Thanatosensitive Design Exemplars for Embodied Experience of Nonattachment

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Abstract

This positon paper highlights the less supported letting go aspect of the experience of loss and positions it within the HCI work on death and dying. It also argues for the value of embracing nonattachment and accepting impermanence and illustrate this with design exemplars piloted with 4 participants in Japan. Findings emphasize the value of the aesthetic, embodied experience to support the celebration of non-attachment.

Author Keywords

Thanatosensitive design; loss; attachment; letting go; biofeedback; design exemplars.

CSS Concepts

• Human-centered computing ~Human computer interaction (HCI).

Introduction

Increased interest in the topics of death and dying from social sciences has been also reflected HCI work, particularly in the thanatosensitive design of technologies [9]. Such work has been clustered in three strands [26]. First, technologies for the end of life have looked at tailored support often in the form of scrapbooks [33] for people living with dementia [8][24] or terminal illness [11][12][25]. Second, technologies for grief aim to provide support for bereaved people most often for continuing bonds [10]

Figure 1: Breathing out-based interactive art prototype for visceral experience of impermanence: before breathing (top), during breathing (middle), after breathing (bottom).

through digital altars [11][30][31] or tangible mourning stones [32], with less work exploring disposal practices to support letting go [13][23][27][28]. Third, inherited digital possessions are challenging to curate [13], and such work builds on memory technologies and cherished possessions with the aim to support remembering [4][14][15][17][21][22][25][32].

Loss Experience: Nonverbal, Cultural, Less Supported
Intrinsic to the death and dying is the experience of loss reflecting the tension between holding on and letting go. While the former is commonly supported through cherished possessions and honoring practices, there are fewer available practices for letting go. Moreover, attachment and grief theories provide limited accounts of loss experience and its non-verbal qualities. Loss is also a cultural construct with distinct approaches rooted in the tension between Eastern Buddhist philosophy and Western psychology's models of grief. Buddhist philosophy advocates detachment as a means to release oneself from suffering by letting go of the illusion of permanence to embrace the ever changing nature of self [6]. In contrast, Western psychology focuses on the consistency of self over time. While Western models of grief are still shaped by the controversy of continuing versus relinquishing bonds, Buddhist philosophy argues for a middle ground of being fully present and non-judgemental with one's grief, while both the griever and the relationship with the deceased are constantly changing. We know however that multisensory imagery and particularly arts and craft [5] supports sense making and the management of negative emotions, promoting recovery and wellbeing.

Design Exemplars
Informed by attachment and grief theories, interactive arts, we explored the design space of letting go technologies and inspire other researchers [29]. In particular, we aimed to design for subtle, mindful embodied and powerful means to viscerally experience the holding on-letting go process [16], by leveraging breathing out as input mechanisms in a biofeedback loop (Figure 1). Borrowing from Buddhist philosophy [6] and embodied cognition theories, we designed a web app which integrates a microphone so that and the interaction involves blowing into the microphone to blow away leaves on a tree displayed on the visual interface. The stronger (or louder) the breathing, the quicker the leaves detach from the tree and fly away, until the tree is left leafless.

The prototype was informally piloted with four participants from Japan (P1 Male under 25; P2 and P3 Females 40-50, and P4 Female 50-60).

Participants expressed appreciation for the emotional qualities of the interface and its celebration of impermanence: "*I feel like I become part of nature when I blow and the leaves/flowers come off the tree [and] It is very beautiful, the leaves look like birds flying*" (P2); "*I liked the image when the leaves were turned totally black; very beautiful! I could see some green at the bottom of the trunk on the ground it was very moving [it] nearly made me cry*" (P4). This idea of hope and renewal was emphasized by another participant: "*I like the point when the flowers come back – seems like some of the flowers will come back…I think it is the strength of nature*" (P1), although following the nature's cycle: "*I don't want more red colour leaves, I need new green leaves*" (P3).

Key insights from this exploration include the importance of users' agency for personalizing the interface, i.e., color of leaves, sky, the aesthetic and expressiveness of the interface, and of richer narrative to support extended interaction.

Conclusions

The design exemplars are intended to open up and inspire novel art-based interactive systems for the embodied, visceral experience of impermanence integrating nature-based content with bodily actuation. They also aim to celebrate and encourage acceptance of impermanence [19], challenging thus some of the Western-based assumptions of attachment and the stigma related to grief [1]. Future work can further explore the value of such technologies in Western contexts, and the integration of personal technologies with virtual reality [18][20] or ambient ones such as public displays [2][3][7][24].

Acknowledgements

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