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# Cultivating Heritage: the role of reflection in keeping history alive

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**Abstract**

Through the sharing of life stories, what is reminiscence for one becomes the heritage of another. In western cultures, people over the age of 80 must often face loneliness and isolation as they become necessarily homebound and rely on relatives for care, emotional as well as physical. Due to the physical limitations of old age, elders are often viewed as societal burdens, no longer contributing to the greater good. But they have lived long lives, and have much still to contribute in the way of experience, and wisdom. Storytelling is one way the younger generations might gain access to this knowledge, learn to appreciate their elders, and elders can continue to contribute to the greater good.

**Keywords**

Aging, storytelling, heritage, reflection

**ACM Classification Keywords**

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous. See [3] for help using the ACM Classification system.

**Introduction**

Some years ago I traveled across the U.S. with my grandmother to see my young cousin perform in a play when he was in primary school. He played the part of one of the main characters in a theatrical production of the book, *The Boxcar Children*. The story tells the tale

of four children who are orphaned during the Great Depression. Fearing they will be separated and sent to live with uncaring relatives, they run away together to eke out a living on their own. At the close of the first act, my grandmother had tears in her eyes as she explained that she had been separated from her siblings in just this way during the Great Depression. She said nothing more about it, but I watched the remainder of the play with a much different understanding of this period of history, which until then had been just another range of dates to memorize for history class.

I share this story because it is the inspiration for my Masters capstone project in Human Computer Interaction Design. I am working towards a design for technology that will encourage/enhance the storytelling experience between grandparents and their adult grandchildren. Storytelling can be a means through which younger generations can share the “felt experience” [4] of their elders. Through the sharing of life stories, what is reminiscence for one becomes the heritage of another. Here at the intersection of heritage, storytelling, and HCI, I believe there is ample opportunity for supporting the social aspects of reminiscence, one of the goals of this workshop.

### **Defining Heritage**

Heritage is commonly defined as “anything that has been transmitted from the past or handed down by tradition”<sup>1</sup> but Giaccardi & Palen offer a much more fluid picture of heritage in which “aspects of physicality, interpretation and ascribed value combine to produce and evolve the meaning of heritage” [2]. While the

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<sup>1</sup> [www.thefreeonlinedictionary.com/heritage](http://www.thefreeonlinedictionary.com/heritage)

Great Depression may technically have been part of my heritage before I learned of the life changing events my grandmother experienced in its wake, it has since become a part of my “lifeworld” [4], a part of how I understand and interpret the world around me. Stories and artifacts of that era now hold new meaning for me in that they help me better understand the experiences my grandmother lived. Heritage is not simply passed from one to another; rather it is recreated, preserved through reinterpretation and incorporation into the lifeworld of another person.

### **The Role of Storytelling**

Children learn much about the world through stories. Nursery rhymes and fairy tales teach us the values held by our caregivers in an engaging and memorable way. As adults we continue to engage with the world through storytelling by listening to and composing stories of our own. The sharing of these stories is key in creating heritage.

In some ways these stories, which are artifacts created by the storyteller, are more authentic expressions of heritage than the “truth” or the “real” story would be. The way in which the story is told can say a great deal about the teller, including values which might not otherwise be shared. Storytelling is a fascinating ancient art that continues to this day in many forms, and there are already technologies, such as Apple’s iMovie, that are designed to assist the amateur storyteller.

### **The Process of Understanding**

Through stories, the past can come alive to those who weren’t alive to live it, but only if the story holds personal meaning for the listener. The experience of

collecting and sharing the story has meaning as well as the story itself.

As a living thing, heritage resides in the lived experience of individuals. It may be tied to an artifact, a way of doing, or a place, but it is the connections we make with these more tangible aspects of heritage that tie us to others, to those who have walked this place, practiced this technique, or created this artifact, that make these things meaningful.

How we understand and make meaning of artifacts (things people have made) has long been a subject of interest to scholars. In [1], Barnard talks about understanding visual culture, and how the role of the understanding subject in different theories. The subject of understanding may be seen for example as gendered, belonging to a social class, a product of a community, or as an individual whose understanding is dependant on their "horizon". Regardless of the lens we choose, understanding requires the understanding subject to make meaning of the object, and meaning-making requires reflection: "Our sense of any particular situation depends on previous experience and reflection. [...] As meanings developed through reflection are absorbed by the object or situation, the sense of that situation changes." [4]

### **Reminiscence and Reflection**

Peesapati and Schwanda define reminiscence as "an everyday activity: informal, unstructured, and woven into everyday life" [6]. If reminiscence, remembering, and reflection can be considered different activities, I would differentiate reflection as being a deliberate action, and perhaps one that is more focused on the present and future than on the past.

Donald Schön talks about reflection in and on action as important to the learning process. Reflection helps us build up a repertoire of experiences, which we can later draw on as a basis for comparison when we encounter new experiences. By understanding an experience in the context of, or in contrast to, some other experience, we can find new meaning or perspective. "To see *this* site as *that* one is not to subsume the first under a familiar category or rule. It is, rather, to see the unfamiliar, unique situation as both similar to and different from the familiar one, without at first being able to say similar or different with respect to what. The familiar situation functions as a precedent, or a metaphor, or... an exemplar for the unfamiliar one." (Schön 1983: 138) via [8].

After further inquiry, my grandmother shared that when her family was scattered she moved from a town where she attended a large high school to a very rural town where the high school students had never heard of a "senior prom." Having heard my grandmother's story and added it to my repertoire, I can now reflect on my childhood experience of moving to a new school in a different light. For me, the differences between the schools were minimal, but because of this common ground I can better understand what the move might have been like for her, and it puts my negligible transition into perspective. In addition, new insights into our differences in personality emerge from this reflection, and I can apply these as lessons to my own life.

Thorne, McLean, and Lawrence also touch on this relationship between reflection and meaning making. In their study with young adults, they explore the question "when is remembering enough, and when is

reflection required?”[9] by examining meaning in self-defining memories. One finding of the study, that “insights were more likely to be accepted by listeners than lessons,” leads to interesting comparisons of lessons and insights. Insights are described as developing slowly over time, and in a social context often involving the telling of the memory.

### Reflective Technologies

Memory aids can help people remember the past and reminisce, however occasions for doing so are infrequent. Sitting down to look through a photo album, for example, doesn't usually happen everyday. More often there is some purpose for it: a death, a birthday, moving, graduation, or some other life event. Technology can help move reminiscence to the forefront of our lives in small chunks. With Pensieve [6], Peesapati, Schwanda et al. explore how digital footprints such as photographs, as well as text prompts can help people reminisce more often. These triggers are sent to individuals to remind them to reminisce, and seem to encourage private reflection. Personal Informatics Systems [3] are becoming increasingly common, and assist with tracking behaviors, habits, activities, etc. to allow for detecting trends and developing insights from personal data.

It is important to reflect not only on our own lives, but also on the lives of others in relation to our own. This can help us better appreciate others, and to learn about ourselves in the process. Petrelli et al. explore with FM Radio [7] how “digital sound can engender and enhance collective family reminiscing.” Their studies of the creation and consumption of sonic mementos suggest that sound can be an effective social memory trigger. Many currently available technologies are designed to

support collection of recent memories. Photo sharing sites such as Flickr and Picasa, and social media such as TwitPic and Facebook are focused on enabling users to store and share just-taken digital images. While it is possible to scan and upload old photos to these sites it is certainly not the main purpose, and is typically a much more labor-intensive process.

### Current Work and Goals

I am currently exploring a design for a physical, digital photo album that would allow audio recordings of viewers' reflections on the photographs within to be accessed at the same time as the photographs. Audio commentary by friends and family members could enhance the value of the digital mementos. The book could travel with the elderly family member in the event that they must move to a nursing home, when it is likely much of their other physical memorabilia will not. The goal of the design is to cultivate heritage through storytelling and reflection among family members using photographs and audio stories as jumping off points.

Existing physical photographs and memorabilia could be scanned in the front cover (a), and the digital nature of the book would allow for multiple albums to be stored within one book (b). Those viewing the album could touch a photo to begin recording (c), and touch again to stop. Audio files already assigned to the photo would be accessible by icons near the photo (d), and a visual representation of the audio recording would be displayed below the photo when recording or playing a file. Minimal audio editing capabilities could be presented with a double tap of the photo.

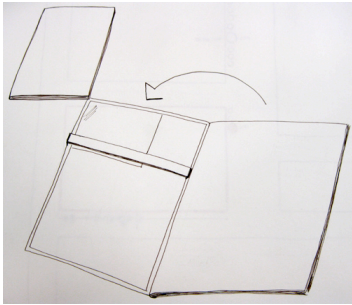


Figure a

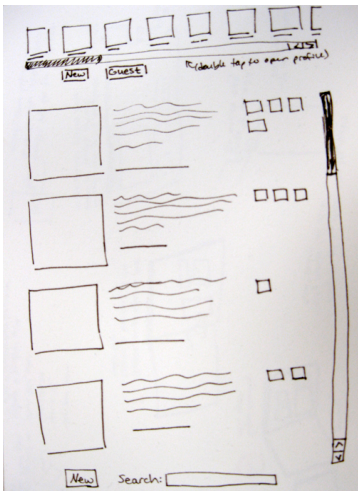


Figure b

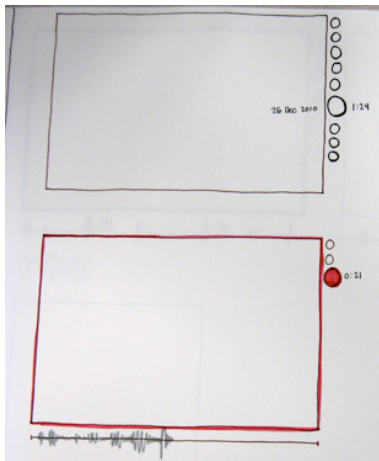


Figure d

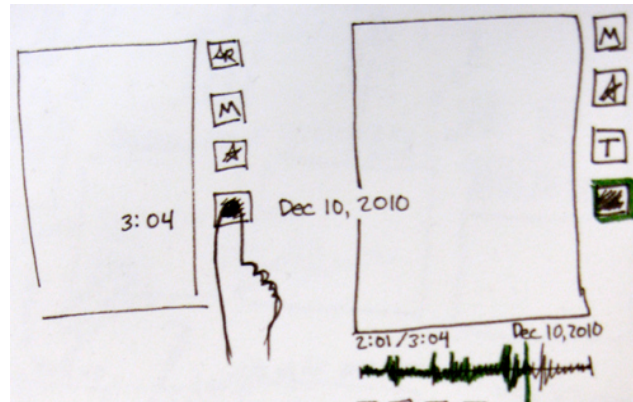


Figure c

### References

- [1] Barnard, M. (2001). *Approaches to Understanding Visual Culture*. Palgrave, New York, NY.
- [2] Giaccardi, E. and Palen, L. The Social Production of Heritage Through Cross-Media Interaction: Making Place for Place-Making. *International Journal of Heritage Studies*. 14:3, May 2008, 282-298.
- [3] Li, I. Dey, A. and Forlizzi, J. (2010). A stage-based model of personal informatics systems. In *Proc. CHI 2010*. ACM, New York, NY, USA, 557-566.
- [4] McCarthy, J. and Wright, P. 2004. *Technology as Experience*. The MIT Press, Cambridge, MA.
- [5] Peesapati, S. T., Schwanda, V., Schultz, J., & Cosley, D. (2010). Triggering memories with online maps. In *Proc. ASIS&T 2010*, Vol. 47. American Society for Information Science, Silver Springs, MD, USA, Article 69

### About the Author

Sarah Reeder is currently pursuing a Master's degree in Human-Computer Interaction Design (HCI/d) at Indiana University, Bloomington through the School of Informatics and Computing, with an anticipated graduation date in May of 2011. She will begin the PhD program at Carnegie Mellon University's Human Computer Interaction Institute (HCII) in the fall of 2011. Her research interests currently include storytelling and heritage interaction design, design theory, and human robot interaction.

- [6] Peesapati, S. T., Schwanda, V., Schultz, J., Lepage, M., Jeong, S., & Cosley, D. (2010). Pensieve: supporting everyday reminiscence. In *Proc. CHI 2010*, 2027--2036.

- [7] Petrelli, D., Villar, N., Kalnikaite, V., Dib, L. and Whittaker, S. 2010. FM radio: family interplay with sonic mementos. In *Proceedings of the 28th international conference on Human factors in computing systems (CHI '10)*. ACM, New York, NY, USA, 2371-2380. DOI=10.1145/1753326.1753683

- [8] Smith, M. K. (2001) 'Donald Schön: learning, reflection and change', *the encyclopedia of informal education*, [www.infed.org/thinkers/et-schon.htm](http://www.infed.org/thinkers/et-schon.htm)

- [9] Thorne, A., McLean, K. C. and Lawrence, A. M. (2004). When Remembering Is Not Enough: Reflecting on Self-Defining Memories in Late Adolescence. *Journal of Personality*, 72: 513-542.