The Good, the Bad, and the Ugly: Ethical Concerns with Triggering a Reminiscence Process

Elizabeth A. Thiry  
Pennsylvania State University  
Center for Human-Computer Interaction  
exn152@psu.edu

Christopher M. Mascaro  
Drexel University  
iSchool  
cmascaro@gmail.com

Mary Beth Rosson  
Pennsylvania State University  
Center for Human-Computer Interaction  
mrosson@psu.edu

ABSTRACT
In the following workshop paper we provide an overview of reminiscing. We illustrate how the focus of most digital system design for remembering has been on the triggering of reminiscences rather than on the varied functions that the reminiscence process may be serving. We articulate several ethical concerns related to deliberate or even unintentional triggering of memories, arguing that HCI researchers must recognize and address these as part of the design process. If designers hope to discover new concepts for evoking and sharing memories that might otherwise slip away and be forgotten, they must also be aware of the side effects that reminiscing may have on participants.

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INTRODUCTION
Reminiscing – “the act or process of recalling the past [1]” - is a core activity for any society. Research shows that the desire and practices for reminiscing can be traced back to early civilizations where the elders of the community were responsible to know and share the history of their community [2, 3]. Current technologies for Computer Mediated Communication (CMC) are being utilized in a piecemeal fashion for reminiscing. For example, sites exist that allow individuals to share pictures (Flickr, Facebook, Photobucket), movies (YouTube), and even details of their daily lives (Facebook, Twitter).

In the following sections, we first trace the history of the term reminiscence. We then illustrate how HCI research has focused on triggers to spark reminiscing. Finally, we present three ethical concerns that need to be addressed as research in this area moves forward.

WHAT IS REMINISCING?
Reminiscing became a focus of academic study in the early 1960s. Robert Butler [1], a psychiatrist and gerontologist, argued for the importance of reminiscing, particularly for the elderly. Reminiscing has since become a multidisciplinary research area, spanning numerous fields such as gerontology, psychology, nursing, and education [4].

Despite decades of academic study, the term reminiscing has no standard definition [5, 6]. Although the definitions presented in the literature generally build on the one proposed by Butler (“the act or process of recalling the past [1]”), different scholars introduce different assumptions. Reminiscing may be viewed as an activity that is social [7] or solitary [8]. It may take drastically different forms [9], for instance a written narrative in a journal, a boisterous conversation at a local pub, or complete digital collection depicting the events of one’s life. Reminiscing happens for a number of reasons [10], such as passing time, teaching life lessons, and remembering a loved one. It can be directed towards different types of audiences, such as family members, friends, people living in the same community, or future generations [6]. To add to the complexity, terms such as life review, storytelling, and autobiography are often used as synonyms for reminiscing.

Our use of the term “reminiscing” follows the process-oriented definition of the psychologist Webster [24]:

"The process of recalling memories from our personal past that is an activity engaged in by adults of all ages at different points throughout their lives. Recalling earlier times can happen spontaneously or deliberately, privately or with other people, and may involve remembering both happy and sad episodes."

HOW HCI INTERPRETS REMINISCING
Digital systems for reminiscing have focused predominantly on triggering, either for private reflection (e.g., the Pensieve system from Peesapati et al. [11]), intergenerational conversation (e.g., Ellis and Bruckman’s Palaver Tree..."
Online [12]), or community memory building (e.g., Carroll et al.’s Nostalgia [13]). These systems provide digital artifacts like photos to evoke generation of new digital content as “responses”, or present digital prompts to promote oral conversations.

Reminiscence Triggers
Triggers start the reminiscing process and they can be can be either spontaneous or intentional. Spontaneous triggers may come from sensory input, such as smell, sounds, flavors, or fleeting images. In contrast, intentional triggers are more deliberate reminiscing events in which a person is prompted about a particular event, object, or place. An example of intentional triggering includes interviewing as in the Story Corps project (http://storycorps.org/). Below, we briefly review some paradigmatic examples.

Pensieve [11] is a website that sends reminiscing triggers by email. It sends generic questions or, if the user chooses to share his or her social networking site information, it provides more specific probes about previous posts to the site. Focusing more on specific modalities for prompting reminiscence, Sonic Souvenirs [14] offered clips from an audio recorder collected during a family holiday. The researchers found that the clips were particularly effective at triggering mundane or everyday shared events, in contrast to photographs that are often scripted to capture “happy” moments [15].

Photos are commonly used to trigger reminiscing. For instance, SharePic [16] provides a table top user interface that allows up to four people to sit around a table, view photos (the triggers) and share oral stories. Nostalgia [13] was a web-based story sharing system where a set of historical pictures of a community were posted to evoke text-based reflection and storytelling about the photos. The stories written by residents served as their own triggers, sparking reactions or related stories from readers.

ETHICAL CONCERNS OF TRIGGERING REMINISCING
As indicated earlier, most HCI reminiscence research focuses on triggers for reminiscing, with little concern for what happens during reminiscence. Some systems intentionally trigger reminiscing, such as the HCI research systems mentioned above; others may unintentionally trigger reminiscing, for example a social networking site that displays evocative wall content.

Most systems for reminiscing assume that individuals want to reminisce, and that any triggers provided will lead to pleasant reminiscing events. However this is not the case; some memories that are triggered may produce a rather unpleasant experience for the individual. A seemingly innocent picture of a newborn baby shown to one person can bring thoughts of his or her own children and how long it has been since they were that small. But the same photo when shown to another person could bring back memories of multiple miscarriages and all of the difficult encountered while trying to have children. While we are not claiming that a reminiscence system designer is responsible for each and every user experience in response to a given trigger, we do argue that HCI designers must be sensitive to the multiple possible outcomes of reminiscence. As social networking sites proliferate and researchers explore a variety of multimedia technologies for reminiscing, we must in parallel identify and discuss the ethical issues associated with triggering both positive and negative personal memories. As a starting point, we have identified three specific ethical concerns for reminiscence system designers:

Concern 1: Choice of Intentional Triggers
There will never be a comprehensive list of triggers that designers should avoid. However, a system might “get to know” a user before offering a trigger for reminiscing, and by so doing perhaps does a better job of selecting triggers for that individual user. Note that because individuals are living and sharing significant aspects of their lives online, systems may have access to past shared status and photos as a way of triggering reminiscing (c.f Pensieve [11]). However, while these records are an obvious resource, designers should tread lightly. A positive memory shared five years ago (e.g., a new relationship) might now trigger a very negative reaction (e.g., a broken relationship). One possible research direction is to assess personal records for their potential to a) trigger memories, but also to b) remain relatively stable over time.

Concern 2: Minimizing Negative Unintentional Triggers
Social networking sites are used to maintain social connections that are often tethered to the physical world [17]. They are also serving as places where individuals reflect on the distant and near past through photos and status updates. Consider Facebook for example: A friend from high school may share and tag everyone in an old class photo, which may spark them to think and post about what everyone is up to now or what they were like back then. However, the same photo could trigger a negative reaction for someone who remembers being an outcast and bullied. Others become engaged in reminiscing, adding even more photos; the process starts all over again. Currently, the only way to prevent oneself from becoming embroiled in this unpleasant reminiscence process is to cut the friend links with (or hide the feeds from) the “offending” individuals, even when the unpleasantness is from many years ago. The downside of course is that all other sharing activities are lost. What is really needed is a way to mark a particular trigger as undesired and eliminate any activity emanating from it.

In addition to allowing users to initiate “hiding” of unwanted triggers, designers should investigate intelligent systems for helping to manage which friends see which content. As people live more and more of their lives online, the supporting software needs to be more sensitive and customizable to the complex relationships that exist in the world. The best solution would be to automatically refrain from sharing a
photo or status with individuals for whom it would be distressing. The challenge of course is identifying just who those at-risk friends are for any given case.

**Concern 3: Handling Negative Reminiscing**

No system will eliminate negative reminiscing events completely. Thus systems should anticipate and support the resolution of these unpleasant events. As mentioned earlier, there must be simple and effective mechanisms for “halting” unwanted reminiscence processes. In addition, HCI researchers who are studying reminiscence – and systems that support it – should explore mechanisms for “guiding” users toward positive reminiscing experiences. This could be accomplished by preferring certain styles of wording or image presentations, giving the system a more informal and conversational interaction style, specific directions to remember “the good times”, or encouraging users to explore customizations that would help to filter negative triggers. Other ideas might be discovered by studies of real world reminiscing, focusing on the “master storytellers” who have learned how to select and present content for best effect.

**CONCLUSION**

As researchers continue their investigation into reminiscing systems, researchers must pay special attention to how they trigger the reminiscing events and what outcomes the events might produce. Possible design solutions include both user customization and preference tools and intelligent systems that detect problematic aspects of shared histories.

**REFERENCES**