Memento Mori: Technology Design for the End of Life

Michael Massimi

University of Toronto 10 King's College Road Toronto, ON, Canada M5V 2J5 mikem@dgp.toronto.edu

Wendy Moncur

School of Computing University of Dundee Dundee, UK, DD1 4HN wmoncur@dundee.ac.uk

William Odom

HCI Institute Carnegie Mellon University Pittsburgh, PA USA 15213 wodom@cs.cmu.edu

Richard Banks

Microsoft Research, Cambridge 7 JJ Thomson Ave. Cambridge, UK, CB3 0FB rbanks@microsoft.com

David Kirk

Culture Lab
Newcastle University
Newcastle, UK, NE1 7RU
david.kirk@ncl.ac.uk

Abstract

The role of interactive technologies at End of Life (EoL) is a recently established and quickly growing topic in the CHI community. In this workshop, we focus on the design space, methodologies and processes associated with EoL, moving forward the research agenda initiated in the successful CHI 2010 workshop "HCI at the End of Life" [8]. In particular, we focus on moving from fieldwork to thanatosensitive design – a process which engages with EoL issues as part of the design concept. We invite participation from a wide range of people interested in technology and EoL, from the HCI community, academic and professional communities with a variety of perspectives/disciplines, and entrepreneurs developing applications in this space.

Keywords

Death; dying; mortality; end of life; research methodology; thanatosensitive design; reflective practice.

ACM Classification Keywords

H.5.m [Information interfaces and presentation (e.g., HCI)]: Miscellaneous.

Motivation

The HCI community has recently identified death, dying, and bereavement as topics that are touched by modern computing. Early investigations have been

Copyright is held by the author/owner(s). *CHI'12*, May 5–10, 2012, Austin, Texas, USA. ACM 978-1-4503-1016-1/12/05.

carried out into how technology use, design, and evaluation apply to this sensitive domain. The process of *thanatosensitive design* [6] – the creation of interactive artifacts that deal with death in their design concept – is becoming more fully developed as ongoing explorations begin to reveal actionable design insights. Indeed, HCI researchers and practitioners have begun to translate these insights into interactive artifacts [4], organizational policies [3], and other End of Life (EoL) services [9,10].

This CHI 2012 workshop builds on a successful CHI 2010 workshop on "HCI at the End of Life" [8] and other early venues which have addressed this topic over the past two years. These include "Digital Death Day" – an annual workshop held in San Francisco and London [2], panels held at design and industry events like SXSW- e.g. [13], and the cross-disciplinary conference "Death & Dying in the Digital Age" [12].

Interest within the CHI community is also growing. Recent work has summarized many of the thematic concerns raised at these events. In the past two years at CHI, there have been numerous archival papers presented that directly address this domain, and a growing number of submissions presented at diverse ACM conferences including Designing Interactive Systems (DIS) and Computer Supported Cooperative Work (CSCW) that substantially address death. In short, this topic is generating growing interest among practitioners and researchers from academic and commercial backgrounds, across disciplines. Now that there is an emergent community and an initial mapping of topics around the end of life [7,11], this workshop seeks to move the agenda forward by focusing on the scope, methodologies and processes of

thanatosensitive design. It is hoped that such a workshop would further galvanize and coalesce this burgeoning community of researchers.

Reflecting the proactive role played by industry, we have recruited industry practitioners from leading-edge companies in this domain to participate in the workshop, to help catalyze this emerging area. These companies are The Digital Beyond (www.thedigitalbeyond.com), one of the foremost blogs and news sites covering technology and EoL, and Entrustet (www.entrustet.com) and Legacy Locker (www.legacylocker.com), two of the world's first websites for digital asset management and inheritance.

Topics and Issues

Designing for EoL and beyond presents a variety of challenges [1,9]. While all stages of work will be considered, the workshop itself will be an opportunity for participants to share ideas and best practices on design-oriented topics grouped into three themes:

Design space. We invite discussion of the perceived boundaries of the thanatosensitive design space before and after death, and how we can design for use across the boundaries of death. Topics in this theme include context (when should thanatosensitive design considerations be applied?), technical considerations (will this hard drive last forever?), social considerations (who will maintain or curate this system?), interoperability (how do we allow data to be stored and used by multiple services for various purposes?) and scalability (how will the systems that we build and use address the growing digital footprints increasingly left behind when users die?).

Design methodologies. Discussions of how to conduct thanatosensitive research, including (but not limited to): epistemological approaches, empirical methods, conceptual or theoretical frameworks, analysis procedures, and standards and metrics for evaluation of systems. We also invite discussions on how to conduct ethical and respectful research, and how to manage the impact on the practitioner of conducting research in this challenging context (e.g., "burnout" and self-care).

Design process. Insights and lessons drawn from creating systems which deal with death in their design concept. We invite reflections on the design process, and on working with(in) organizations. This includes constraints and tradeoffs (how do I build something impactful with limited time and money?), organizational/participant values (how does working with a particular group of people result in design choices?), and the influences of cross-disciplinarity. This also includes questions of how to conduct research studies around designed artifacts (e.g., technology probes), and how HCI researchers can contribute to the broader academic community concerned with death. We invite contributions not only from HCI practitioners, but also from thanatologists, psychologists, sociologists, and those working in EoL and bereavement care, to share insights and join us in building a research community in this fascinating and emergent area.

Workshop Goals

The main goals for the workshop are to:

 Provide a 'sandpit' environment [5], where a multidisciplinary mix of participants can generate a

- shared understanding of the research challenges in the thanatosensitive design space.
- Continue to develop a cross-disciplinary design community which fosters lateral thinking and uncovers innovative research directions, where HCI research and design projects dealing with EoL can be identified and organized.
- 3. Develop a plan for disseminating workshop results, through (a) traditional means such as books, journals, conferences, and (b) emerging venues that will increase visibility of the HCI community in this space (e.g., at Digital Death Day, SXSW).
- 4. Promote discussion with leaders in the commercial space. Founders from three prominent companies will attend as invited participants.

Conclusion

The role of interactive technologies at EoL is a recently established and quickly growing topic for researchers, designers, and practitioners. We are at an exciting point in time, where members of the HCI community are beginning to move from exploratory fieldwork to engaging in thanatosensitive design projects. Holding this workshop in conjunction with CHI 2012 provides an opportunity to bring together a diverse group who are engaging with EoL topics from a variety of perspectives. Participation will help to build working relationships between the HCI community and the broader academic and professional communities concerned with EoL.

Acknowledgements

Michael Massimi acknowledges GRAND NCE for support. Wendy Moncur acknowledges the support of the EPSRC (grant ref. no. EP/I026304/1).

References

- [1] Banks, R. *The future of looking back*. Microsoft Press, 2011.
- [2] Digital Death Day. Welcome. 2011. http://digitaldeathday.com/.
- [3] Hourizi, R., Moncur, W., and Walter, T. Digital Participation at the End of Life (Submitted). *Proc. Digital Engagement 2011*, (2011).
- [4] Kirk, D. and Banks, R. On the Design of Technology Heirlooms. *Proc. International Workshop on Social Interaction and Mundane Technologies (SIMTech '08)*, (2008).
- [5] Maldé, B. Sandpit Psychology. 2011. http://www.epsrc.ac.uk/funding/grants/network/ideas/Pages/SandpitPsychology.aspx.
- [6] Massimi, M. and Charise, A. Dying, death, and mortality: towards thanatosensitivity in HCI. *Proc. CHI EA'09*, ACM (2009), 2459-2468.
- [7] Massimi, M., Odom, W., Banks, R., and Kirk, D. Matters of life and death: locating the end of life in lifespan-oriented HCI research. *Proc. CHI'11*, ACM (2011), 987-996.
- [8] Massimi, M., Odom, W., Kirk, D., and Banks, R. HCI at the end of life: Understanding death, dying and the digital. *Proc. CHI EA'10*, ACM (2010), 4477-4480.
- [9] Moncur, W., Bikker, J., Kasket, E., and Troyer, J. The role of technology after the end of life. *Proc. CHI'12*, ACM, (Submitted).
- [10] The Digital Beyond. Digital Death and Afterlife Online Services List. 2011.
- http://www.thedigitalbeyond.com/online-services-list/.
- [11] Walter, T., Hourizi, R., Moncur, W., and Pitsillides, S. Does the internet change how we die and mourn? An overview. *Omega: Journal of Death & Dying*, (Forthcoming).
- [12] Walter, T., ed. Abstracts: Death & Dying in the Digital Age. *Centre for Death & Society Conference 2011*, Centre for Death and Society, University of Bath (2011), 1-18.

[13] You're dead, your data isn't: What happens now? *SXSW 2011*, 2011. http://schedule.sxsw.com/events/event IAP6048.