

Games and the Posthuman Condition: How game design preserves memory for people with Alzheimer's disease

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INTRODUCTION

In this era of increasing lifespan and pronounced population aging, dementia has become an unprecedented challenge, both for well-being and socio-economic burdens (Bouchard et al., 2012). “Every three seconds, someone, somewhere, develops dementia” (Alzheimer's Disease International et al., 2025, p. 10). As the most common type of dementia, Alzheimer's disease brings substantial impacts not only for people living with dementia (World Health Organization, 2025), but also for caregivers and families (Ferrara et al., 2008). For people with AD, how can they sustain the consistency of personhood when facing severe cognitive impairment? For caregivers and family members, when they can no longer elicit responses from people with AD, how can caregivers maintain the emotional bond with people with AD when their personhood seems to be untouchable?

For family members of people with severe AD, bereavement may start earlier than biological death, at the moment of social death (Odom et al., 2010; Brannelly, 2011). Bereavement is complicated in the Alzheimer's context: for families, their connection with beloved ones still exists, but is weaker and vaguer. Meanwhile, family members face realistic challenges of psychological and physical burdens due to caregiving responsibilities, which may further threaten their emotional bond with people with AD. People with AD also face the dilemma of a diminishing sense of self. Thus, preservation of family memory for people with AD is both practically and sentimentally significant for the Alzheimer's community. The author's first-hand experience of the weakening of emotional bonds and anticipatory grief of people with AD motivated this research, with a particular emphasis on the emotional connection within the Alzheimer's community.

As serious games are increasingly used as a rehabilitation approach, more studies propose serious games as valid methods for assessing or improving the well-being of people with AD (Tziraki et al., 2017). However, most research focuses solely on improving the cognitive abilities of people with AD using memory puzzles, ignoring

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their interaction needs and social health (Bouchard et al., 2012; Robert et al., 2014). This suggests that current interventions using serious games are limited in consideration for the life situation of people with AD, who live in an interwoven social network as Being-with-Others. Moreover, the mere emphasis on improvement of cognitive ability predefines a standard of normality. As Linda Clare and Yun-Hee Jeon remind: “We often think and talk about dementia in terms of decline, impairment and loss, but what if we focused instead on what people with dementia can still do” (Alzheimer's Disease International et al., 2025, p. 43)—what if we focused on who people with AD still are?

The response to the above inquiries begins with an in-depth analysis of personhood and autobiographical memory. The rethinking of self refers to a posthumanist approach. According to Braidotti's (2018; 2013) posthuman theory, humans are embedded, embodied, and becoming subjects in an entangled web with other humans and non-human others. Braidotti's analysis of the posthuman condition indicates the limitations of current interventions in serious games. The posthumanist analysis lays the theoretical foundation for the proposed Research through Design project.

This study involves designing a memory house to preserve family memories for people with AD. The initial version of the memory house will be further developed through co-design workshops with the Alzheimer's community, to explore the design of a personalized memory house. The game is not merely an outcome of posthumanist theory, but also serves as a case study for critical reflection on the posthuman condition of people with AD. The primary target audience will be the Alzheimer's community, including family members and caregivers of people with AD, as well as the patients themselves who are willing to recapture memory and identity. The target audience also include people interested in the life situation of the Alzheimer's community. The vulnerability of participants and the possible outcomes of intervention in patients' lives need careful consideration.

The co-design workshop adopts a participatory design approach (Hendriks et al., 2013), aiming to include the voices and perspectives of the Alzheimer's community (Yoo et al., 2024). In the workshop, family members, caregivers and people with AD will create their personalized memory houses, building upon the general house pattern developed in the previous RtD stage. The feasibility of obtaining consent from people with AD entails complex ethical consideration. In collaboration with the designer, participants will develop personalized interactive elements, to facilitate meaningful memory experiences for the Alzheimer's community.

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