



AI and the Afterlife

Jed R. Brubaker
University of Colorado Boulder
Boulder, CO, USA
jed.brubaker@colorado.edu

Meredith Ringel Morris
Google DeepMind
Seattle, WA, USA
merrie@google.com

Dylan Thomas Doyle
University of Colorado Boulder
Boulder, CO, USA
dylan.doyle@colorado.edu

Casey Fiesler
University of Colorado Boulder
Boulder, CO, USA
casey.fiesler@colorado.edu

Martin Gibbs
University of Melbourne
Parkville, VIC, Australia
martin.gibbs@unimelb.edu.au

Joanna McGrenere
University of British Columbia
Vancouver, BC, Canada
joanna@cs.ubc.ca

ABSTRACT

AI technologies are likely to impact an array of existing practices (and give rise to a host of novel ones) around end-of-life planning, remembrance, and legacy in ways that will have profound legal, economic, emotional, and religious ramifications. At this critical moment of technological change, there is an opportunity for the HCI community to shape the discourse on this important topic through value-sensitive and community-centered approaches. This workshop will bring together a broad group of academics and practitioners with varied perspectives including HCI, AI, and other relevant disciplines (e.g., law, economics, religious studies, etc.) to support community-building, agenda-setting, and prototyping activities among scholars and practitioners interested in the nascent topic of how advances in AI will change socio-technical practices around death, remembrance, and legacy.

CCS CONCEPTS

• **Computing methodologies** → **Artificial intelligence**; • **Human-centered computing** → **Human computer interaction (HCI)**; **Collaborative and social computing systems and tools**.

KEYWORDS

AI, Generative AI, AI agents, HCI, digital afterlife, digital legacy, post-mortem AI, post-mortem data management, end-of-life planning, death

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1 MOTIVATION

Recent advances in machine learning (particularly the advent of increasingly capable [5], general [22], and multimodal [17] generative AI models) raise profound questions that we must grapple

with as a society over the coming years. These technologies will pervade, and potentially transform, a wide array of socio-technical practices. There is already widespread discussion of how AI might transform diverse aspects of modern society such as education [13], employment [7], entertainment [6], scientific inquiry [15], and military strategy [12]. Practices around death and dying are an oft-overlooked area of cultural importance that stands to be profoundly impacted by this changing technological landscape.

AI technologies are likely to impact an array of existing practices (and give rise to a host of novel ones) around end-of-life planning, remembrance, and legacy in ways that will have profound legal, economic, emotional, and religious ramifications. Already, we are beginning to see reports describing individuals' attempts to use AI to interactively memorialize loved ones [8, 16], the use of AI to posthumously complete unfinished creative works [21], and start-up companies professing to offer AI-based digital afterlife services [1, 20].

At this critical moment of technological change, there is an opportunity for the HCI community to shape the discourse on this important topic, much as HCI scholarship helped shape (and understand) practices regarding digital legacy and social media [2–4, 11]. We advocate for a value-sensitive [10] and community-centered [19] approach to designing interfaces, interactions, and systems that will empower people to shape their digital legacies.

In this workshop, we propose to bring together a broad group of academics and practitioners with varied perspectives including HCI, AI, and other relevant disciplines (e.g., law, economics, religious studies, etc.) to discuss this emerging area of inquiry of "AI and the Afterlife" (so named such as to distinguish our focus on end-of-life planning, remembrance, and digital legacy from applications of AI to life extension, i.e., through AI-supported improvements to medical care and/or the science of longevity). Our objectives are (1) to build community around this nascent topic; (2) to develop shared vocabulary and priorities; and (3) to engage in design ideation that will facilitate new lines of inquiry.

2 ORGANIZERS

Jed R. Brubaker is an Associate Professor in the Department of Information Science at the University of Colorado, Boulder. He conducts research in social computing focused on how identity is designed, represented, and experienced in socio-technical systems. He has conducted extensive research at the intersection of HCI and mortality, notably around memorialization, grief, legacy, and

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post-mortem data. He has previously organized six workshops at CHI, CSCW, and ICSWSM.

Meredith Ringel Morris is Director for Human-AI Interaction Research at Google DeepMind. Prior to joining DeepMind, she was Director of the People + AI Research team in Google Research's Responsible AI division. She also previously served as Research Area Manager for Interaction, Accessibility, and Mixed Reality at Microsoft Research. Merrie is also an Affiliate Professor at the University of Washington in The Paul G. Allen School of Computer Science & Engineering and in The Information School. She is an ACM Fellow and a member of the SIGCHI Academy. Her research explores novel methods of human-AI interaction as well as issues around AI ethics and the societal impacts of AI. Merrie has been an organizer of fifteen academic workshops, including at HCI-oriented venues such as CSCW, ASSETS, and UIST and at AI-oriented venues such as CVPR and the AI Now Institute.

Dylan Thomas Doyle is a Ph.D. student in the Department of Information Science at the University of Colorado Boulder. His research explores technology in healthcare settings. Dylan's dissertation research focuses on designing tools and techniques for technologies to more effectively attend to data and account management needs at the end of our lives. A hospital chaplain and ordained Unitarian Universalist minister, Dylan holds a Masters of Divinity from Union Theological Seminary at Columbia University.

Casey Fiesler is an Associate Professor in the College of Media, Communication and Information at the University of Colorado, Boulder. She researches and teaches in the areas of technology ethics, internet law and policy, and online communities. She is a Fellow in the Silicon Flatirons Institute for Law, Technology, and Entrepreneurship, an ATLAS Fellow, and holds a courtesy appointment in Computer Science. Also a public scholar, she is a frequent commentator and speaker on topics of technology ethics and policy. She pioneered the "Black Mirror Writer's Room" design fiction technique for reflecting on ethical issues and societal impacts of technology.

Martin Gibbs is a Professor of Human-Computer Interaction in the School of Computing and Information Systems at the University of Melbourne. His research interests lie at the intersection of Science and Technology Studies (STS) and Human-Computer Interaction (HCI) with a focus on remembrance and digital commemorative practices. He is an author of the recent books *Death and Digital Media* (2018, Routledge) and *Digital Domesticities* (2020, Oxford). He is also a co-editor of the collection of essays, *Residues of Death* (2019, Routledge).

Joanna McGrenere is Co-Head and Professor in the Department of Computer Science at the University of British Columbia and recently completed a five-year Inria & Université of Paris Saclay International Research Chair. Her broad research area is Human-Computer Interaction, with a specialization in interface personalization, universal usability, assistive technology, and computer-supported cooperative work; recently, her research has included a focus on understanding individual differences in how people manage their ever-increasing amounts of personal digital data and designing technologies for end-of-life planning that account for that data and those differences.

3 WORKSHOP STRUCTURE

The primary goal of the workshop is to encourage collaboration in addressing critical issues where AI and mortality intersect. The workshop will set the stage by providing state-of-the-art updates and short talks from interdisciplinary experts. Participants will engage in design activities to tackle these issues and chart out promising paths for future research. Additionally, we anticipate that the networking opportunities provided by the workshop will foster a community of scholars who share an interest in this emerging and vital field.

3.1 Workshop Format

3.1.1 In-Person Workshop Structure. The workshop will be a one-day, in-person event comprised of varied activities, including small-group and general discussions, presentations from external experts, and design activities to explore the space. As one of the primary goals is to grow community around a new topic, there is high value in the networking opportunities afforded by face-to-face interaction (including activities such as the workshop lunch and dinner). Further, the hackathon/design sprint activity benefits from the flexibility of in-person, small-group collaboration and access to shared digital and physical artifacts for prototyping activities. We plan to cap attendance at 30 participants to facilitate an intimate and interactive workshop experience.

3.1.2 Plans to Publish Workshop Artifacts. Because this workshop aims to grow community around an extremely nascent area of scholarship, we do not anticipate that many participants will have existing research agendas in this space; consequently, submitting a 2-4 page position paper will be optional. Instead, participants will complete a short questionnaire about their disciplinary background and their interest in the workshop, with the opportunity to include a design artifact or position paper if desired. A website will host detailed information about the content and organization of the workshop and will be used to publish any position papers and design artifacts associated with the workshop submissions and activities.

3.2 Pre-workshop Plans

Prior to the workshop, we will ask participants to complete a guided activity, the results of which will serve as an ice-breaker in the workshop. Participants will complete an adapted version of "Black Mirror Writer's Room" (BMWR) [14], a technology and ethics-focused activity developed by co-organizer Casey Fiesler and used extensively in other settings. BMWR asks people to speculate on possible futures, ultimately developing a short pitch for an episode of the series *Black Mirror*.

For our purposes, we will prompt participants with a set of technologies (e.g., AI agents [18], digital memorials [2], etc.) and ask them to produce two pitches: *Light Mirror* (capturing the best possible future) and *Black Mirror* (a dystopian counter-point). Participants will briefly present each during our ice-breaker. These pitches will be completed no later than one week before the workshop date, and will be made available to all workshop participants as pre-reading.

3.3 Workshop Activities

3.3.1 Introduction, SOTA, and Ice-breakers. During the first hour, we will introduce the structure and goals of the workshop. We will then present a brief overview of the State of the Art as it relates to AI and digital legacy, including brief overviews of case studies in actual or proposed uses of AI in this context (e.g., for finishing a Beatles song after the death of two band members [21]) and of related commercial offerings (e.g., start-up companies such as HereAfter AI [1] or Re;Memory [20]).

Participants will then engage in an ice-breaker based on the pre-workshop activities, presenting two slides - one summarizing their "AI and the Afterlife" Light Mirror and one summarizing their Black Mirror [9]. During the ice-breakers, all participants will be asked to note themes that emerged for good vs. bad scenarios across the various pitches. Themes will be collected and organized and will serve as a resource for participants during design exercises later in the day.

3.3.2 Experts and Provocations. In order to foster a broader understanding of the topic space, a set of experts from non-HCI areas will present "micro-keynote" provocation talks. These talks will be kept short (less than 20 minutes) to provide ample opportunity for discussion and Q&A. The following experts have agreed to present remotely (Yip) and in person (Callison-Burch):

- Megan Yip, Esq. (Law, Estate Planning, Post Death Administration): Legal expert on digital accounts and data. The original author of Twitter's policies for data after a user's death. Affiliated with Borchard Foundation Center on Law & Aging and Sacred Dying Foundation.
- Vanessa Callison-Burch (Technology, Hospice, Spirituality): Expert at the intersection of end-of-life care and technology. Led Facebook's product team for the development of memorialization and Legacy Contact. Trained as a chaplain at the Upaya Institute and Zen Center focusing on end-of-life care. Over 20 years of experience in hospice.

3.3.3 Hackathon/Design Sprint. Our design exercise consists of three phases, spread over a three-hour period. First, we will devote 30 minutes to the *Design Pitches and Group Selection* activity, in which participants can share ideas for prototype systems with attendees, who will then self-organize into small teams around their favorite concepts. Group selection will take place just before lunch, so that project teams might network and brainstorm during the meal. After lunch, we will have two, one-hour *Hackathon/Design Sprint* sessions (broken up by a coffee break), in which groups can use their preferred methods of either lo-fi (e.g., paper prototyping, storyboarding) or hi-fi (e.g., prompt engineering, coding) prototyping to create an artifact related to the workshop's theme. Finally, we allot thirty minutes for the *Share-Back*, in which each group will present their design to the workshop attendees.

3.4 Post-workshop Plans

We will close with a *Wrap-Up* discussion that reflects on the day's conversations and activities, with a focus toward how to harness these conversations and design provocations to create momentum in this space.

With permission from participants, we intend to compile artifacts into a publicly available design resource that can support and inspire future work in this area. We anticipate including the optional position papers and design artifacts from the workshop applications, the Light Mirror/Dark Mirror pitches done as pre-work, as well as designs and prototypes that were developed during the workshop's hackathon/design sprint.

Additional follow-on activities might include identifying funding sources to seed work in this space (e.g., joint grant proposal authoring, potential industrial connections such as through Google's Technology & Society program, etc.), planning additional workshops, developing speaker series or reading lists, organizing a journal special issue, or other activities suggested by workshop participants. We will conclude the day with an optional networking dinner to further cement relationships among attendees.

4 CALL FOR PARTICIPATION

This one-day, in-person CHI 2024 workshop invites researchers, practitioners, and students interested in how technology may change practices around end-of-life planning, remembrance, and digital legacy to explore the possibilities and pitfalls created by recent developments in AI for how we care for and represent the dead. Participants will co-create visions of the future of "AI and the Afterlife." These visions will form the basis of a shared vocabulary and research agenda for this nascent space, and help create a socio-technical future for the dead that is respectful, engaging, and culturally sensitive.

Participants in the workshop will learn about the state-of-the-art in this space as well as hear interdisciplinary perspectives from experts in law and end-of-life care. Participants will have an opportunity to present and generate design concepts and other ideas about the afterlife and the role technologies such as AI might play with it in the future.

People interested in participating can apply by completing a form indicating their disciplinary background and the nature of their interest in the topic by February 16th, and can optionally attach a position paper of up to ten pages (plus references) in the ACM single-column format and/or a link to a design artifact. Participants will be selected on the basis of their application materials, with a focus on the relevance of their prior research and/or disciplinary background to the workshop topic, and a goal of selecting a group of participants that represents diverse disciplinary and methodological backgrounds that will create an academically engaging environment.

4.1 Registration Requirements

Note that per CHI 2024 policies, workshop participants (including at least one author of each position paper, for applications that optionally include position papers) must attend the workshop in Honolulu, and all participants must register for both the workshop and for at least one day of the conference.

REFERENCES

- [1] HereAfter AI. [n.d.]. <https://hereafter.ai>
- [2] Jed R. Brubaker and Vanessa Callison-Burch. 2016. Legacy Contact: Designing and Implementing Post-Mortem Stewardship at Facebook. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (San Jose, California,

Table 1: Proposed structure of the workshop

Time	Activity
9:00-10:00	Introduction (Goals, SOTA, Ice-breakers). Organizers will present the workshop goals and topics, and give an overview of the State of the Art in this space. Participants will then present brief ice-breakers based on the pre-workshop writing activity.
10:00-10:30	Morning Coffee Break.
10:30-12:00	Expert Micro-Keynote Provocations. Two “micro-keynotes” of twenty minutes each by experts in post-mortem technology from beyond the HCI community (e.g., Law, Spirituality), followed by a joint 20-minute Q&A with the speakers.
12:00-12:30	Design Group Selection. Participants give brief pitches for the hackathon/design activity and form groups based on shared interests, so that they may discuss ideas with their group over lunch.
12:30-1:30	Group Lunch.
1:30-2:30	Hackathon/Design Sprint: Session 1. Teams work in small groups to develop prototypes related to the workshop theme, using their choice of lo-fi (e.g., paper prototyping, storyboarding) or hi-fi (e.g., prompt engineering, coding) methods.
2:30-3:00	Afternoon Coffee Break
3:00-4:00	Hackathon/Design Sprint: Session 2. The design sprint continues.
4:00-4:30	Hackathon/Design Share-Back. Each group will present their prototype to the group.
4:30-5:00	Wrap-up. Reflection, group discussion on follow-on activities.
6:30-8:00	Off-site Networking Dinner.

- USA) (*CHI '16*). Association for Computing Machinery, New York, NY, USA, 2908–2919. <https://doi.org/10.1145/2858036.2858254>
- [3] Jed R. Brubaker, Lynn S. Dombrowski, Anita M. Gilbert, Nafiri Kusumakaulika, and Gillian R. Hayes. 2014. Stewarding a Legacy: Responsibilities and Relationships in the Management of Post-Mortem Data. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (Toronto, Ontario, Canada) (*CHI '14*). Association for Computing Machinery, New York, NY, USA, 4157–4166. <https://doi.org/10.1145/2556288.2557059>
- [4] Jed R. Brubaker, Gillian R. Hayes, and Melissa Mazmanian. 2019. Orienting to Networked Grief: Situated Perspectives of Communal Mourning on Facebook. *Proc. ACM Hum.-Comput. Interact.* 3, CSCW, Article 27 (nov 2019), 19 pages. <https://doi.org/10.1145/3359129>
- [5] Sébastien Bubeck, Varun Chandrasekaran, Ronen Eldan, Johannes Gehrke, Eric Horvitz, Ece Kamar, Peter Lee, Yin Tat Lee, Yuanzhi Li, Scott Lundberg, Harsha Nori, Hamid Palangi, Marco Tulio Ribeiro, and Yi Zhang. 2023. Sparks of Artificial General Intelligence: Early experiments with GPT-4. [arXiv:2303.12712 \[cs.CL\]](https://arxiv.org/abs/2303.12712)
- [6] Thomas H. Davenport and Randy Bean. 2023. The Impact of Generative AI on Hollywood and Entertainment. *MIT Sloan Management Review* (2023). <https://sloanreview.mit.edu/article/the-impact-of-generative-ai-on-hollywood-and-entertainment/>
- [7] Kweilin Ellingrud, Saurabh Sanghvi, Gurmeet Singh Dandona, Anu Madgavkar, Michael Chui, Olivia White, and Paige Hasebe. 2023. *Generative AI and the future of work in America*. Technical Report. McKinsey Global Institute. <https://www.mckinsey.com/mgi/our-research/generative-ai-and-the-future-of-work-in-america>
- [8] Jason Fagone. 2021. The Jessica Simulation: Love and loss in the age of A.I. *The San Francisco Chronicle* (2021). <https://www.sfchronicle.com/projects/2021/jessica-simulation-artificial-intelligence/>
- [9] Casey Fiesler. 2022. The Black Mirror Writers Room: The Case (and Caution) for Ethical Speculation in CS Education. (2022). <https://medium.com/cuinfoscience/the-black-mirror-writers-room-the-case-and-caution-for-ethical-speculation-in-cs-education-5c81d05d2c67>
- [10] Batya Friedman and David G. Hendry. 2019. *Value Sensitive Design: Shaping Technology with Moral Imagination*. The MIT Press.
- [11] Katie Z. Gach and Jed R. Brubaker. 2021. Getting Your Facebook Affairs in Order: User Expectations in Post-Mortem Profile Management. *Proc. ACM Hum.-Comput. Interact.* 5, CSCW1, Article 174 (apr 2021), 29 pages. <https://doi.org/10.1145/3449248>
- [12] Alexander C. Karp. 2023. Our Oppenheimer Moment: The Creation of A.I. Weapons. *The New York Times* (2023). <https://www.nytimes.com/2023/07/25/opinion/karp-palantir-artificial-intelligence.html>
- [13] Sal Khan. 2023. How AI Could Save (Not Destroy) Education. <https://www.youtube.com/watch?v=hJP5GqnTrNo>
- [14] Shamika Klassen and Casey Fiesler. 2022. “Run Wild a Little With Your Imagination”: Ethical Speculation in Computing Education with Black Mirror (*SIGCSE 2022*). Association for Computing Machinery, New York, NY, USA, 836–842. <https://doi.org/10.1145/3478431.3499308>
- [15] Meredith Ringel Morris. 2023. Scientists’ Perspectives on the Potential for Generative AI in their Fields. [arXiv:2304.01420 \[cs.CY\]](https://arxiv.org/abs/2304.01420)
- [16] Casey Newton. 2016. Speak, Memory. *The Verge* (2016). <https://www.theverge.com/a/luka-artificial-intelligence-memorial-roman-mazurenko-bot>
- [17] OpenAI. 2023. GPT-4 Technical Report. [arXiv:2303.08774 \[cs.CL\]](https://arxiv.org/abs/2303.08774)
- [18] Joon Sung Park, Joseph C. O’Brien, Carrie J. Cai, Meredith Ringel Morris, Percy Liang, and Michael S. Bernstein. 2023. Generative Agents: Interactive Simulacra of Human Behavior. [arXiv:2304.03442 \[cs.HC\]](https://arxiv.org/abs/2304.03442)
- [19] Robert Racadio, Emma J. Rose, and Beth E. Kolko. 2014. Research at the Margin: Participatory Design and Community Based Participatory Research (*PDC '14*).

- Association for Computing Machinery, New York, NY, USA, 49–52. <https://doi.org/10.1145/2662155.2662188>
- [20] Re;Memory. [n. d.]. <https://rememory.deepbrain.io/en>
- [21] Mark Savage. 2023. Sir Paul McCartney says artificial intelligence has enabled a 'final' Beatles song. *British Broadcasting Corporation* (2023). <https://www.bbc.com/news/entertainment-arts-65881813>
- [22] Blaise Aguera y Arcas and Peter Norvig. 2023. AGI is Already Here. *Noema* (October 2023). <https://www.noemamag.com/artificial-general-intelligence-is-already-here/>