Photo-based Narratives as Communication Mediators between Grandparents and, their Living Abroad Children and Grandchildren

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Abstract. Media-sharing websites are facilitating modern versions of storytelling activities. This study investigates the use of photo-based narratives for supporting young parents who are geographically-separated from their aging parents to share stories about their young children. We analyze the case of Malaysian young mothers living in the UK, communicating regularly with their families back home, sharing experiences living in another country, looking for parenting advice, and opening opportunities for sharing the life and development of their young children. Sixteen families participated in our study through giving us access to their social networking and web spaces and participating in exercises for creating photo stories. We identified the characteristics of the mediating system serving to establish the contact between grandparents and grandchildren as well as the characteristics of the photo-stories and the practices around sharing them.

Keywords: Photo-sharing, Narratives, Young Mothers, Computer-Mediated Communication (CMC).

1 Introduction

Today, the way families are communicating and maintaining awareness of the activities of their members is in part defined by the way they use Information and Communication Technologies. The term “family” has been defined in various ways. For instance, Popenoe [1] defines the nuclear family as a “relatively small domestic
group of kin consisting of at least one adult and one dependent person”, whereas Bengston [2] extends the notion and argues that nuclear families need other family members, such as grandparents, for emotional and physical support. Our paper follows closely Bengston’s definition of familial relationship, which involves family members of several generations. Intergenerational familial relationships had been widely discussed in family-related publications; however, technology that can support intergenerational family communication is not as widely discussed even though there is evidence that this technology can help bridge communication when family members are separated by distance due to work-, study- or retirement-related causes [3, 4].

Technology-mediated narratives of everyday experiences are said to be relevant in keeping families living apart emotionally connected. For instance, Van House’s study of photo-sharing practices in the web site called Flickr.com reveals how photos enhance conversations among distant relatives providing the means to keep them aware about daily activities of their kin [5]. Similarly, Nardi and her colleagues found that one of the applications of blogging web sites was for documenting the lives of bloggers and those of their children so they could maintain and strengthen social ties with people living away [6]. Following that line, Corson recommends that grandparents with limited opportunities of seeing regularly their grandchildren record videos of them telling a story as a way to enhance connectedness [7].

Social networking technologies are increasingly seen as intergenerational mediators. For example, with new video sharing technology like YouTube.com, video recordings are much easier to deliver and recent studies by Gonzalez and Kurniawan [8] and Harley and Fitzpatrick [9] have shown that YouTube is a suitable tool for intergenerational communication. Both studies examined the YouTube user Geriatric1927, an older adult who updates his blogs in YouTube. They highlighted the value of video-based communication to share experiences, avoid isolation, and facilitate dialogue, which can be also ideal to support family intergenerational communication.

The goal of enhancing family communication with media sharing technologies has been instrumented in many research projects. For instance, work by Mynatt and colleagues explores the use of communication enabled portraits that are meant to support adults living independently especially when their children are concerned with their well being [10]. Similarly, work by Markopoulus and his colleagues produced the Astra system, which supports communication and connectedness among family members, using mobile phones and novel interfaces to broadcast information of their activities [11]. Although not extensively tested, a number of other systems have been proposed for supporting narrative and storytelling creation with the purpose of connecting distant families with no collocated audiences [12].

The interest that some people can have to create narratives as a form of expression and the use of media sharing technologies for that purpose are increasingly evident. Yet a clear understanding of the role played by this media on the creation of those narratives is needed, as well as the practices emerging from its usage, and, more fundamentally, the nature of storytelling around intergenerational contact and family life. Our study focuses on the use of technologies for storytelling of young children’s lives; technology as a contact mediator between grandparents, their children and grandchildren abroad.
Baby storytelling and narratives of everyday life as an activity is increasingly popular in both generic and purpose specific web sites and social networking spaces. Major newspapers such as the Washington Post report that more and more young parents share stories about their young child(ren) in social spaces such as Facebook [13]. A host of new sites, including Totspot, Odadeo, Lil’Grams and Kidmondo, now offer parents a chance to, instead of sending multiple e-mails with stories about their young child(ren), invite friends and family to join and contribute to a network geared to connecting them to the child’s live [13]. In addition there are also websites specifically for documenting the lives and developmental steps of babies and young children; such as BabyJellyBeans, OurBabyHomepage or TotSites. Despite their lack of specificity, other generic media-sharing web sites such as Fotopages, Blogger, YouTube or Flickr are also likely to be used by parents to create narratives about their child’s development with text, photos or videos.

For this paper we will discuss storytelling activities on the topic of the young children (which, from here on, we just call “baby storytelling”) using Flickr.com, a popular photo-sharing, social network web site [14-17]. We studied the communication practices of the families of sixteen young mothers from Malaysia living in the United Kingdom guided by the following three main research questions:

a. How is intergenerational contact achieved using photo-sharing websites, such as Flickr.com, between the young children, their parents and their grandparents when the young families live abroad? We aim at identifying the structural elements defining the systems of communication and sharing.

b. What are the characteristics of the stories created using photo-sharing websites with the purpose of achieving intergenerational contact and communication between the lives of the young children and their ageing grandparents? We aim at identifying the types of content, the way that content is crafted, and the main topics that are shared with family. In our particular case we are focusing on the context of everyday experiences while raising a child and communicating with their family in Malaysia where the communication with their parents for advice and sharing life stories is quite common.

c. What are the motivations, social and emotional benefits to both creators and consumers of those photo-based stories? This study aims at enhancing our knowledge of the needs of the photo-based story producers (young mothers in the UK) and the consumers (extended family members in Malaysia).

The rest of this paper is organized in the following way: Section 2 discusses the usage of Internet by young mothers, as well as previous studies of photo-sharing and narrative practices with digital technologies; Section 3 describes the methodology of this study. Section 4 presents the results of an initial stage of the study conducted to identify the main elements and characteristics of the mediated contact established between family members. Section 5 presents the results of the content analysis of the usage of photo-sharing web sites by those participating in our study. Section 6 shows the results of photo story exercises, in which the young mothers were asked to prepare photo-based stories for sharing with family members back home. We present the topics that emerge from the individual photos and the series of photos that form stories. This section also highlights the main themes that resulted from the interviews on how the young mothers capture their young children’s photos. Section 7 presents the results of the online questionnaire with a member of the extended family and
specific analysis of the sort of communication established with the aging parents. Section 8 describes the design implications of the findings for Flickr and other photo sharing tool developed for supporting baby storytelling activities for intergenerational communication. Finally, Section 8 presents our conclusion and future work.

2 Young Mothers, Internet and Photo-sharing Practices

Internet services can be particularly useful for young and new mothers. A previous study conducted in the UK found that young mothers aged 25-35 years old regularly search for information about parenting and joined parenting forums on the Internet for sharing experiences and learning from others [18, 19]. These young mothers built online social networks for those purposes even when they received support from midwife, health visitor or doctors [18]. The study also found that Internet was more suitable for mothers who are often physically and socially isolated as it provides a comfortable medium to socialize from their homes [19]. Similarly, a study in the USA by Smith and colleagues found that young mothers use the Internet for communicating to their extended family the news about their baby, describing what they have done and how they are doing, and sharing their experiences while rising their young children [20]. Other studies have found mothers are generally a more reliable source for news on baby development than fathers are [12, 13].

Frequent communication with extended family is more likely to be necessary when young mothers live away from their homeland. In the case of Malaysian parents living in the UK, as reported by Khalid and Dix [14], mothers usually keep in touch with their extended family back home through a number of channels, typically through phone calls, but increasingly more through Internet services. Khalid and Dix’s study focuses on user behaviour of a small group of women from a Malaysian community in the UK through sharing pictures using Fotopages [14]. They describe photo-sharing as a central practice to enhance communication with friends and family living in Malaysia, and women had a central role in maintaining these records.

The value of photo-sharing practices to enhance intergenerational contact and family connectedness among those living apart is to share moments and events with family members who cannot be present at all times. Photos – sometimes enhanced with text or audio – can be used to communicate stories. Previous studies highlight how, within the context of family communication, photo-sharing had become a form of story-telling. For instance, Nardi et al.’s study found that people use blogging websites for posting text and pictures to document their lives and those of their children, which in turn can maintain and strengthen social ties with people living away [21]. Similarly, while studying photo-sharing practices in the UK, Frohlich et al. found that parents use photos to enhance phone conversations among distant relatives and to provide the means to keep them aware of children’s development [22]. These studies highlight the importance of picture-sharing for enhancing connectedness but also the relevance of photo story telling that we aim to investigate in this study.

Our study focuses on a particular tool for photo sharing: Flickr.com. This social networking website facilitates the sharing of pictures among people with Internet access. Users can upload digital photos to the web site and then enhance them with
comments, organize them into collections, and specify different levels of access for the different groups or individuals with whom they want to share the material. Flickr had been reported in other studies, usually in the context of amateur photography and picture sharing with family and friends (e.g., [23] and [24]). Previous studies found that Flickr is used by some parents to regularly post pictures of their family [1, 5]. Some other evidence indicates the potential of this tool for supporting photo-based storytelling. In early 2007, Flickr supported an active photo-based storytelling group called ‘Tell a story in 5 frames’ – no text description was allowed [25]. The group has 8640 members and 3385 items posted. Interestingly, the first winner in the visual story competition of 2007 was a US young mother for a photo story, titled ‘Full Circle’, about the life of her baby. Despite the success of photo-based storytelling in Flickr and the fact that baby storytelling is a popular activity, we could not find a systematic study of the use of Flickr as a baby storytelling medium. Our study aims at extending the findings from those studies by investigating and understanding within the context of intergenerational contact and family communication, the characteristics of the mediating system emerging from photo-sharing practices (both online and offline), the characteristics of the photo-based narratives, and the emotional value of photo-based narratives among family members from both the creator’s and viewer’s perspective.

3 Methodology

Our study consisted of three phases: a preliminary study focusing on revealing the general characteristics of family communication practices involving photo sharing, a content analysis of the photo-sharing web sites of nine participants, and a study where sixteen participants conducted a number of baby storytelling exercises using photos in Flickr. Each of the phases of the methodology is explained in the following lines.

3.1 Phase 1: Preliminary Study of Family Communication Practices

At the end of June 2007, we conducted a short preliminary study in Malaysia with three grandparents who have been using the Internet to communicate with their children living in the UK. This study was designed to understand the characteristics of the current practice of photo-sharing from the older adult perspective. Only one grandmother is a novice user. This study served to reveal the general characteristics of the mediating system around photo-sharing. Brief data on the three grandmothers and their families is shown in Table 1 below:

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Computer literate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aisya</td>
<td>55</td>
<td>Yes</td>
</tr>
<tr>
<td>Jamilah</td>
<td>60</td>
<td>Yes</td>
</tr>
<tr>
<td>Hayati</td>
<td>60</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 1: Three grandmothers participate in the preliminary study in June 2007.
We then identified potential participants living in the UK. We found that there are around 34 Malaysian student communities all around the UK and Ireland [26]. The Malaysian Community of Cheetham Hill (MCCH) is located in the area of Greater Manchester where our research is based, and is one of the biggest student communities in the UK: in 2008 there were 116 Malaysian families registered with it. A majority of its members are mature students [27].

From that group, sixteen Malaysian young mothers aged 25 to 34 years old volunteered to participate in the study. The majority are studying in Manchester. Recruitment priority was given to mothers with newborn babies and first time mothers, who might be in more dire need of help and communication compared to mothers of newborn second or third children [28]. The researchers contacted the participants by telephone, using information gained in the MCCH database and also through the snowball technique. Some of the participants did suggest to the researchers other friends in MCCH who recently had a baby. All of the mothers who were contacted by telephone agreed to participate in the study.

The majority of these young mothers were working professionals in Malaysia before they came to the UK. At the time of the study, two of them still work as professionals, nine are postgraduate research students and five are full-time housewives. Table 2 shows more details of each of the families participating in the study. Three of the participants have children under three years old, three with infants aged one to two years old, and three with newborn babies (under one year old).

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Occupation</th>
<th>Duration in UK</th>
<th># of child (ren)</th>
<th>Child Age at the time of study</th>
<th>Child’s place of birth</th>
<th>Mother has online social space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amina</td>
<td>27</td>
<td>Student</td>
<td>1 year</td>
<td>1</td>
<td>5 months</td>
<td>Malaysia</td>
<td>No</td>
</tr>
<tr>
<td>Bibi</td>
<td>29</td>
<td>Student</td>
<td>1 year</td>
<td>1</td>
<td>13 months</td>
<td>Malaysia</td>
<td>Yes</td>
</tr>
<tr>
<td>Cindy</td>
<td>32</td>
<td>Working</td>
<td>4 years</td>
<td>1</td>
<td>12 months</td>
<td>UK</td>
<td>Yes</td>
</tr>
<tr>
<td>Diana</td>
<td>30</td>
<td>Accompany husband</td>
<td>5 years</td>
<td>2</td>
<td>5 years old</td>
<td>27 months</td>
<td>UK</td>
</tr>
<tr>
<td>Effa</td>
<td>29</td>
<td>Accompany husband</td>
<td>5 years</td>
<td>2</td>
<td>4 years old</td>
<td>6 months</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Fifi</td>
<td>27</td>
<td>Working</td>
<td>3 years</td>
<td>1</td>
<td>6 months</td>
<td>UK</td>
<td>Yes</td>
</tr>
<tr>
<td>Gina</td>
<td>29</td>
<td>Accompany husband</td>
<td></td>
<td>1</td>
<td>17 months</td>
<td>Malaysia</td>
<td>Yes</td>
</tr>
<tr>
<td>Haslin</td>
<td>29</td>
<td>Accompany husband</td>
<td>7 months</td>
<td>2</td>
<td>3 years old</td>
<td>9 months</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Ilna</td>
<td>30</td>
<td>Student</td>
<td>8 months</td>
<td>2</td>
<td>7 years old</td>
<td>18 months</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Jenny</td>
<td>31</td>
<td>Student</td>
<td>1 year</td>
<td>1</td>
<td>27 months</td>
<td>Malaysia</td>
<td>Yes</td>
</tr>
<tr>
<td>Kathy</td>
<td>31</td>
<td>Student</td>
<td>6 months</td>
<td>1</td>
<td>13 months</td>
<td>Malaysia</td>
<td>No</td>
</tr>
<tr>
<td>Laily</td>
<td>30</td>
<td>Student</td>
<td>1 year</td>
<td>1</td>
<td>26 months</td>
<td>Malaysia</td>
<td>No</td>
</tr>
<tr>
<td>Maddy</td>
<td>30</td>
<td>Student</td>
<td>1 year</td>
<td>1</td>
<td>18 months</td>
<td>Malaysia</td>
<td>No</td>
</tr>
<tr>
<td>Nur</td>
<td>32</td>
<td>Accompany husband</td>
<td>2 years</td>
<td>3</td>
<td>6 years old</td>
<td>4 years 5 months</td>
<td>UK</td>
</tr>
<tr>
<td>Oleen</td>
<td>26</td>
<td>Student</td>
<td>1 year</td>
<td>1</td>
<td>8 months</td>
<td>Malaysia</td>
<td>Yes</td>
</tr>
<tr>
<td>Pija</td>
<td>32</td>
<td>Student</td>
<td>4 years</td>
<td>1</td>
<td>27 months</td>
<td>UK</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 2 Participants demographic and their families.
3.2 Phase 2: Analysis of photo-sharing social media space

The second phase of our study focuses on the content analysis of the stories and narratives of young mothers in Malaysia living in the United Kingdom. A total of nine young mothers were identified from the group of 16. Those were participants who had been using a photo-sharing social media space before we contacted them in March 2008. We decided to conduct an analysis on the content generated by these nine participants during the three months from December 2007 to end of February 2008. The content analysis was intended to identify the kinds of pictures of their children that these young mothers usually post in media sharing spaces. The list of the existing social media spaces of these nine participants is shown in Table 3. They were also interviewed on how their parents looked at the photos posted in their social spaces.

<table>
<thead>
<tr>
<th>Name</th>
<th>Existing Social Media Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bibi</td>
<td>Flickr</td>
</tr>
<tr>
<td>Cindy</td>
<td>Fotopages</td>
</tr>
<tr>
<td>Diana</td>
<td>Fotopages, YouTube</td>
</tr>
<tr>
<td>Effa</td>
<td>Flickr, YouTube</td>
</tr>
<tr>
<td>Gina</td>
<td>Blogspot</td>
</tr>
<tr>
<td>Jenny</td>
<td>Blogspot</td>
</tr>
<tr>
<td>Nur</td>
<td>Fotopages</td>
</tr>
<tr>
<td>Oleen</td>
<td>Fotopages</td>
</tr>
<tr>
<td>Pija</td>
<td>Fotopages</td>
</tr>
</tbody>
</table>

Table 3 List of existing social space of nine participants

3.3 Phase 3: Analysis of the photo exercise using Flickr

During this final phase of our study, we conducted an exercise where we asked the participants to create photo-based narratives and share them with their siblings and parents in Malaysia. These exercises give us more control over the experiences while creating these narratives and they allow us to inquire about the emotional effects the narratives had on all of the parties involved. We followed this approach based on the success stories of narrative researchers who were able to get insights into emotional experience of the participants through studying the participants’ recorded stories that the researchers instructed them to write [29-31]. We asked our participants to create photo stories using Flickr (this will be explained in detail in the next section). We ask them to focus their stories on their young children as previous studies indicate that this a favorite topic of young mothers when they share information on the Internet [18, 19, 32].

3.3.1 Photo exercise

For the photo exercise, participants were required to post two photo-based stories in one week describing the experiences they recently had with their young children.
We created new Flickr accounts for each participant and asked participants to include at least five photographs in each photo story. Participants were asked to post about something that had just happened that week and on a topic that their family in Malaysia had not yet heard about. They were allowed to discuss it with their spouse and to decide together what the story was going to be about.

3.3.2 Online questionnaire

After the stories were created, one of the extended family members in Malaysia accessed the story and answered an online survey. The family member had to be computer literate. As a result, the majority of participants (13 people) chose their own siblings; only two chose their sisters-in-law and one their father-in-law. There were nine females and seven males among the family members in Malaysia; most were 17-30 years old, except one aged 56 years old. They had to rate eight statements that described their feelings after reading the photo story, using a five-level Likert Scale (from Strongly Disagree to Strongly Agree), and to respond to a series of open questions. With these instruments we also explored the sharing of media done by this person with the rest of the family and particularly the grandparents. The list of family members for each participant that reported in this paper is explained in Table 4 below:

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Chosen family member</th>
<th>Age</th>
<th>Place to access the Internet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Amina</td>
<td>Sister</td>
<td>30</td>
<td>Workplace &amp; Home</td>
</tr>
<tr>
<td>2</td>
<td>Bibi</td>
<td>Brother</td>
<td>18</td>
<td>Home</td>
</tr>
<tr>
<td>3</td>
<td>Cindy</td>
<td>Brother</td>
<td>21</td>
<td>University</td>
</tr>
<tr>
<td>4</td>
<td>Diana</td>
<td>Brother</td>
<td>21</td>
<td>University</td>
</tr>
<tr>
<td>5</td>
<td>Effa</td>
<td>Sister</td>
<td>30</td>
<td>Workplace</td>
</tr>
<tr>
<td>6</td>
<td>Fifi</td>
<td>Sister</td>
<td>35</td>
<td>Workplace</td>
</tr>
<tr>
<td>7</td>
<td>Gina</td>
<td>Sister</td>
<td>32</td>
<td>Workplace</td>
</tr>
<tr>
<td>8</td>
<td>Haslin</td>
<td>Brother</td>
<td>25</td>
<td>Rented house</td>
</tr>
<tr>
<td>9</td>
<td>Ilina</td>
<td>Sister</td>
<td>33</td>
<td>Workplace</td>
</tr>
<tr>
<td>10</td>
<td>Jeny</td>
<td>Father-in-law</td>
<td>55</td>
<td>Home</td>
</tr>
<tr>
<td>11</td>
<td>Kathy</td>
<td>Sister</td>
<td>20</td>
<td>University</td>
</tr>
<tr>
<td>12</td>
<td>Laily</td>
<td>Sister-in-law</td>
<td>23</td>
<td>Workplace</td>
</tr>
<tr>
<td>13</td>
<td>Maddy</td>
<td>Brother</td>
<td>23</td>
<td>Rented house</td>
</tr>
<tr>
<td>14</td>
<td>Nur</td>
<td>Sister</td>
<td>22</td>
<td>University</td>
</tr>
<tr>
<td>15</td>
<td>Oleen</td>
<td>Sister</td>
<td>23</td>
<td>University</td>
</tr>
<tr>
<td>16</td>
<td>Pija</td>
<td>Brother</td>
<td>30</td>
<td>Workplace</td>
</tr>
</tbody>
</table>

Table 4 List of family members and their relationship to the young mothers

3.3.3 Telephone Interview

We decided to follow up the survey with a telephone interview with the grandparents to investigate their feelings regarding their experiences. We invited the young mothers to nominate which parent we should call, and all recommended their mothers (the demographics of the grandmothers are shown in Table 5) as they felt closer to their mothers than the other three possible candidates. One participant said
that her mother is talkative and has more emotional feeling compared to her father. The phone interviews lasted about fifteen minutes.

<table>
<thead>
<tr>
<th>Young mother</th>
<th>Social space</th>
<th>GP</th>
<th>Age</th>
<th>Occupation</th>
<th>No. of GC in UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pija</td>
<td>Fotopages</td>
<td>Zainab</td>
<td>65</td>
<td>Housewife</td>
<td>4</td>
</tr>
<tr>
<td>Diana</td>
<td>Fotopages &amp; YouTube</td>
<td>Fatimah</td>
<td>70</td>
<td>Retired (Ex-lecturer)</td>
<td>6</td>
</tr>
<tr>
<td>Cindy</td>
<td>Fotopages</td>
<td>Ervina</td>
<td>55</td>
<td>Retired (Ex-teacher)</td>
<td>1</td>
</tr>
<tr>
<td>Bibi</td>
<td>Flickr</td>
<td>Ema</td>
<td>55</td>
<td>Housewife</td>
<td>1</td>
</tr>
<tr>
<td>Oileen</td>
<td>Fotopages</td>
<td>Wati</td>
<td>56</td>
<td>Housewife</td>
<td>1</td>
</tr>
<tr>
<td>Nur</td>
<td>Fotopages</td>
<td>Suhana</td>
<td>61</td>
<td>Housewife</td>
<td>3</td>
</tr>
<tr>
<td>Effa</td>
<td>Flickr &amp; YouTube</td>
<td>Hashimah</td>
<td>63</td>
<td>Housewife</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 5 List of grandmothers interviewed by phone

4 Family Communication Practise in Photo Sharing

The preliminary study with three parents in Malaysia with family in the UK was conducted to understand the current practise of photo-sharing from their perspective. Although the number of people was small nevertheless we considered it enough to put together an initial understanding that can serve as the foundation for the rest of the study. Two of the three participants had a good level of experience using computers while the other is a novice user. Details of each participant are explained below:

Aisya

Aisya, 55 years old, lived with her family at the family house in Kuala Lumpur (KL). She is a professional IT lecturer in one of the public Universities in KL and a very busy person. Her husband is a politician. Aisya has two grandchildren in the UK: Husna (2) and her newborn brother Najmi. They are her third and the fourth grandchildren. Her daughter accompanied her husband for PhD study in Manchester and has been living there since Sept 2005. She has never seen either of them face to face in Malaysia because both of her grandchildren were born in the UK. On the other hand, she is the one who went to the UK and helped her daughter during confinement for a few weeks. Aisya’s main use of the Internet was to communicate with her daughter in the UK. The purpose was to keep up with the development of her grandchildren in the UK, for example what words Husna could say, what kind of food she could eat, her physical appearance, and other aspects of the live of the newborn baby. Interestingly, Aisya has other grandchildren in Malaysia but never uses the Internet to communicate with them, even though they also have easy access to it. They usually come and visit her during weekends. Normally her daughter in the UK would use VoipStunt to call her in Malaysia (Pc to phone) once a week.
Jamilah

Jamilah, 60. Jamilah is a housewife and her husband Hassan is a pensioner after a career as general manager at Telecoms Malaysia. They bought a house and lived in Kuala Lumpur after they got married. Their house was always full of people. Most of their children lived with them after their marriage or bought houses nearby. Jamilah usually cooks for the children, or invites the children for dinner at her house. Jamilah and Hassan, have two granddaughters in the UK, Nadia, 8 and Normi, 7. Her son has been in the UK for four years for PhD study. Both of them are very close with Jamilah because they are the first grandchildren and their parents lived together with them after marriage. During that time, Jamilah cooked for them every day, and that’s why, she argues, when they first arrived in UK, Nadia and Normi were homesick. According to their mother, they always cried and did not want to eat their mother’s cooking for the first month after arriving in the country. The mother often called Jamilah to ask the recipe for the food she always cooked for Nadia and Normi. Once Nadia and Normi started school in the UK and made new friends, they started to feel better. Once a year, Jamilah and her youngest daughter would visit Nadia and Normi in the UK. Hassan did not want to come along because he does not like to travel. Jamilah regularly posts present to Nadia and Normi. Even when they went to the UK, sometimes Jamilah would post them presents like new traditional clothes for the Eid or homemade cookies from Malaysia.

Hayati

Hayati, 60, moved to Kuala Lumpur ten years ago to take care of her first grandchild. She lived in her eldest daughter’s house until now. She has been a single mother with four children after divorce with her husband when she was 30 years old. Recently Hayati has suffered very bad health, suffering from arthritis, asthma, diabetes and a knee injury. Thus the daughter paid a maid to take care of the house and the child, while Hayati just did the cooking. She is a novice computer user. She had never used a computer at all until recently when her daughter in the UK delivered a newborn baby. At least once a month, she will go online with the help of other family member to see the blog of her daughter and her family in the UK. Hayati just sits in front of the computer. During our study, her daughter in the UK just gives birth to a baby boy and she calls her almost every day to seek advice on confinement. She has four grandchildren in the UK including the newborn baby and all of them accompanied the mother pursue PhD in Manchester.

From the analysis of the practices of these three families we discovered four main forms of sharing photos:

1. Photos by Post

Jamilah always gives presents to her grandchildren including her two granddaughters in UK. If they go on vacation, they will send Jamilah a postcard of their photo.

“I love to give presents to my grandchildren including the one in UK. They will always remember me. Usually if they went on vacation my daughter-in-law will send me postcard with their picture on it” (Jamilah)
Hayati’s daughter usually posts her family photos at least once in two months with short descriptions at the back of the photos. Normally she receives two to five copies of photos. However her daughter has just delivered a baby, and she included more photos of the newborn baby.

“My daughter sends me two to five photos of her family members at least once in two months. However after her delivery, she post me lots of her newborn baby photos”

2. Photos in Email

Only Aisya uses emails as a media to receive photo’s from her daughter in UK. There are two reasons of using email: (1) Aisya is a computer expert and her husband is a politician. Thus her family must be very careful in sharing family photos in public spaces because of her husband’s job “I’d prefer my daughter to send her family’s picture through my email than through the social space because everybody can see the photos. People can manipulate digital pictures and we must be very careful in distributing it especially after my husband got actively involved in politics.” (Aisya)

3. Photos in Slide show

Aisya requests her son-in-law to consistently upload video of her grandchildren at least once a month in the YouTube, due to the limitation of email. However sometimes he creates a slide show compilation of all photos for making a story.

“It is ok for me if they share the pictures of my grandchildren only (not including the parents). I request them to upload my grandchildren video to see their monthly development in the YouTube because video is big size. Sometimes we are not allowed to send through email. Sometimes my son-in-law does create slides showing compilation of photos with music background to create a story which is very interesting. So when I’m feeling bored or stressed I would be looking at these slides show again and again...” (Aisya)

4. Photos in Social Space

Jamilah’s and Hayati’s daughters have their own social space. Jamilah’s daughter use Fotopages while Hayati’s daughter prefer to use Blogspot. Both daughters update their Fotopages at least twice a month including photos and text story. Hayati is a novice computer user, so her daughter (where she lives with) switch on the computer for her to see the Fotopages. Although Jamilah is computer literate she likes to see their social space with her youngest daughter because she claims that it is fun to see the Fotopages with other people.

“My daughter-in-law loves to upload their family photos in Fotopages. I like to see it with my youngest daughter, because it is fun to watch with her; besides I will cry if I see their photos alone. I missed them so much especially my granddaughters. They used to live with me” (Jamilah)

“Every time my daughter calls from UK she is the first to cry. Maybe she is the youngest so she is not as tough as her sisters. I also can’t help her during the pregnancy because I’m also not in very good health. I have arthritis, asthma, diabetes and a knee injury too. However my daughter in UK likes to update her family photos and her children progress in her blog. The other family members will help me to show the Fotopages in the computer when the Fotopages have been updated.” (Hayati)

All the three grandmothers above are satisfied with their long-distance relationship with their adult child and their family living in UK. Most of the time, the adult child
(the daughter) takes the initiative to report and send photos to them. Based on the study, we found that the easier way to share more photos is using social space. We also notice that most of the young mothers with newborn baby show more excitement to post more pictures.

5 Photo sharing in social media spaces

We conducted content analysis of the material posted by our participants in their photo-sharing social media spaces for three months. We found that among the sixteen participants, nine of them had their own social spaces and posted regularly. Five participants used Fotopages, two used Blogspot account (linked with Picasa for image storage) and two used Flickr. They also shared their photos in social networking sites such as Friendster and Facebook. We decided not to analyse their social networking sites as our focus are tools that are comparable to Flickr, especially as from the interviews we realized that most of them use the social networking site mainly to keep in touch with old school friends, instead of family. We found that generally they update their social media space at least twice a month. We present here the analysis of the type of content posted as well as the mediating practices emerging for sharing that content with family (siblings and grandparents) in Malaysia.

5.1 Type of content

The total number of pictures analyzed was 1405, in which 80% (1035) show young children pictures either posing or performing certain activities. We defined a coding scheme to categorize the baby photos based on the scheme proposed in the Digital Imaging Consumer Survey in 2000 [33]. Their original top five categories include festivities, birthdays, pets, holidays, and people visiting. From our data samples we derived a new coding scheme with eight categories as shown in Table 2.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outing</td>
<td>317</td>
<td>31%</td>
</tr>
<tr>
<td>Holidays</td>
<td>181</td>
<td>17%</td>
</tr>
<tr>
<td>Portraits</td>
<td>172</td>
<td>17%</td>
</tr>
<tr>
<td>Domestic Activities</td>
<td>165</td>
<td>16%</td>
</tr>
<tr>
<td>Special events</td>
<td>65</td>
<td>6%</td>
</tr>
<tr>
<td>People visiting</td>
<td>66</td>
<td>6%</td>
</tr>
<tr>
<td>Nursery</td>
<td>39</td>
<td>4%</td>
</tr>
<tr>
<td>Birthdays</td>
<td>30</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td>1035</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 2: Coding of baby pictures (number of pictures and percentages per category)

The four top categories are Outing, Holidays, Portraits and Domestic Activities. The difference between Outing and Holidays is the distance and time spent. Outing
was usually done around Manchester and involved activities such as shopping, going
to stadium, museum, or park; where they did not stay overnight at that place. Holidays
are usually activities that are far from Manchester or that require them to stay
overnight. We speculate that outing was the most frequent topic as the study was
performed in winter (i.e. during Christmas holiday) and therefore they spent a lot of
time with their family on shopping trips or short excursions. Portrait is where the
pictures focus on the baby’s face and body movements (either alone or with other
family members). Domestic activities are in-house’s activities, e.g., playing with toys,
eating, watching television. We found a statistically highly significant difference
between the distribution of photos groups in the data collected ($X^2=519.095, df=7, p<
0.0001$).

5.2 The Mediating Mechanism of Photo Sharing

We identified four methods of sharing those pictures with the grandparents in
Malaysia. We note that most of them are characterized by the participation of a
mediator (other family member, usually a sibling) who provides the content of the
ways to be accessed to the content by the grandparents.

a. **Family member show print out the photos.** Bibi’s brother who is studying in
public university in Malaysia has Internet access and every semester break, she
will ask the brother to print out some pictures to show to her mother in the village.
“Usually I will ask him to print some pictures and show to my mother because it is
cheaper that way” (Bibi)

Oleen’s mother and her in-laws also have to wait for other family members to visit
them during holidays to see her family pictures because there is no Internet access
in their village.

“My mom has to wait for my sister who studies at UiTM to go home if she wants to
see the pictures because she has easy access to the Internet. My sister will develop
the photo and show to my mother. So it takes times because in my hometown we do
not have the Internet connection. The same goes with my parents-in-law, they have
to wait for my brother in-laws who is working to go back home during weekend to
see the baby’s picture.” (Oleen)

b. **Family member show on computer.** The majority of the parents (5 out of the
nine participants) show their picture in social space on computer but with the help
of other family member.

“My parents live with my sister who just finished high school, so she will help my
parents to see the Flickr and YouTube” (Gina)

“My sister (who is studying at university) she has access to the Internet and she
will save all our pictures in her laptop to show to my parents” (Nur)

My parent’s house has broadband Internet connection but my brother is the one
who switches on the Internet and shows them our picture from Flickr (Effa)

My brother lives with my parents and he will show our Fotopages to my parents
whenever there is an update (Diana)

My brother has now started his college and lives with my parents, he is always
online and he is the mediator in assisting my parents in using computer. (Cindy)
c. **Grandparents visit other family member’s house or friend’s house.** Jenny’s mother and Gina’s mother-in-law do not have Internet access in their home and in addition they cannot patiently wait for other child to visit them with an update, Jenny’s mom will visit the child whom has Internet, whereas Gina’s mother-in-law will borrow her neighbour’s computer.  
  
*My mother sometimes for instance once within two to three months, she will travel to my sister’s house in Kuantan (town) because she wants to see our Blog. My sister’s computer is a dial up so the Internet connection is quite slow for video conferencing; the Blog is suitable for this kind of communication (Jenny)*  
  
*My mother-in-law she is willing to go to neighbour’s house to borrow the computer and online for video conferencing (Yahoo messenger) with my son. She said she misses my baby a lot and wants to ‘see’ the baby’s development. However before she goes online, she will telephone us first using i-Talk to set the time for video conferencing. Besides she also uses the Internet to see my Blog. (Gina)*

d. **Grandparent opens by themselves.** Pija’s mother has the motivation to use computer because of her Fotopages. She is willing to use computer because she wants to see the latest update of Pija and her family.  
  
*My mother likes to see my Fotopages. She is willing to use computer only to see my Fotopages and nothing else. She likes to browse and read comments from my friends but she doesn’t comment. My sister and brother also see my Fotopages too, they are computer literate but they hardly comment. I know they have already seen it when I telephone them. (Pija)*

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6 **Photo Storytelling Exercise**

After a training session and explanation of the task, the participants were given a week to prepare photo-based stories of their young children. The participants produced stories with an average of 8 pictures (s.d. 5.7). Most of the participants found the photo storytelling a new experience. Most of the photos focused on particular aspects of the baby’s daily life. At the end of the session, 29 stories (228 photos) were uploaded. We analyzed the data collected at two different levels: at the picture level as well as the story level.

6.1 **Analysis at the level of Photos**

**Type.** The total number of pictures participants posted during the exercise was 228 photos, averaging eight pictures per participant. We only found six categories instead of the eight categories that we found when we analysed the pictures that they uploaded prior to the start of the study. Figures 1 and 2 show the difference in the distribution of these categories. Using chi-square, we found a statistically significant difference between the distribution of photos groups from the data collected in the exercise ($X^2$75.3684, df=5, p<0.0001). Interestingly, the two categories which did not emerge at the exercise are Nursery and People visiting. We suspect that because the participants had to complete two photo stories in a week, they focused their effort
on the times when they are less busy at home rather than at the nursery or while having visitors.

![Fig 1: Category of photos in existing social space (1405 photos, Dec 2007 – Feb 2008)](image1)

![Fig 2: Category of photos in photo story exercise (228 photos, March 2008)](image2)

**Setting.** From our content analysis, we discovered that, despite our initial suspicion that most stories would be indoor (as it might be easier to capture children pictures in the house – and in deed ‘Domestic activities’ has the largest number of pictures), there is almost an equal split between indoor (57%) and outdoor pictures. The participants, however, did indicated that they preferred to take outdoor pictures as they tend to associate pictures taken outside the homes as ‘special’: “If I can, I want to post something special, like her birthday, going on a trip anywhere, fun fair or any special event, but unfortunately we didn’t go anywhere for this exercise...”(Haslin),
6.2 Analysis at the level of Stories

Type. Twenty nine stories were analyzed and a coding scheme was derived to identify the main types of stories that these mothers created. The analysis produced five high level codes (based on the image content or caption): ‘Basic skill’, ‘Performance’, ‘Experience or moment’, ‘Activity’ and ‘Emotion’. One thing that struck us was that the activities that were reported in the photo stories were highly dependent on the age of the young children. Basic skill relates to the story in which child learns to do basic physical activity such as walking, eating or rolling. Most of the baby aged below one year old were shown doing this (see Fig 3).

![Fig. 3: Basic skill category - Rolling.](image1)

Performance is where the child acts in front of the camera like dancing, posing or writing. These are normally with children around the age of three (see Fig 4).

![Fig. 4: Performance category - Posing.](image2)

Experience or moment is about special events or places, such as walking on the snow. Most often children aged 1-2 years old were in this type of story (see Fig. 5).

![Fig. 5: Experience category - Trip.](image3)

Activity is where the story is about the baby doing physical activity from start to the end (reading a baby book, choosing a dress). This is usually with children that are around three years old of age (see Fig. 6).
Finally, Emotion is when the pictures focus on the baby’s facial expressions or body language (see Fig. 7). This was only found with babies one year old or younger.

All the five codes above have been related to certain ages (see Table 3 which shows the number of stories identified for each category). A chi-square test revealed that there was a relationship between the type of story and the baby age ($X^2=33.8$, df=8, $p<0.000$). ‘Emotion’ is dominated by the pictures of babies below one year old. Six young children fall in this story category. Young child between one to less than two years old mostly are reported in ‘Experience or moment’ and ‘Activity’ stories (five to six children). Lastly children more than two years old and less than three years old are more on the ‘Performance’ and ‘Experience or moment’ story.

<table>
<thead>
<tr>
<th></th>
<th>age&lt;=1 (6 children)</th>
<th>1&lt;age&lt;=2 (6 children)</th>
<th>2&lt;age&lt;=3 (4 children)</th>
<th>Total (16 children)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic skill</td>
<td>3 25%</td>
<td>0 0%</td>
<td>0 0%</td>
<td>3 10%</td>
</tr>
<tr>
<td>Performance</td>
<td>0 0%</td>
<td>0 0%</td>
<td>3 50%</td>
<td>3 10%</td>
</tr>
<tr>
<td>Experience/Moment</td>
<td>3 25%</td>
<td>6 55%</td>
<td>3 50%</td>
<td>12 41%</td>
</tr>
<tr>
<td>Activity</td>
<td>0 0%</td>
<td>5 45%</td>
<td>0 0%</td>
<td>5 17%</td>
</tr>
<tr>
<td>Emotion</td>
<td>6 50%</td>
<td>0 0%</td>
<td>0 0%</td>
<td>6 21%</td>
</tr>
<tr>
<td>Total</td>
<td>12 100%</td>
<td>11 100%</td>
<td>6 100%</td>
<td>29 100%</td>
</tr>
</tbody>
</table>

Table 3: Photo story exercise by type of story, with the age of the baby.

6.3 Photo story telling characteristics – mediating communication between young children and their grandparents

We then analyzed the characteristics of the stories that these mothers communicated to their kin from the perspective of their narrative value and mediating
role on the communication between young children and their grandparents. From this data, we identify five main characteristics of these stories:

Young children as Narrators. We found that these young mothers aim at simulating the experience of grandparents talking directly to the (babbling) babies on the phone through telling stories from the point of view of their young children. Specifically, they wrote captions in which the young children are the ones talking: “Am I so cute that these people have to invent this thing called camera to memorise my face?” – (Cindy)

Content Filtering. Because the narrative acts as news to the aging parents back home, these mothers tended to choose carefully the content that they share so that all of the postings are about happy moments. Even when there was a problem it would have a happy ending. The participants suggested that they tried to paint a happier scenario purposely so not to make their parents worry. For instance: “...when on the phone I complained to my mother, but in the blog, ...you get to put everything in a nicer and proper way”- (Amina) or “...that day my baby got stomach ache because we gave her wrong food, if I tell this kind of story to my mom of course I will get scolded, so if I am to write a story about it, I will cover it up... (Cindy)

Privacy. Although all of the participants agreed that these various media were very helpful for bridging communication with their parents regarding the development of the young children, many were concerned about the public aspect of these media, as one comment indicated: “I don’t agree that public can see [the narrative]. If they are my friends, even if they are not close friends, it’s ok for them to watch what I did with my family, but not public. We are not a celebrity so there is no need to be public.” (Fifi)

Colorful Stories. Some participants went a long way in composing stories with different media, in anticipation that their parents may have different preferences in receiving the “stories”: “If you can share all (picture, text and video) it would be the best solution. When they feel bored to read, they can just to see the pictures; or sometimes if they do not like to see picture because they have to click one by one, they can see the video because it is moving and more interesting.” – (Diana). However, providing various media has its drawback, some media more than others. The majority of participants complained that it takes longer to upload and create just 1 minute video in YouTube than multiple pictures on Flickr (mostly due to video editing problem).

Perfection. Even though these stories are supposed to be shared only with their parents (in which case, the formality should not be an issue), it seems that the participants really want the stories to be very precise and well crafted, to the point of using Microsoft Word’s grammar checker: “I’m a perfectionist, I must write in Word to avoid missing stories and to make sure there is no grammatical error before posting to the ...” (Kathy); “…I’d prefer describe the whole thing as text then put pictures to conclude the story.” (Pija).
6.4 The Stories of the Photo Stories

One of our research questions aims at investigating the way that content is crafted and the topics that the participants thought as worth sharing with their aging parents and other members of their extended family. To find this out, we analysed the interview data and connected it with the stories crafted by participants. We identified four main aspects that triggered the mothers’ ideas for photo story construction:

a. **Using and interacting with objects.** In many of the stories the baby plays with various objects, including objects belonging to the mothers. This topic was inspired by mothers noticing a new form of interaction of the baby with their environment:

   “That week we did not plan any outside activity, so I have to be aware of what are the new things he does at home... I saw he is holding the books so I just snap some of the photos in sequence... (Kathy).”

   This interaction with objects is often edited to be more natural when presented as a sequence. Pija, who took her baby pictures randomly while playing with clothes, later re-arranged the photos in the computer to create a story about the baby wanting to help her fold the cloth:

   “Usually I arrange the photos’ sequence for the story, because actually I snapped randomly those folding cloth pictures, then after transferring to my computer I re-arranged the pictures, then uploaded them on Flickr” (Pija)

   ![Figure 8: The baby is playing with her mother’s iPhone](image)

b. **First timers.** Many of the stories were built around the first time the baby does something as the following two comments indicated:

   “I just take the picture because I want to record when he started rolling; besides because the camera has the correct date I want to record it” (Amina) or

   “Lately my baby likes to do something new like writing while lying down, pretending to read a piece of paper when I gave her a picture and colouring in my office.” (Laily)

   As the first comment indicates, this highlights an important design issue of the need to have a proper time stamp on the pictures.

c. **Routine activities.** Some of the participants were short of ideas with regards what type of stories they would like to share, and hence, resort to posting their routine
activities together. For example, Laily got an idea of a photo story from her routine with her baby of baking a cake together:

“I usually bake cupcakes every week for my children and my baby has a tendency to follow me to the kitchen to ‘help’ me. Then I thought, why don’t I snap these pictures which I think is suitable for the Flickr exercise (Laily)

d. Facial Expressions. Newborn babies spend lots of time indoors, and will sleep most of the time. Therefore, any change in facial expressions in the babies often trigger ideas for photo stories, such as when they are taking a bath, waking up from a good sleep, smiling, after drinking milk or playing with their toys (see Figure 11 for an example of this type of story). As illustrated in the following quote, it is interesting to notice that participants mostly want to capture moments when the infant is awake:

“If I take my baby’s picture in my house I will make sure that he is in a good mood like after drinking milk, after having his cloth changed, after taking bath or just waking up from a sleep. Not while he is sleeping, only happy moments. (Nur).

e. Taking charge. Finally, there are stories that are built around the idea of the baby actively performing a certain activity (e.g., pretending that the baby is really using an iPhone). This was supported with the captions that usually use the tone of the baby as the author:

“Mummy, don’t disturb me, I’m busy with your iPhone... I can’t think now” – (Fifi).

Figure 9: Baby just waking up and smiling.

7 The Value of Photo-Based Stories to Connect Separated Families

This section discussed the value of Photo-based storytelling from the perspective of enhancing the communication between family members and in particular connecting grandparents with their living abroad children and grandchildren. We analyze three main actors on this process: the young mothers making the stories, the siblings in Malaysia looking at those stories and sharing them with other members of the family, and the grandparents as agents experiencing a mediated process of communication given their lack of digital literacy.
7.1 Young mothers: motivations and value of photo-story telling

Young parents create photo-stories for their parents and other family members for sharing the parenting experience as it happens and for feeding their curiosity: “Even though I always use the phone to call my family, people really want to see photos. If you just call without sending photos, people don’t really know about the baby condition. But with photos, they can follow the story from the site and every moment of the child’s development” (Pija). Yet, we found that some young mothers considered this photo sharing as a chore they have to do: “…for me this photo storytelling definitely is not wasting time especially for the purpose of sharing. Honestly speaking I’m not missing my parents in Malaysia; maybe because I’m too busy with my own family and studying, however there is no reason for me not to share pictures or stories with them. I’ll continue post more photos after this exercise” (Laily).

We found that beyond serving to connect with their families, the experience of making and preparing these stories for others benefits the creator at a personal level. The participants referred to the enjoyment and fun while making the stories: “I really enjoy doing this exercise because it is my first experience. My baby is getting bigger and more clever, he has lots of activities and new things he wants to do, so capturing this moment and crafting stories is really fun” (Fifi) and “When the photo story is ready, I like to read it again and again. Maybe I feel proud of my own work” (Haslin).

7.2 Siblings: value of photo-story telling

We asked the members of participant’s extended family to view the photo stories and to answer an online questionnaire to explore their feelings and reactions. From the questionnaire data (see Table 4), we found that overall, the pictures bring the feeling of togetherness. The family members felt that they were closer to the family in the UK even though they are not present.

We found that indications of negative feelings or effects (Indifferent, Sad, Worried) resulted in lower average scores, while positive indications (Feel closer, Less stressful, Happy, Wish was there, Miss the baby less) showed higher average scores. Two highest rated positive statements are: ‘I feel closer to the family’ and ‘I feel happy,’ which shows that pictures really bring the feeling of togetherness and make them happy.

Besides the photos, the captions were also responded positively by the extended family members

“Great pictures with interestingly funny captions! Brought tears to my eyes...You just feel like scooping him up and cuddling him. It brought joy just looking at the pictures.” (Fifi’s sister).
## Table 4: Family member’s feelings for the photo stories

<table>
<thead>
<tr>
<th>Family member’s feeling</th>
<th>Average (s.d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel closer to the family</td>
<td>4.5 (0.82)</td>
</tr>
<tr>
<td>I feel happy</td>
<td>4.4 (0.72)</td>
</tr>
<tr>
<td>I wish I was there</td>
<td>4.2 (0.75)</td>
</tr>
<tr>
<td>I miss the baby less</td>
<td>3.9 (1.81)</td>
</tr>
<tr>
<td>I feel less stressful</td>
<td>3.7 (0.87)</td>
</tr>
<tr>
<td>I feel sad</td>
<td>2.7 (1.01)</td>
</tr>
<tr>
<td>I feel worried</td>
<td>2.1 (0.68)</td>
</tr>
<tr>
<td>I feel indifferent</td>
<td>1.4 (0.81)</td>
</tr>
</tbody>
</table>

We found that family members experience mixed feelings when looking at the pictures, many of them contradictory, from happiness, pride, to longing for being reunited:

“*A mix of excitement and sadness*” (Bibi’s brother),

“A little bit sad as they are not at arm’s reach for a meeting and a kiss on his fat cheeks” (Gina’s sister),

“I feel good and relieved; at least it helps me to reduce the feel of loss and feel like I was there too” (Nur’s sister), and

“... proud of him because he is still small but he can pose in front of the camera” (Amina’s sister).

We also noticed that sharing photo-stories can result in misinterpretations and raise concerns unnecessarily. For instance, there is a story where the baby is choosing the clothes and the picture makes it look like the baby is messing up the room with clothes, so the reader takes it seriously and blames the parents for not giving full attention to the little baby.

“She seems happy doing her own things without any restraint, such as pulling clothes from the drawer and messing the whole room. Intentionally, she did that to grab her parents’ attention. I felt alarmed watching her like that, she may be happy doing that but others may not be.” (Cindy’s brother).

### 7.3 Grandparents: value of photo-story telling

From the online survey we can draw the perspective of Jenny’s father-in-law with regards the value of photo-story telling: “*After looking at her photos, I feel so relief, as if helps me to reduce the loss of feeling because I miss them so badly. Besides those pictures make me (feel) I’m also with them*” (Jenny’s father-in-law)

Jenny’s father-in-law was also was asked to show which story he likes the most and he preferred a set showing his granddaughter posing (see Figure 10) instead of a second set which focuses on the places that the family visited (see Figure 11). He said:
“I like the first set because she seems deeply occupied. It seems like she is thinking of something which is far away in her mind. I really want to know about it.” (Jenny’s father-in-law)

Figure 10: The first set of photo story

Figure 11: The second set of photo story

He also commented on the importance of leaving their children to have this new experience and the value of Internet to keep them connected:

“Their needs are not the same as our needs, so let them face the new experience without us. But gladly the Internet is a good platform for us to keep in touch.”

Additional understanding of the value of these narratives was gained from the telephone interviews we conducted later on. We interviewed seven grandmothers from the original group of sixteen families participating in our study. We did not follow the online survey questions and used instead an open semi-structured online-questionnaire approach asking participants about their reactions or feelings, after seeing the stories posted by their children. Mostly the grandmothers express their happiness when see their daughter’s social space that has lots of pictures:

“Very excited, happy and enjoy looking at their photos. It seems like they are very near to me” (Hashimah)

“When looking at their photos it really makes me feel so happy” (Ervina)

A reason the grandmother feeling happy is because of the quality and the size of the pictures: “I feeling so happy looking at my daughter’s Fotopages. The photos are very clear and there are in big sizes too.” (Fatimah).

Suhana enjoys looking at the pictures whenever her daughter (in Malaysia) shows the latest picture of her grandchildren in the UK, but she said that she feels sad after that when the computer is turned off. She also tends to forget which picture they are talking about as there are many pictures: “I enjoyed and feels happy looking at their pictures however I feel sad when the computer is off, all are also gone. No memory left, besides I tend to forget which picture they are talking about because there are many pictures” (Suhana)
Besides feeling happy, Ema also expresses that the pictures can help reduce the feeling of missing her first grandchild. If she cannot sleep at night she will look at those pictures (printed by her son in Malaysia from the Fotopages): “I miss them badly, besides that is my first grandson. At least the pictures give me comfort. …Sometimes if I can’t sleep at night, I like to see their photo (printed version) while lying on the bed. I also like to frame these pictures too” (Ema)

Wati also commented about the value of printed pictures but at the same time praised Internet as a place to share pictures with her distance family: “Very happy, at least they got something to share on the Internet but the satisfaction is not there until the picture is in our hand, the feeling is different. I can’t touch my grandson because he is too far so at least touch his photos is good enough for me.” (Wati)

Another grandmother, Zainab who also stated the need for touching, felt that she worried too much over her daughter and her granddaughter in UK, and looking at these photos can reduce her worries.

“I feel like I want to cuddle my granddaughter, kiss her and feeling like going there. I sometimes feel sad too, thinking of my daughter all alone in UK without any family members to help if anything happens…maybe I’m thinking too much but the issue is as long as the family is happy I’m happy too. So the pictures really help me to release my worried ness” (Zainab)

7.4 Some Characteristics of the Families participating

Discussing the sharing of these stories we can see how they are used for supporting intergenerational communication. Gubrium (2008) recommends to the narrative researcher to study the social relationships around the script [29]. This emphasis on revealing the social factors behind the narrative making practice is important because we argue that use of technology will be determined more by social motivations rather than by technological innovation. We can briefly analyze those aspects guided by Bengtson’s framework on intergenerational family relationship and focus on four factors [34].

a. Family Contact.

We can see that all the participants of this research are the mother’s of the baby; as a result, people most contacted are more on the maternal side. This close relationship motivates them to update their website.

“The relationship more closer to my mum compared to my dad. She is like a friend to me, I can tell her almost anything in terms of problems…when I have not updated my social pages she will SMS and ask, how I am, or everything is ok? So feel like responsible to update her about my family and especially about my baby, because she is the central of our communication.” (Pija)

“If my mom is in Malaysia she is an active user because she want to see my baby’s pictures, but if my mom is in the UK (visiting) she is not an active user but still looking at it anyway, she likes to see the pictures and do what she likes for example reading the comments people give to the post.” (Pija)

b. Family Support. Some of the young parents did set up the computer at their parent’s house with Internet facilities to overcome the cost of communication before migrating to the UK.

“Before we came here, my husband already set up broadband, PC and webcam at my parents-in-law’s house…. beside for the purpose of video conferencing, they can
also see our latest news in the UK from our blog too, so it will save budget because developing photo and posting cost from the UK is expensive.” (Jenny)

c. Family Structure. Family structure reflected in number, type and geographic proximity of family member. We noticed that their mother (of the young mothers) are in the average age of 55 to 65 years old and on average have less than five grandchildren, so the relationship of grandparents interested to know about their grandchildren is higher.

“In terms of ranking, my baby if from my husband side, he is the 20th grandchildren but for my side he is the second so my mother is much more interested to know about my baby. My mother-in-law she is quite old and besides she is not healthy too” (Bibi)

d. Family Sharing Resources. Some grandparents who live alone in the rural area depending on the other siblings who has Internet access at the office to print out the picture for them.

“My mom has to wait for my sister who studies at university to go home if she wants to see the pictures because she has easy access to the Internet. My sister will develop the photo and show to my mother. So it takes times because in my hometown we do not have the Internet connection. The same goes with my parents-in-laws, they have to wait for my brother in-laws who is working to go back home during weekend to see the baby’s picture.” (Oleen)

8 Discussion

We discuss here the results of our study and how they help to respond to our research questions as well as our contribution to previous efforts in this area. One of the research questions of this study is to understand how young mothers share everyday experiences and life moments of their babies in social space with their aging parents and other family members in Malaysia using photographs.

From the content analysis we found that young mothers tend to post photos about holidays or outing or any other activities outside their homes and 80 percent of the photos show their babies. The presence of child-related pictures is expected given the fact that our participants are young parents, with access to digital technologies and the need to share those moments with family abroad. However, it is interesting to notice the high proportion of them. This might indicate that although there are many other things that the parents can potentially report to the extended family back home (e.g., school, work, religious activities, going out with other friends, etc), the story of the child seems to be a dominant topic of communication between geographically separated families.

For the photo story exercise, the analysis was done at photo level (photos were analysed independently) and story level (collection of photos that built the story). As expected, domestic activities were the most reported category, followed by outings and portraits, or in general, photos about ‘everyday’ life. This result supports the findings of Cohen [17] and Khalid and Dix [14], which reported that photo loggers tend to post mundane, simple everyday real life moments of their life rather than special events such as birthday parties.
When we looked at the stories that the participants shared with their families, we identified five main types of stories: ‘Basic skill’, ‘Performance’, ‘Experience or moment’, ‘Activity’ and ‘Emotion.’ The interesting finding, however, is not the types of stories, but the fact that the types of stories depend on the age of the babies being reported. Newborn baby and infants below one year old mostly appear in the ‘Emotion’ and ‘Basic Skill’ stories. As they baby grows up the mother tends to build stories on ‘Performance’ and ‘Activity’. Sharing ‘Experience or moment’ can be found with children of all ages but most often with children between one to two years old.

In the interview session, we observed that some participants often struggled with the dilemma of selecting the “best” story to share (perhaps due to the limited time that was given to complete the task). This finding is in line with the finding of a study on general graphics storytelling. Eisner stated that in telling a life story, usually the storyteller is confronted with the difficulty of selecting a revealing story [35]. Eisner also discussed about graphics storytelling through a sequence of photographs. As this topic bears a resemblance to the task we assigned to our participants, we compared these two cases. In Eisner’s book, there were 11 elements that made a sequence of pictures to tell a story. From those 11 elements, we found that only 3 of them were similar to our cases (it should be noted that Eisner discussed about drawings): the object itself (i.e. the baby in our case), the composition of the object and its environment (the baby and the things/persons around it) and the text that accompanies it (caption).

In general we can say that our study highlights the importance of child stories on social spaces to communicate with aging parents who are separated geographically. We found that young parents put some effort into translating the experience of more traditional communication medium into the more modern social spaces. More specifically, to simulate the experience of grandparents talking directly to the babies on the phone, these mothers created stories in which the babies are the ones telling the stories. As these stories act to update families and friends, there is a sense that bad news should be muted and good news should be amplified, which perhaps is not different from the pattern when more traditional communication media is used. We found that some mothers prefer to keep the stories within a close-knit circle of immediate family while others are more open. We can see that some mothers went a long a way in attempting to provide baby stories in various forms to ensure that their parents can have a rich experience of the baby experiences. Finally, many mothers also go a long way trying to perfect the structure and language of the stories to the point of drafting the story in a separate application and using a grammar and spelling checker, indicating that making the story right and good quality is very important for them. This again is an indication of the perception of how important it is for these mothers to maintain the communication link with their parents.

Our study also investigated the effect of photo-based stories to the creators and consumers of these stories. From the perspective of the mothers producing the stories we found that they are seen as valuable and more effective way to communicate with their family members, but also as recreational activity which brings fun and enjoyment. From the perspective of the family members, analyzing the responses to the pre-packaged statements, we found that the two highest rated statements were “I feel happy” and “I feel closer to the family,” suggesting that these photo stories act as
a proxy of the presence of the baby and its parents. While these positive statements are expected, the open-ended comments suggest that these photo stories had caused negative feelings as well, although they are more associated with missing the babies and a heightened awareness of the separation, something that we argue would also happen in other modes of communication such as phone calls.

In line with the findings from Quadrello et al.'s study [3], we found that grandparents also went a long way to try to follow the lives of their grandchildren who live abroad, to the point that they are willing to learn and use the Internet to mediate the communication. This is an important finding as every now and then older persons are pictured as technophobic, especially those from developing countries. Our finding shows that even in Malaysia, older persons are taking up advanced Internet technology to enable more frequent communication with geographically separated families.

9 Conclusion

Despite the explosion of photo social spaces and family communication in Cyberspace, very little research has been done on this as yet that investigates photo-based baby storytelling. This forms the motivation of the reported study. We found several interesting phenomena from our study:

a. Babies naturally dominate the photos that are intended to bridge communication between young parents and families that are geographically separated.

b. The content that is shared through photos with extended families depends on the age of the babies.

c. There is a general preference to report special events, and particularly those happening outside homes. However, routine home activities are also chosen when there is nothing else to report and people want to keep reporting.

d. While expectedly the photo-based reports are received positively by the extended families, there are some negative feelings caused by these photo stories, mostly due to an awareness of the separation.

e. Grandparents are willing to use advanced Internet technology to maintain communication with children and grandchildren who live abroad.

Certain limitations can be pointed out in various aspects of this research. Firstly, due to budget limitations, we did not have a chance to observe the grandparents in Malaysia while looking at the photo narratives from the exercises. Having such observation and direct face to face contact with the grandparents would be ideal to understand their reactions. Secondly, the number of grandparents and children pairs may be too small and represent only Malay ethnic whilst there are three major ethics in Malaysia: Chinese and Indian. Further studies can be conducted observing those groups. Finally, majority of Malay older adults participating in our study are novice computer users, thus this research reports a type of Internet usage that remains mostly at the level of receiving information rather than they actively creating content and communicating with their children. Additional studies can be conducted to understand
how grandparents can reciprocate and create their own photo narratives for their children and grandchildren.

Further study will be done as part of our research programme on analyzing child video narratives in YouTube and text stories in Blogspot and map into the categories that have been found in photo stories to investigate the similarities in the types of stories generated. At the end of our investigation we aim at defining a framework that maps the rich-media forms of computer-mediated-communication (CMC) tools to create child stories. We hope our results can contribute to the understanding of digital storytelling to communicate and connect families living apart.

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