# Everyday Storytelling: supporting the mediated expression of online personal testimony

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Abstract. Personal stories make our everyday experiences memorable over time. This paper presents 'Everyday Mediated Storytelling', a model of the casual storyteller's process of capturing, creating and sharing personal mediated narratives. Based on this model, an online authoring and publishing application for sharing everyday rich-media narratives named 'Confectionary' was developed. Results from a lengthy study with a group of committed users signify the success of the Confectionary system as an engaging everyday tool for personal storytelling that stimulated self-reflection, broadened the scope of storytelling strategies demonstrated by its users and supported active audience interpretation. The model, methodology, and system presented in this paper provide a basis for understanding how we move fluidly between our direct experiences, our cognitive and emotional reflections and our storied representations and interpretations. This paper also demonstrates how a spatial everyday authoring and publishing application advances the digital storytelling process from one of media collection to one of storied reflection.

**Keywords:** Everyday mediated storytelling, spatial narratives, multimedia authoring tools, participatory audiences.

## 1 Introduction

Telling stories is a fundamental part of what makes us human, arising from the desire to transform the fragmented chaos of our daily lives into a patterned, coherent and shareable narrative. This process of testifying to our life experiences in a reflective manner helps us understand and convey who we are as individuals and as members of a larger, cultural society [4]. From the earliest cave drawings to oil portraits, photographs and home movies, we have used a variety of media, tools and technologies to support our endeavors in representing ourselves and our life experiences. The basic properties of a particular medium determine what type of narratives can be told, how they are presented, why they are communicated and how the audience experiences them [6].

In today's world, the proliferation of personal media recording devices, home editing systems and advances in network communications provide opportunities for exploring alternative forms of digital mediated storytelling. The media explosion of the digital age has introduced new forms of expression (VR, hypertext, multimedia websites) and communication (email, IM, text-messaging). At the same time, digital technology has 'reimagined' the production, distribution and appropriation of older media forms. Digital media is 'collection-based and computationally ready', instantly available to be browsed, sequenced and exchanged in individual or collaborative real-time endeavors [2].

Casual everyday media storytellers are the disparate amateur photographers, homemoviemakers and scrapbook enthusiasts who document their life experiences for their future grandchildren, an imagined posterity, or simply to keep a record of their life lived. For these storytellers, the process of capturing, composing and sharing media memories of their daily experiences can be time-consuming, complicated and frustrating. Multifunctional video cameras confront users with an overwhelming variety of features while the steep learning curves of media editing and composition software tools such as Photoshop or Final Cut Pro can prove daunting to the casual media-maker. When it comes to sharing our media stories, the everyday publishing of personal media online is becoming more prevalent, as evidenced by sites such as YouTube and Flickr. However, it is still a non-trivial exercise to create works for these sites that fulfill our narrative imagination. Creative constraints are evident within these platforms where user generated content is displayed uniformly and according to a singular storytelling style. In addition, there are minimal tools within these sites for the sharing of points of view or the creation of connections between individual media entities.

Ultimately, there are few readily available everyday technologies for ordinary people to engage with their media in meaningful and storied ways. Everyday tools, such as pencils or cellphones, are those that are enmeshed in routine daily activities and deeply embedded in common cultural practices. There is a need to create everyday tools for engaging with our personal media. These tools must prove seductive and engaging to a broad spectrum of users, blend seamlessly into our everyday activities and reward us by providing insight into our individual and social life experiences.

# 2 Everyday Mediated Storytelling

In order to develop everyday mediated storytelling tools, we must first begin to rethink the relationship between narrative purpose and the design and functionality of such supporting technologies. To gain a better understanding of the process of personal story construction, a six-month ethnographic study was carried out into the practice of personal storymaking, as a reflective, creative and interpreted endeavor.

Through in-depth interviews with a series of people who solicit, listen or respond to personal testimony as part of their daily job (lawyers, journalists, psychiatrists, detectives, negotiators etc.), we discovered a variety of best-practice methodologies for soliciting and recording personal testimony, developing storybuilding strategies, and constructing story evaluation metrics. These methodologies included using story templates to stimulate discussion and organize coherent narratives, creating relationships between stories using categories or themes and approaching the construction of a story from a variety of perspectives.

Based on the study findings and our considerations of current best practice in personal storymaking and story sharing (e.g. weblogs, Flickr, MySpace), we developed the *Everyday Mediated Storytelling Model*. This model depicts how ordinary people can express, share and experience story-centered personal reflections. The media capture, story authoring, story publishing and audience feedback components of the *Everyday Mediated Storytelling* model are depicted in Fig. 1 below.

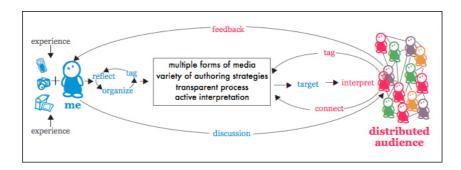


Fig. 1. Everyday Mediated Storytelling Model

The everyday mediated storyteller captures her experiences using a variety of digital recording devices such as a camera-enabled cellphone, digital camera, audio recorder and digital video camera. She organizes, edits and manipulates her original media files in preparation for inclusion in her mediated stories. She selects the media files from her collection that best represent her experiences and uploads them to a central online server. She authors her personal rich-media stories in an environment that allows her to reflect and create in an easy, risk-free and playful manner. Within this environment she explores a variety of integrated rich-media storymaking styles, ranging from poetic and ambiguous to direct reportage. She browses through other stories on the server examining the story strategies of others and learning from their approach. She completes and publishes her story. Once her story is contributed, she may participate in defining the context for her story by creating her own 'narrative paths' or connections between her story and other stories on the server. Whether they promote chronological interpretation of a series of story sequences or an anthology based approach, these pathways provide the audience with some directed, meaningful

navigation strategies. The audience can provide feedback by adding comments and metadata, or by creating their own connecting story paths.

# 3 Background and related work

The Everyday Mediated Storytelling model described above draws on prior theoretical knowledge and empirical research in the areas of mediated personal storytelling, rich-media authoring and publishing tools and spatial storytelling strategies.

#### 3.1 Mediated Personal Storytelling

By documenting and recording our lives, we make them in a sense visible. Through the creation of external artifacts, we are able to share our experiences with others while also providing some memorable evidence to return to again and again. We not only recount, but also justify our actions at the originally experienced time and in the later moment of recollection. Described by Aram Saroyan as "a kind of willed immortality", the desire to leave a trace and have our existence matter compels us to create and share representations of our lived experiences, in a process whereby "we write [our] names over and over and over again" [7]. For centuries, people have used diaries, scrapbooks and photo albums to record the events of the day, interesting anecdotes, or their thoughts and hopes for the future. With the advent and growth of the World Wide Web, mediated personal storytelling has developed a distributed global audience thanks to personal publishing technologies like weblogs, podcasts and wikis, and media hosting services such as Flickr, YouTube and MySpace. These technologies embrace a style of personal storytelling that is fragmented, serialized and highly connected. Like the clipped and abbreviated dialog of instant messaging, micro-narratives in the form of multimedia story snippets are the main form of communication and expression in these online sites.

# 3.2 Rich-media authoring and publishing tools

The convergence of media technologies and digital computing afforded the emergence of rich-media storytelling. Rich-media story authoring involves the assembling of a variety of entities to create a mixed media presentation that can express and communicate an experience. Advances in database design and distributed networks have additionally greatly expanded opportunities for the publishing and sharing of rich-media stories. Commercially successful multimedia authoring tools such as Flash, Director, Authorware and Mediaforge are targeted towards multimedia professionals and technically-savvy users with the necessary time and energy to invest in gaining proficiency with the technology. Based on timeline or graph-based authoring paradigms, these software tools rely on scripting mechanisms of varying

complexity for coordinating interactivity, non-linear playback or asynchronous events. Within the research community, scripting and graphical strategy tools for richmedia story authoring have been developed but are largely oriented towards users with clearly defined multimedia story goals, as opposed to directly supporting the casual, everyday user [1][5][10].

#### 3.3 Mediated Spatial Storytelling

From cave drawings to Egyptian paintings, stained glass windows to comics, telling stories in 2-dimensional space has long been a popular and instinctual human pursuit. Within the realm of traditional personal storytelling, we have created stories using a variety of spatial strategies in diaries, photo albums, collages and scrapbooks. These organizational spatial constructs support varying levels of *narrativity*, depending on their sequential and their configurational qualities [8]. Narrativity in this case refers to the potential for a text (verbal or non-verbal) to evoke a 'narrative script'; a mental cognitive construct built by the interpreter in response to a text [6]. The observer decodes the text through a sensory, perceptual and cognitive analysis of its composition, content and form. Design theorists examining the relationship between narrative intent and comprehension in 2-dimensional space have drawn attention to the power of the spatial plane in quickly relaying complex narrative constructs [3][9]. Through informed use of compositional strategy, layout techniques and prudent media combinations, the spatial storyteller can create a narrative artifact that is logically consistent and readily understandable.

## 4 Confectionary Application

Based on the Everyday Mediated Storytelling model and informed by prior research and current best practice, an online authoring and publishing application for creating and sharing everyday rich-media narratives named 'Confectionary' was developed. Confectionary provides storytellers with a simple tool for uploading media (movies, still pictures, audio files) and authoring story compositions by arranging multiple media elements on a 2-dimensional spatial canvas. Fig. 2 below is a screengrab of the Confectionary spatial authoring canvas.

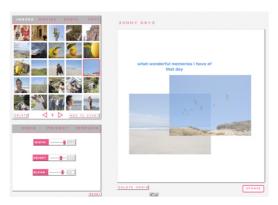


Fig. 2. Screengrab of Confectionary story authoring interface

The spatial nature of the application instigates activity and encourages experimentation by the simple addition or deletion of media entities, drag-and-drop functionality and re-sizing and transparency settings. This WYSIWYG framework is ideal for novice storytellers with little prior computational or programming experience.

The publishing interface, as shown in Fig. 3, encourages audience feedback through a novel pathmaking feature that allows participants to construct preferred methods of wayfinding through the entire collection of stories. A *story path* is an ordered navigation sequence through the *Confectionary* story collection made up of one or more stories that are thematically related and arranged in a preferred order. Preferred order means that stories in the path should be accessed in the numbered order determined by the path author. Additional feedback features support the commenting of individual stories and/or paths, the designation of favorite stories and the display of viewing and commenting statistics.

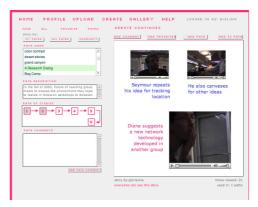


Fig. 3. Screengrab of Confectionary publishing interface

Confectionary extends the idea of composition beyond the framework of a single image or movie. It suggests instead that it is the relationship between artifacts that can help people elevate their everyday media to transform memories into powerful personal testimony that is engaging and transformative to the maker and to the audience. Grounded in our model of everyday mediated storytelling, the Confectionary application is used as a foundation for studying how we can use our personal media to reflect on and communicate that which is meaningful and connected in our everyday lived experience.

## 5 Evaluation

The story authoring and sharing activities of participants using Confectionary was quantitatively and qualitatively analyzed over a 5-month period. Through data analysis, surveys and in-depth interviews, the evaluation study examined the ease of use of the Confectionary application, the range of storymaking approaches and styles supported by the application, and reflections on the use of the application in documenting personal experiences and exploring personal media collections. The activities and documented responses of 35 dedicated participants during the 5-month study showed that Confectionary functioned well as an engaging and easy to use everyday application for creating and sharing story-centered personal reflections. A key descriptor used by many study participants to describe both the stories themselves and the authoring process in Confectionary was short. The swift nature of the storymaking process in Confectionary supported everyday activity and influenced participant's approach to the task, with one subject noting for example: "I liked the fact that you can just document on the go. The fact that Confectionary is so short, I knew I didn't have to be perfect that I could simply make many. I was just cranking them out simply to get down the little bits of memories of that day". The spatial authoring environment supported participants in interacting with their media entities in a natural and intuitive way as demonstrated by one subject who stated: "I think its great that everything is just there in front of you. Confectionary is in synch with my actions... and becomes my think space. Using Confectionary is more reflective as a storymaking process". Another subject described the unique affordances of the Confectionary spatial canvas as enabling her to "make stories that I would not have made in any other tool that I know of because it allows you to juxtapose media and you reflect on the story, the characters, the sort of length of time or scenes that you might want to devote to that story. You reflect on those things as you try to take advantage of having this spatial canvas."

From initial simple creations using one or two media entities, participants demonstrated their growing sophistication and fluency with the tool as they developed more complex and evolved storytelling styles and approaches. The 155 stories created by participants were classified according to a variety of genres including personal documentary, instructional, poetic, comedy, fantasy and portraiture. The study participants used compositional techniques as defined by the literature, such as repetition, grouping, symmetry, and layering to create stories with preferred

interpretive readings. Participants responded to works through the use of favorites (39 created), by repeated viewing (stories viewed on average 11 times), by adding comments(68 submitted) and creating story paths(32 created). The comments provided by Confectionary participants showed a broad range of reflective reactions with exchanges relating to story content, story styles, poetic evocations and directed questions. The creation of story paths, along with their attached descriptions and comments, further extended and enriched the story exchange process. For some participants, the pathmaking function became an important part of their storymaking process, such as the participant who described how he "preferred using the path function to overloading any one story with too much visual information". Using the Confectionary application also had a reported impact on the participants approach to media collection. Several subjects described how using Confectionary had inspired them to re-examine their entire media collections, as engaging with their newly acquired media reminded them of previously captured footage and imagery. Furthermore, these subjects described how exposure to the system had also encouraged them to reimagine afresh the representation of their personal experiences as they developed new methods of observation and media capture techniques with the system in mind.

## 6 Conclusion

The integrated process of mediated story exchange described and supported by this research advances the everyday digital storytelling process from one of media collection to one of storied reflection. The traditional static photo album has become an evolving, multi-voiced rich-media environment containing intertwining personal stories. Such an approach, based on the Everyday Mediated Storytelling model has implications beyond the domain of personal testimony towards broader interaction between the storyteller, the story and the audience within the fields of traditional online publishing, social networking, the semantic web and social software. Here authors are supported in crafting shareable narratives where the story exists both as an individual expression of entity relationships and as part of a connected trail of narrative intentionality. The audience is encouraged to actively participate as a creator of editorialized story meaning. We exchange stories to communicate that which is considered memorable and valuable. By understanding and creating models of how people express, share and experience stories we can better support the process of story exchange through the creation of appropriate technologies and representative forms. With this work we are taking an initial step towards creating an environment for personal story exchange that encourages reflection, stimulates active dialog and continues to help give us a shareable world.

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