

# Designing Memorial Rituals and Practices: Overcoming Sensitive Contexts and the Constraints of Trial and Error

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Figure 1: Designing memorial rituals in various ways: A) Fenestra [11], B) SenseVase with Virtual Memorial [10], C) Supporting remote funeral attendance [15], D) Designing Virtual Funerals as design fiction [9].

## Abstract

This essay explores the design of memorial rituals in sensitive contexts where trial-and-error prototyping is not feasible. While iterative design works for domestic memorialization, public commemoration and funerals require alternative approaches. To address this, I have used expert interviews with concept videos and a design fiction film. By sharing these experiences, this essay aims to foster further discussion.

## Keywords

Mourning, Memorialization, Remembrance, Death Ritual, Funeral, Spirituality, Thanatosensitivity, Research through Design

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## Position Statement

Designing memorial rituals—such as funerals, memorial services, grave visits, and domestic memorialization—is highly challenging. As digital archives increasingly preserve data that remind the bereaved of the deceased, their significance continues to grow, driving greater demand for memorial rituals. However, modifying traditional rituals and practices remains difficult due to their long-established history, the sensitivity surrounding them, and the

unpredictable nature of death. Since the proposal of thanatosensitive design [6], HCI design researchers have been addressing this challenge.

My colleagues and I have also been designing memorial rituals for the past 20 years [4, 9–15]. In this article, I highlight and four CHI papers [9–11, 15] that focus on Research through Design (RtD) [2, 16]. These studies also involved creating research products [7] tailored to specific memorial contexts, as shown in Figure 1.

Fenestra [11] (Figure 1-A) is designed for domestic memorialization rituals and practices, drawing significant inspiration from Japanese domestic memorial traditions. In the deployment study, each participant who had lost a loved one in recent years used Fenestra for one week. This duration was chosen because, with a completely new product designed for a sensitive, grief-related context, we could not predict its impact. The study revealed diverse insights, showing that participants interpreted Fenestra in various ways—not only evoking sentimental and sensitive emotions but also bringing positive and cheerful recollections of precious memories with the deceased.

While domestic memorialization takes place some time after the funeral or farewell to the deceased, designing public commemoration and funerals is significantly more challenging. SenseVase with Virtual Memorial [10] (Figure 1-B) was designed to support public commemoration rituals by bridging a physical interactive product, SenseVase, with a Virtual Memorial site where multiple people worldwide could share virtual spaces for remembrance. While SenseVase was developed as a functional prototype, the Virtual Memorial existed only as a video prototype for expert interviews with individuals relevant to the concept. This study revealed a wide range of opinions, from highly positive to relatively negative, highlighting the complexities of designing public commemoration rituals that engage many people in a shared memorial space.

Recently, I have focused on designing virtual funerals in response to COVID-19, which restricted in-person attendance. Funerals occur suddenly, leaving the bereaved with little time to prepare. As an

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HCI design researcher, it is nearly impossible to carefully design a funeral in advance. In fact, my colleagues and I autobiographically documented our experience supporting a family's remote funeral attendance [15] (Figure 1-C). Initially, we planned to deploy our 360-degree telepresence system at the funeral, but it faced numerous technical issues and critical failures. As a result, I decided to use my smartphone with Zoom instead of our original research product. The reason was simple: funerals do not repeat, and we could not postpone participation to improve our system for a future event. Real funeral settings do not allow trial and error.

While virtual funerals have been in demand for various situations, they have gradually faded from public attention after the pandemic, especially in Japan. To explore the design of future virtual funerals, I collaborated with a video creator to produce a Design Fiction [8] film depicting a near-future world where virtual funerals are widely accepted [9] (Figure 1-D). Following my experience in 2020 [15], I aimed to design and implement virtual funerals in real-world settings. However, there was little to no demand from either the general public or the funeral industry, making it impossible to iteratively refine design prototypes through actual funeral testing. Instead, we incorporated several Diegetic Prototypes [1, 5] into the film, using the filmmaking process as a means to explore and discuss the design of future virtual funerals.

As these four studies demonstrate, designing memorial rituals and practices is not only inherently private and sensitive but also presents challenges that make typical design methodologies—such as trial and error and iterative prototyping, commonly used in other fields—difficult to implement. While deployment studies can be conducted to some extent in research on domestic memorialization [4, 11], this challenge becomes even more pronounced in the context of funerals [9, 15], which occur immediately after death.

At the conclusion of this essay, I aim to emphasize the ongoing importance of exploring how to design memorial rituals and practices, while also considering how to contribute to the HCI design community through RtD. Since thanatosensitive design was first conceptualized [6], several concrete research findings have emerged over the past years. One possible direction is to expand the scope of HCI design research by integrating perspectives from other fields. For example, when comparing the challenges faced in medical and nursing contexts (e.g., [3]), where professionals are responsible for patients' lives and must constantly strive to provide the best possible care, there may be valuable lessons to be learned for designing memorial rituals and practices.

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