
Temporal dimensions of boundary regulation in the context of reminiscence: Future considerations and ethical dilemmas

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Abstract

What happens if you only have good memories to reflect on? This paper considers how boundary regulation intersects with the potential benefits of reminiscence and nostalgia. We bring these literatures together to explore how current privacy practices and concerns may affect the types of online content that will be available for people to reflect on in the future and pose several ethical questions and implications for future researchers and designers to consider.

Author Keywords

Social Media; privacy; boundary regulation; Reminiscence; nostalgia; emerging adulthood

ACM Classification Keywords

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

Introduction

Memories, both good and bad, are central to people's identities, how they learn, and also how people make decisions. Many of our memories are now stored online in the form of photos, videos, and text on sites such as

Facebook and people use these platforms as sites of reflection and personal record keeping [17]. Yet how people make decisions about whether to share and whether to keep these memories, and what benefits may accrue from reflecting on them in online spaces is largely unknown. What are some of the trade-offs between privacy practices and beneficial outcomes in the context of reminiscence and nostalgia?

In this paper, we consider how boundary regulation and privacy intersects with the potential benefits of reminiscence, especially when we consider how boundary regulation and privacy concerns may affect the character and kind of online content that will be available for people to reflect on in the future. We suggest that several ethical issues should be considered in both the research we conduct and the values around which we design systems that facilitate reminiscence.

Literature on Boundary Regulation, Reminiscence & Well-being

According to Altman [1] and later Palen and Dourish [10], privacy is a complex boundary regulation process that occurs both online and off, in which people regulate identity and disclosure boundaries across time. Various components of privacy have been studied extensively across disciplines, but how temporal dimensions of boundary regulation intersect with disclosure and identity is still in its infancy [14,17,18]. At the same time, there is a growing body of literature on how people engage in technology mediated reflection and reminiscence [6,7]. Our work brings these two bodies of literature into dialogue in order to further explore how memories are resurfaced,

experienced, and re-shared with relation to concerns for boundary regulation.

Algorithms and systems play an important role in mediating reflection by resurfacing past content in the present, such as through Facebook's "On this day" feature, and through apps such as TimeHop. Despite a growing body of research on technology mediated reminiscence, much of this work has focused on designing new tools to study reflection [6,7,11] rather than how people already use sites such as Facebook for these purposes. However, a rich body of research has begun to examine both how privacy practices change over time, and how people feel about their past data. For example, [14] found that emerging adults playfully engage with past content in ways that let them relive their past while still presenting current adult identities. [17] found that people use Facebook to maintain personal records or online diaries of events that carry emotional significance.

In terms of changes in privacy practices, [2] found that life changes such as graduating from college are correlated with a decrease in willingness to share, while [16] found that people were sharing less publicly over time, but more with their friends as they used more Facebook privacy settings. In a diary study, [19] found that the ways in which people think about their data and share content are mediated by temporality.

There are many emotional and social benefits to reminiscing and experiencing nostalgia that have been identified in offline contexts, and for which researchers are beginning to identify in mediated contexts as well. For example, there has been a large body of research, pioneered by [13], that links written narrative to

enhanced mental and physical health. When participants describe traumatic personal events in writing, as compared to trivial events, and do so over time, they tend to experience improvements in general physical health and mental well-being. Studies have demonstrated that such positive consequences appear related to the development of a coherent narrative, and that careful writing about past events may help in the production of organized, structured memories and how the past can be applicable to the present and future [3,12]. Some of this research has shown that contrasting current and past feelings about negative situations can help people see how they have overcome difficult experiences, creating a redemptive sequence in which people have triumphed over them, making previously negative experiences more positive [9].

Research has also found that nostalgia can serve as a coping mechanism to feelings of loneliness, increasing perceptions of social support [20]. Nostalgia is also linked to benefits such as higher self-esteem, feeling more connected to others, being more generous, altruistic, and optimistic [15].

Studies on technology mediated reflection (TMR) have identified positive outcomes linked to reflecting on the past. Research found that users of a reminiscence system called Pensieve resulted in improved mood among users [5,11]. Isaacs et al. [6] found that capturing and recording experiences as they happened and reflecting on and writing about them later increased well-being. Konrad et al. [7] found that TMR regulated mood, and that people demonstrated mechanisms shown to influence well-being when positive moods prevailed over negative memories, but that in some cases negative moods resulted in

negatively tainting previously positive memories when reflecting on them.

Research on the valence of self-disclosures provides some important insights that can guide future research as well. For example, [8] found that people use twice as many positive as negative words in their Facebook posts, while [4] found that negative emotions and events are generally shared through private channels on Facebook rather than in public. If people are sharing mostly positive content, and then Facebook provides people with mostly positive content to reflect on, how does this affect people's long-term well-being? Will people still reflect on the difficulties of their past in other ways? How should we use these findings to guide future research? We argue that both research on privacy and reminiscence must carefully consider temporality in order to understand how we must design for the future. In the next section we pose some important questions for researchers to consider, introduce some research currently underway that begins to explore some of these issues, and consider several ethical implications.

Future Research and Ethical Questions

If people begin to share mostly positive, significant life events on sites such as Facebook, what does this mean for the content they will reflect on in the future, and the potential benefits they may receive from such technology mediated reminiscence? Do our findings require that we nudge people towards sharing or reflecting on different types of content that may be beneficial to their long-term well-being, even if they may negatively affect current mood? Should sites retain content people delete in case they later change their mind and wish they had kept it? What are the potential

pitfalls to providing too much control over privacy? For example, if people decide to delete content they find embarrassing at one point in life but later wish they had kept in some capacity to reflect on later. On the other hand, moving on from the past can also have benefits. How do sites such as Facebook and their algorithmic decisions, the control of users, and the user life course converge to alter the ways in which people reflect on their past, and how should we as researchers and designers develop ethical systems with an eye toward the future? How do we weigh the positive and negative consequences of resurfacing either traumatic or negative life events versus positive life events?

To begin addressing some of these questions, we are currently conducting mixed-methods research that examines the types of nostalgic content emerging adults share on sites such as Facebook and Instagram, some of the social benefits that may come from sharing such content, how people think about their past sharing behaviors and content, and what some of this content means to them in the present context. Further, we are also looking at how people perceive their sharing practices have changed over time. This research is building on studies such as [7,14,17] and others to help answer foundational questions about how people regulate interpersonal boundaries as they reminisce and share nostalgic content in spaces such as Facebook.

Boundary regulation is central to reminiscence and provides a fruitful context within which to examine how temporal dimensions of privacy intersect with specific practices such as managing past content, reflecting on it, and re-sharing it. By focusing on not only how people experience past memories online, but also how

they make decisions about whether to share it, and what benefits may come from it, and also how present privacy practices will affect future reminiscence, we can begin to address important ethical problems and design solutions to address them. Broadly speaking, we must study and design for privacy over the life course.

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