# **Life Transitions and Social Technologies:** Research and Design for Times of Life Change

#### Oliver L. Haimson

University of Michigan Ann Arbor, MI, USA haimson@umich.edu

#### Bryan Semaan

Syracuse University Syracuse, NY, USA bsemaan@syr.edu

#### Brianna Dym

University of Colorado Boulder Boulder, CO, USA brianna.dym@colorado.edu

# Joey Chiao-Yin Hsiao University of Michigan Ann Arbor, MI, USA jcyhsiao@umich.edu

#### **Daniel Herron**

University of Dundee, Dundee, Scotland, UK dherron@dundee.ac.uk

# Wendy Moncur

University of Dundee Dundee, Scotland, UK wmoncur@dundee.ac.uk

#### Abstract

When people experience major changes in their lives (e.g., relationship changes, transition from high school to college, realizing an LGBTQ identity, etc.), they often turn to social technologies to help navigate shifting identities and networks and find support and resources. People's experiences using social technologies during times of life transition, and how to better design such technologies, has been a major focus of social computing research. This workshop will gather researchers working in this space to discuss eight themes: life events vs. processes; changing identities; multiple overlapping life events; physical and digital transitions; technology non-use during life transitions; liminality framework; theoretical frames; and methodological considerations. Collaboratively, we will 1) synergize insights from workshop organizers' and participants' research to determine how social technologies can be designed to better support people during life transitions and 2) outline an agenda for the future of social computing work on life transitions.

#### Introduction

Social technologies are increasingly pervasive in people's experiences with life transitions. Social computing research shows that social technologies benefit people during a wide range of life changes [30] such as transitioning from high school to college [9,34,41], relationship breakups [19,33], changing health conditions [29], pregnancy loss [2],

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the owner/author(s).

CSCW'19 Companion, November 9-13, 2019, Austin, TX, USA.

Copyright is held by the author/owner(s).

ACM ISBN 978-1-4503-6871-1/19/10.

https://doi.org/10.1145/3311957.3359431

technology design; research methods.

Author Keywords: Life transitions; social

technologies; social media; online identity;

Oliver L. Haimson is an Assistant Professor at University of Michigan School of Information. He conducts social computing research focused on people's changing identities on social media during life transitions, with a research goal of impacting technological inclusion of marginalized users. One of his main research areas is transgender people's social media use.

Bryan Semaan is an Assistant Professor in the School of Information Studies at Syracuse University. His research examines the role of ICTs in enabling resilience amongst individuals, groups, and communities immersed in challenging contexts, especially those faced by marginalized and vulnerable populations.

Brianna Dym is a PhD student at the University of Colorado Boulder. She researches methods for empowering marginalized online communities to build their own technologies as well as critiques power structures in technology. She works with communities in transformative fandom.

Joey Chiao-Yin Hsiao is a PhD Candidate at the University of Michigan, School of Information. Hsiao conducts research to study how newcomers to a new city or country use social technologies for socialization and resource-seeking. His ongoing research investigates voluntary immigrants' adaptation and opportunities for social applications to address their adaptation needs.

transitioning into and out of the military [12,38,39], job changes [8,10], transition from incarceration to citizen life [35], immigration [26], transition into older adulthood [5], coming to terms with a death in one's network [7], and gender transition [18,20,21]. Although social technologies can be beneficial during life changes, people also face many challenges using social technologies during transitional life periods [8,11,12,18,21,23,30,36]. For instance, managing social lives online is a complex endeavor due to context collapse [43], decisions around disclosure [2], and potential harassment [11]. Thus, many people maintain online identities and networks across several social media sites [18,40,44].

This workshop builds from previous successful workshops on this topic, such as Massimi et al.'s CHI 2014 workshop on Designing Technology for Major Life Events [31] and Herron et al.'s NordiCHI 2016 workshop on HCI and Sensitive Life Experiences [22]. Given the substantial volume and depth of social computing research about life transitions and social technologies, there is great value in bringing together researchers to discuss opportunities, challenges, and futures of this vibrant research area.

# **Workshop Themes**

This workshop will address eight major themes around life transitions and social technologies:

# Life events vs. processes

When designing technologies to support people undergoing life transitions, it is important to understand the differences between life events and processes. Many life transitions are processes that take months or years to complete and involve multiple stages. For example, divorce does not happen in a day, but instead includes social and legal aspects that usually occur over a longer period of time. In contrast, beginning or ending one's job is a life event that can often be pinpointed to a particular day; yet this life change also involves a longer process of identity transition around one's career. Designing and studying technologies for life transitions requires understanding how these temporal complexities apply to different types of life transitions.

## Changing identities

Identity change is a fundamental aspect of many life transitions. Thus, understanding life transitions and social technologies involves understanding how individuals in transition's identities are changing, and how these identity changes play out in digital spaces. At the workshop, we will discuss whether life transitions that are processes rather than events involve identity change, and how these distinctions impact how we study and design technologies in this space.

### Multiple overlapping life events

No life transition occurs in a vacuum; people often face multiple life transitions simultaneously. For example, relationship breakups often also involve moving to a new residence and shifting friend groups. Yet social computing research (as cited in the Introduction) has tended to study one type of life transition at a time. We will discuss how social computing research can move beyond studying life transitions in isolation, to a more holistic approach that considers how life transitions intersect and overlap.

**Daniel Herron** is a Joint-PhD Candidate at the University of Dundee and UTS. His research explores how technology can be used to support individuals in managing and curating their digital possessions after a relationship break up, as part of moving on.

Wendy Moncur is an Interdisciplinary Professor of Digital Living at the University of Dundee. Her research focuses on being human in a Digital Age. She has examined the design and use of technology in becoming a parent, relationship breakdown, retiral and end of life. She also examines methodological issues in conducting research in sensitive contexts, and opportunities for research to illuminate policy.

# Physical transitions and digital transitions

Some life transitions, such as starting a new job or moving to a different city or country, involve physical movement or routines with new physical settings [25–27]. In other life transitions, such as realizing one's LGBTQ identity, people may remain in many of the same physical settings as before, but will start to frequent new digital spaces [18]. Many life transitions involve both physical and digital movement. When studying people's use of social technologies during life transitions and designing technologies to support these changes, researchers must pay attention to these differences and the different needs that arise with each.

#### Technology non-use during life transitions

Some people may withdraw from social technology use during life transitions. Scholars exploring technology non-use have described how the lack of adoption of technology, as well as the withdrawal from using technology, can be related to a range of socio-cultural logics, rather than traditionally explored factors such as finances and infrastructure [3,37]. A limited body of research has examined why transitioning populations sometimes withdraw from social technology use. Semaan and colleagues [38] found that, in the context of veteran transitions, some veterans discontinued use of social media when they observed other veterans violating the pro-social cultural logics they drew upon while in the military. Lingel and colleagues [27] found that transnational migrants can experience fatigue from social media and disconnect from their old networks, such as on Facebook. Additionally, LGBTQ people coming out of the closet might practice non-use in online spaces where they perceive participating as a risk to their privacy and safety [13]. Prior work has also demonstrated numerous motivating factors behind non-use, demonstrating that non-use in itself can be a task deeply entangled with life transitions [3]. We will discuss implications for designing for and researching technology non-use during life transitions.

#### Liminality framework

Several social computing researchers have discussed and theorized how van Gennep's [14] liminality framework (see Figure 1) applies to life transitions and social technologies. For example, Haimson [18] built from van Gennep's liminality framework to develop the concept of social transition machinery, which describes the ways that, for people facing life transitions, multiple social media sites and networks often remain separate, yet work together to facilitate life transitions. This work argued that van Gennep's description of the transition stage as being neutral or identity-less is not accurate in digital contexts, when instead people often portray multiple identities on different social media sites [18]. Semaan et al. [39] applied van Gennep's liminality framework in the context of veterans reintegrating into civilian society, and found that veterans were drawing on a range of ICTs, such as social and mobile media, to engage in identity repair work stemming from conflicting rules and norms between the military and civil society, as they processed their changing identities across the phases outlined in Van Gennep's [14] framework. The authors built from this framework by developing the concept of *identity awareness*, whereby the authors argued that across the stages of transition, by drawing on an assemblage of social and mobile media, people undergoing transitions are able to develop an understanding of new rules and norms in the spaces they are transitioning into [39]. In this workshop, we will discuss further ways to build from van Gennep's framework [14] (as well as Turner's [42] and Bridges' [6] work which further expanded on it) to understand and design for social technology use during life transitions.

# Separation stage

Preliminal rites

separating from previous identity



# **Transition stage**

Liminal rites

transitional period



# **Incorporation stage**

Postliminal rites

incorporating back into social world after transition

**Figure 1:** Van Gennep's liminality framework.

# Theoretical frames to draw from

We will discuss further theoretical frames that social computing researchers can draw from. These include Higgins' self-discrepancy theory [24], Markus and Nurius' possible selves [28], Gergen's saturated self [15] and other social constructionist theories [4,16], and Goffman's dramaturgical theory [17], to name a few. We will also spend time exploring the potential application of other theories, such as those from Science and Technology Studies (STS), Feminist Science and Technology Studies (FSTS), and more. We aim to hear from workshop participants and learn from their expertise on different theories, and collaboratively generate connections between theories and how they can be applied to life transitions research.

### Methodological considerations

In this workshop, we will address methodological considerations unique to life transitions research. For instance, which types of methods work well for studying particular types of life transitions? What are each method's limitations in this context? Many life transitions can be traumatic for people, and many are related to stigmatized or vulnerable identities. Thus, researchers must take care when interacting with and designing technology with/for these populations. Additionally, researchers may feel personally vulnerable if they have also experienced the types of life changes they are studying. We will discuss ways of handling these situations, as highlighted in past work [1,32].

# **Workshop Activities**

This workshop will include four activities: brainstorming, discussion, agenda setting, and presentations. After participant introductions and short talks, the first half of the workshop will be dedicated to collaborative brainstorming. In the second half, we will hear a keynote presentation by a topically-relevant speaker. Then, we will discuss workshop themes and brainstorming results, and then set an agenda for future research and design in the area.

#### **Workshop Goals**

This workshop's goals include the following:

- Facilitate networking, connections, and collective identity for social computing researchers who study life transitions and social technologies.
- 2. Discuss and make connections between the eight workshop themes described above.
- 3. Set an agenda for future social computing research and design for life transitions/social technologies.
- 4. Potentially derive a new concise term that can be used to describe this research area.
- 5. Provide groundwork for a collaborative research publication based on insights gained at workshop.

#### References

- [1] Nazanin Andalibi and Andrea Forte. 2016. Social Computing Researchers, Vulnerability, and Peer Support. In Ethical Encounters in HCI: Research in Sensitive and Complex Settings Workshop, CHI 2016, 6.
- [2] Nazanin Andalibi and Andrea Forte. 2018. Announcing Pregnancy Loss on Facebook: A Decision-Making Framework for Stigmatized Disclosures on Identified Social Network Sites. In Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (CHI '18), 158:1–158:14. https://doi.org/10.1145/3173574.3173732
- [3] Eric P.S. Baumer, Phil Adams, Vera D. Khovanskaya, Tony C. Liao, Madeline E. Smith, Victoria Schwanda Sosik, and Kaiton Williams. 2013. Limiting, Leaving, and (Re)Lapsing: An Exploration of Facebook Non-use Practices and Experiences. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '13), 3257–3266. https://doi.org/10.1145/2470654.2466446
- [4] Peter L. Berger and Thomas Luckmann. 1966. The social construction of reality. Penguin Books.
- [5] Robin Brewer and Anne Marie Piper. 2016. "Tell It Like It Really Is": A Case of Online Content Creation and Sharing Among Older Adult Bloggers. In Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI '16), 5529–5542. https://doi.org/10.1145/2858036.2858379
- [6] William Bridges. 2004. Transitions: Making Sense Of Life's Changes. Da Capo Press.
- [7] Jed R. Brubaker, Gillian R. Hayes, and Paul Dourish. 2013. Beyond the Grave: Facebook as a Site for the Expansion of Death and Mourning. The Information Society 29, 3: 152–163. https://doi.org/10.1080/01972243.2013.777300
- [8] Moira Burke and Robert Kraut. 2013. Using Facebook After Losing a Job: Differential Benefits of Strong and Weak Ties. In Proceedings of the 2013 Conference on Computer Supported Cooperative Work (CSCW '13), 1419–1430. https://doi.org/10.1145/2441776.2441936
- [9] David C. DeAndrea, Nicole B. Ellison, Robert LaRose, Charles Steinfield, and Andrew Fiore. 2012. Serious social media: On the use of social media for improving students' adjustment to college. The Internet and Higher Education 15, 1: 15–23. https://doi.org/10.1016/j.iheduc.2011.05.009
- [10] Tawanna R. Dillahunt, Jason Lam, Alex Lu, and Earnest Wheeler. 2018. Designing Future Employment Applications for Underserved Job Seekers: A Speed Dating Study. In Proceedings of the 2018 on Designing Interactive Systems Conference 2018 DIS '18, 33–44. https://doi.org/10.1145/3196709.3196770
- [11] Jill P. Dimond, Casey Fiesler, and Amy S. Bruckman. 2011. Domestic violence and information communication technologies. Interacting with Computers 23, 5: 413–421. https://doi.org/10.1016/j.intcom.2011.04.006
- [12] Bryan Dosono, Yasmeen Rashidi, Taslima Akter, Bryan Semaan, and Apu Kapadia. 2017. Challenges in Transitioning from Civil to Military Culture: Hyper-Selective Disclosure through ICTs. Proc. ACM Hum.-Comput. Interact 1, 2.
- [13] Brianna Dym and Casey Fiesler. 2018. Vulnerable and Online: Fandom's Case for Stronger Privacy Norms and Tools. In Companion of the 2018 ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '18), 329–332. https://doi.org/10.1145/3272973.3274089
- [14] Arnold van Gennep. 1909. The rites of passage. University of Chicago Press, Chicago.
- [15] Kenneth Gergen. 2000. The Saturated Self: Dilemmas Of Identity In Contemporary Life. Basic Books, New York.
- [16] Anthony Giddens. 1991. Modernity and Self-identity: Self and Society in the Late Modern Age. Stanford University Press.
- [17] Erving Goffman. 1959. Presentation of Self in Everyday Life. Doubleday Anchor Books, New York, NY.
- [18] Oliver L. Haimson. 2018. Social Media as Social Transition Machinery. Proc. ACM Hum.-Comput. Interact. 2, CSCW: 63:1-63:21. https://doi.org/10.1145/3274332
- [19] Oliver L. Haimson, Nazanin Andalibi, Munmun De Choudhury, and Gillian R. Hayes. 2018. Relationship breakup disclosures and media ideologies on Facebook. New Media & Society 20, 5. https://doi.org/10.1177/1461444817711402
- [20] Oliver L. Haimson, Jed R. Brubaker, Lynn Dombrowski, and Gillian R. Hayes. 2015. Disclosure, Stress, and Support During Gender Transition on Facebook. In Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW '15), 1176–1190. https://doi.org/10.1145/2675133.2675152
- [21] Oliver L. Haimson, Jed R. Brubaker, Lynn Dombrowski, and Gillian R. Hayes. 2016. Digital Footprints and Changing Networks During Online Identity Transitions. In Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI '16), 2895–2907. https://doi.org/10.1145/2858036.2858136
- [22] Daniel Herron, Nazanin Andalibi, Oliver Haimson, Wendy Moncur, and Elise van den Hoven. 2016. HCI and Sensitive Life Experiences. In Proceedings of the 9th Nordic Conference on Human-Computer Interaction (NordiCHI '16), 134:1–134:3. https://doi.org/10.1145/2971485.2987673
- [23] Daniel Herron, Wendy Moncur, and Elise van den Hoven. 2016. Digital Possessions After a Romantic Break Up. In Proceedings of the 9th Nordic Conference on Human-Computer Interaction (NordiCHI '16), 36:1–36:10. https://doi.org/10.1145/2971485.2971539

- [24] E. Tory Higgins. 1987. Self-discrepancy: A theory relating self and affect. Psychological Review 94, 3: 319-340. https://doi.org/10.1037/0033-295X.94.3.319
- [25] Joey Chiao-Yin Hsiao and Tawanna R. Dillahunt. 2017. Detecting Life Changes: Increasing Opportunities to Benefit from People-Nearby Applications. In Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA '17), 1700– 1707. https://doi.org/10.1145/3027063.3053099
- [26] Joey Chiao-Yin Hsiao and Tawanna R Dillahunt. 2018. Technology to Support Immigrant Access to Social Capital and Adaptation to a New Country. Proceedings of the ACM Human Computer Interaction (PACM) 2, CSCW: 21.
- [27] Jessa Lingel, Mor Naaman, and danah m. boyd. 2014. City, Self, Network: Transnational Migrants and Online Identity Work. In Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW '14), 1502–1510. https://doi.org/10.1145/2531602.2531693
- [28] Hazel Markus and Paula Nurius. 1986. Possible selves. American Psychologist 41, 9: 954-969. http://dx.doi.org/10.1037/0003-066X.41.9.954
- [29] Michael Massimi, Jackie L. Bender, Holly O. Witteman, and Osman H. Ahmed. 2014. Life transitions and online health communities: reflecting on adoption, use, and disengagement. In Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing, 1491–1501. https://doi.org/10.1145/2531602.2531622
- [30] Michael Massimi, Jill P. Dimond, and Christopher A. Le Dantec. 2012. Finding a new normal: the role of technology in life disruptions. In Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work (CSCW '12), 719–728. https://doi.org/10.1145/2145204.2145314
- [31] Michael Massimi, Svetlana Yarosh, Madeline E. Smith, and Joseph Jofish Kaye. 2014. Designing Technology for Major Life Events. In CHI '14 Extended Abstracts on Human Factors in Computing Systems (CHI EA '14), 83–86. https://doi.org/10.1145/2559206.2559235
- [32] Wendy Moncur, 2013. The emotional wellbeing of researchers: considerations for practice. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 1883–1890. http://dl.acm.org/citation.cfm?id=2466248
- [33] Wendy Moncur, Lorna Gibson, and Daniel Herron. 2016. The role of digital technologies during relationship breakdowns. In Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing.
- [34] Tsubasa Morioka, Nicole B. Ellison, and Michael Brown. 2016. Identity Work on Social Media Sites: Disadvantaged College Students' First Year College Transition. In Proceedings of CSCW, 846–857. https://doi.org/10.1145/2818048.2819959
- [35] Ihudiya Finda Ogbonnaya-Ogburu, Kentaro Toyama, and Tawanna Dillahunt. 2018. Returning Citizens' Job Search and Technology Use: Preliminary Findings. In Companion of the 2018 ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '18), 365–368. https://doi.org/10.1145/3272973.3274098
- [36] Corina Sas and Steve Whittaker. 2013. Design for forgetting: disposing of digital possessions after a breakup. In Proceedings of the 2013 ACM annual conference on Human factors in computing systems (CHI '13), 1823–1832. https://doi.org/10.1145/2466110.2466241
- [37] Christine Satchell and Paul Dourish. 2009. Beyond the User: Use and Non-use in HCI. In Proceedings of the 21st Annual Conference of the Australian Computer-Human Interaction Special Interest Group: Design: Open 24/7 (OZCHI '09), 9–16. https://doi.org/10.1145/1738826.1738829
- [38] Bryan Semaan, Lauren M. Britton, and Bryan Dosono. 2017. Military Masculinity and the Travails of Transitioning: Disclosure in Social Media. In Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '17), 387–403. https://doi.org/10.1145/2998181.2998221
- [39] Bryan C. Semaan, Lauren M. Britton, and Bryan Dosono. 2016. Transition Resilience with ICTs: "Identity Awareness" in Veteran Re-Integration. In Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI '16), 2882–2894. https://doi.org/10.1145/2858036.2858109
- [40] Manya Sleeper, William Melicher, Hana Habib, Lujo Bauer, Lorrie Faith Cranor, and Michelle L. Mazurek. 2016. Sharing Personal Content Online: Exploring Channel Choice and Multi-Channel Behaviors. In Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI '16), 101–112. https://doi.org/10.1145/2858036.2858170
- [41] Madeline E. Smith, Duyen T. Nguyen, Charles Lai, Gilly Leshed, and Eric P.S. Baumer. 2012. Going to College and Staying Connected: Communication Between College Freshmen and Their Parents. In Proceedings of the ACM 2012 Conference on Computer Supported Cooperative Work (CSCW '12), 789–798. https://doi.org/10.1145/2145204.2145322
- [42] Victor Turner. 1969. The Ritual Process: Structure and Anti-Structure. Transaction Publishers.
- [43] Jessica Vitak. 2012. The Impact of Context Collapse and Privacy on Social Network Site Disclosures. Journal of Broadcasting & Electronic Media 56, 4: 451–470. https://doi.org/10.1080/08838151.2012.732140
- [44] Xuan Zhao, Cliff Lampe, and Nicole B. Ellison. 2016. The Social Media Ecology: User Perceptions, Strategies and Challenges. In Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI '16), 89–100. https://doi.org/10.1145/2858036.2858333