

Serendipitous Family Stories: Using Findings from a Study on Family Communication to Share Family History

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ABSTRACT

Storytelling and sharing family histories are important parts of what it means to “be” a family. Based on results from a study on intergenerational communication over a distance, we created the Serendipitous Family Stories system. The service allows family members to create visual and audio stories about places of importance in their lives and for their relatives to discover them serendipitously as they go about their lives. We will describe the motivation for the application and explain its functionality. Results from a field study are forthcoming.

Author Keywords Storytelling, mobile, video, family, serendipity.

ACM Classification Keywords H.5.1 [Multimedia Information Systems]: Artificial, augmented and virtual realities; H.5.m [Information Interfaces and Presentation (e.g., HCI)]: Miscellaneous

General Terms Design, Human Factors

INTRODUCTION

Family history is an important part of family identity. Parents and relatives often spend time talking to their children about places and events that were important in their lives. These stories serve to bring generations together and create a sense of shared context that is important to “being” family.

However, today these types of rich interaction with family members are limited to the explicit times that family gathers across generations. Once children leave home, these are often only brief interactions at holidays, at special occasions, or when talking on the phone. We wanted to create further opportunities for sharing family stories and to contextualize them in the world. We envisioned a system where family members could be passing by a place of importance in the family and be notified of this and have the ability to hear a story from the family member who was connected to that place. In this way, the world becomes a place for interaction with family history at new times.

We view these forms of contextualized communication as a way to create a stronger sense of family and remind people of their relatives and the rich histories of their experiences as they go about their own lives in the world.

MOTIVATION AND RELATED WORK

The idea for this system came out of a study on intergenerational communication across distance that was conducted at Motorola in early 2009. [1] We visited seniors and their adult children that were separated by approximately 1,000 miles and learned about their communication patterns over a series of three weeks. Through semi-structured interviews and logging of communication, we were able to learn how communication tools worked for or against them today and what separated a memorable communication from an unmemorable or frustrating one.

One of our participants, EC2-IL, described to us a time during the study where she passed a theater, thought of a family member, and communicated with her mom through a photo: “My grandfather used to dance there, when he was in the army or whatever. And so I noted, and I put ‘Where Pops used to dance’ as the memo [subject line].” Other participants discussed times when they used to live in Chicago and places that they frequented there or activities that they used to do. These rich stories were frequently tied to a specific location and we saw an opportunity for serendipitous discovery of these stories from the past as relatives traveled through their days.

Throughout the HCI and Ubicomp literature, there are many examples of interfaces designed for personal reminiscing. Pensieve was a system created by Peesapati et al that encouraged individuals to reminisce and comment on data from historical social media interactions. [6] Petrelli and Whittaker studied physical and digital mementos in the home and the stories that they contained. [7] They provided a series of design guidelines for making digital artifacts more accessible.

On the mobile device, Yoon et al created a system to promote photos in a contextual manner. [8] For example, photos taken at the current location could be shown as the background of the mobile device.

Bidwell et al studied the use of mobile phones to capture and share personal stories in rural South Africa. [2] These stories combined a rich combination of audio, video, and photos captured from the device. However Bidwell’s system provided no contextual means for retrieving these stories.

Olsson and colleagues at Tampere and Nokia investigated systems for sharing events with others through mobile

phones. [4-5] This involved sharing photos and other rich media from the event. While not looking at historical events of importance, their design guidelines help in understanding how events can be shared and consumed from a mobile device.

In all of this work, we see that the fun and joy of sharing family history is missing from the types of interaction that are created. From here, we sought to create a system that encouraged the sharing and serendipitous discovery of life memories.

SYSTEM DESCRIPTION

The system consists of three main components. There is a web user interface that allows users to create stories, a server for storing and providing access to stories, and a mobile phone application that allows for stories to be triggered and for playback of the associated media.

Users can create new family stories from a web user interface. They are presented with a map and from that map can create a new story from their past relating to a selected place. They can associate a time period to the story and then record video/audio or provide a text depiction of the story. If they have photos or videos on their computer of that place or story they can upload them to the system or hold up physical artifacts to the webcam.

The server stores the media files and metadata for the stories. It has APIs for retrieving a list of stories with their locations and for retrieving the media items associated with those stories.

The mobile phone app is the core part of the experience with the system. The application runs as an Android service, periodically querying the phone's location and comparing it to a local cache of story locations from family members. If the phone nears one of these locations, it provides a notification to the user stating that there is a story nearby. The user can then choose to browse media related to that story and to communicate back to the story's creator by phone, email, or lightweight communication. Uncovering a story unlocks it so that it can be viewed again later.

Users can view all stories that have been unlocked from any location as well as an indication of the number of stories left to be discovered. Optionally, they can see information about distance and direction to the nearest unlocked story.

DISCUSSION AND FUTURE WORK

We believe that this system affords new types of interactions among family members. Rich family history that might have otherwise gone untold can now be shared with relatives serendipitously. Learning about family members can become a game similar to the Reverse Geocache Project [3] where we hope that the family memory will be seen as a treasured object to be unlocked.

Over the summer, we plan to field this application in the lives of several participants. By the time of the conference,

we will have specific findings on how the system was used and the experiences our participants had while creating and discovering family memories in their lives. We hope that this service will increase their feelings of the importance of family and help to make physically distant family members seem closer to mind.

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