 2018, p. 9; Venbrux 2007, pp. 5-10).

Among these scholars, Peter Metcalf and Richard Huntington, in their book *Celebrations of Death: The Anthropology of Mortuary Ritual*, points out that "the symbolic aspects of Hertz's argument have been passed over," and "the complex issues raised by the death essay have yet to be discussed." Accordingly, they

contribute to the field of study by elaborating the symbolism in mortuary rites by clarifying Hertz's argument, "corpse, soul and mourners undergo a parallel transition" with a triangular model (Metcalf and Huntington 2014, pp. 83). It demonstrates the interrelatedness of the three - corpse, soul and mourners, and each side in this model offers a systematic explanation of the death rituals.

In this model, the stakeholders previously discussed are categorized into three different groups - the living & the mourners; the corpse & the burial; the soul and the dead. Relying on these three, common death ritual practices are classified into explanations that exist in between any two of the three groups. This tripartite model of death rituals provides a concrete structure and framework for conducting analysis on death rituals.

*Fig. 1 Hertz's Tripartite Analysis of Death Rituals Diagram*



More specifically, the relationship between the living and the mourners and the corpse and the burial decides on the scale of the rites (*Explanation 1*). The existence of the death ritual is to express and ensure the certain social order. Many of the previously mentioned social functions fall into this explanation, such as the reaffirming social bonds, and mourners paying respect to the corpse collectively during the burial occasions. These rituals are usually solemn, with proper etiquette that attendees need to follow, in order to maintain and in some cases reinforce the social order. The more impactful the living and mourners would like the rituals to be, the more complex and grand the rituals would have, which reflects how prominent the deceased used to be among the living and mourners.

Accordingly, the death rituals involving the corpse and the burial and the soul and the dead are the embodiment of the eschatology. Since each believe system depicts the end of life differently regarding the form of posthumous life, and destinations or situation of such form, these various arguments and believes give birth of various forms of rites, which correspond to the proper treatments and the metaphorical relationship of body and soul (*Explanation 2*). In China, it was common to burn joss paper, also known as ghost money, in front of the cemetery. This ritual come from the believe that the deceased live in the deceased world and the living ones have the duty to “wire” the money to their deceased family members via burning accompanied with fire crackers. Though it has been discouraged in many locations due to the potential fire hazard, many safer alternatives are being introduced such as electronic candles, incense and firecrackers. On the contrary, because it is commonly believed in Western societies that the soul rests in the graveyard where the corpse is buried, many of the rituals share the atmosphere of being quiet and even meditative.

Regarding the connection between the living and the mourners

with the soul and the dead, this relationship is embodied as way of people's endeavor to keep involving the living and the dead (*Explanation 3*). As previously discussed, Torajans, indigenous to a mountainous region of South Sulawesi of Indonesia, practice the ritual of keeping the deceased family members inside their households and include them into daily life by delivering meals and cleaning for them. This involvement delays the gradual extinction of the social person. This explanation doesn't only exist in certain unique rituals, but also drive many of the universal ones such as sharing memories on the deceased friend's Facebook timeline, paying visits to the graveyard during holidays and anniversaries, which can be found around the globe.

Although certain specific rituals are strongly associated with one of the three parts of the model, but generally, two or three stakeholders and the explanations in between contribute to the existence of most of the rituals. This tripartite framework leads my following analysis on the existing attempts on death rituals made by mobile media, and how mobile media has been utilized in these rituals.

## ***2.3 Mobile Media***

### **Definition of mobile media**

Throughout history, death has been communicated with different media, and has been involved with various objects and events deployed by the cultures around the world. It is even more so contemporarily where the assemblage is mediated by technologies that are shifting the way how the society functions rapidly and profoundly.

As one of the mainstream technologies pushing the society forward, mobile media, with hand-held devices' high penetration into households and individuals thanks to iterative mobile technology, Internet, GPS, etc, has redefined many aspects of living – traditional banking replaced by mobile banking, instant messages and news delivering, streaming and broadcasting self-made content.

In general, mobile media can be defined as “media in motion”. The most commonly associated product to mobile media would

be mobile phones nowadays. However, the concept of mobile media encompasses a wider range of devices from mobile phones, tablets, and e-readers to game consoles. According to Wei, It is “primarily a personal, interactive, Internet-enabled and user-controlled portable platform” on which “the exchange of and sharing of personal and non-personal information among users who are inter-connected” are enable (Wei 2013, pp. 50-56).

## **A brief history of mobile media development**

The development of mobile media, if looked closely at wireless communication, could date back to the emergence of mobile radios followed then by walkie talkie and conversational radio phone. This progressive iteration is supported by the technological invention and its successful application. However, if we look further away, even books, radios, walkman and Kodak camera are also early examples of mobile media consumptions. However, in the recent decades, the mobile phone dominated the discussion of mobile media. According to Canalys, a technology market analysts firm, in 2011, the growth of mobile media “as a true force in society was marked by smartphone sales outpacing personal computer sales” (“Smart Phones Overtake Client PCs in 2011.”). In the current year of 2021, 5G time has already arrived. This means more and more people have access to fast Internet connection, and more data can be transmitted and exchanged in a fraction of time. The speed and accessibility permits vast amount of information to be exchanged, stored, and computed, which opens up many gates for mobile media to become the carrier or portal to cutting-edge technologies such as machine learning, artificial intelligence, mixed reality, and neural



networks just to name a few.

## **Features of mobile media**

What makes mobile media fascinating, concluded by Wei, is “the experience of connected co-presence 24/7 – a mutually perceived expectation among mobile media users that they can instantly be there for one another around the clock.” (Wei 2013, p. 50) This point to point communication between users, regardless the time and location, is pushing back the significance of “social institutions” such as media corporate as the traditional “producers and distributors of information” to mobile media users and consumers, who are, instead, moving towards a more central position in the new communication paradigm. Mobile media represent a “user-generated communicative space” where content needs careful consideration unlike the old “carrier model of the plain old telephone” service (POTS), and more distributed way of communication instead of the more centralized one-to-many mass media model controlled by just a few powerful media tycoons. In a nutshell, users of mobile media are positioned at the center of interactive and participatory communication for “the experience of presence and co-presence” (Wei 2013, pp. 50-56).

# ***3\_How mobile media mobilize death rituals***

## ***3.1 How the features of mobile media play in current death rituals?***

In Florida, friends build online Facebook memorial pages for their friends passed away during the Pulse nightclub shooting. In Shanghai, an elderly woman replays videos of the deceased partner on her phone in order to feel that he is around. In Seoul, a mom keeps holding onto the old phone which stores the last text from her daughter who was on the Sewol ferry. In Tokyo, a brother sends memorial messages to his deceased sister's social media LINE account.

Stories like the above are happening nowadays everywhere.

Users of mobile media are accessing photos of their deceased friends and family members, or sharing memories and visiting the memorial profiles. Mobile media are not only, embracing and expanding traditional memorial practices, e.g. reviewing digital photos and videos and sharing the content is the modern approach that is developed from the old tradition of post-mortem photography where the deceased was photographed with the living to capture the moment and memory , but also facilitating and creating contemporary adjustments onto how death and its ritual practices manifest within our daily life.

As discussed above, the enabled co-presence, as one of the more prominent features of mobile media, allows for users involved to transgress the limitation of temporal and spatial distances, which are essential requirements highlighted in many cases of death and rituals. The application of this feature range from tools available on mobile devices such as FaceTime, Skype or Zoom, with the bereaved could show up to funerals via Internet and screens, to Facebook storing and displaying data of the deceased to “reanimate the dead through mobile media” (Cumiskey and Hjorth 2017, p. 4). Its allowance for co-presence of either the living or the dead is aiding death rituals to better serve their social functions and psychological functions.

More specifically, co-presence of living enables the mourners who are physically unable to be present in death rituals to be participating the collective expression of solidarity and allegiance, reaffirming social bonds with the deceased and the mourners. They could also undergo the shifts to their new social status, while paying the respect to the departed. Therefore, the relationship between the living and the mourners and the corpse and the burial is protected from breaking apart due to temporal and spatial distances obstacle (*Explanation 1*), maintaining the expression of social order.

Additionally, the co-presence opens up the possibilities for certain degree of representation of the departed to remain, which embraces the psychological functions of death rituals. The extended presence of the soul and the dead can prolong the involvement between the living and the mourners with the soul and the dead (*Explanation 3*), slowing down the extinction of the social person. This notion of co-presence could become particularly beneficial to provide activities that distract the mourners from the actual separation yet focus on feeling the presence of the departed, leading them to adjust, navigate and allay anxiety through grief period which is “an unending process that changes and evolves over time” (Cumiskey and Hjorth 2017, p. 4).

Depending on how the deceased and their soul are positioned in the mobile media, the co-presence enabled by the mobile media could obey or challenge eschatology (*Explanation 2*), which reinforces the forms of rites and the metaphorical relationship of body and soul or brings in unconventional ritual practices. The former maintains the same ritual yet with augmentation due to adoption of mobile media, and it could be found in many places. For example, the futuristic looking cemeteries in Japan are using LED Buddhas and conveyor belts to replace tombstones while packing “symbolic representations of the dead in orderly columns and house their actual remains in locker spaces”, and visitors upon arrival could swipe their own smart card to light up their deceased family member’s locker and display information (Jozuka 2016). In more advanced cemeteries such as Rurikoin, a conveyor belt and fork lift system is activated upon card swipe to bring the remains to a communal tombstone with accompanying images and offerings. However, the latter would arguably irritate certain believers and create controversy such as the debate over whether the soul resting in a completely virtual cemetery accessible with phones or whether platforms such as ETER9 where counterparts or chatbots of the deceased

are trained are actually housing the deceased.

What is also worth mentioning here is that since the involvement of user as generator of the “communicative space” is intrinsic to mobile media, the delivery of the content and how the mobile media is designed to ensure user-centered experience is crucial. As introduced by Kathleen M. Cumiskey and Larissa Hjorth, mobile media “entangle various forms of material, social, online, and digital media in specific ways that are both intimate and yet public” (Cumiskey and Hjorth 2017, p. 3). The complexity of mixing intimate and public space is extremely sensitive when contextualized with death and its rituals. The creators especially user experience designers behind mobile media that is applicable to this realm would have to be extra cautious on navigating through the interwoven layers of etiquette, respect, religions and believes, and obligation, so that the potential impacts of mobile media could turn out to be positive, avoiding the creation of psychological stress and discomfort during the rituals along with upsetting the social orders and “collective expression of feeling appropriate to the situation” (Radcliffe-Brown 1968, p. 168).

Mobile media “encompass a variety of platforms, techniques, and affordances” that should empower us with the possibility to comprehend the “continuum between older technologies and practices”, while “remediating” (representing one medium in another) rituals at the same time. Mobile media practices could teach everyone in the society about “the fabric of contemporary life”, and they broaden our horizons by providing new approaches to understand “how death and afterlife are negotiated, ritualized, and reimagined, especially within the everyday” (Cumiskey and Hjorth 2017, pp. 2-3). Therefore, in the following sections, a selection of diverse attempts of mobile media practices in death ritual are deliberately analyzed relying on death rituals functions while introducing, perhaps never

been done before, Hertz's tripartite model presented above into academic discussion. The following analysis aims to provide fresh perspectives on this not so frequently-visited context of mobile media, and offer systemic insights on the impacts the selected mobile media is making and its features being explored.

## ***3.2 Theoretical analysis on existing attempts***

### **Facebook: Legacy contact and memorial profiles**

As a place to stay connected with family and friends, Facebook has witnessed many of people's life events and moments. It has also been a platform where many of the users experience death, where the deceased are remembered and honored. As a common practice, many mourners usually visit the post-mortem accounts to share memories and updates. However, the profiles are not solely memorials—they are digital legacy and artifacts of the deceased; they are also shared personal archives between the deceased and their friends; they can be an online memorial site for the mourners to cope with grief; and they are also a gathering place for online communities. With these function needs of users to keep involving the deceased in mind, Facebook realized the significance of the spaces, and offered the possibility to “memorialize” an account in 2007—as summarized by Jed R. Brubaker, who later on took a leading role on designing the Legacy Contact function, and Vanessa Callison-Burch, once Facebook is

notified that the owner has passed away, their profile remains viewable with the same privacy settings as before. However, the account “cannot be accessed or changed in any way” (Brubaker and Callison-Burch 2016). This approach manages to protect the memory of loved ones, yet it also generated a series of questions and requests. A father, upon hearing about the memory sharing on his deceased son’s Facebook profile, joined Facebook to view and participate. However, since he wasn’t friend with his son, he was not able to do so and had to request help from Facebook. Likewise, people asked Facebook to change their beloved ones’ profiles pictures since they wish they could be appropriate or modify privacy setting so that important messages info could reach out to the friends. Jed R. Brubaker and Facebook team, after a series of human-computer interaction research, proposed Legacy Contact function and improved implementation on memorializing profiles. They can be described as the following as of Mach 2021.

### ***Legacy contact or delete permanently***

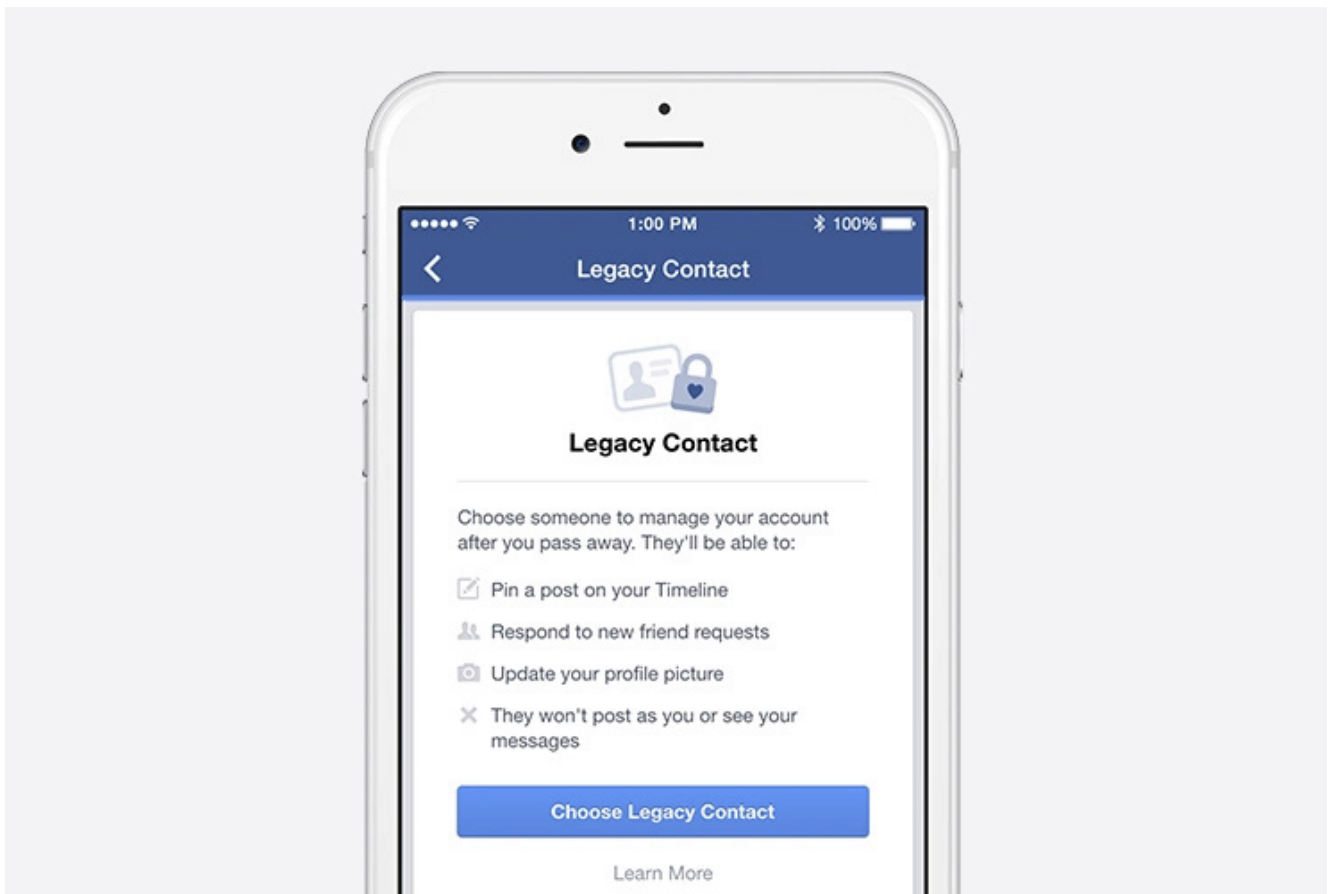
Every user is offered two options of what can happen to their Facebook profiles after they pass away - they can either set up a legacy contact or choose to have their profile deleted permanently. Legacy contact can accept friend requests on behalf of a memorialized account, pin a tribute post to the profile and change the profile picture and cover photo. If the memorialized account has an area for tributes, a legacy contact will be able to decide who can see and who can post tributes. The other option of deleting the profile would erase all the digital footprints of the user.

Being offered these two options, users are able to arrange before they turn “the dead”. This control to certain extent is putting the dying in a more active position in the event of their own death and rituals instead of falling into the passive “puppet death”



genre of rituals due to the fact that “peace and fulfillment are conceived of as passive conditions” as coined by Peter Metcalf and Richard Huntington (Metcalf and Huntington 2014, pp. 83). With the legacy contact, the deceased’s profile, content, and privacy setting made pre-mortem can be preserved, properly managed and well maintained.

*Fig. 2 Facebook’s Legacy Contact*



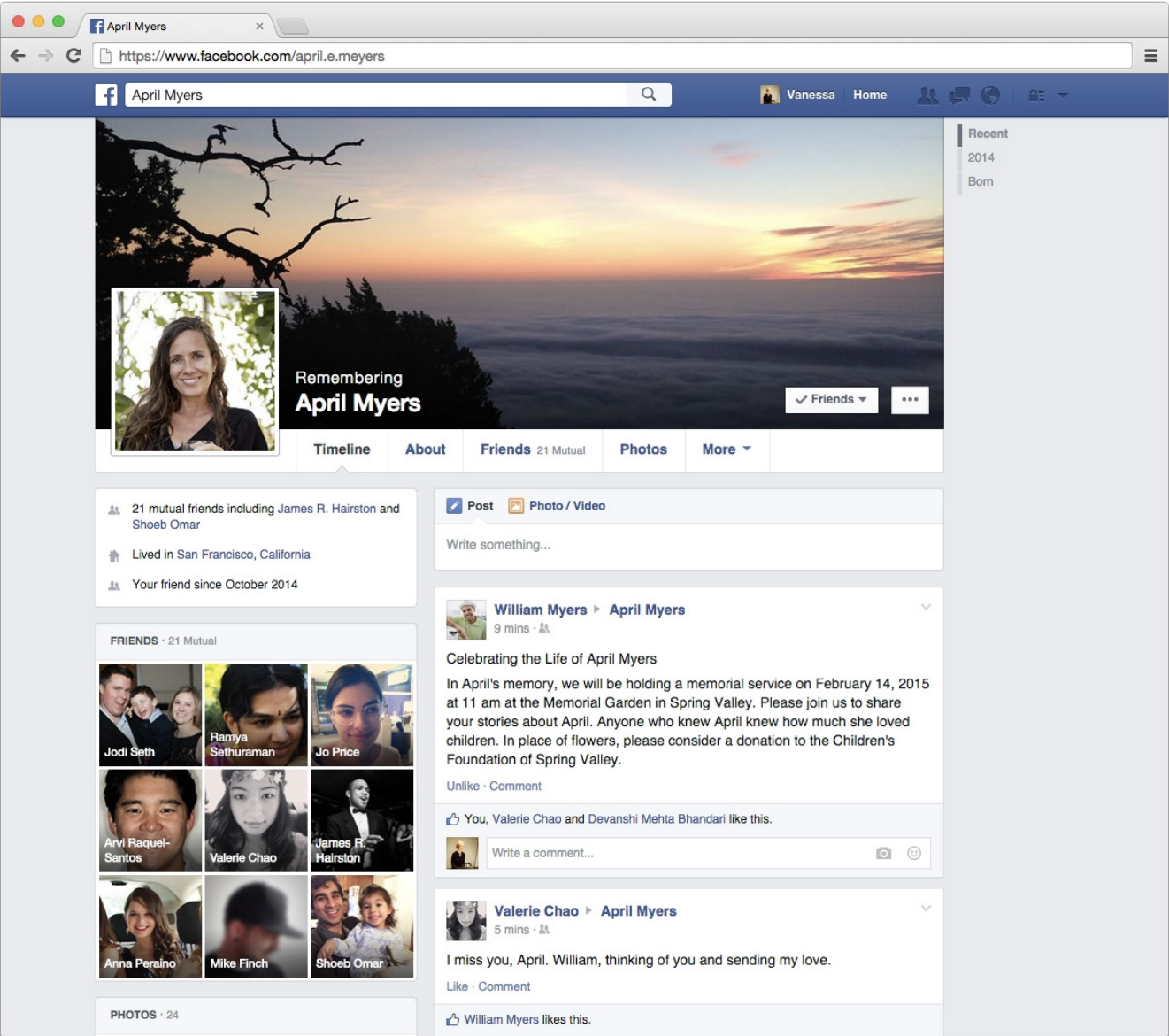
Appointing a legacy contact ensures the possibility of continuing the involvement between the living and the dead, which falls into *Explanation 3* in Hertz’s tripartite framework. When setting the legacy contact pre-mortem, the user is able to do so because their autonomy to their share of the mobile media of taking up the role of “producer” and “distributor” of information. When

the legacy contact is put into use post-mortem, the living and the mourners would be able to perform the ritual of holding memorial by sharing memories and posting updates no matter where they are and when it is. As long as Internet accessible is available, the application or website of Facebook via their mobile devices is always accessible and allow their co-presence with others browsing the same deceased profile.

**Memorial profiles**

If the user hasn't chosen to have their account removed from

*Fig. 3 Facebook's Memorial Profile*



Facebook after they pass away, their account will transfer into a memorial account if a family member or close friend informs Facebook. With memorial profiles, a sign of “Remembering” will be added to the name of the deceased. Friends’ ability to share memories on the memorialized timeline will depend on the privacy setting of the account. To prevent unpleasant situations where the deceased show up unsolicitedly, memorialized profiles don’t appear in public spaces such as in suggestions for People You May Know, ads or birthday reminders. Additionally, no one can log into a memorialized account.

This approach of turning profiles into memorial profiles also ensures the involvement of the living and dead, falling into *Explanation 3*, which helps the living to perform the ritual of mourning and memorializing. However, the user journey, compared to the initial endeavor, has taken more into consideration. The mobile media now, with deliberate investigation and design, provides proper guidance on top of being a social and engaging platform that smooths the practice of rituals by maintaining the inclusive community and facilitating the gathering and supporting among each other. It also reduces ambiguity about the mortal status of the deceased while keeping the old content accessible for the mourners to reflect on the deceased.

# Instagram: #Selfies at #Funeral

A Tumblr blog titled *Selfies at Funerals* created huge online buzz in late 2013. Jason Feifer, a journalist, compiled a series of selfies found on Instagram and a few other social media with the hashtag “#selfie” and “#funeral” or having them as keywords. “After funeral selfie lmao”, tweets a young woman posed with good lighting and a green filter. “#nans #funeral #suited #and #booted #like #for #like” posts a young guy flexing his bicep in front of a mirror (Selfies at Funerals 2013). The images listed are all featuring young people “turning their cellphone cameras on themselves during one of life’s most solemn moments” (Clark-Flory 2013). Viewed as debased forms, these photographs taken with and shared on mobile media quickly received condemnation. They are attributed to the overall superficial nature of millennial

Fig. 4 Selfie 1 at Selfies at Funerals

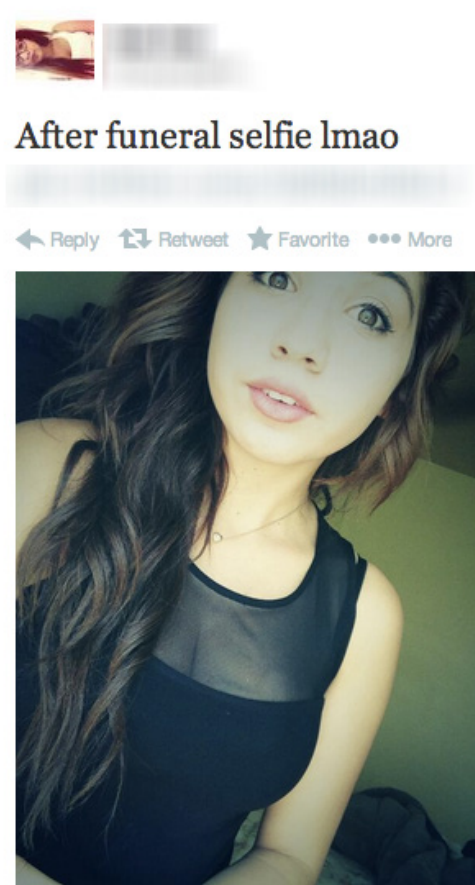
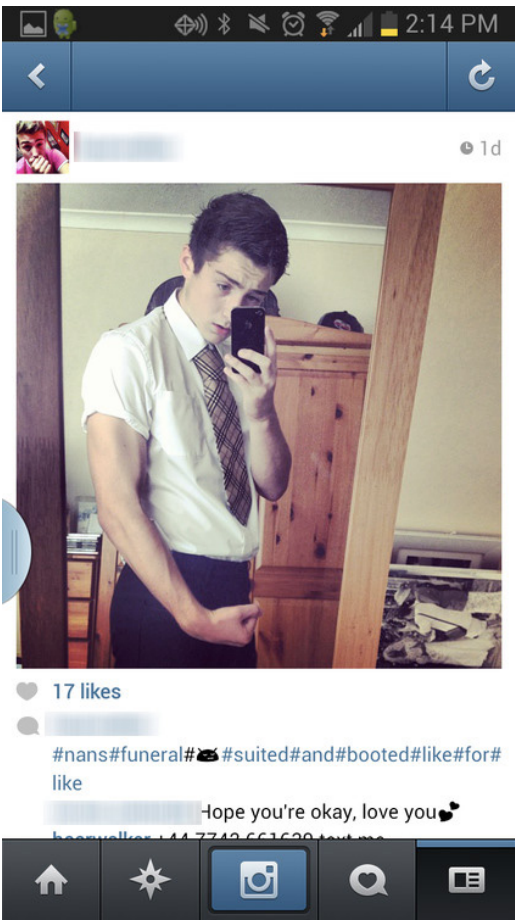


Fig. 5 Selfie 2 at Selfies at Funerals



users of mobile media for their vanity, conceit and lack of respect (Jolivet 2013; Moss 2013; Wells 2013). As pointed out by James Meese and co-authors, some even argued that social media had “emptied death of meaning, solemnity, and gravitas” (Meese et al. 2015, p. 1818). Huffington Post even ran a “doomsday banner headline”—“Funeral Selfies Are The Latest Evidence Apocalypse Can’t Come Soon Enough” (Grandoni 2017).

The action of the supposed mourner taking a selfie within the context of funeral puts this mobile media usage scenario into *Explanation 1* in Herts’z tripartite model. The social order is challenged partially because the traditional ritual of attending the funeral while following etiquettes to show respect seem to be countered by a vernacular practice established on Instagram. The difference among mobile media is heightened here—Facebook and other media have dedicated space locus for the living to mourn, while selfies on Instagram, featuring “the conflation of photographer and subject” and involving “mobile phones and cameras to capture the image”, tend to be “embedded in and defined by the establishment and habituation of discursive conventions” (Meese et al. 2015, p. 1821). At the same time, mourning with selfies on Instagram can be interpreted as a new form of individualistic mourning. The social order that usually institutional ritual practices help rebuild and maintain is indeed confronted by young generation turning away from institutionally supported forms of ritual, shifting to a more individualistic practice. Selfies at funerals, if looked positively, is a new form of co-presence, and users behind who also carry the role of producing and distributing can be viewed as trying to enlarge the broadcast of their own grief to a wider social network via mobile media.

## Zoom: Live streaming funerals

As of March 2021, Zoom has been brought up countless in many households in the past year due to the pandemic. Most of the meeting and conventions with people are transferred to be in virtual space. Many death rituals where physical presence is more than appropriate have to look into alternatives. Funerals, as one of the most important death rituals in many societies, have to follow strict restrictions on the number of attendees. Therefore, many of the families and funeral directors set up a mobile device with camera and microphone to stream the funeral via live streaming platforms such as Zoom where all the family and friends could watch from where they are. This mobile media usage scenario isn't something new since pre-pandemic, people who aren't able to attend the funerals due to distance or inconvenience are already Skyping or FaceTiming into the site of the funeral, and pay condolences

Funerals are one of the few rituals where all three parts of Hertz's tripartite model all involved. The corpse is displayed at a funeral and the burial happens at a funeral; the living and the mournings are present at a funeral; and the dead and the soul, in many believes, are also present.

Live streaming funerals via Zoom avoids any disruption on the involvement between the living and the dead, as *Explanation 3*. Mourners could follow the ritual on their phone screen and still pay their respect to the dead. The social relations the deceased had with all the attendees are still celebrated. Since the livings ones are all virtually in the same digital space, they could all collectively show solidarity and indicate heir allegiance, reaffirming social bonds, and offer support and sympathy to the bereaved online.

The live two-way connection built via mobile media between the burial site and the livings households, as *Explanation 1*, also maintain the scale of rites, or maybe even upscale the rites since more attendees should be available to participate without temporal and spatial limitation.

## **Animal Crossing: Funerals in game environments**

Video games are usually non realistic, and people enjoy the instant gratification in a virtual fantasy land where they can take on roles such as wizards, fighters, and explorers to complete missions. However, some games feature a pace of real life with the possibility to perform life-like events and activities. These world-building games such as Second Life, The Sims, World of Warcraft construct an extensive digital environments where players “have spent years creating their own settings and characters, from the fantastical to the mundane” (Ionescu 2020). Players around the globe are using their avatars and tools to design, produce, and participate in digital replicas of real life events in virtual space such as parties, weddings and even funerals.

Animal Crossing is a quintessential one in this genre. Created by Nintendo, Animal Crossing released the latest version, New Horizons for their Nintendo Switch console, back in March 2020. Happening in real-time, the game lets people build their own worlds and reflect their actual “passions, personalities, and lives” (Ionescu 2020). The new release became insanely popular not only because its accumulated success, but the timing helped the game become a placebo during the global lockdown. Players



could reconnect and be present with their friends, and hang out just like they would do in real life. Consequentially, it has become a place to host cyberspace funerals.

Branden Perez, who passed away at the age of 23 due to complications from COVID-19 in 2020, was arranged a funeral service in the world of Animal Crossing by his family and friends who are fellow enthusiasts of the game. In the game, friends and family could visit the password-protected island Branden created and “leave virtual flowers as a tribute” and “view a virtual memorial complete with his photo” (Ionescu 2020). Similarly, other players of the game designed and crafted garden, tombstones to build their own mourning spaces to mourn the lost ones in this game. Some of these rituals enabled by the mobile game “may even be continued from previous” editions. A Reddit user on the Animal Crossing Subreddit shared his story– “A whole room full of ‘hey, Dad.’ Animal Crossing helped me as a lost nine-year-old, and I figure it can be a tool now, fourteen years later” (DaRienzo 2020).

*Fig. 6 Funeral in Animal Crossing*





Animal Crossing game as a mobile medium is exploited as *Explanation 3* to replace spaces for funerals and provide mourning occasions for individuals and groups, which keeps the involvement between the living and the dead. The mourners could gather with fellow mourners and hold funerals together to pay respect. It also delays the extinction of the social person by providing a digital space to create freely, and people use the space to create for the deceased for memorial purpose, while keeping them in mind. The allowance of co-presence is more immersive and interactive, in comparison to videoconferencing and other messaging mobile media because users in the game environment can move at their will, pick up and modify items, and interact with other users via avatars. This social and engagement within the game environments can be even pushed further if virtual reality is introduced.

Additionally, mobile game aids the ritual of mourning by filling user's daily routine with small, positive actions that generate instant gratification. The design of mechanics of the media can encourage the player to return to the game every day—even just for a little bit—to maintain this routine. Its possibility to habitualize the user's behavior should have a far positive impact on mourning, and help the mourners to navigate through sorrow, stress and anxiety.

## **AFTR: Audiovisual device-mounted grave**

Joseph Schechter founded the company AFTR after his father passed away from brain tumor. Experiencing his sister stressed over not being able to visit the father's resting place as often because she lived far away, he then created the first AFTR camera

that was installed onto the tombstone. Later on, he developed the idea and started providing a packaged service for people to “change the way people visit burial sites and remove the obstacles they face” as company AFTR (“Our Story”).

Their products are solar-powered mountable or grounded cameras for grave sites, and with the accompanying mobile app and monthly subscription, users can manage the camera directly from their phone or tablet; check in on the memorial; talk and play music to the site; archive and access recorded photos, videos, and audio streams in the app. The “Peace of Mind” subscription plan allows capturing a photo of the resting place every day and it appears in the mobile app. Meanwhile with the “Stay Connected Plan”, users can access the AFTR camera stream at any time.


*Fig. 7 AFTR Camera*

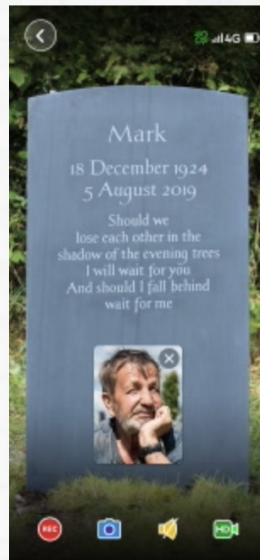



# Connect, View, Talk, Listen.

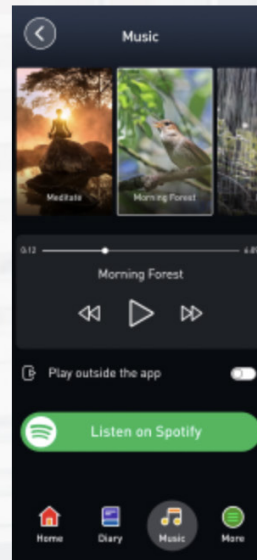
24/7 streaming access with the AFTR App.




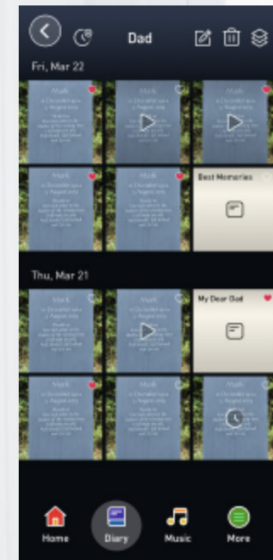
  
Manage your camera  
directly from your phone  
or tablet



  
Peace of mind - check  
in to make sure the  
memorial is being taken  
care of, rain or shine



  
Connect to a soothing  
mental space with  
music features and  
meditative functions




  
Archive and access your  
photos, videos, and  
audio streams in the  
app's Diary

Fig. 8 AFTR Application

AFTR's offering can be attributed to *Explanation 1* for mixing mobile media of digital application and hardware and bridging the living ones far away with the grave site. The system simplifies and eases the ritual of grave visiting by allowing co-presence of both the living and resting place of the dead. The usually formal actions that require planning ahead are turned into extremely simple actions that can be performed 24/7 with a mobile device, overcoming the spatial and temporal limitations. By installing audiovisual system composed of a camera, speaker and microphone onto the grave, users are offered the possibility

to communicate actively to the grave by talking onto the built-in microphone on their mobile devices or playing specific song within the AFTR application to aid their mourning process. The gravesites, in return, are passively communicating to the users by offering a camera stream and an audio stream picked up by the installed microphone. The communicability, usually linear in most of the death rituals, is enhanced with AFTR's adoption of mobile media that carries appropriate components. Because of the accessibility of the application which can be connected to the audiovisual system on the gravesite 24/7, the mourners are enabled to practice the ritual of mourning anytime they want, and they should share the feelings of staying connected with the deceased with other family members who also have access.

## **RipCemetery and iRip: Virtual cemetery**

The previous endeavor by AFTR is to augment the cemetery and make it more accessible. In Italy, entrepreneur duo Jacopo Vitali and Gianluca Tomasi developed an app titled RipCemetery back in 2015 aiming to transfer cemetery space into the digital world. It was designed to create a virtual family tomb for family members and pets that can be customized with a variety of visuals. The virtual tomb was not public as the cemetery, instead, it is equipped with adjustable privacy settings to let the families determine who can participate. The ones who can visit would be able to add written notes, photos and videos—even virtual flowers and objects that would be purchasable as part of the initial plan. Followed by this endeavor, the duo quickly developed a product called iRip, “a digital cinerary urn”, which has the double duty of being “a vessel for cremains” and “a portal through which the

keepers of the urn can view tributes to the deceased” (Hartley 2019). It uses RipCemetery as the accompanying app with which the owner of the urn could customize the display, and allowed visitors could send virtual flowers, hearts or gifts with messages. The installation would send a sound signal to notify the family.

Applications like RipCemetery and iRip challenge the conventional view on the metaphorical relationship of body and soul by digitizing the burial site along with integrating the urn in a digital system composed of hardware and mobile application. Forms of rites are influenced in regarding to *Explanation 2*. For believes that the deceased or the soul needs to have a calm or isolated space, and they belong where they can rest in peace, a digitally connected household item in replacement of an actual burial site challenges the view. This replacement is the embodiment of mobile media involved providing a spatial alternative flexibility.

However, because the connection of this system enables authorized visitors to involve with the dead and the burial site in a much easier way as *Explanation 3*. The rituals of mourning and visiting with flowers and messages can be conducted digitally on the mobile device, without the obstacle of financial or environmental reasons, showcasing the spatial flexibility and accessibility of the system.

This introduction of storing urn in a household environment with mobile app as the occasion and means to interact could aid the grieving process of the living by habitualizing ritual behaviors. The scale of rites defined by *Explanation 1* are fragmentalized into daily simple actions on viewing the screen on the urn and interacting with mobile screens in comfortable home environments. This diluting used-to-be formal ritual into daily live interwoven with grief and mourning that typically happens at home, could solidify the social order by making the

# RIP CEMETERY

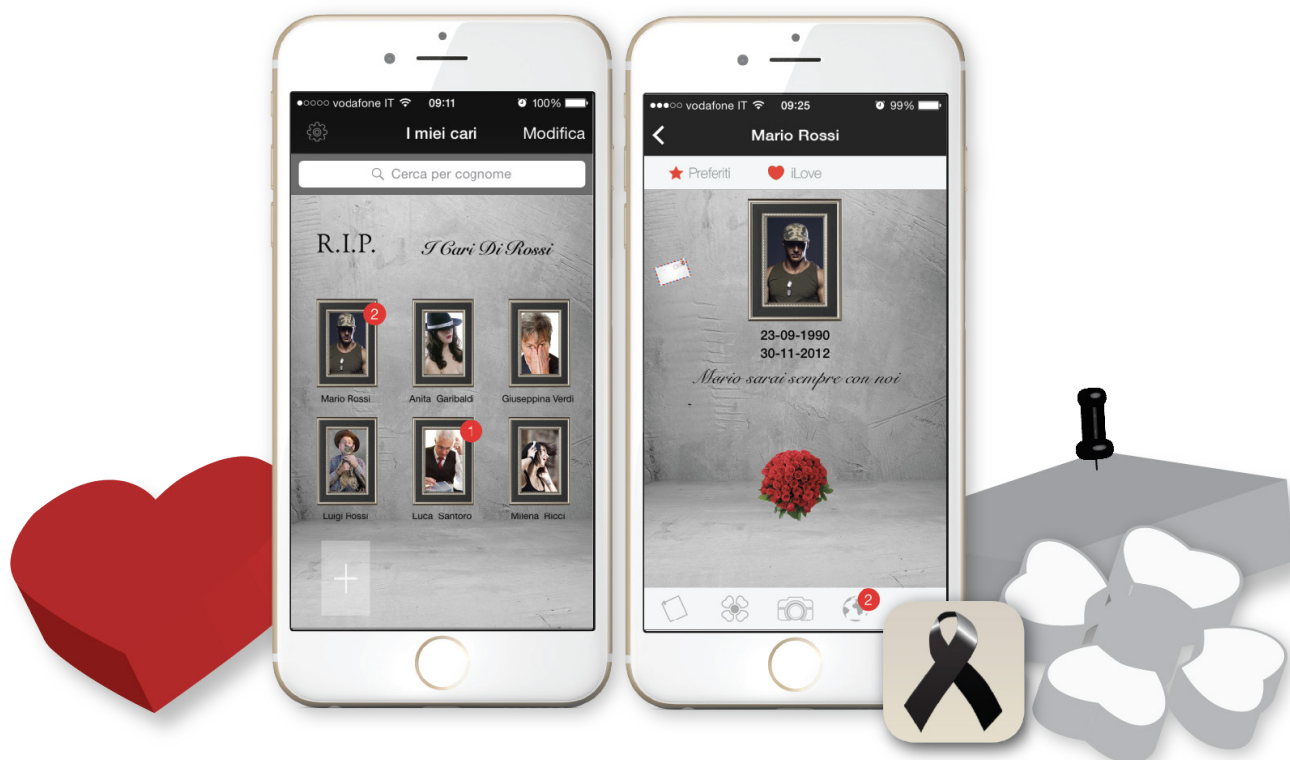
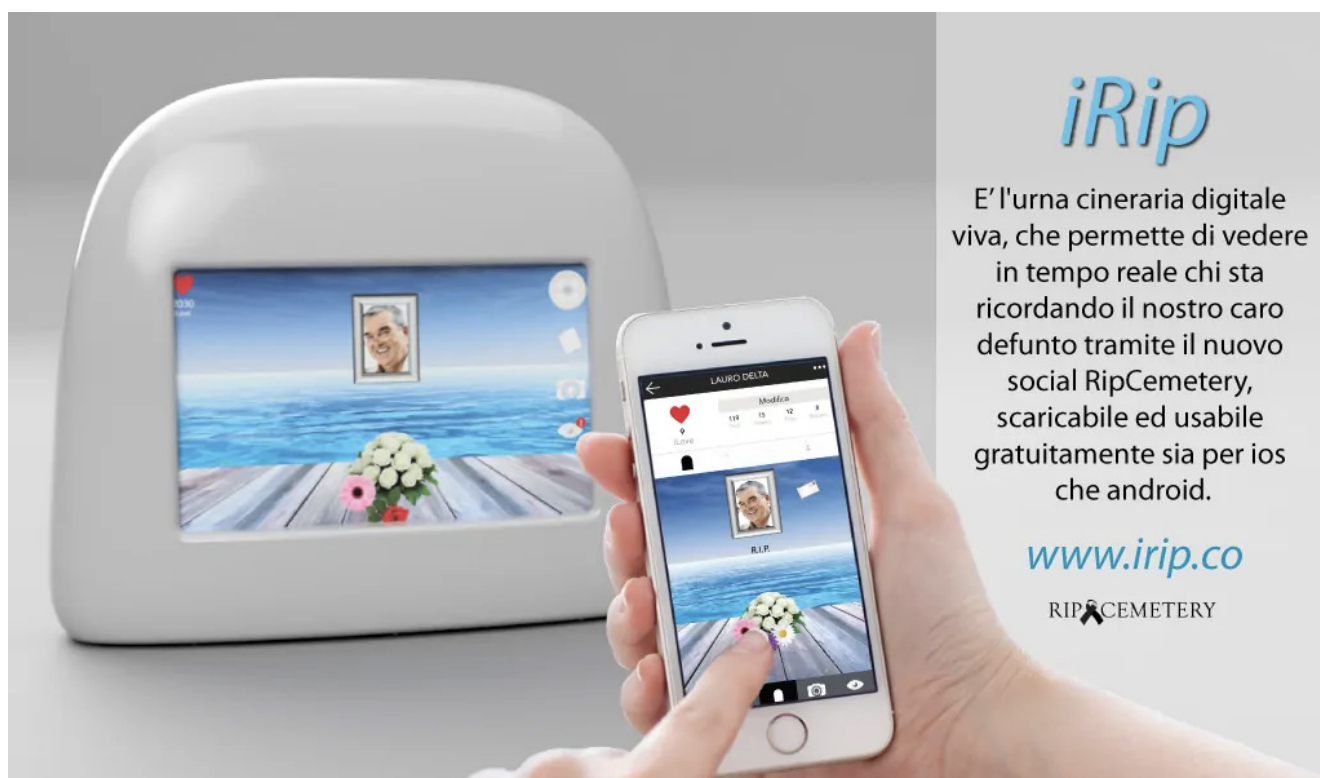


Fig. 9 RipCemetery Application

Fig. 10 iRip Urn and Application



## iRip

E' l'urna cineraria digitale viva, che permette di vedere in tempo reale chi sta ricordando il nostro caro defunto tramite il nuovo social RipCemetery, scaricabile ed usabile gratuitamente sia per ios che android.

[www.irit.co](http://www.irit.co)

RIP CEMETERY

process easier to participate and endure considering that we are already used to finding refuge behind the screen of a computer, tablet, or smartphone as a way of coping with our grief. However, the accessibility could also upset the social order by casualization the rituals.

## **WeChat: Paid ritual performances**

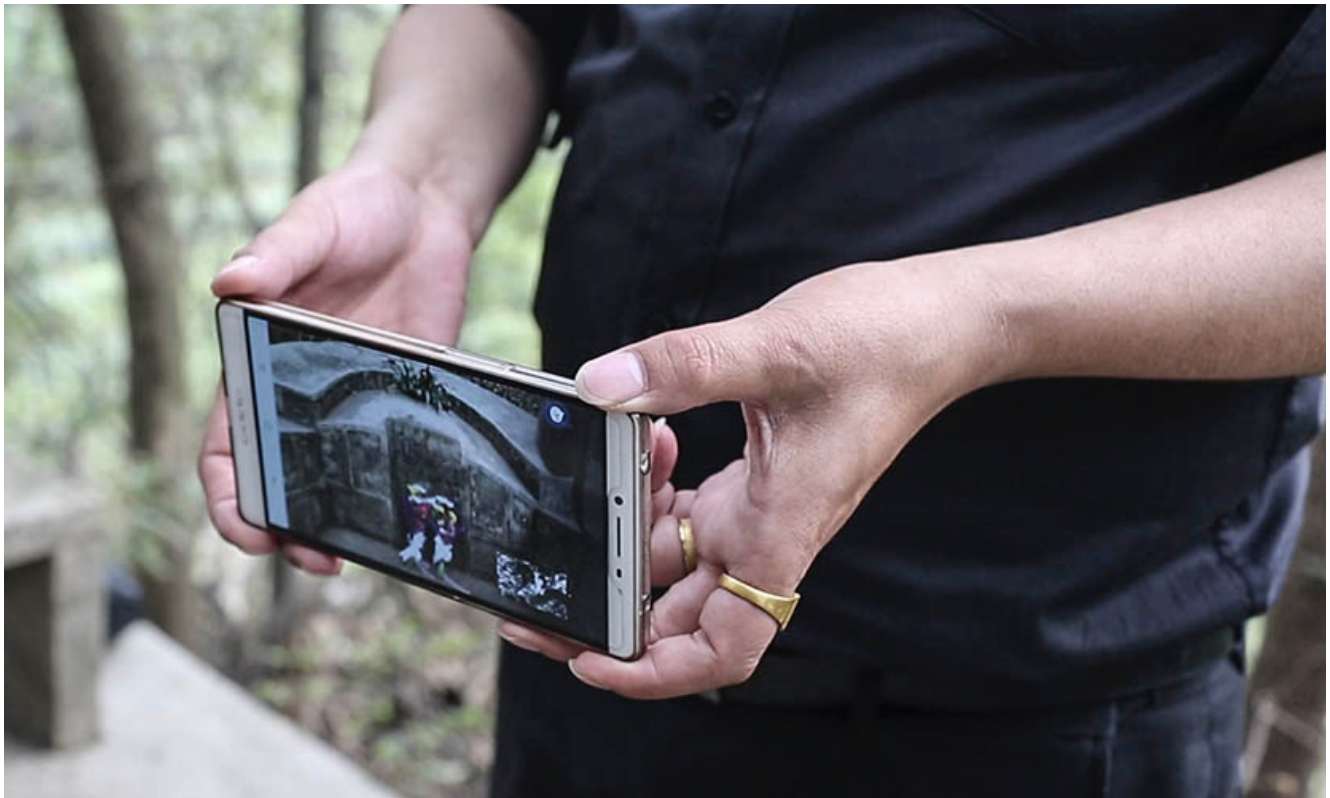
Qingming festival is the annual national holiday in China dedicated to paying respect to the deceased, and this tradition has been around for a truly long time. Even in modern days, city-living folks will have one extra day off to go visit the cemeteries where their beloveds ones rest in peace. This tradition, known as “tomb sweeping”, includes a series of rituals such as cleaning the tomb, pouring alcohol drinks in libation, burning incenses, burning joss paper and other papier-mâché items, though banned in many regions due to potential fire hazard and replaced with electronic candle lights and flower, to ensure the spirit of the deceased living a good or even luxurious afterlife.

Starting from 2017, Yuhuatai Martyrs’ Cemetery in Nanjing City offered proxy-tomb sweeping service for those who are too busy to perform the rituals themselves. Using one of China’s most popular social media platforms, WeChat, the cemetery, upon payment, would arrange workers to perform the traditional rites for the dearly departed and livestream the entire process to the absent relatives. The relatives would only need to register and make payment on WeChat. Then they would be given a personal password allowing them to tune in the ritual being carried



out on their behalf. This proxy service has not gone down well with many Chinese netizens who acclaim that “it is turning the solemn occasion into a mockery and could spell the end for 5,000 years of Chinese culture” (Tan 2017).

*Fig. 11 Performance of “Tomb Sweeping” via WeChat*



The mobile media, WeChat, plays a significant role here for being the booking and payment system as well as the live streaming platform. Along with the introduction of the proxy or performers of the ritual practices, it ensures and eases the burden of ritual of “tomb sweeping”. Users can be arrange remotely the death ritual via the mobile media, and witness the actual ritual being performed by a proxy without the mourners to physically be there and arrange everything on their own. This stress-free and convenient detour of “tomb sweeping”, as *Explanation 3* stated, utilizes the feature of providing spatial and temporal flexibility of mobile media.



In the mean time, the introduction of proxy, though ensures the ritual being performed, waives the supposed needs and duties of the mourners. Additionally, the involvement of monetary exchange laying in between the burial site and the mourners seems to challenge the social order umbrellaed under *Explanation 1*. Although money could influence the scale of rites as previously argued that in some Asian culture, performers are hired to make the scene of funeral and the reception as extravaganza as possible as a sign of wealth and respect. What makes the WeChat-mediated proxy different is that the physical presence of the mourners is replaced by an employee who is almost completely performative. This media-interposed clash between sincerity and performativeness challenges the social order by blurring the lines between solemnity and mockery, and making such ritual with the function of restoring social order by paying respect and respiting somewhat meaningless.

## **Chatbots and counterparts: Posthumous interaction**

Eugenia Kuyda, founder of Luka, a digital service whose initial aim was to “emulate human dialogue”, decided to pivot it to a tool through which she could communicate with her recently departed friend Roman’s “digital ghost”. With the help of Roman’s friends and relatives who sent over thousands of messages, she managed to create a chat bot that could mimic Roman’s way of communication. She then moved onto another project named Replika (<https://replika.ai>). As a “cross between a diary and a personal assistant”, Replica learn to mimic the communication style of one person by asking them series of questions. Her goal

with this project is to “get closer to creating a digital avatar that would be able to reproduce and replace” people once they pass away. This endeavor and interest in giving a voice to “digital ghosts” of the departed are shared by many technology and anthropology enthusiasts. Among them, James Vlahos, a journalist and an AI enthusiast, created “Dadbot” in 2016 when he found out that his father was diagnosed with lung cancer. Immediately after the diagnosis, James started recording his last conversations with his dad about his life story. Partnering with Pullstring, “a program designed to create conversations with fictional characters”, he managed to have the software “Dadbot” working on his smartphone which simulates written conversation with his dad (Sisto 2020, pp. 43-45).

Around the same time, Marius Ursache pitched his idea “Skype with the dead” idea during the 2014 MIT Entrepreneurship Development Program as recorded in his medium post titled *The Journey to Digital Immortality*. Then this idea evolved into Eterni.me, a site where users upload their mind “into a digital clone for the next 30–40 years” of their life by “talking to an artificial intelligent biographer”. It is, in Marius’ word, “something less spectacular but more pragmatic” (Ursache 2016). However this service, still in beta testing, bears the end goal of preserving people’s thoughts, stories and memories, with which “you could ask people in the past about their individual or collective experiences and thoughts” (Ursache 2016). ETER9, a similar service that has been discussed previously, when function, works with a “newsfeed similar to that of Facebook” (Sisto 2020, p. 48). Users could write posts and share as if they were on Facebook, along with making friends, commenting and reacting to each other’s updates. The user’s Counterpart would be in the same time learning their behavior and ways of interacting, and would be able to post auto-generated content on behalf of the user when they are away or deceased based on data mining resources.

These technologically advanced attempts are all working with heritages of the deceased, and revive them in a digital interactive form or generate coherent content and actions based on the data set. In the examples of Luka and Dadbot, the communication with the deceased are manually collected and processed with appropriate algorithm. Meanwhile with Replica.ai, Eterni.me and ETER9, users alive could utilize their mobile application and websites to actively contribute to training of their afterlife entity and remain interactive. Although all of the endeavors aim to prolong the social involvement between the living and the dead as *Explanation 3* or to hang on to the bond that death has dissolved, “puppet death” is avoided with the latter tools. The dying ones are provided with the power to arrange their legacy and future post-humous social engagement that will happen on these mobile media platforms before death. Because of the need of user participation to have as much “minuscule digital footprint” as possible to mimic them as accurately or identically as possible, the media of mobile application and website are being exploited for its spatial and temporal flexibility. In this way, the collection of user’s thoughts, stories and memories and training of the Counterpart can be done with daily interactions anytime anywhere. In the example of Dadbot, the mobile application James managed to develop with external help also provides easy accessible to soothing stimulated communication which “soften[s] the blow of his loss” (Sisto 2020, p. 45).

The underlying ideology of afterlife or digital immortality in these services is a realm that has yet been explored much in the world of eschatology, and it still needs much debate from all the scholars on whether these approaches could help us realize digital immortality as contained by *Explanation 2*, or rather what immortality really means in the world of digital. What we do know is that these services are designed “from the perspective of those who remain, not of those who have died” (Sisto 2020, p. 64). As Luigi Pirandello stated, “Those who think they are alive

also think that they are crying for their dead. Instead, they are crying for one of their own deaths, one of their own realities, which no longer exists in the hearts of those who have died” (Pirandello 1956). These chatbots and Counterpart only keep the living ones’ interaction with the dead, which “disrupt the coping mechanism of conscious or preconscious dissimulation, put us in the position of feigning possession of that which we no longer possess” as argued by Davide Sisto, “relying as much on our full awareness of the loss as on our simultaneous desire to deny it.” This duality standpoint mixed with our habit of delegating our personal stories, memories, and experiences to any artificial agents, allows “today’s digital ghosts to be more alive than ever” (Sisto 2020, pp. 65).

# ***4\_User research and benchmarking***

## ***4.1 User research method***

The existing attempts by mobile media from selected fields, from social media, game, live streaming service to hardware-software product and digital afterlife service, were analyzed with the framework of Hertz's tripartite model and their impacts on correlated death rituals. Some of these cases, collected from scholastic publications, web services, news report, might seem novel and niche, meanwhile some are practiced more often. Therefore, in order to provide a more holistic overview of some of the mobile media involvement in death rituals in real-life scenarios from the perspective of user experiences, I adopted the commonly practiced qualitative user experience research method semi-structured interview. The findings of the interviews are organized and illustrated with the framework of user journey map because death rituals universally follow a general pattern of sequence which is essentially a journey. The interviewed users' involvement with various mobile media are mapped onto the general timeline of death rituals, which

provides the possibility to benchmark the covered mobile media.

I reached out to 15 people around the world, who fall into same age group of around 25 years old, growing up along the rapid development of mobile media. They recently experienced loss of their beloved ones or acquaintances, and they generously agreed to speak with me in person or via video chats to share their experiences.

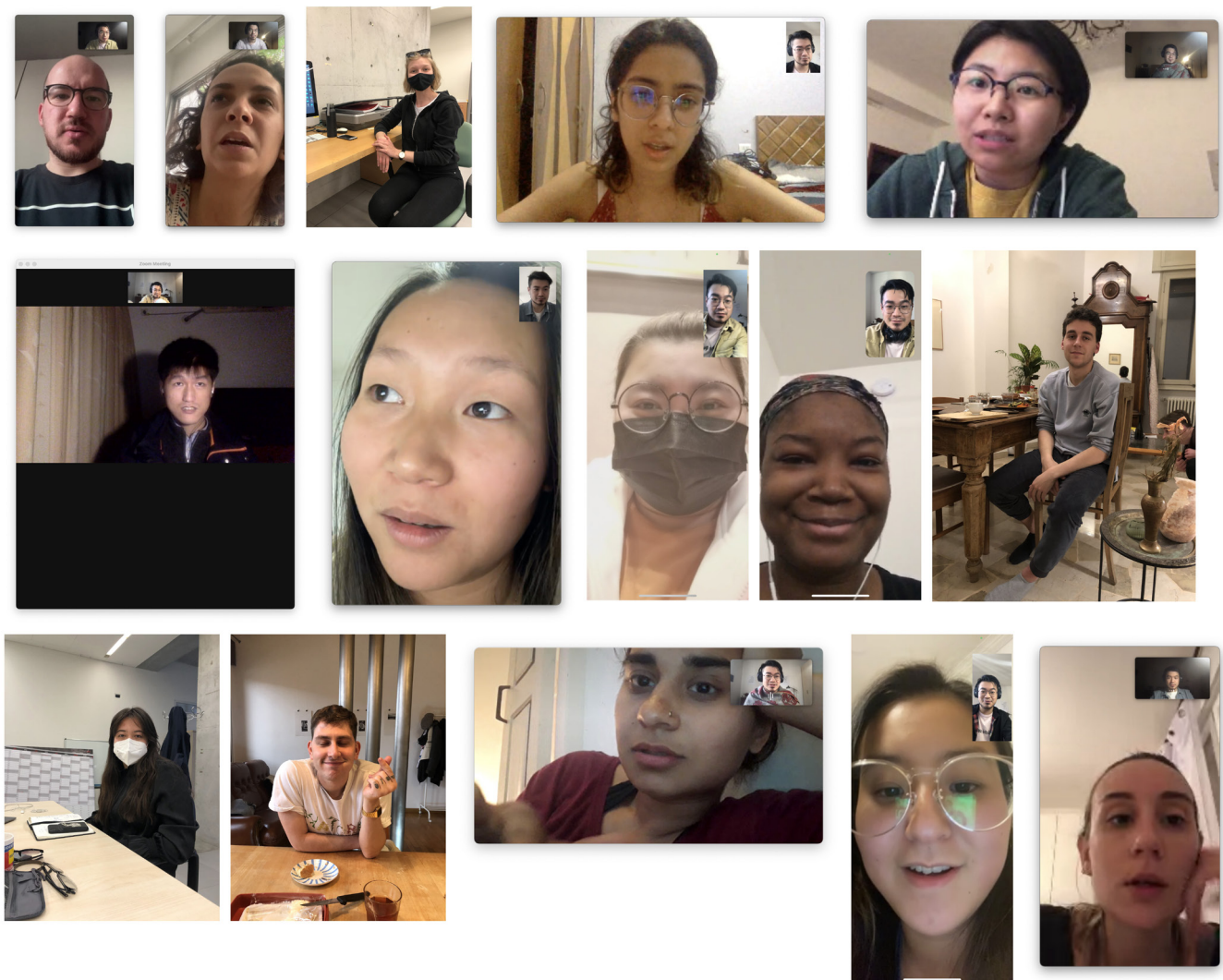
This user research is conducted with the method of semi-structured interview, combining predefined questions and open-ended questions. It is chosen because each interviewee's way of participating in death rituals could vary to a large extent. It would depend on the mobile media they had experienced with, their social relationship to the departed, the local culture and customs, which decide different obligations or etiquettes of what to do and how to do it.

The predefined questions asked during the semi-structured interviews are as follows:

1. Can you briefly describe the unfortunate event? Who passed away and what's the relationship between you and the deceased?
2. Which death ritual involved mobile media? What mobile media was involved?
3. Why was the mobile media involved? Which party decided to involve the mobile media?
4. Could you briefly describe your experience of using the mobile media in the death ritual you mentioned?
5. Is there anything the mobile media could have done to facilitate or mediate the death ritual better?

Follow-up questions were asked depending on the interviewees' answers, and they were mainly asked to clarify their feelings and thoughts and shed a light on interesting points that could be explored further such as interaction with other users, organization of the rituals, cultural explanation of the death rituals, and so on.

*Fig. 12 User Research Interviewees*



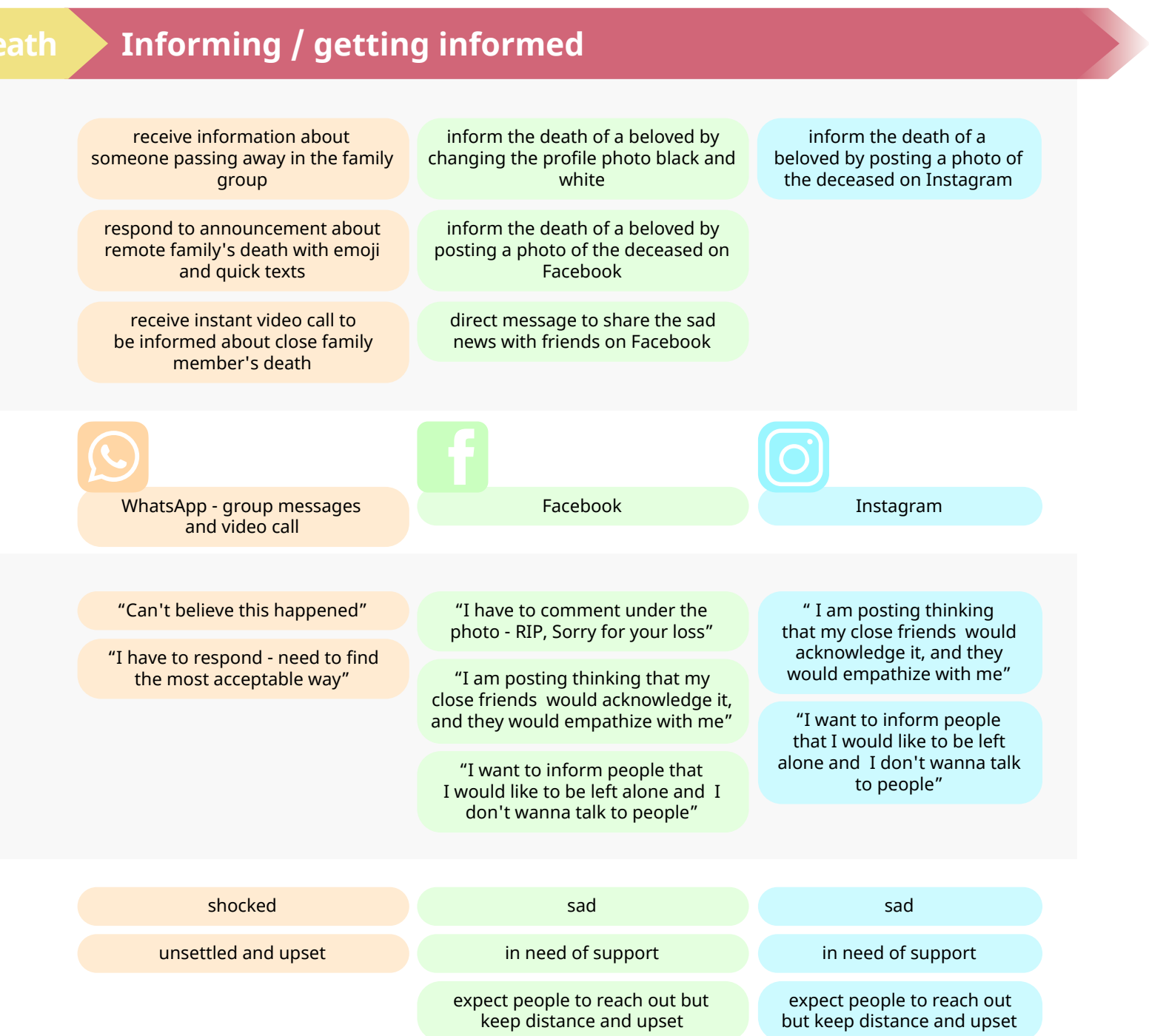
## 4.2 Mobile media in death ritual journey map



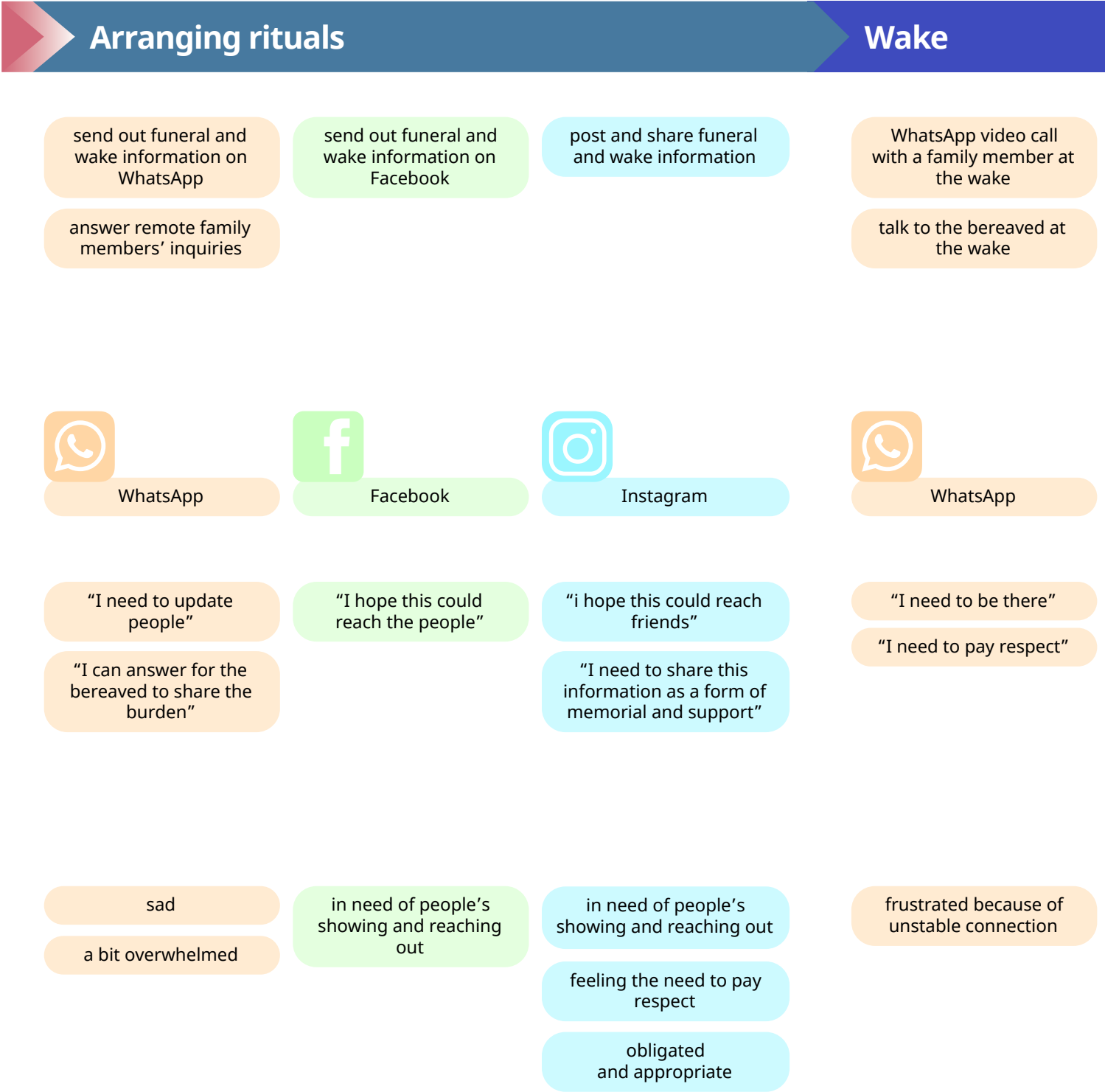


Following the structure of user journey map, the results of the interviews are put into the phases of journey- pre-event of death, event of death, informing or getting informed, arranging rituals, wake, funeral, and mourning. The listings in the sections, which are actions, touchpoints (which mobile media, or which function of the mobile media), user thoughts and user feelings, follow the

Fig. 13 Mobile media in death ritual journey map



fashion of using different color to differentiate which mobile media they were referring to. The mobile media the interviewees had first person experience during the death rituals are a Polish cemetery locator web service, WhatsApp, Zoom, Facebook, Instagram, YouTube, Animal Crossing, iPhone album app, Dead Man's Switch (an electronic will web service - setting up emails to be sent to designated recipients after users fail to confirm "still alive").



## Funeral

Uthavni event held on Zoom

WhatsApp video call with a family member at the funeral

live stream funeral service on Zoom

attend live stream funeral service on YouTube

talk to the bereaved at the funeral



Zoom



WhatsApp



Zoom



YouTube

"I need to set up this meeting for the community to come join the memorial"

"I need to be there at the funeral"

"I can pay attention to all the eulogy givers"

"I need to attend the funeral"

"chaotic at first when everyone was trying to speak so I needed to monitor and ask everyone to text instead"

"I need to talk to the bereaved to pay respect"

"This is organized quite well"

"I can't interact with any of the people on here"

"I am not involved in conversations, and don't need to look sad all the time"

chaotic at first but later on it felt at ease

weird grieving process

weird, feel lonely

feel distant to the family of the deceased

nice that the community can still come together virtually, and recording and texts can be shared

tough because the need of swift transition to go on with daily life

feel closer to people

amazed at the streaming technology (various cameras views available), seem very professional

frustrated because of unstable connection

nice to be able to see different faces

## Mourning

locate a specific bury site for paying respect

share photos and memories in the family group

get invited by the wife of the deceased to share memories and photos onto a dedicated page for the deceased's daughter

post photos of deceased

listen to the funeral recordings shared by WhatsApp

see others post common friends

see photos and memories in the family group extensively in the first few weeks then during special occasions such as holidays and birthday of the deceased

comment on colleague's black and white profile pictures and updates



Cemetery Catalog



WhatsApp



Facebook



Instagram

"This is actually quite convenient"

"I don't need to see these photos and reminded of the death"

"I am not very close to the deceased so maybe I shouldn't post"

"I need to see sad news to make they know what through"

"It's slow because many people are trying to visit cemeteries on the same day"

"Do I need to respond? What should I do?"

"Should I comment RIP Sorry for your loss?"

"Should I respond? What should I say?"

"I wonder who is behind this service"

quite amazed to know this platform exists, and can be visited on a phone.

sad and embarrassed to be reminded of the deceased

surprised to be invited since not very close

in need of support from other

Kind of annoyed on how slow it can get when a lot of people are trying to access.

feel powerless on how to interact

empathetic for the bereaved

expect people to come out but keep

temporarily m



s of the  
relative

osting the  
d's obituary

named one villager in  
the game to the recently  
deceased grandma's  
name, so she felt she  
could be close to her

keep the album on the  
phone of the deceased

ram



Animal Crossing



iPhone photo album

hare the  
y friends so  
t I am going  
gh"

"It would feel like my  
grandma is always here  
with me"

"I will keep the photos  
and the memory forever  
by making copies"

ach out?  
d i do?"

upport from  
rs

loved and assured

nice to preserve the  
memories

e to reach  
o distance

oriented

reluctant to go  
through the photos

melancholic

## ***4.3 Summary of findings and benchmarking***

### **General distribution of mobile media involvement**

In terms of general distribution and frequency of appearing, for the five of the interviewees who brought up the usage of WhatsApp, it appears in all the phases of death rituals other than in event of death. This universality comes not only from how penetrated this instant messaging app service is highly penetrated into the societies and cultural contexts where the five interviewees are from - Brazil, Singapore, Spain and two from India - but also the functions of video call and group messages make it accessible and convenient to enable co-presence when people aren't able to physically be there; to share instant or sensitive messages with a larger audience; to mourn within a social group.

During the phase of pre-event of death, in addition to WhatsApp,

which is used to talk to the interviewee's dying relative, Dead Man's Switch is also brought by one interviewee. It functions similar to an "electronic will" where emails can be written and they will be sent to designated recipients if the user fails to confirm that they are still alive by simply clicking to a periodic confirmation email.

None of the interviewees has experienced or observed the usage of mobile media in the event of death.

When users are informing or getting informed about someone's death, WhatsApp and social media, Facebook and Instagram, are brought up by in total six interviewees. Instant sharing of the time-sensitive information and news are needed, as well as broadcasting the information to a wider audience for the purpose of inform the public and invite to the funeral or any memorial event.

These three social media are the same case for the arrangement phase where point to point communication is needed for confirming details, and point to multi-point communication is needed for announcement and invitation.

Live stream services Zoom and YouTube are mentioned by three interviewees mainly used in the wake and funeral phases where people need to come together. All three of the interviewees explained that Zoom and YouTube are chosen because of COVID-19 gathering rules.

Animal crossing, iPhone photo album, and a Polish cemetery locator each is only brought up once. Unlike WhatsApp, Facebook and Instagram also brought up for mourning phase where sharing photos is predominantly the mourning activity, these three are all individual and personal.

## **Spread the message - messaging apps and social media**

Informing and getting informed phase happens right after the event of death, and the message related to the passing away of someone is extremely time sensitive. In many cases, the message regarding the death of someone comes unexpectedly. Three interviewees list WhatsApp as the mobile media where they were informed about the death of someone they know, and that's where they need to form first hand and direct emotional response and linguistic response. Since the messages came unexpectedly, the three users share the common feeling of being "shocked" by the message, and felt "unsettled and upset". Among the three, two of them were receiving the messages in a family WhatsApp group and one received a video call from a direct family member to inform him about another immediate family member's death. Regarding the announcement made in the group, the users had concern on how they should respond to the message. Typically, they described that people in the group would respond with sending heart or praying emojis. But one user was reflecting on herself whether sending out these emojis are enough for "responsibility, obligation and respect" other than "feeling that you have done your part". The family group and the video call these two channels were chosen because the deceased was close to the one getting informed and part of the family group. This close kinship determined that immediate and private communication that the mobile media enables was chosen.

However, for the living ones who aren't so close to the deceased or the bereaved, a broader communication approach is preferred. Two interviewees shared their experience of encountering someone's death on Instagram and Facebook these two social media. One of the two interviewees lived in Vietnam for work,



and she noticed multiple times when her colleagues' profile photos turned to black and white as a way for her colleagues to inform their not-so-close friends what they were going through. For the interviewee, she felt the need to comment under the profile photo with phrases such as "RIP" and "Sorry for your loss". The other interviewee mentioned her own encounter on Instagram as the "modern tradition or custom" in Tunisia where many friends and family members post the same photo of the deceased with obituary, as a way to inform the living one who know about the deceased yet haven't been reached by the news, and everyone around the mourners, indicating what they are going through and showing publicly their condolences and respect to the deceased.

One interviewee posted a photo of her passed Grandma both on Facebook and Instagram with personal text. She posted information on these two social media because they were relatively private since she only befriended with her friends in real life on these platforms. She wanted to reach out for her friends' support, but the same time informing them what she was going through and the friends "shouldn't expect too much from her" then.

One of the interviewees had to jump into messaging and answering inquiries from other family members because of the etiquette to not bother the immediate family of the deceased in India immediately after the event of death. She said she was "sharing the burden of the bereaved".

Messaging apps for its close network and social media for it being more public are involved in the informing and getting informed phase of death ritual. The choice of the mobile media depends on how close the bereaved and the deceased with the users are. Though other users are generally feeling compelled or expected to respond given it being a simple "sorry for your

loss” and “RIP” or emoji responses. The posting on social media messages does not only function as a way of public showing of the emotion, condolences and respect, but it also functions as explaining what the users are going through and preparing their friends for the upcoming period of mourning, expecting them to be more understanding and supportive. This echoes with the social function of death ritual where people come together to show solidarity and indicate allegiance and duty, reaffirming social bonds.

## **Wake and funerals via live streaming services - ups and downs in special time**

Due to the COVID-19 global pandemic, many of the travels and gatherings are prohibited, and certain death rituals that require physical gathering of the mourners are also unfortunately heavily impacted. Four of the interviewees had to rely on live streaming services Zoom, YouTube and WhatsApp video call to be co-present at the events.

One interviewee who wasn't able to travel back home to Singapore because of travel restrictions shared her experience of video calling with her mom on WhatsApp to attend the wake and funeral. She used the mobile media to talk to family members who were present and pay her verbal condolence to the bereaved directly out of the need to be there and pay respect directly. Another interviewee participated in the funeral of an acquaintance by watching the live streaming on YouTube. The remaining two interviewees were using Zoom. One of them participated in an online funeral and memorial session on Zoom

for her deceased uncle. The other participated in an Uthavni event for her late cousin-in-law hosted on Zoom. Uthavni usually is the event where the community come together to “chant, give flowers, and give condolences”.

Regarding this approach of continuing the involvement between the living and the mourners with the soul, as well as maintaining the social order by not remain the scale of rites by overcoming physical and lawful limitation, the interviewees shared some common unpleasantness. Although these live stream mobile media could enable their co-presence with Internet, the interviewees still felt “lonely” and “distant” to the family because they could only text the family on Zoom since everyone was encouraged to mute themselves. For the YouTube live stream, the interviewee felt more so because she could neither communicate with the bereaved family in any way nor talk or interact with other attendees. It is “weird” and “tough” because they had to go on with their daily life immediately after the event. It was also mentioned that the Internet stability issue and the chaotic organization since “live streaming such events is still quite new” contribute to the negative experience.

However, a few positive feedback also emerged from the interview because of using these mobile media in such events. For example, one Zoom funeral had a moderator who would mute and unmute participants according to the schedule of speeches. The interviewee specified that she could “easily see everyone’s face since all the camera were on”, even more so for the eulogy givers. She could really pay attention to the speeches. She also specified that it felt easier than the previous funeral she had been to because she “didn’t need to look sad all the time”. This Zoom funeral also ended on a positive note with a toast to her late uncle where everyone raised their glasses to “cheer and celebrate” the life of her uncle. The Uthavni event experienced by another interviewee happened on Zoom was recorded. Although

everyone was muted, they could text their condolences and memories in the Zoom chat. The bereaved family then asked the interviewee who helped set up the Zoom call to download the recording and the text content so they could preserve them. As for the YouTube streaming, though being very non-interactive, the interviewee present pointed out she could clearly tell that a professional crew, which might be partnering up with the church, was behind the live streaming since multiple cameras in different locations of the venue were set up, and the live stream would switch to various camera view according to the movement of the priest and ritual agenda, which was “quite nice”.

As special methods during special times, the mobile media mentioned above provided ways to continue the involvement of the living and the mourners overcoming temporal and spatial limitation. However, based on the results of the interview, being co-present via mobile media still fall short compared to the conventional physical gatherings for rituals regardless the certain improvements on focusing on participants and innovative ways of broadcasting because of the technology involved. They maintain the social functions however in terms of the psychological functions of rituals, with the mediation of mobile media, the users who need to navigate and allay anxiety seem unable to do so.

## **Diverse and individualistic - various mobile media in mourning phase**

The ritual of mourning can vary from person to person, and the interview results echo this argument. Three interviewees

stressed their own way of mourning by involving the game Animal Crossing, iPhone photo album, and a Polish cemetery catalog these three mobile media. Among the three, one interviewee has been very fond of the game Animal Crossing, and have been playing it religiously for the ability to create her own world. She decided to name one of her villagers who she has to interact everyday in that game after her recently-deceased grandma. By doing so, she can feel like her “grandma is always there.” Another interviewee, after her dad’s death, kept holding onto the phone belonged to her dad. She saved all the photos from the album and stored copies in her laptop because she could “keep the photos and the memory forever by making copies”. Although she never looked at the photos so that she “wouldn’t think about the death” of her late dad, but knowing that the memories are preserved well she feels nice. These two examples are using mobile game and mobile phone application to enable the continuation of the involvement between the mourners and the deceased. For the other interviewee of the three, she annually uses a “nice” tool, a cemetery catalog site, managed by private individuals to locate and look up where the grave is located. This site is “quite popular because it creates convenience” for people who need to pay respect at the cemetery and mourn. This tool improves the accessibility of the burial sites for mourners especially the elderly.

The individualistic is also shown in one interviewee’s confession that he didn’t enjoy “seeing photos of the deceased grandma posted in WhatsApp group” by his aunt, who posted extensively in the following week of the death and every holiday. He found it quite “embarrassing and awkward” because he had to be constantly reminded of the death of his grandma, which conflicts with his own way of mourning which is less explicit and avoid relevant content on social media.

The other interviewee confessed that her way of mourning her

late grandma was to post photos of her on social media, mainly Instagram and Facebook. It is her public showing of respect and missing, but she always was seeking “support” yet inform her close friends that she would prefer “to be left alone” for the mourning phase.

## **Event of death - missing in action**

Interestingly, none of the 15 interviewees has mentioned any mobile media involvement in the actual event of death. The possible answer to this phenomena is that the involvement of mobile media in one of life’s most vulnerable and sacred moments seems extremely profane because of mobile media’s heightening of “the witnessing relationship” of the user and the event. With the involvement of mobile media, the ethic debate of “the unevenness of bodies” could be highlighted where some bodies would appear to be more “mournable” or “grievable”. As Kathleen M. Cumiskey and Larissa Hjorth argued, “age, ethnicity, class, and sexual orientation all feed into this unspoken biopolitic”, and yet it needs much critique and debate (Cumiskey and Hjorth 2017, p. 204).

# ***5\_Summary and conclusion***

This thesis work is conducted as an attempt to answer to the research question that how mobile media is involved in contemporary death rituals.

It starts with context research about death, rituals and mobile media by highlighting renowned sociologists' views on death, society and culture, which are fundamental in sociology and anthropology. Following the definition of death, concept of rituals and death rituals are introduced citing one of the most important works in the field done by Robert Hertz - his tripartite model analysis of death rituals framework. Social functions and psychological functions are then summarized with common examples of death ritual practices. As the other half of the research question, mobile media is later defined with its brief development history. Then the mobile media's feature of being an interactive and participatory communication highlighting co-presence is introduced.

Built on these academic theories, the features of mobile media

are explained within the framework of Hertz's tripartite model analysis of death rituals - co-presence of mobile media overcomes temporal and spatial distances obstacle, maintaining "the expression of social order"; the extended presence of the soul and the dead can prolong the involvement between the living and the mourners with the soul and the dead, slowing down "the extinction of the social person"; the co-presence could obey or challenge eschatology, reinforcing "the forms of rites" and "the metaphorical relationship of body and soul" or brings in unconventional ritual practices.

Eight existing attempts by various mobile media are then deliberately analyzed relying on Hertz's tripartite framework and user experience design perspectives, aiming to offer systemic insights on the impacts the selected mobile media is making and its features being explored. They are: Facebook's legacy contact and memorial profile functions mechanisms, which ensure the possibility of continuing the involvement between the living and the dead; the phenomena of posting selfies at the funerals that challenges the social order; live streaming funerals on Zoom, which avoids any disruption on the involvement between the living and the dead, as well as maintains the scale of rites; virtual funerals in game environments that keeps the involvement between the living and the dead; AFTR - a mountable hardware and software system for the grave that alters the forms of rites and metaphorical relationship of body and soul; virtual cemeteries services RipCemetery and iRip that influences forms of rites, prolongs the involvement between the dead and the burial site, and breaks down the scale of rites; WeChat where paid ritual performances is used that keeps the involvement and challenges the social order; last but not least, chatbots and counterparts designed to provide posthumous interaction that prolong the social involvement, and alters the forms of rites by challenging eschatology and metaphorical relationship of body and soul.



The theoretical analysis of current mobile media attempts is followed by user research with semi-structured interview for insights based on their real-life experience. Fifteen users around the age of 25 coming from various cultural backgrounds are interviewed, and the user research results are organized borrowing the format of user journey, following the general timeline of death rituals- pre-event of death, event of death, informing or getting inform, arrangements, wake, funeral, and mourning.

In terms of the general involvement, messaging app WhatsApp are involved in almost all phases, and social media Facebook and Instagram are used more in the informing and getting informed phase, arrangements and mourning phrases. Live stream services Zoom and YouTube are mentioned by three interviewees mainly used in the wake and funeral phases. Animal crossing, iPhone photo album, and a Polish cemetery locator each is only brought up once in the mourning phase along with the WhatsApp, Facebook and Instagram.

For the interviewees, messaging apps and social media are involved in the informing and getting informed phase of death ritual but the choice of the mobile media depends on how close the bereaved and the deceased with the users are. Though other users are generally feeling compelled or expected to respond given it being a simple “sorry for your loss” and “RIP” or emoji responses. The posting on social media messages does not only function as a way of public showing of the emotion, condolences and respect, but it also functions as explaining what the users are going through and preparing their friends for the upcoming period of mourning, expecting them to be more understanding and supportive. This echoes with the social function of death ritual where people come together to show solidarity and indicate allegiance and duty, reaffirming social bonds.

Zoom, YouTube, and WhatsApp video call have been used to live stream funerals during COVID-19 for their ability to overcome temporal and spatial limitation. However, based on the results of the interview, being co-present via these mobile media still fall short compared to the conventional physical gatherings for rituals, although a few positive remarks are made such as the possibility to focus on participants and innovative ways of broadcasting. They maintain the social functions however in terms of the psychological functions of rituals, with the mediation of mobile media, the users who need to navigate and allay anxiety seem unable to do so.

Mourning phase is proved to be an individualistic phase where unique mobile media is involved differently. They serve the user's preferred ways of mourning and individual needs. Meanwhile, the use research also shows the lack of mobile media presence in the actual event of death.

Viewing the results comprehensively, it is not difficult to conclude that mobile media have been exploited mainly in slowing down the gradual extinction of the social person and ensuring the involvement of the living and threat without temporal and spatial limitation and obstacles. The emphasis largely can be attributed to mobile media's feature of enabling its users to practice co-presence. Seven out of the eight existing attempts or case studies, though covering a range of social media service design and phenomena, to tools, games, hardware innovation, all share the same impact on prolonging the involvement of the living and the deceased. This can also be supported by the fifteen user research interviews where eight out of the nine mobile media mentioned and experienced by the interviewees are functioning to prolong the involvement between the two.

This clustering of mobile media, no matter the format, could also possibly be explained by the overall human being's non-

acceptance regarding death. As argued earlier, though being unavoidable, humans avoid projecting their lives onto death. Once the death inevitably happens in their surroundings especially kinship circles, they still would prefer to have the thought or to convince themselves in certain ways that the deceased is still around to offset the tragedy. In the light of this intrinsic human needs to neutralize the feeling of loss because of the death, many mobile media are turned to then tailored into a “placebo” where the living can still feel involved with the deceased.

That being said, almost all the mobile media’s attempts emerged during this research are designed for the people who are still alive with the exception when users can decide what would happen to the social media account, and what emails they wanna send out to specific people after their death. Referred to Hertz’s tripartite model again, this tendency coined as “puppet death” could also explain why mobile media are more functional with the living and the mourners involved such as *Explanation 3* as previously argued, and *Explanation 1* with the example of funeral selfies shared on Instagram that challenges the institutionally supported forms of ritual and endeavors to virtualize cemeteries. When it comes to the ritual category that tackles the soul and the dead and the corpse and the burial *Explanation 2*, without the living being the key stakeholder, attempts by mobile media could potentially be read as profane and blasphemous by challenging the eschatological public believes to a great extent, and it still needs much debate and exploration from all the relevant scholars.

Based on what have been examined in this thesis work, I would argue that what could as well use more endeavors from various sectors—designers, ethics scholars, sociologists, and related scientists and developers—are how people can be better involved in their own future death, considering death won’t be avoidable soon. Turning the passive mode of “puppet death” into rituals

where the deceased could actively anticipate or participate with the help of mobile media could arguably make the tragedy less suffering, and, quoting Jed Brubaker, “death is a little bit kinder to people” (Marshall 2019).

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