

Extended Episodic Experience in Social Mediating Technology: Our Legacy

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Abstract. Drawing from an online survey and a focus group study, we extend the concept of the extended episodic experience to include truly long-term interaction. As our life is still unfolding, we leave many legacies in the flow; both printed and more subtle. Although much effort is being made to preserve digital legacy in online space, we also need to look into the subtle legacy that is equally important in the long-term experience. This subtle legacy is untouchable and often forgotten but it follows us till the very end. Our concern on the consequences of this legacy has led us to suggest the need to design for virtue.

Keywords: extended episodic experience, long-term interaction, digital legacy, virtues.

1 Introduction

The way we use social media is changing. The technology allows new forms of control, encouraging new forms of social interaction, promoting certain values while discouraging other values. Crucially, the technology was often not designed for its current use in the first instance but has been repurposed [1, 2] by its users to satisfy their evolving needs.

To date many researchers are working on imparting human values in their research and design. This is not just about improving usability and effectiveness of interaction design but more on thinking how moral and ethical values are affecting certain parties upon whom the technologies are being implemented [3, 4]

Our concept of extended episodic experience was developed to understand the emotional and human values implicit in long-term interactions, and we hope can also a means to promote positive values. Extended episodic experience or EEE is defined as a long-term experience that combines multiple individual experiences that happen at different times and places. Each individual experience, which we call an episode, involves reflection, perception, awareness and emotions. The concept was defined from our study on user experience in photologging. Although the study has focused on photologs, we believe the knowledge could be applied in other social applications such as Facebook. There are three aspects that allow experience in Facebook to become a long-term experience as mentioned in [5]. Every action in Facebook has its direct and reflective effect, often influenced by our mood; is motivated by our offline communication and interactions in other domains; and lasts until the very end.

In a recent development, we are trying to understand user social interactions and their legacy in social mediating technology. For most of us, Facebook has become a place to meet, socialise, share our thoughts and preserve our memories. But as we all rely heavily on the social media for our day-to-day interactions, what will happen if we stop using the application, or it suddenly disappears? And what will happen to people who rely on us for information, for making connections and preserving our personal histories? What will happen to the flow of the long term-experience? How does our interaction today affected our future life including the hereafter? And what happens if a person dies? Will their legacy remain in the sites or shall we delete the data to respect the deceased?

Legacy is something precious that we leave behind. In today's world, our legacy also constitutes the digital print that we leave in the social media. There have been some cases where families dealing with death are using Facebook for handling public rituals and memorialisation. However, due to some restriction and websites rules, this case is never straightforward. Different social media have their own processes, but this is usually unclear or not made apparent to the public. Thus, it is not a surprise to see a lot of people still do not know what will happen to their content after they die and who will keep their digital legacy.

Social media is an important 'place' for many, not merely a 'space', but invested with social meaning [6], for example, Facebook, which is often the locus for extensive interaction and sharing personal content. The application has become a place to some people, because of their ongoing interaction, purpose and meaning. Outside social media, we hire advisers to write our will in order to protect our legacy; money and properties. Information, personal treasures in social media are also our property, but are kept by strangers. Creating awareness about the importance of these treasures and providing means to support them is very crucial as more and more data are being shared online. To date there has been some research in managing post-mortem data [7], [8], [9]. Although having a tool is very important, the awareness of the importance of managing the digital legacy is significance too. Thus, in this research we hope to contribute to the growing literature on managing post mortem data from the Malaysian perspective. Data has been sought from an online questionnaire from 104 respondents from students and staff of a private institution in Malaysia.

However, this initial study, in common with similar studies by others, only considers 'tangible content' such as photographs, notes and also status published in the user account as the digital legacy. In this paper, we also consider another digital legacy that we think is important to be highlighted. We discuss the intangible features that are the accumulation of actions that we perform in our interaction in the space, the feelings and emotions that we had and the thoughts and perception that we had for others in our interaction. In EEE flow, our content might stay in the space, but its implication will stay with us until the very end.

To have a deeper understanding on the second issue presented in this paper, a focus group was used for data collection. In terms of data analysis process, we used online statistical software to analyse data from the survey and network thematic analysis for data from the focus group.

The paper is structured as follows: after this Introduction, we present some related work on the main issues. The research methodology is described in Section 3. In

Section 4, findings on the survey is presented and discussed. We discuss findings on focus group in Section 5. Finally, we offer some conclusions and future work.

2 Related Works

In HCI, the work on digital legacy and its 'life after death' are slowly gaining its momentum. Massimi, Odum et, al [10], discusses research ethics, methods and design consideration for death and dying. Their approach is called thanatosensitive design [11] that also suggests there are 4 stakeholders (bereaved, dead, dying and in living) that need to be considered in research end of life in Lifespan. To date, there are many applications and websites developed to preserve the digital legacy of the dead such as My Wonderful Life [12], Kathryn [13], Legacy Locker [14] and some have repurposed Facebook page for obituaries and memorization [15].

Maciel and Pereira [7] try to understand how user's religiosity could help in designing digital legacy systems. They study a sample population of youngsters in Brazil who prefers to have some flexibility to configure their account in order to manage their digital legacy. Other work on techno-spiritual [16] also has touched on preserving personal memories.

3 Research Methodology

This research is conducted in two stages. The first stage is to understand users' digital legacy and their plans for post-mortem data management. This was done through an online survey that was sent out randomly to 120 students and employees in a private institution in Malaysia. The questions are 17 open and close questions, which was divided into demographic information, Facebook activity and usage and their planning for post mortem.

In order to have a deeper understanding on user experience interacting in Facebook, a focus group was conducted. The focus group was chosen as the method because it provides different insights from different participants in a discussion. We also can observe their emotional reactions when discussing certain issues. Participants were recruited through email. 20 participants agreed to participate; all of them are Malay and Muslims. The age of the participants ranges from 20 years old to 45 years old. Data from the online survey was analysed using web based statistical software whilst we used network thematic analysis to analyse data from the focus group.

4 Findings from Online Questionnaire

4.1 Demographic Information

A set of online questionnaire was given randomly to 120 respondents. From this figure, only 104 replied to the questionnaire. It contains a total of six variables, which include gender, age, occupation, citizenship, race and marital status. Among the 104 respondents who participated in the survey 36% are male and 64 % are female. The

result also indicates that most of the respondents are in the age range of 21 to 29, which represent 77.7% of the total sample. The second highest are respondents between the range of 18 to 20 which represent 29% of the total sample followed by respondents between the range of 30 to 39 which represent 16% of the total sample. Based on the respondents, 94% are Malaysian while 6% are foreigners. From the total number, 62% are single while 38% are married. The respondents are coming from diverse ethnicity, with Malay 48%, Chinese 35%, Indian 8% and other races 10%.

4.2 Facebook Usage

74% of the respondents have subscribed to Facebook for more than 3 years, 19% for between 1-2 years while 2% for less than 5 months. 78% of the respondents access Facebook everyday, 12% in 2-3 times a week and 4% of the respondents access the application once a week.

The respondents also were asked how they access their Facebook account. Based from the total number of respondents, 61% access their Facebook account using mobile phones, 32% using laptop and PC and 7% using other devices.

4.3 Facebook Password

Accessing Facebook through a mobile phone requires people to log in every time they access it. Thus, we are intrigued to know if they still remember their password after some period of time. 95% of our respondents remember their password while 5% did not remember. 88% from the total number of respondents said that they did not share their password with other people, while 9% did share it with their spouse and 1% with their mother, 1% with fiancé, 1% with their children and best friend respectively.

85% of the respondents did not keep their password somewhere else while 15% wrote it in their diary, notes in mobile phone and email. Most of them are protective of their Facebook and do not allow anybody else to have access to their account. This is evidence by the figure that shows 84% did not give any access to anybody, while some married couples share the access with their spouse (11%) and other respondents share the access with their parents (1%), children (1%), mother (1%) and finance (2%).

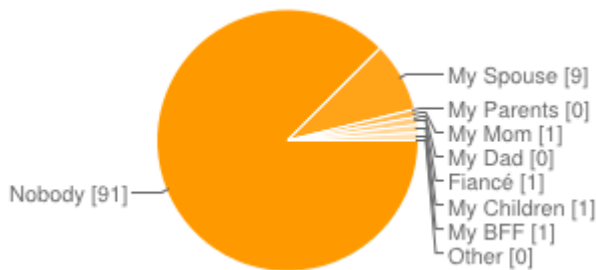


Fig. 1. Who else remembers your password?

4.4 Who Will Managed Their Account When They Die

To date we have seen that many Facebook accounts belong to someone who has already died. The question is who is keeping this account for them? We have asked the respondents about their plans with their Facebook account if they die. 64% of the respondents said they have not considered anyone to look after their account, 25% are not sure and 12% thought that their family members would look after the account.

4.5 Do They Want Their Account to Be Deleted?

61% of the respondents wanted their account to be deleted by if they passed away, 17% wanted the account to be remained and 22% of the respondent said they are not sure.

4.6 Any Idea about Post Mortem Data Management by Facebook Administration

If they passed away, 85% of them did not know what will happened to their Facebook content while 15% think that the content will stay there until someone deleted them.

4.7 Activity in Facebook

They were asked about their three most active activities in Facebook. The three most active activities in Facebook by the 104 respondents are commenting, sharing photographs with others and like other people's upload.

4.8 Consequences of Action

Of those who responded, 98% believe that their Facebook interactions do in fact have consequences. This may stem from their upbringing, cultural experiences or religions- we cannot know with certainty why they believe as they do.

4.9 Reaction to Facebook Closure

The survey asked how the respondents would act if Facebook announced that it had plans to close its operations; 30% of the respondents would take no action, 28% would share the news with their friends and families, 21% would download all their materials from the account, 11% would delete their account, 6% would write a status about this, 3% would contact Facebook administration for clarification and only 2% would find another space to get connected.

However, if Facebook confirmed it was closing its operation, 31% would delete their account, 26% of them would download their content from the account, 19% would not feel affected, 16% would share the news with friends and families, 6% would find a new space immediately and 2% of them would upload a status regarding the matter.

5 Findings from Focus Group

As mentioned earlier in Section 3, the focus group method was chosen because we wanted to have a deeper understanding on user perceptions and their experience interacting in Facebook. Other studies on social interaction in Facebook have used other methods such as in-depth interview and online observation.

The focus group consisted of 20 respondents. The respondents were divided into two groups. Each group was coordinated by one moderator. The focus groups were audio taped and photographed. The study was divided into two sessions. The groups were given a picture (Fig. 2) that illustrates an individual experience and interaction when trying to post a picture on Facebook. In the first session they were asked to discuss about the picture.

In the second session, they were asked to discuss this question:

*“Sharing our personal legacy in Facebook is a big responsibility.
What are your opinions?”*

The two questions related to each other. Information was recorded, transcribed and analyzed using thematic network analysis (see Section 3 for further info). In the following we explain findings from the focus group.



Fig. 2. User interaction in posting photographs

5.1 User Perception and Their Legacy

When publishing content in Facebook, participants are usually conscious and aware of their audiences and their reaction, thus performing accordingly to suit the norm and standard that will be accepted by their audience. For instance, in sharing photographs, their past experience on reflecting on their own photographs in Facebook and viewing

others' photographs, contributes to their decision of what kind of photographs are suitable for their personality, lifestyles and also expectations of visitors.

When posting status, respondents are involved in task attention and self-attention. Task attention is giving attention to the task that is choosing the right words to form the sentences. It can take a few minutes before they satisfied with their 'work' and press the button 'publish'. In the case of publishing photographs, participants did some screening before publishing. Browsing and screening their photographs before deciding what to upload involves reflecting on their experience, their culture and norms, and responsibilities towards their friends and families. Some of the participants are afraid that they will get negative feedback from their audiences, whilst others think that they are not concerned about people's criticism because it is their wall. The common view amongst this group is "*this is my wall, it is up to me what I want to share, people can say anything about it*".

Participants interact with many people. Their personality is not static but a dynamic and relational one. Goffman suggested people construct their identity through a region in which the parties reveal personal information selectively according to their relationship and tacit moral code. He suggests in everyday life, we are 'the performer', 'the pretentious', 'the motivator and the actor'; which have stories to conceal and unhide [17]. Our interaction is fluid and dynamic based on situational and relational factors. The activity of browsing Facebook is usually done alone; giving them a lot of freedom to explore and indulge in their own moment. Based from the focus group, interacting in Facebook is one-way of distraction from work; work that is now mostly done in front of computers. Most of our participants use computers to do their work, and will find interacting in Facebook as one way of relaxing after completing their tasks.

Another interesting finding from the focus group is that participants always involved in internal conversation when browsing Facebook. Internal conversation is common, especially when we are alone or silent [18]. For instance during the session, one of the participants talked about members of her clique who always post photographs that deviate from their culture and norm. When she looks at the photographs, she thinks, "*I wonder how her mother will react if she knows about this*". Some participants sometimes criticize silently when looking at strangers' photographs. The freedom of browsing people's profile and content in their own time and alone gives them more freedom to express themselves regardless of the fact that their perception or internal conversation about the other people might be wrong.

5.2 Responsibility in Interaction

Some thought interaction in social media such as Facebook is a leisure activity. Other participants thought it is a form of self-exhibitionist. Although this perception might be true, nonetheless, everyone agrees it comes with a big responsibility. Unconsciously, they hold a responsibility to supply their friends, family even strangers with updates; sharing valuable information, sharing photographs or even showing some support through the button 'Like'. In Goffman's Face-Work [19], he describes how one may expect to find an understanding on how to save someone's face and his own in his social circle.

All of our respondents are Muslims. They believe everything that they do in this world including interacting in Facebook have both moral and eternal consequences. Other religions such as Buddhism and Hinduism also believe in these consequences, which they defined as Karma [20]. This finding echoed with our survey results that show 98% of the total respondents agree that their interaction in Facebook have its consequences. Thus in our focus group, those who believed in Karma agree that they have to foster good relationship with others. They believe that their actions in Facebook will have effect in the hereafter. This also includes their feelings and emotional reaction towards certain issues, their misjudgment about others and things that they said about other people in Facebook and also offline communication. If they do good deeds, then they will be get a good reward and vice versa. Thus, some of them are cautious in their interaction in Facebook and the content that they shared in the application.

6 Discussions

Our relationship with technology is quite different now and expected to be more so in the future. Computers and humanity are inseparable giving new challenges to all designers to think of the best technologies to support our needs. However, as much as we want to create the best and most humane technology, understanding what it means to be human in a digital future must be better understood first.

It is evident from the focus group, that for many, the scope of design must now include virtues, not just values. In HCI, many designers have concentrated in fostering and supporting human values. Designers are not just focusing on improving usability and effectiveness of technology, but also weighing up various moral and social impacts to the affected parties whom the technology is being proposed [3]. Thus, rather than focusing on values alone, designing for human today must also includes virtues.

In order to design for virtues, we must understand the meaning of being human [21]. Understanding what it means to be human will help us in designing application that help people better understand the purpose of their existence in this world. For many, both religious and secular, our human intelligence includes a focus on virtue: having a sense for others, reflecting on creation, hope, and wisdom, and for those with religious beliefs this may also include thinking about the Creator in everyday interaction and being spiritual. Some technology today, although not designed for virtue, has been repurposed by some of its user to help them in seeking virtue. Facebook for instance, allows for self-reflection. The application helps people to understand themselves and others through social interaction and things that we shared inside. The application also has been repurposed as techno-spiritual tool [22] by some people to promote religious practice to the public. In this multicultural world, it is acknowledged that our views on virtues can be diverse. Thus future research needs to address this concept first before we can emphasize designing for virtues.

Designing for virtues is very important especially to people who believe that our actions in this world will affect us in the hereafter. Sigmund Freud suggests that “*the aim of life is death*” [23]. It is interesting to note that this Western scholar would

consider death to bear such influence upon human behavior in the world. This is also true in Islam that believes the world is the bridge to the hereafter. Discussing about death and life after death can be a bit taboo for some of us, but there is a growing interests about it in HCI as we are accommodating the evolving needs of people, where we need to consider all aspects (physical, psychological, sociological, spiritual etc.).

7 Conclusion

We are extending our ideas on the extended episodic experience concept to include truly long-term interaction. Our life has many episodes; coming and passing; still unfolding. In our long-term experience, we leave many legacies, some in clear digital content and some more subtle ones. In this paper, we highlight virtues in our findings. Interacting in Facebook is seen as a leisure activity but it comes with a big responsibility. This responsibility is not only being cautious about the content that we publish but also the actions and the hidden interactions that we had in our heart. All these accumulate and influence our long term experience, and as the paper reveals, it lasts until the very end.

References

1. Carroll, J., Howard, S., Velere, F., et al.: Just what do the youth of today want? Technology appropriation by young people. In: The Proceedings of the 35th Hawaii International Conference on System Science (2002)
2. Mackay, H., Gillespie, G.: Extending the Social Shaping of Technology Approach: Ideology and Appropriation. *Social Studies of Science* (1992)
3. Harper, R., Rodden, T., Rogers, Y.: Being Human; Human Computer Interaction in 2020. Microsoft Research (2008)
4. Friedman, B.: Human values and the design of computer technology. Cambridge University Press (1997)
5. Khalid, H., Dix, A.: The experience of photologging: global mechanisms and local interactions. *The Personal and Ubiquitous Computing* 14(3), 209–226 (2010)
6. Harrison, S., Dourish, P.: Re-place-ing space: the roles of place and space in collaborative systems. In: The Proceeding of CSCW 1996 of the 1996 ACM Conference on Computer Supported Cooperative Work (1996)
7. Maciel, C., Pereira, V.: *Digital Legacy and Interaction*. Springer (2013)
8. Carrol, E., Romano, J.: *Your Digital Afterlife*. New Riders, Berkeley (2011)
9. Forever Missed, <http://www.forvermissed.com/>
10. Massimi, M., Odom, W., et al.: Matter of Life and Death: Locating the End of Life in Lifespan-Oriented HCI Research. In: The Proceedings of CHI 2011, Vancouver, BC, Canada (2011)
11. Massimi, M., Charise, A.: Dying, death and mortality: towards thanatosensitivity in HCI. In: The Proceedings CHI Extended Abstract. ACM (2009)
12. MyWonderfulLife, <https://mywonderfullife.com>
13. Kathryn, <http://Kathryn.org>
14. Legacy Locker, <http://legacylocker.com>

15. <https://www.facebook.com/washpostobits>
16. Wyche, S., Hayes, G., et al.: Technology in spiritual formation: an exploratory study of computer mediated religious communications. In: The Proceeding of CSCW 2006, New York, USA (2006)
17. Goffman, E.: *The Presentation of Self in Everyday Life*, Anchor (1959)
18. Archer
19. Goffman, E.: *Interaction Ritual- Face to Face Behaviour*. Pantheon (1982)
20. Karma, <http://www.buddhanet.net/e-learning/karma.htm>
21. Salleh, A., Ahmad, A.: *Human Governance, A Paradigm Shift in Governing Corporations*. MPH Publication (2008)
22. Ahmad, N.H., Abdul Razak, F.H.: On The Emergence of Techno-Spiritual: The Concept and Current Issues. In: *The Computer and Mathematical Sciences Graduate National Colloquium (SISKOM 2013)* (2013)
23. Freud, S.: Beyond the pleasure principle. In: *Penguin Freud Library*, vol. 11, Strache, J.