Reflecting on Development through Digital Family Stories in Bangladesh

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ABSTRACT

Bangladesh has a rich history of storytelling for cultural, historical, social, and personal memories. Family stories in particular are powerful ways to reflect on relationships along with social values in a particular snapshot of time. Our goal is to derive insights for the design of culturally and value-sensitive digital storytelling tools for families in Bangladesh to preserve and share their stories. This paper describes ongoing work to understand the kinds of stories people tell, as well as the experience of listening to recorded stories.

CCS Concepts

• **Human-centered computing** → **Collaborative and social computing** → **Empirical studies in collaborative and social computing.**

Keywords

Bangladesh; families; storytelling; memory; digital storytelling; development

1.   INTRODUCTION

Bangladesh is **a land of storytellers and listeners.** Our country holds a rich history of stories, from religious stories coming from religious mythologies, regional stories in the form of songs (e.g. Mymensingha Gitika [21]), family-themed fairy tales (e.g. "Grandma's stories" or "Grandpa's bucket (of stories)" [22]), and of course family stories where elderly family members share stories to younger ones. Some of these are starting to be preserved by archives and historical societies as unique cultural heritage. There is also a unique tea-stall story sharing culture [13], where people in gather around for a cup of tea and story sharing. The stories shared in this form are called "adda" in Bengali, and are common in rural, urban and suburban communities. The adda takes a domestic form in households and an upper-class form in coffee shops. Many Bangladeshis also have personal stories of historically significant events, such as the struggle for independence during the 1971 Liberation War.

Amongst all these diverse forms of stories, we focus on sharing stories in families. Family stories are powerful ways to reflect on personal relationships and social values, and often represent a rich picture of a particular snapshot of time. Family stories serve as a platform to share family values and moral lessons and represent the family bonding and responsibilities (such as passing on morals) that are an integral part of East-Asian culture. Moreover, the personal stories shared in intimate family exchanges can carry on the memory of important events of the past, like the Liberation War, in a more humane and relatable form.

As family structures change due to urbanization and modernization, older generations and younger generations face challenges in sharing their stories in-person. For example, economic shifts mean families are more mobile, less likely to live in multi-generational households, and family members might go abroad for work. As children are born later into the lives of their parents, grandparents might be old or have passed away when these children are old enough to hear their stories. Unlike the formal, public forms of storytelling, such as those described above, family stories, along with the multi-faceted social role they play, are lost with the storyteller if not preserved.

Motivated by these challenges, there has been an array of work in HCI and Design research on preserving memories through recorded stories (e.g. [6, 10]), and on creating digital storytelling tools for families (e.g. [9, 11, 16]) and cultural groups (e.g. [14, 15]). These technologies have the potential to provide novel ways for people to share memories, relive old times, visit an unseen time or region, connect over a distance, and preserve important cultural knowledge in times of transition. However, for technologies in a developing region, designers must account for differences in digital literacy, technical infrastructure, and perceptions of technologies (e.g. Bangladesh [1]). To be effective, such work must be socially and culturally situated.

The goal of our ongoing work is to design culturally and value-sensitive digital storytelling tools for families in Bangladesh to preserve and share their stories [5]. To do this, we first endeavored to understand family storytelling experiences for Bangladeshi people, especially as it incorporates more digital recording tools. To explore this question, we built a simple smartphone app, called *GolpoKotha*, for people to record and collect their family stories. We then had seven "listeners" use this app over three months in their families and reflect on their experience of recording family stories. While prior work has focused on designing for storytellers, we focus on the experience of being a listener, both in-person and remotely via digital recordings. We describe the kinds of stories that were collected during the three-month study and the reflections from the listeners. These findings will help to inform and inspire future ethnographic and design work in this area in Bangladesh. In this paper, we present related work and our study methods, and discuss preliminary results and insights.

2. RELATED WORK

2.1 Family Storytelling

"Through the repeated recall of the family's past--usually via oral stories which are told at family get-togethers--those who did not experience past events first hand can also share in the memory. In this way an exchange of 'living memory' take place between eyewitnesses and descendants." ([4], p. 306).

Family storytelling is the foundation of building collective memory, "constituted through ongoing social interaction between children, parents, and grandparents" [4]. As such it has been theorized as a critical aspect of shaping a person's identity and relationship to the past, as well as one's social identity. Family storytelling is characteristically intergenerational. Participating in these interactions, as well as learning the stories themselves, gives family members a sense of belonging and shared identity [17]. Our study offers an introductory look into the topics that people share in Bangladeshi families, an account of the relational and emotional experience of sharing, and what these experiences can reveal about living through the transitions of development.

2.2 Technologies for Digital Family Stories

Many of the ways that people share their memories and experiences has shifted to digital media, to augment or replace face-to-face interactions when families are separated, such as for work, urbanization, or changing household structure. In these cases, family members look to mediated communication technologies to connect and stay in touch.

Prior ethnographic work in HCI and Design has argued that designing technologies that facilitate storytelling is a key need for supporting intergenerational family interactions and relationship building in families living apart [8, 16]. Much of this work is highly situated in a particular cultural context (such as the UK, US, and South Africa), with limited applicability to South-east Asian culture and social practice. The focus of prior work has also been on the storyteller as the primary user of a system (e.g. 9, 15).

In parallel to this work, there is an emerging trend, called "digital storytelling" in which individuals, and sometimes groups, use digital tools to tell their own personal stories, usually for public presentation [23]. Digital stories are growing in popularity among practitioners engaged in development and social initiatives as mechanisms of gathering real stories about interventions, augmenting quantitative data, and giving voice to otherwise marginalized groups [12]. Although families are often involved as storytellers to the public, there has not yet been work examining the benefits and impact of digital storytelling *within* families.

Our work focuses on stories told within the intimate family context in Bangladesh, and considers the experience of digital listeners, both recording in person and listening remotely. This focus adds a missing piece to better understand the perspective of younger generations who inherit and engage with family stories in increasingly digitized media environments.

3. METHODOLOGY

The study was conducted from February 2018 to July 2018.

3.1 GolpoKotha App Design

GolpoKotha is a "family story album" application for collecting stories (Figure 4, Left). The prototype design is inspired by family photo albums, a popular means in Bangladesh for keeping shared memories. GolpoKotha was developed to be a single point solution for recording a story and collecting its related information, such as photos and explaining references, which are usually stored in different places. Smartphones are widespread, familiar devices in Bangladesh [18], making them an ideal platform for our study. The app allows the user to audio-record stories, save the stories as a collection, label them, and attach other related documents as necessary. Each story is accompanied by a representative photo (Figure 4-Right).

Figure 4. Overview of GolpoKotha: (L) Application Features, (R) Photos associated with Storytellers and Stories.

3.2. Collecting Stories and Experiences

We started with a small pilot study to understand the effort and experience of gathering stories among families and friends. Seven people familiar with the project were recruited as listeners to record their own family stories (six undergraduates, 1 faculty member; 3 women, 4 men). The listeners used the GolpoKatha app to collect stories over three months from eighteen different storytellers, all family members or friends. In most cases, the story tellers were older family members, except three stories collected from same-age friends. Storytellers were simply asked to share stories that were special, intense, or memorable to them.

Once the initial listeners had recorded the stories, there was another round of experience sharing where a different listener experienced the recorded stories. The second set of listeners (4 people) were connected to the storytellers as part of the same family but were only able to interact with the storyteller through the digital connection of the recorded stories.

There were 33 collected stories in total. Elderly family members often had a lot more to share: they shared multiple stories (6 was the maximum) and longer stories (e.g., a five-minute-long story). Younger storytellers gave fewer and shorter accounts. The stories recorded in familiar places preferred by the storyteller and listeners. Each story collection took on average of thirty minutes of time. All the stories were recorded and shared in Bangla, the native language of Bangladesh.

3.3 Preliminary Analysis

Our analysis was inspired by the auto-ethnographic research methods of oral history researchers (such as [7]), which include *"research, writing, stories, and methods that connect the autobiographical and personal to the cultural, social, and political."* [3]. Applying this tradition, the listeners carefully recorded and reflected on their personal experience and activities in an attempt to draw out meaningful insights and patterns. All the listeners who collected the stories are Bangladeshi.

Four of the seven listeners recorded their experiences in field notes, and each discussed their thoughts individually in informal

interviews with the lead researcher throughout the 3-month recording phase of the study. After the recording phase, listeners met together to reflect on their common and different experiences to draw insights from their experience of recording. The stories they recorded were transcribed by the research team (in Bengali), and later transcribed into Bangla or English for the purposes of this report. All the transcribed stories were read by all members of the research team to build common ground and understanding.

To derive insights about the kinds of stories being told, each story was coded using inductive analysis. Stories were annotated with their topic and teller-listener relationship and coded according to their content. The coding was independently conducted by three researchers, and then collectively these codes were synthesized into the themes. We describe the topics and themes in our findings. Participants and their anecdotes have been anonymized.

4. FINDINGS

The timelines of the collected stories spanned over three generations of family members, from war time experiences during Bangladesh's struggle for independence to recent joyful celebration of individuals. Our listening period also extended over Ramadan and Eid, an important religious period for Muslim families, which yielded many religious stories being told. It is also time of family gathering for all people in Bangladesh, which gave many opportunities for the listeners to connect with family.

4.1 Story Topics

The stories varied in topic based on the personal preferences of storytellers. Older storytellers (usually grandparents of the listeners) wanted to share stories with moral lessons. Parents and peers, on the other hand, shared a mixture of stories about their challenges, experiences, achievements and inspiration. Topics were diverse, including: the fight for independence in 1971 (3 stories); major emotional incidents in families (e.g., a sickness or death of a family member, 6); memories of cultural celebrations (e.g. Eid, Puja, 4) and adventures (6); and stories about family (11) and morals (2), which also contained religious teachings.

Recalling Important Historical Events. Listeners learned about the Liberation War of 1971 through personal experiences of their family members. The stories varied from stories of bravery to personal feelings of fear during the ongoing war. For example, a listener's aunt described fleeing from the army and mistakenly grabbing a pumpkin instead of her baby in her haste to run away (she went back). These stories conveyed the emotion of the period, and also the personality and perspective of the people who lived through them. Though such personal accounts are not generally archived in Bangladesh, there has been work in other settings to preserve the "folk history" of major events to provide a more human view of the past (e.g. [15, 24].

Nostalgia for Changing Times & Lost Relationships. In one example, a mother who was the source of happiness for the family suffered health problems over ten years and became immobile. The storyteller shared memories of her happiness and also her struggle of her mother's suffering. Another storyteller recalled with nostalgia a time in the past of more relationships across religions. As a Muslim growing up, the storyteller remembered attending puja, a Hindu religious celebration, which was not common now. These stories, and others, represented memories of changing times and circumstances, and a longing for the past.

Sharing Enjoyable Experiences. Many storytellers shared stories of bonding with friends and family during important festivals, or their memories of how the times had changed. Stories also conveyed simple experiences in nature and exciting lifetime moments such as escaping a Royal Bengal Tiger after being stuck in a tree.

Teaching Moral Lessons. There were two moral stories shared by the same storyteller, an 85-year old grandfather of the listener. He told legends dear to him about how people were inspired by Islam and decided to convert from different religious beliefs, to share his faith with his family.

Strengthening Family Connections. Numerous stories were shared from family context to reflect love, affection and concern about family members. There was a story about how a severely sick father, on his way to hospital, worried about his children, asking about whether they had their dinner. The listeners shared about feeling the family connections through these stories.

Overcoming Struggle and Adversity. In example, a story was shared together by a mother and her younger son while the elder son recording them. They shared their experience of having the earning member of their family work abroad, endeavoring to bring the family to a higher economic level. When the earning member suddenly died, the grieving family had to struggle with the decision of letting the elder son continue his studies or also go abroad to work. The brothers worked to convince their mother that the elder should stay, and eventually she decided to sell their land instead. As the younger son described their situation: "*We are happy that brother is working hard. We did the right thing. I really love my brother.*" These stories showed how families persevered to lift themselves economically, and the steep costs it could have to their relationships and family bond.

4.2 Experiences of the Listeners

Prior work has shown that sharing one's experiences can be cathartic and empowering for the storytellers [12]. To add to this knowledge, we asked the listeners to share their experiences. Four listeners who recorded stories participated in the reflections of their experience, and in addition, recruited three other listeners from their families to listen the recorded stories and share.

Create a deeper bond. Listening to stories created a shared experience among storytellers and listeners. Some shared how listening to a loved one's story created a deeper bond between them. As one listener shared about a friend's stories that she recorded: "*We were childhood friends. But I did not know about her childhood memories.*"

Trigger Intense Emotion. A listener who was working far away from home heard recordings from his family, and it reminded him of how hard it was to be away. He felt intense emotion when he heard their voices in the recordings shared with him: "*The stories are too intense for me. Every time I listen to them I start crying.*"

Share an Emotional Load. For our listeners, being able to bear witness to another's experience allowed them to share in it, especially heavy emotion: "*It was a story about my grandfather who passed away suddenly. My brother shared this story. I knew it all. But when he said it, I knew about his pain. We all shared the pain.*"

Learn personal perspective of history. Some historical memories, such as the Liberation War stories, enabled the younger generation to hear a more personal perspective of important events, and reflect on how things had changed for themselves: "*I wonder if we could be so brave in this generation.*" Some mentioned that they felt like they have experienced the war, even being thrilled, as they have heard these stories many times in family gatherings.

In these preliminary findings, we have shown the world of stories that continue, even in challenging periods, to share pain, struggle, hope and happiness. Next, we discuss the nature of these stories as a reflection of the collective experience of transition in development, and insights for directions of future work.

5.   DISCUSSION

5.1 Stories as a Mirror

The stories of families showed a reflection of time, relationships and development. Bangladesh is a country on its journey from a low-income country to middle-income [19, 20]. The topics of the family stories shared by different generations show this progression, as well as the values that families hold onto during these transitions.

Older generation's stories reflecting war time experiences painted a picture of struggle, uncertainty and fear. Rural families talked about economic struggles as they negotiated decisions of training in skilled labor, working abroad or pursuing education to support and raise up their family. The stories of grandparents and parents showed changing lifestyles through their different adventures, as older people talked about climbing trees and roaming around in rural areas, and younger storytellers talked about urban lives and traveling abroad.

The stories reflected relationships, their importance and how they changed over time. The storytellers and their stories represented the breadth of relationships considered as family in Bangladesh, from the nuclear families (parents and children) to extended families (grandparents, aunts, uncles, cousins), to even close neighbors and friends. For example, storytellers would often refer to an "aunt" as a person considered to be part of the family since they had known each other for so long.

Stories also reflected the emotional journey of a family, with tough circumstances depicted in tales of hardship and trials, struggles with health, and efforts to improve their lot. Joyous circumstances were related in stories of enjoyment, adventures, and personal achievements.

We are inspired by the insight of these family stories as a reflection not only of personal experience, but of the shared experience of development and transition. In future work, we hope to build on these insights to design mediated storytelling experiences that help facilitate connections, through stories, within and across families about shared events that impact their collective memory.

5.2 Lessons for Design

Listeners and storytellers also gave helpful feedback about the prototype app features that help inform future iterations.

Visual Memories: Two listeners suggested adding photos and videos as attachments to the audio story, pushing the photo album metaphor even further to enhance their ability to revisit past relationships and events: *"There was a story about Omi Bhai (Brother) who died at a young age. If we had this (video option), we could save his video, watch it and cherish his memories."*

Sharing: One listener suggested adding a mechanism to discuss recorded story with other family members who have a common interest or relationship: *"If it's a story of my grandfather, I could share my thoughts with my cousin. May be through a small chat window."*

Connecting further: Another listener talked about her desire to share interesting moments over social media, as she was accustomed: *"Everyone share things on Facebook, we could do the same."* However, social media is viewed somewhat negatively by older generations in Bangladesh, as it thought to take people away from socializing. Future work can consider the benefits and tradeoffs of keeping stories local and private, and leveraging the connective power of social media.

Length of Story: Stories varied in length where longer stories were shared with older storytellers and the younger ones preferred to share short ones. The styles of storytelling varied mainly based on the storyteller. Older storytellers also had more stories to tell and would tell one story after another while being recorded. Future recording tools might assist listeners by segmenting long recording periods by time, topic, or speaker to make it easier to record multiple stories over the same session.

Emotional Impact of Storytelling: Some stories were fun to tell and to hear, while others are painful. In the recordings, people were giggling over stories and some were sobbing at their recollections. It's important for us as designers to recognize the impact of revisiting the past, both for tellers and listeners. We add added the caution that people telling and listening to recorded stories might do so because they are alone, without the social support and connectedness of their families. In future work, we will use this sensitivity in thinking about how stories are presented in our interface and how we might support social interaction when stories are told. Other work on storytelling has also suggested to allow options to share the stories when the storyteller is ready to share or to only share it among trusted listeners [8].

"Mediatized" Stories: Two younger listeners described the audio stories being *"boring and dull."* Digital mediation will transform family storytelling as it moves from direct, face-to-face interactions to technology-enabled forms. In mediatization theory, when personal narratives become digital stories, there is a trend toward making visual representations out of narratives, limiting the length for attention or file size constraints, and standardizing the format and presentation for ease and speed of access [2]. In our ongoing work, awareness of the "pressures" of mediatization will help us to interpret in a critical way the feedback and suggestions about different media from storytellers and listeners as we endeavor to support these important family interactions.

6.   CONCLUSION

Preserving family stories with digital technologies can help people paint a picture of the past, capture transitions in society and culture over time, and remember the personal experiences of important historical events and periods. Recording and listening to these stories is also a way of connecting to family members in the midst of the changes of urbanization and modernization in Bangladesh. This paper has offered some preliminary insights into the nature of stories that people tell in families in Bangladesh, and the experience of the people who are recording and listening to recorded stories. From these insights we derive insights for future work in this area taking into account the type of stories being told, their impact to the listener, and the influence of media forms.

7.   ACKNOWLEDGMENTS

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