

Combining Psychology & Design: Facilitating Scaffolding of Autobiographical Memories through Interactive Digital Media Presentation Devices

Scaffolding autobiographical memories can be facilitated through external representations [1], such as digital photographs, and the way these media are presented. We use design research [2] to create new presentations and explore scaffolding in everyday life. This 'designing for personal memories' [3] is gaining momentum in the field human-computer interaction and design.

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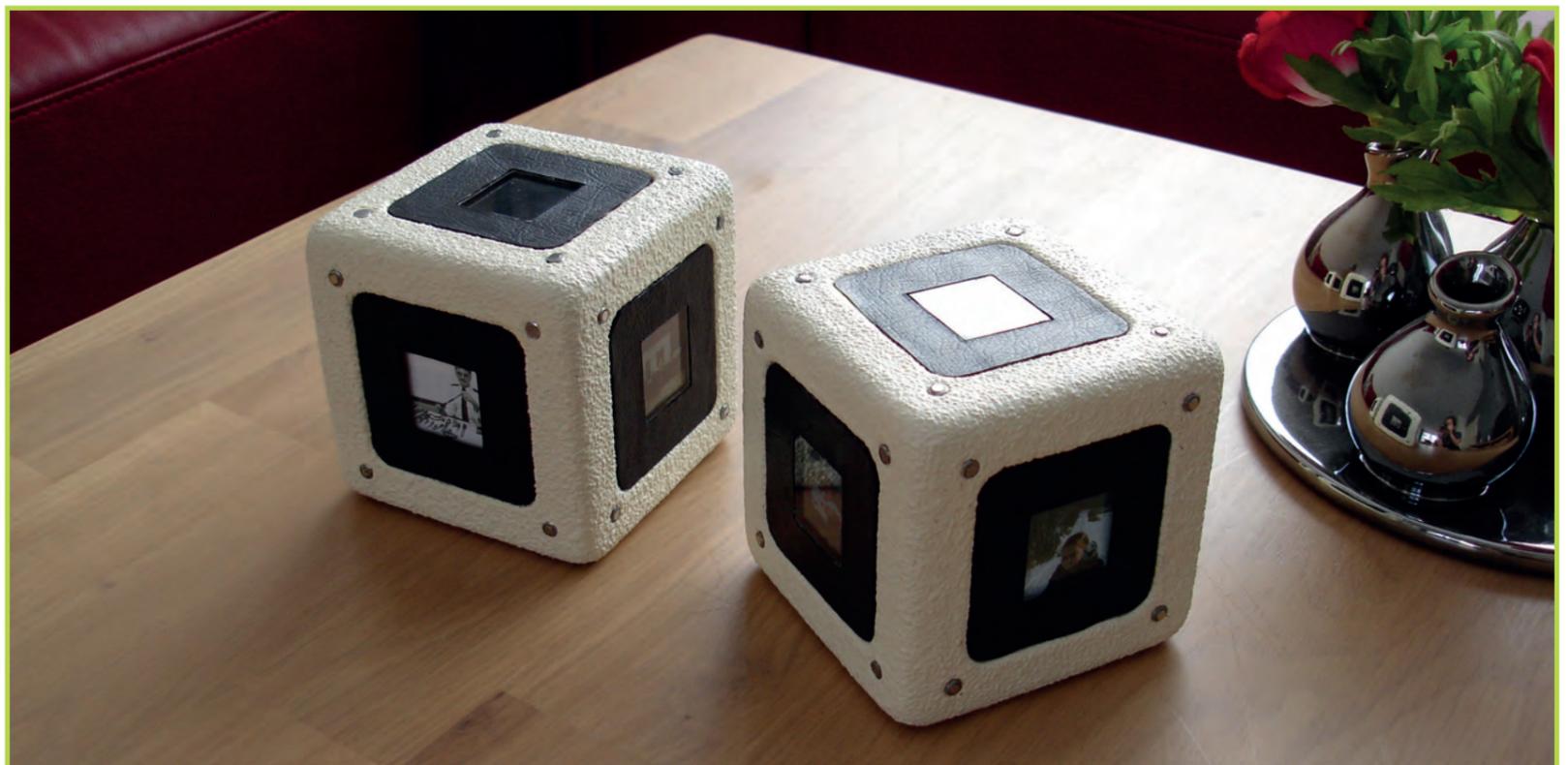
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The case study presented as an example of designing for remembering is called Cueb [4], and was designed and implemented to support communication between parents and teenagers, about the parents' past. The Cueb system consists of two cubes, each containing personal digital photos of one family member (either a parent or a teenager). The cubes facilitate several types of interactions, including shaking, which will randomly display photos on six sides, and connecting cubes by holding them together, which will display photos of the family members' shared experiences.

The evaluation of Cueb with four families showed that the family members felt significantly more triggered and supported to share their experiences and stories with Cueb's full functionality (connecting cubes, switching and locking photographs) than with limited functionality (shaking to display random photographs), similar to more traditional photo media.



Authors' bios

Elise van den Hoven (www.elisevandenhoven.com) has a background in biology and HCI, and an interest in supporting everyday remembering through the design of interactive systems. She is associate professor in design at University of Technology, Sydney and Eindhoven University of Technology. *Connie Golsteijn* (www.conniegolsteijn.com) has a background in interaction design, and an interest in materiality and craft. She is currently doing a PhD at the University of Surrey. Cueb was created during her Masters' graduation project, supervised by Elise van den Hoven.

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References

- [1] Hoven, E. van den & Eggen, B. (2008). Informing Augmented Memory System Design through Autobiographical Memory Theory. *Personal and Ubiquitous Computing*, 12 (6), 433-443.
- [2] Hoven, E. van den, Frens, J., Aliakseyeu, D., Martens, J-B., Overbeeke, K. and Peters, P. (2007). Design Research & Tangible Interaction. In *proc. of Tangible and Embedded Interaction '07*, 109-116.
- [3] Hoven, E. van den, Sas, C. and Whittaker, S. (2012). Introduction to this Special Issue on Designing for Personal Memories: Past, Present and Future. *Human-Computer Interaction*, 27 (1-2), 1-12.
- [4] Golsteijn, C. and Hoven, E. van den (2013). Facilitating Parent-Teenager Communication Through Interactive Photo Cubes. *Personal and Ubiquitous Computing*, 17 (2), 273-286.