Exploring Novel Ways of Continuing Bonds Between the Bereaved and the Deceased Through a Multimodal Haptic Artifact

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Abstract. Death and mourning are very personal subjects, and everyone deals with grief in their own way. According to in-depth interviews in Korea and Japan with people who lost their loved ones more than 10 years ago, there were some moments when they missed the deceased and some were still grieving. The mourning of the anniversary of loved one's death was become a more formal occasion. As such, I propose an artifact that presents an immersive mourning experience to the bereaved using heartbeats and scent. This natural stimulation can evoke momentary calmness by simulating the deceased's embrace along with his/her heartbeat and smelling his/her scent. This immersive atmosphere gives a new way of continuing bonds between the bereaved and the deceased and allows the bereaved to move forward.

Keywords: death, mourn, the deceased, haptic experience, heartbeat

1. Background and Motivation

Throughout the past, humans have been trying to preserve the memories of the deceased, such as 'mourning jewelry' and 'memento mori photography'. This desire to preserve the memories of the deceased is a natural desire in humans. At present, some try to evoke the deceased through technology. A South Korean documentary called "Meeting you" from 20201 showed a mother meeting her deceased daughter using VR technology. This was a sensational way that technology could touch human's emotion. However, the reaction waned from season 2 and 3. It was seen as too artificial and unnatural, and people could not empathize as they did for season 1. Another documentary² showed a man who had lost his wife the previous year and he wanted to make an avatar of his wife for their young daughters. However, when he first met the deceased wife's avatar, he couldn't feel his wife from the avatar. He was certain that his daughters would never feel their mother from this avatar. These circumstances could be described as the 'Uncanny Valley'3; the feeling of discomfort humans feel when they see something that looks or moves almost - but not exactly - like a living being. "Does meeting the deceased with VR or replicating the deceased in things such as cyborgs or avatars help to relieve grief of those people who are left behind?" This fundamental question has led me to investigate this project.

2. Design Goal & Concept

Through in-depth interviews with people who actually lost their loved ones, the concept is seen as "the image of the deceased in my mind, though it may be intangible and invisible, is the closest images of the deceased". For instance, if something triggers our memories, we can vividly evoke the deceased's memories, and we could also say that we 'met' the deceased. This refers to the guidelines below. 41) When a loved one dies, the relationship doesn't evaporate. 2) Offering users the opportunity to create, personalize and build a meaningful artifact - be it digital or physical -. 3) Some mourning symbols are extremely private, while others are meant to be publicly viewed. 4) In terms of psychiatry, 'expressing' is one of the treatments for overcoming grief of the bereaved. The artifact gives the bereaved an immersive mourning experience. They are able to feel the deceased's heartbeat and scent. This is a natural way to stimulate by evoking the moments that calm down the user, through the deceased's hug next to his/her heartbeat and smelling the deceased's representative scent. This immersive atmosphere gives a new way of continuing bonds between the bereaved and the deceased through a haptic and olfactory experience. It helps to trigger good memories of deceased loved ones to move forward to the next step in the grieving process. In terms of technology, the heartbeat is recorded with a stethoscope connected to a small vibrating speaker, and adjusting between the frequency of light and heartbeat.

3. Conclusion

Everyone deals with grief in their own way depending on their personality, culture, social convention and religion. With the haptic interaction of vibration, lighting and scent of this artifact, it is expected to form a discussion about the ways of mourning and contribute to existing cultures of mourning that are currently limited. The proposed research suggests a way of remembering the deceased through static images or sound to better provide a more interactive way of evoking memories through this artifact.

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