Grassroots Heritage in the Crisis Context: A Social Media Probes Approach to Studying Heritage in a Participatory Age

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Abstract

Social media technologies are rapidly changing the way people create, share, and experience memories especially around crises. When collective memory is generated on a societal scale and shared across generations over time, this practice assumes social and cultural significance and becomes a heritage matter. Emerging uses of social media are generating new kinds of heritage practices from the bottom-up, what I call "grassroots heritage." This interdisciplinary design study works at the intersection of social media and cultural heritage in the crisis context using a variant method called "social media probes." I present a grassroots heritage framework with design ideas for facilitating "socially-distributed curation" to guide future HCI research in the heritage domain.

Keywords

Cultural heritage, social media, crisis informatics, socially-distributed curation, social media probes, participatory design.

ACM Classification Keywords

K.4.m Computers and Society: Miscellaneous, J.4 Social and Behavioral Sciences: Sociology, I.m Computing Methodologies: Miscellaneous.

General Terms

Human Factors, Design, Theory.

Introduction

Social media technologies are opening up new ways of understanding cultural heritage in the digital landscape. Broadly speaking, heritage is the cultural process of deriving meaning and value [12] from our memories to respond to present-day social and cultural needs. It is a living system shaped by our social relations and collective memories [6]. Since heritage topics in human computer interaction (HCI) are nascent, this interdisciplinary study offers a novel way to rethink the notion of heritage in a networked world specifically in the crisis context. "Grassroots heritage" is a way to redefine the notion of "heritage" as the people's cultural legacy in this participatory age.

Research Questions

The following questions guide my research: How is the notion of heritage changing in a participatory age? What kinds of heritage practices are emerging from social media use in the crisis context? How can social media technologies be designed to sustain living heritage systems through socially-distributed curation? How can the social media probes method inform future technology design research?

Background

Major crises often assume cultural significance, and we tend to recognize them as historical events that are worth remembering and sharing with present and future generations. At the same time, people are increasingly using social technologies to capture, collect, interpret, and share memories about crises in unprecedented ways. I use my past and current investigations of social media use in the crisis context as touchstones for a critical understanding of heritage in the digital milieu [7, 9, 10].

Issues related to technologies of memory "at a more collective and cultural level" have been understudied in HCI [13]. My research fills this gap by examining collective memory practices on a societal scale across multiple generations over time—a type of memory practice that assumes social and cultural significance and becomes a matter of heritage. Friedman and Nathan [2] are also developing similar work through a "multi-lifespan" perspective of designing information systems to preserve knowledge and support social processes across generations.

Cultural informatics (or new heritage) is a way of broadening how we view heritage in the context of new media [5]. Heritage is about renegotiating our identities and value systems by "reworking the meanings of the past as the cultural, social and political needs of the present change" [12]. The goal is "to sustain the whole system as a living entity" [6]. Innovative uses of new media can "nourish this complex social system" by being "a force and stimulus for evolving heritage practices, meanings and values" [4]. I study how social media use in the crisis context is sustaining living heritage systems as well as becoming an emerging heritage practice arising from participatory culture.

Fischer [1] presents a "model-democratic," "publish-then-filter" approach to studying "cultures of participation." People are producing more content thus creating massive information repositories due to weak input filters. Therefore, "existing and new output filters" need to be developed to collectively make sense of these large repositories on a societal scale. As we increasingly generate and share our collective memories online, we all face the problem of "curatorial overload: too much information, too difficult to organize and retrieve" [13]. I offer design ideas for facilitating "socially-distributed curation" to help people make sense of and derive meaning from our collective memories through a socially-distributed process.

Lastly, Oliver-Smith [8] argues that disasters should more accurately be viewed as "processual phenomena [not events]…with historically produced patterns of 'vulnerability'." Awareness of such vulnerabilities can strengthen a society's capacity to anticipate, mitigate, cope with, and recover from the impact of disaster processes. I investigate how information can be designed to better communicate these vulnerabilities in hopes of strengthening resilience to future crises.

Social Media Probes Method

Using ethnographic methods and drawing from the HCI participatory design literature, I adapt the "cultural probes" technique [3]. Probes in HCI are meant to generate "inspirational data" and "open up new design spaces" by provoking "the users to consider their environment in a new way" [3]. In my research, I call them "social media probes," where the probes are tailored to each participant and contain a collection of open-ended questions and tasks using social media technology. I use this design method as a way to engage participants to reflect on, self-document, and express their thoughts about heritage and curation issues in the crisis context. I also apply aspects of reflective design [11] to understand the "unconscious values" of the creators and users of particular social media sites with respect to crisis matters.

Fieldwork and Probe Studies

Between August 2005 and December 2008, I conducted quick response research on-site and on-line with my lab to understand the emerging information flows among the public around recent crises. I also surveyed various social technologies and compiled a list of crisis-related social media sites to use in the probe studies (e.g., digital archives, Facebook and Flickr groups, map mashups, and websites engaging in curation activities).

I began conducting the probe studies in April 2009 and will continue until April 2010. Currently, I have 33 participants but I plan to have around 10 more over the next few months. After conducting an informal interview with each participant, then I create a social media probe packet tailored to each person containing a set of open-ended, evocative tasks. For example, one probe task is as follows: Choose 7 events from the

HistoryCommons.org 9/11 Timeline and create the 9/11 Story that you would tell to future generations 50 years from now. I am also extensively documenting and reflecting on the social media probes process—describing how I created the probes, what inspirational data I received from my participants, and how this data has informed the development of a grassroots heritage framework—in hopes of offering this variant method to the HCI community for technology design purposes.

Grassroots Heritage Framework

Based on my preliminary research findings, I have started to develop a "grassroots heritage" framework (see Figure 1). This working framework consists of five processes: (1) Enable participatory creation of content generated by the public, (2) Facilitate open collection and storage of content on a societal scale, (3) Allow long-term, multi-generational preservation and access to these collections, (4) Foster interpretation of these collections thru meaning-making tools to create stories, and (5) Stimulate interactive forms of story telling and story sharing. I use a five-petal visualization to show the interconnections between these processes; each process overlaps, shares a common intersection, and works in parallel with each other. Together these processes facilitate socially-distributed curation to nurture living heritage systems. I explain each process using empirical data from the probe studies.

Expected Contributions

My interdisciplinary research informs studies in cultural informatics, crisis informatics, technology design, and new media. I broaden the notion of heritage by extending existing HCI research on digital memory to matters of heritage based on my analysis of emerging social media use in the crisis context. I offer a well-

Figure 1: Grassroots Heritage Framework to Support Socially-Distributed Curation

documented design method called "social media probes." I also offer a grassroots heritage framework, which includes design implications for facilitating socially-distributed curation, to guide future HCI work in the heritage domain.

Conclusion

In this participatory age, we have the opportunity to write ourselves into history as well as collaboratively curate what we think is meaningful to pass down to future generations. Perhaps, the heritage that can be learned from past crises can strengthen our resilience to future crises. We are all stewards with a social, political, and technological responsibility for sustaining our cultural heritage as a "living system" through our everyday practices. To sustain our living heritage system, the past must be continuously negotiated and reconstructed in ways that are relevant to our present conditions and future visions. Social media technologies are increasingly lifestreaming the people's legacy online from the bottom-up. The questions that remain for us living in this participatory culture are: What kind of cultural legacy are people choosing to pass down (or rather upload) to future generations? And how is the HCI community shaping this legacy through the design and implementation of interactive computing systems?

Acknowledgements

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