

# The experience of photologging: global mechanisms and local interactions

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Received: 20 August 2008 / Accepted: 2 July 2009 / Published online: 16 January 2010  
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**Abstract** This paper describes an in-depth study of the photologging behaviour of a small group of women who are part of an active expatriate community. In addition to sharing with family and friends in their home country, the participants appropriated the photolog as part of local social interactions both with local friends and as part of their role in the local community. The photographs themselves sometimes resemble those of physical albums, but also include more candid, imperfect and apparently trivial topics. The participants report a subtle pattern of prospective anticipation of the impact of postings and retrospective reflection and discussion of others' postings, linking posters and viewers of photologs in a rich unfolding web of interactions within an extended episodic experience.

**Keywords** Photologging · Photologs · Social interaction · Local community

## 1 Introduction

There is much research in CSCW and HCI that focuses on how technology is used to support and maintain a community. For example, McEwan [1] studies use of the Community Bar to support ad hoc groups, Still et al. [2] explore the ways technology may support knowledge creation and distribution of community of interest, while Becker et al. [3] discuss mobile technology to support healthcare in tribal communities in Arizona.

In this paper, we present a study on how a technology is used to support the social interaction of an expatriate community. Our work focuses on photologs, which combine an Internet-based photo-sharing application and a network community [4], and embody people, places and practise. Photologging is, on the surface, a simple application: one uploads photos that are then seen by friends and family far away. However, as with many other mundane aspects of life, the picture revealed in our studies is far richer than this crude caricature would suggest. Elsewhere, we have drawn out particular threads from these results, linking them with other studies, most notably in considering the activity of photolurking [5]. However, here we look at two broader aspects of the data. The first concerns the activities that occur within the photologging application itself, the eyes-down world within the social computing environment as a virtual space. However, the second aspect is the way in which this cyber world is thrown open in eyes-up interactions with community and local friends; the digital world becoming a resource for physical social interactions.

The study reported in this paper began in 2004 when photologs were still in their infancy. This study was motivated by our preliminary investigation of photologs in a particular application, Fotopages. All the participants came from the Malaysian community at Lancaster University. The participants all shared a number of features that gave a particular slant to their use, but of course are not universal. They are all Muslim, all women, all Malaysian, all far from their native home, and yet all part of this expatriate community. Any in-depth study is bound to have a restricted scope and some of the results we have seen are clearly about this very specific situation. However, there are also issues that, while illustrated by this very specific group, also appear to apply more widely. The factors

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influencing these participants, such as religion, nationality and local community, are varied and not comparable. However, we will refer to the overall effect of these as ‘culture’ using the widest sense of the word. Where it seems important, we will draw apart some of these influences, but often the way they weave into one another makes such clean separation impossible.

This study, unlike those mentioned above, does not focus on how this technology supports collaborative work in the community (i.e., organising gatherings, learning, etc). Instead it deals with richer and more subtle findings. Photologging can be seen as a simple application, but its implication for the social interaction of the community is paramount. The photologs are public; their photographs can capture many eyes and can provoke many hearts. Aware of these consequences to the community, as we will see later, photologging involves reflective and reflexive moments so as to maintain the bond and to support social interaction, here and in the future.

This study was motivated by our preliminary investigation of photologs in Fotopages (Study 1) where we identified online social interaction that happened on the site. Although the application suffers from some usability issues, including privacy and cluttered design, these did not obstruct people from using the application. As we began this work, the number of photologgers increased dramatically in a single year, and in the expat community, people had started to talk about this application and its content. This phenomenon intrigued us and prompted us to investigate further.

In this paper, we explain findings from our second study on photologgers’ experience. Following a preliminary investigation which served as a background study, we conducted this study to further understand:

- The photologgers and their photologging experience and how this affects people around them.
- The social uses of their domestic photographs<sup>1</sup> and how this can connect people.

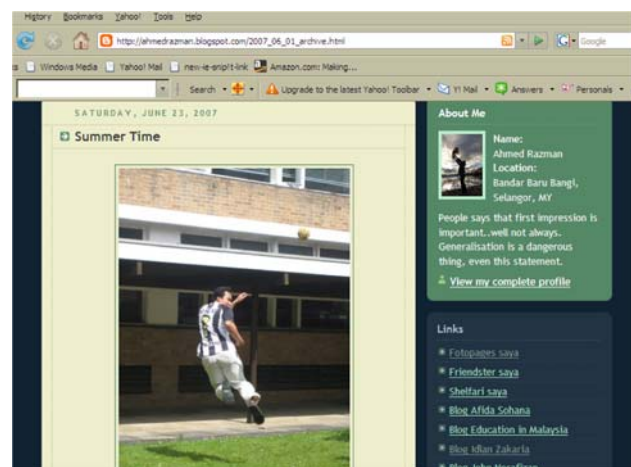
In the following section, we review related work on photo-sharing practises, technology and community. Sections 3 and 4 set the scene of our study, describing, respectively, the participants’ community and the data collection and analysis methods employed. Section 5 presents raw results, organised between activities within the photologging application and those extending outwards into the participants’ life and community. Finally Sect. 6 analyses a number of issues in more depth, ending with a call for a new theory of extended episodic experience.

<sup>1</sup> Permission has been granted by participants from this study to publish some of their photographs for this paper.

## 2 Related work

Since personal photography was commercialised with the invention of Kodak [6], people started to share their photographs through photo albums [7], picture frames [8] and letters [9]. The advancement of technology has allowed us to scan and email our photographs. Apart from emailing, physical photographs that have been transformed into digital media are widely shared in online albums and web galleries. In recent years, both the affordances and the affordability of camera phones and digital cameras have led to a huge volume of digital photographs being produced worldwide. This development has motivated some designers to develop photoware [10] that can support pervasive image capturing and sharing [11] of mass digital photographs. Studies on camera phones have identified some applications that support instantaneous sharing, personal networking [12], geo-blogging [13], moblogging [14] and photo-conferencing [15]. Nardi et al. [16] recommended a design to support the need for bloggers to share their massive photograph collections. While some bloggers still use a blog for pictures (Fig. 1), others now use photolog hosting services (Fig. 2) to complement their blogging [17]. A photolog is a web-based photo-sharing application that allows users to mass upload and publish their photos. Photolog hosting services include Flickr, Fotopages and Fotolog. Our research focuses on photologs from Fotopages.

Whilst a gallery or online album is typically seen only by visitors to the owner’s web page or blog, photologs are by default public, encouraging viewing by strangers as well as friends. It was, of course, this social networking aspect that led to their dramatic growth in popularity. Most moblogs [14] also include social networking features, but are focused more on instant, candid camera-phone shots uploaded at the moment of taking, leading to the emergence of pervasive



**Fig. 1** Blogging with pictures, text is the main content

**Fig. 2** Photolog from a photolog hosting service



image capture and sharing [11]. In contrast, photologs tend to be used with photographs from dedicated digital cameras uploaded later with more reflection. However, we shall see that the nature of photologged photographs is certainly not that of the traditional posed photo album.

Photologs as a phenomenon have started to get attention from researchers, mostly focused on Flickr, which has become the most well-known photolog hosting service on the Internet. Some research on Flickr, such as [18, 19] and [20], has concentrated on tagging. Zwol [21] conducted a study to investigate user behaviour on Flickr based on a sub-set of photographs uploaded onto the site. Negoescu and Perez [22] investigate group behaviour in Flickr; they explain how groups in Flickr are self-organised communities, were created spontaneously and unite based on specific topics and themes.

Van House et al. [23] studied the social uses of personal photography in Flickr, in particular how participants' photographs in Flickr are used for self-representation and self-expression. On other hand, Cohen [24] talks about photoblogs from a media and cultural studies perspective. He describes how photobloggers like to share 'real life' photographs in their photoblogs, and he discusses the motivation of photoblogging and differences between blogging and photoblogging. Both these studies show how photologs are used as self-presentation of personal experience. Some of these findings were echoed in our study. However, the significant new finding of our study lies in how photologs have been repurposed for local usage.

There are some studies on supporting photo-sharing in a local community, notably work by Taylor et al. [25], who developed a public photo display for the people in Wray village to share their photographs, both personal and community photographs. The Wray display was sited

originally in a village hall and later in the village Post Office, both hubs of the local community. Although our participants, a non-UK community, live near to each other and share the same culture and values, they do not have a dedicated facility such as a public photo display, or even a common room in which to socialise. Thus, photologs are an alternative way to share their community photographs. They find spending time in photologs to be an interesting and pleasurable activity [26], seeking comfort and familiarity in photologs when the local surroundings and culture seem alien. During the period of this study, people in this community used photologs hosted by Fotopages.

### 3 Fotopages and the community

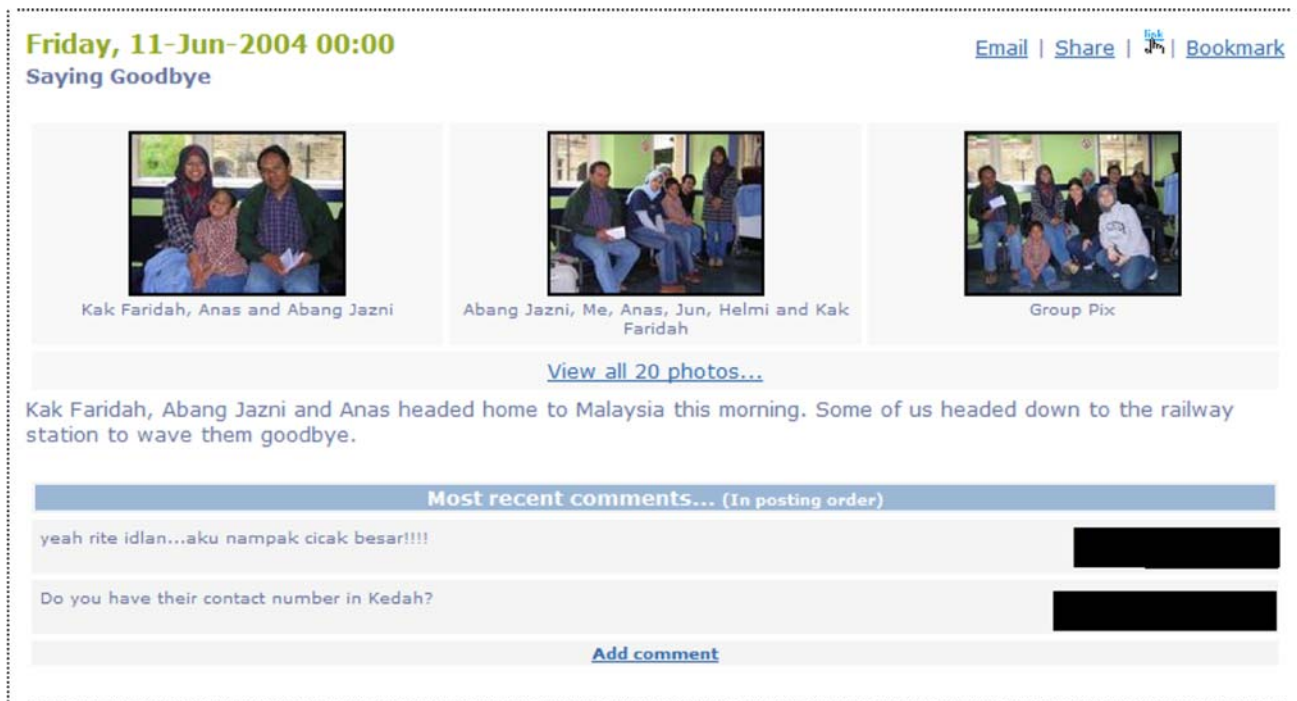
Participants in this study came from the Malaysian community at Lancaster University, a community which was established in the 1980s. The number of Malaysians in Lancaster varies according to the number of students sent by the Government of Malaysia to pursue their studies. The Malaysian community at the university consists of students, spouses and children. People from this community stay in Lancaster for a limited period of time, usually around 3.5 years; yet they have developed a strong sense of community together. Co-operation within the community can be seen through gatherings (see Fig. 3), welcoming newcomers and assistance during sickness. The degree of relationship among them varies. There are many private cliques in the group, usually based on common interests and age.

From our personal observation as one of the members of the community,<sup>2</sup> their interactions are not confined to face-

<sup>2</sup> One of the authors is a member of the community.



**Fig. 3** Some local community events



**Fig. 4** Photolog by one of the participants in this study

to-face interaction but are also mediated by technology, such as emails, telephones, mobile phones and instant messaging. This is one of many examples of how technologies are used to maintain community connectedness, providing support and making the community work. Apart from these technologies, social network applications such as Friendster and Facebook are widely used to communicate.

However, people in the community were familiar with Fotopages (see Fig. 4 for example of a photolog by one of the participants) before they started to use other social

networking applications. When Fotopages was introduced to Internet citizens and subsequently spread to this community, they welcomed it as a phenomenon. Not only did it answer their needs for mass photo-sharing, but, most importantly, they were able to see other people's personal photographs freely, which is something different from our traditional ways of photo sharing [17]. The excitement of browsing, looking and socialising is just like what we see now in social networking sites such as Facebook and Twitter. Although the rhythm of interactions [4] in the

photologs is slow paced compared to other media such as instant messaging, this does not stop people from finding their own excitement and memorable experience. We will see how participants' photologging experience and other members' experience of photologs are interdependent and influence their physical activities and vice versa.

#### 4 Methods

This study used multiple qualitative methods. We visited participants in their homes and conducted in-depth interviews. The choice of in-home interviews means that the participants are as close as possible to the situations and settings being studied. Questionnaires concerning their demographic background, education, age, and Internet usage were given prior to the interviews. Overall, the interviews were conducted in an informal manner, putting the respondents at ease in discussing personal experience. Questions were prepared as a guide (Fig. 5), while allowing new questions prompted by the discussions. When quotations are given later in the paper, the interviewer's questions (prepared or responsive) are presented in bold italic whilst the participants' responses are in plain italic.

We employed an inductive approach in analysing the data, as commonly used in social science and health research. According to Thomas, the "inductive approach allows research findings to emerge from the frequent, dominant or significant themes in raw data" (p 238) [27]. In our study, interviews were audio-recorded and transcribed. When reporting quotations from these interviews in this paper, we leave the grammar as spoken, in order to convey the naturalness and emotion in the interaction. The interviews were read several times to identify themes and

categories. Briefly, interesting and relevant passages in the interviews were highlighted and saved as quotations. Codes were created based on the quotations and attached to the saved quotations (see Fig. 6). Quotes with similar meaning were given the same code. Themes (or categories) were then created from the codes by identifying connections between them. This process was iterated a number of times. The transcripts were read several times. The codes were checked and identified for any overlapping. For example, during the first stage, we used two codes to record participants' objectives in photologging: '*reasons*' and '*motivation*'. We later omitted the '*reasons*' and included all quotations with that code into '*motivation*'. A meeting and informal discussions with some experienced researchers in qualitative data has also helped in identifying the themes for this research. As mentioned in the Sect. 1, the study presented here (Study 2) is one of the five interrelated studies of our research. After we completed the last study on photolurking [5], the data from Study 2 was revisited to look for connections between the themes and to set focus for the research. The data analysis process that we briefly described above is evident in several types of qualitative research, especially in grounded analysis [27, 28]. However, as mentioned by Thomas, the inductive approach is a more straightforward and convenient way of doing data analysis compared to other traditional methods [27].

We obtained permission to observe the participants' photologs prior to and after the home visit. These observations were made to complement data that we acquired during the interviews. Photographs<sup>3</sup> from their first posting until August 2004 were quantified and analysed. We revisited their photologs in March 2005 to quantify comments that they received during the study period. Informal discussions were conducted to gain further understanding of their interaction in photologs. One of the authors is part of the target community, and so was able to participate in some of the participants' gatherings both as a researcher and also as a member of the community. The observations of these gatherings are therefore used primarily to inform, interpret and illustrate other more formally gathered data. Finally, we should note that the study reported here is one of a number of interlinked studies looking at different aspects of photologging experience [29]. These other studies include semi-controlled experiments and quantitative analysis of large numbers of photologs. While we have not explicitly used the results of these in the analysis reported here, the understanding obtained from them has undoubtedly informed our interpretations.

When do you first subscribe to Fotopages?  
 How do you know about this application?  
 Why photolog? What are your objectives?  
 How do you describe your photolog?  
 What type of photographs that you posted?  
 How about comments?  
 Do comments motivate you to post?  
 Do you discuss your photographs with your friends and families? How?  
 What do you like to discuss about?  
 How often do you upload your photographs?  
 How many people link you/ that you linked to?  
 Do you know how many visitors visited your photologs?  
 How about visiting others? When visiting, how do you feel when you see others, pictures? Feeling? Motivation?  
 Are you not afraid of your privacy?  
 How about personalization features in photologs?

**Fig. 5** Pre-prepared questions to act as stimulus for interviews

<sup>3</sup> Consent to publish some of the participants photographs was obtained.

Participant	Quotes	Code	Sub-code	also in
P3	"so basically Fp is a complementary"	reasons	complement for blog	
P1	"Yup friends, only our circle"		local friends	
P4	"To keep track occasions, events and to share with my friends and families."		remote friends	
P5	"my Fotopages is for friends and families only"		family abroad	
P3	"Some people take it for family use, I'm not. This is for the sake of people in Lancaster"		audiences	local friends
P1	"I don't like to write and give stories about my photos."		writing experience	
P4	"Because usually after any event, that night, one day or two days after that I will upload"		upload photographs	
P1	"I browse the most popular one (fotopages) ...but not the trackback and the statistics I just used what are necessities"		activity	browsing others
P3	"Usually, if there's any event going on around us, we'll let everybody knows about the pictures and discuss"	Discussion		

Fig. 6 Extract of coded transcript

#### 4.1 Participants

All the participants came from the Malaysian community at Lancaster University. This was partly through convenience, but also because they are a group which we would expect to use the photolog for its clear purpose of sharing with family and friends back in Malaysia. In order to allow in-depth analysis, a small number of participants were sought. We restricted the study to those who had existing photologs, specifically from Fotopages as we knew this was used within the community. In all we used five participants, all women, four of them single and one with a family. All were students at the university, but with different disciplinary backgrounds: one each from computing, management, and environmental science, and two from linguistics. All are originally from Malaysia and were here for further studies, averaging 3.5 years in the UK. None of them knew one another before coming to Lancaster.

## 5 Results

### 5.1 Doing photologging

In this study, we identify that different members of the expat community have different roles in photologs (and take different roles at different times). Some of them, like our participants, are photologgers, people who own and update photologs. Photologging itself involves not only uploading photographs to photologs, but writing narration and captions for the photographs. However, the photolog would not be useful if it consisted purely of posting; in fact, the use of a photolog comprises three main activities:

- Posting
- Browsing
- Commenting

Photologgers are also visitors. In fact, most members of the community are visitors to photologs; however, not everyone who browses leaves comments. Indeed, we have in other studies looked specifically at photolurkers: those who browse but do not leave comments [5]. However, many users will be involved in all three activities at different times. The roles of photologgers and audiences (including photolurkers<sup>4</sup>) are interdependent [30] in the sense that their actions influence others' actions. The dynamic role that each member plays is fundamental to the way photologs influence their local social interaction.

In this paper, we concentrate on photologgers and their photologging activity and we shall see how the participants' photologging activity influences the actions of other members in the community.

#### 5.1.1 Posting

Posting activity includes uploading photographs, writing narratives to describe the photographs and writing captions to the photographs. Most of the participants are occasional photologgers. They upload their photographs of occasions and activities during moments of spare time. Not all of

<sup>4</sup> The term 'lurker' has many negative connotations, and press reporting of our work on photolurking has often picked up on these. However, as is discussed in more detail elsewhere [5] the photolurker's actions are an important part of the photologging ecology, and may be why the photologger posts pictures. For example, visit counters act to expose the level of photolurking and hence enhance these social effects, giving feedback and kudos to the photologger.

their photographs are shared publicly. They select what they want to and can share with their audiences.

Creating an entry involves *giving attention* and *seeking to get attention* from other users. So, when people are creating an entry in a photolog, usually they have their viewers in mind, just as when writing a book one has to keep the reader in mind. The participants are wondering, “Should I post this picture? Will it look alright? What will others think?” There is some ambiguity in the process of creating an entry. Participant 1 describes her experience:

*“I’m conscious. Every time I put my photos, I always keep it in my mind that someone is watching outside. I did censor some of the photos here.”*

***So you did choose before you put your pictures over here?***

*“Yes”*

Evidently photos uploaded usually have to compromise between the photologger’s own need and public reception. Some people even edited their photographs with Adobe Photoshop to make them more appealing, both to themselves and to the viewers of their photolog. The photographs below were snapped by Participant 3 in a local gathering organised by the Malaysian Lancaster Students Society (Fig. 7).

She took some photographs of the event and posted them in her photolog. Before putting them in the photolog, she made sure everyone looked presentable and the photos would not offend any of the members of the community.

Participant 2 acted in a similar way. In the interview, she described how she makes sure everyone in her photos looks nice. She wanted everyone who looked at their photographs in her photolog to be happy. She further explained:

*“We like the company of friends and families... I noticed in some photologs, I don’t look nice in their pictures. But if I put photos in my photolog, I’ll make sure everyone look pretty at least no one close her eyes. I’ll make sure other people are presentable.”*

In this expat community, friends are an integral part of their everyday lives; often replacing family that they left behind. Thus fostering and maintaining friendship is very crucial. The awareness of participants 2 and 3 of making people in the community happy with their photographs can be seen as one way to foster and maintain good relationships among friends in the local community. Apart from that, their awareness of others’ sensitivity could avoid any anger and conflict that might detract from their positive experience [31]. This is because negative events, even if they happen rarely, can damage all the positive experience of a friendship (see Fehr [31]).

Apart from posting photographs, users of Fotopages can also write narratives about their pictures. However, not everyone that we interviewed likes to write these narratives. Participant 1 regards people who write stories about themselves and their photographs as *self-exhibitionists* [14]. For her, people tend to write all the nice details,

**Fig. 7** Photographs from a local gathering organised by Malaysian Lancaster Students Society



Zeti, Lopes, Ayu, Helmi, Azmie & Farid



Zara, Fina and Sze Ee



Manhunt Parade



Kongsi Raya



Hafiz, Farid, Zeti, Azhar, Helmi, Jane, Idlan, Lopes



Gambar raya

display nice photographs, and will hide anything unpleasant. However, Participant 2 thought people are not trying to show off but rather to share their experience. Note, how in both cases the participants are reflecting on the *motives* of the photologger at the time of posting, and in particular how the photologger intends to influence the viewer.

Participants are aware that they have been looked at, as the service provides statistics to show the number of visitors to their photologs. Visitors may be their own friends from the local community, remote friends, online acquaintances or simply passers-by. Realising that anyone could watch them and judge or misjudge, most of them exercise caution in selecting pictures to post. Participant 2 describes how she has to compromise between her desire to share her holiday experience and being misjudged by some of her friends back home. She explained:

*“My colleague happened to come across my Fotopages and let others see as well. And because all my photos look happy and always showing me going here and there, they asked me if I didn’t do any work, so I’ve been thinking what they will say if I’m applying for extension. Now I am applying for study leave extension, so I don’t want them to think that I’m only having fun around here.”*

Note, how these different responses demonstrate multiple levels of feeling and reasoning during posting (and browsing and other photologging acts);

First-order	direct, enjoying a picture during browsing
Second-order	reflective, both prospective “will she feel happy to see this picture?” and retrospective “why did he write that narrative”
Higher-order	reflexive, “how will others view my actions/intentions now”

This higher-order, reflexive thinking is of course both cognitively complex, itself involving higher order theory of mind,<sup>5</sup> yet also commonplace in social interaction [32]. However, it is interesting to note the difference in level

<sup>5</sup> Theory of Mind (ToM) in philosophy and psychology refers to the ability to ‘put oneself in another’s shoes’, to understand that others have beliefs and desires different from one’s own; the emergence of ToM is seen as a key stage in child development and essential for social interaction [32]. Often ToM distinguishes first order theory of mind (A’s understanding of B’s beliefs) from second-order ToM (A’s understanding of B’s beliefs about A). While third order is possible “I’d hate to think she thought I’d lied to her”, we soon struggle with more complex levels, as demonstrated by the Kursaal Flyers’ 1976 one-hit wonder, “Little does she know that I know that she knows that I know she’s two-timing me”. Note that our second-order level of reflection corresponds to first-order ToM; this is because here the first-order effect is the experience itself. ToM’s levels tend to be one less than other uses of first-/second-order as by definition ToM is already a second-order phenomenon.

between Participant 1’s worry about narratives being self-exhibitionist and Participant 2, whose concern is effectively about what people will think of her when they see the *content* of the photograph that depicts her. In contrast, Participant 1 appears to reject writing narrative herself, not because she intrinsically does not want to, but because (retrospectively) she makes inferences about the intentions of others (that they are self-exhibitionists) and hence considers (prospectively and reflexively) the feelings she would have about herself, or maybe what others would think of her, if she did the same. We return to these issues in Sect. 6.4 when we reflect on extended episodic experience.

### 5.1.2 Browsing

Apart from posting their own content, the participants spend a lot of time browsing other people’s photologs. The publicness of photologs allows them to do that. They use links from their page, links on Fotopages’ homepage, and the directory lists, to browse from one photolog to another. Some participants used links provided in their comments box. Sometimes, they looked at certain photologs after being informed by friends. Participant 3 described:

***Apart from posting, do you visit and look at other people’s photolog?***

*“Yup. (Laugh) there’s quite a number that I browsed...”*

***So do you discuss about this with your friend and how often,***

*“We don’t discuss everyday, see everyday yes... Usually, if there’s any event going on around us, we’ll let everybody knows about the pictures and discuss. And then I’ll go and see the photos. If they didn’t tell, I’ll just browse...”*

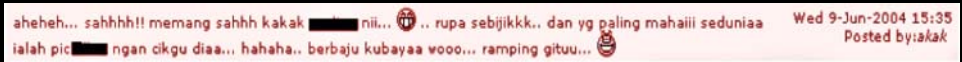
Although there are numerous photologs available, these participants select what they like to see. Their preferences differ: some browse photologs that they know have good quality pictures and provide photography techniques; others prefer to look at strangers’ photologs found on the service homepage (usually among the 99 most popular in the service). Most participants agreed that, when looking at another person’s photolog, they are more interested in the content of the photographs than their quality. People’s lifestyle and experience capture the participants’ attention and can elicit further discussion. However, our participants only look at photologs from their country or from the same culture. Participant 1 further explained:

***How do you feel when you look at these people’s photos?***

*“I feel horrible... sometimes the way they expose themselves, like sometimes they drink alcohol... I only look at Malays photolog not other races.”*



**Fig. 8** Comment from Participant 5 to Participant 3



Translation: *Confirmed! You look exactly like your little sister..and the most priceless picture is the one of you and your teacher...hahahaha.. you wearing kebaya?! Woooooo..what a figure!hahahahaha...(sic)*

### **Why don't you see the foreign?**

*"Because I know any outrageous behaviour that they put in their pictures is part of their culture. Whereas for Malays, like woowww!"*

Her action reminds us of Barthes' theory of gaze in photography [33]. According to Barthes, when seeing a photograph a viewer may experience a 'studium' or a 'punctum'. A 'studium' or informational and aesthetic value is available to anyone. However, a 'punctum' (a shock, thrill or emotion elicited by the photograph) is specific to the individual. He describes, *"A photograph's punctum is that accident which pricks me (but also bruises me, is poignant to me)."*

### 5.1.3 Commenting

Social browsing, observation and self-observation in photologs can generate intense reactions, but only some of these are transformed into written comments. Sometimes the participants interacted with the photologs of their friends, online acquaintances and photologgers in the community, leaving comments including jokes, inquiries and praise. Apart from that, they also interacted with their own photologs, replying to any inquiries, returning jokes, giving announcements and moderating their comments box. While some participants interacted with strangers' photologs, the extent was minimal. Participant 5, for example, left a comment on a stranger's photolog but she did not introduce herself. She also became anonymous in some of her friends' photologs. For instance, Fig. 8 below shows Participant 5 commenting to Participant 3. In her comment, she became anonymous by putting 'akak' instead of her name. Akak is a general word in Malay that describes an elder sister. The close relationship that Participant 3 and Participant 5 share was brought into their photologs. However, as exemplified in Fig. 8, they maintained their private interaction even in this public sphere by using a 'code'; only people who are close to them or whom they tell about this interaction will know about this.

This comment (Fig. 8) was in response to the picture below (Fig. 9). In this picture, Participant 3 was wearing a



Me and my Add Maths teacher En Rahim, fondly known as Pak Yem

**Fig. 9** Participant 3 and her 'kebaya'

*kebaya*.<sup>6</sup> Participant 3 is known to members of the community as someone who likes to wear loose jeans, and looks grungy and boyish. So when she put up a photo of herself wearing a *kebaya*, it invited a reaction... this comment and many others in this entry were making fun of her!

Apart from interacting with local friends, participants also interact with people who are geographically dispersed; friends, family members and also strangers. Comments received from strangers are usually about the quality of the pictures or to start a relationship with the owner. Some comments received by the participants can be disappointing and elicit reactions such as described by Participant 2:

*"When people give nice comments, full of praises you'll appreciate. But this one comment by Matt, he said, well he's a photographer, he commented about one of my photos... he said that my photo have a finger prints, so he said that I should cleans my lens. I don't give a damn about his comment because I'm no professional photographer, but I delete his comment and I send a personal email to him but I won't put it up coz I'm not professional in this."*(sic)

Comments can motivate a photologger to perform better. Some feel satisfied when people give comments, as they feel their *effort* of sharing pictures with others is being

<sup>6</sup> A *Kebaya* is a traditional blouse worn by women in Indonesia, Malaysia, Brunei and Singapore, sometimes made from sheer material and usually worn with a sarong, batik, or other traditional knitted garment. *The kebaya silhouette gives emphasis to a womanly figure.* <http://en.wikipedia.org/wiki/Kebaya>.

recognised. In this study, commenting is part of social interaction online. However, not everyone is willing to participate online. For example, if they look at the photolog of a friend who lives nearby, they would rather comment to the person face-to-face or use instant messaging or telephone.

#### 5.1.4 Other online interaction in photologs

Apart from posting, commenting and browsing, there are other online activities in photologs, such as tagging and linking. However, at the time this study was conducted, no tagging feature was available in Fotopages. Our participants created links with other photologs in Fotopages and elsewhere. This has benefitted some members in the community who used the participants' photologs as a gateway to others' photologs. The act of linking could also *implicitly* show preferences and relationships with other people. Participant 2 felt disappointed with another participant in this study because she did not link her photolog to hers. She mentioned:

*“... I bothered to link them; they should bother to link me. It's like Friendster, we put testimony, and they have to put testimony. If this person didn't link me, it's like she is being choosy of friends...”(sic)*

Here the act of linking, like any act in the photolog (commenting, posting, browsing) has a direct 'meaning', rather like the propositional act in speech act theory [34, 35], “this is an interesting photolog”. It is also an invitation/offer to the reader “why not visit this page”, a form of illocutionary act; and, most important in this setting, it is a perlocutionary act directed at the person whose page is linked to, making them feel cared for, valued, a form of gift. Of course, these 'gifts' are then interpreted socially, not just “you are cared for” but “you are cared for by me”, which reflects both on the social status of the recipient and also the giver: “people tend to be held in higher esteem if others perceive them to be more generous” [36]. In the case of Participant 2, the absence of action, not leaving a link, just as in speech act theory with the *absence* of an utterance, is also interpreted socially, in particular because it represents a lack of reciprocity.

This complex interplay of social statements has also been apparent in studies of Facebook with its multiple channels: public 'wall', private messages, playful tokens. Sas et al. [37] describe the way users formulate “appreciative expressions” for the obvious recipient (e.g. the owner of the wall), but also “competitive expressions” aimed more at the onlookers or audience, maybe making fun at the wall owner's expense. However, they are also very aware of the duties and joys of gift giving and social reciprocity. They quote one of their participants:

*“I meant to draw a graffiti on his wall. My friend has drawn me a few pictures before, and I now feel like I've finally returned the gift.”*

While many social theorists focus on the semi-economic exchange implications in gift giving, this latter quote emphasises that the sense of reciprocation cannot be reduced to signs of social status or hopes of future benefit, but can also be something freely and lavishly given, echoing more the post-market sentiments of Hyde's analysis of artistic and creative gift giving [38].

#### 5.2 How photologging activity influences everyday life

As we mentioned in Sect. 3, people in the community welcome Fotopages as a phenomenon. It is something different for them. Their daily routines now include discussing the excitement. However, as in other studies on community, private conversations among cliques dominate. It can happen in casual meetings at café and restaurant, in a hallway or even when waiting for a class to start. Usually these spontaneous discussions are prompted by a cue that reminds them of what they see in photologs, or when someone starts the conversation by saying, “hey, have you seen my pictures?”. Different private cliques have different common interests to discuss. For instance, participants 1 and 5 like to talk about a photologger called 'abang hensem'. His photolog does not have aesthetic photographs that could impress many people, but his lifestyle does impress. The behaviour of participants 1 and 5 was further described by Participant 3:

*“... For example, the 'abang<sup>7</sup> hensem<sup>8</sup> photolog', I went to visit his photolog but didn't joined the discussion. Not like Participant 5. Participant 5 always goes there and she talks about 'abang hensem' with us”*

Apart from face-to-face conversation, instant messaging and telephones are also widely used to discuss their personal experience. This is usually a one to one interaction, where discussions tend to be more private than the above examples. They may discuss people in their private cliques or they may express their immediate reactions to certain photographs.

Visiting each other in their houses to nurture their relationship is common. When visiting a friend's house or that of a family member, one of the activities people do is to discuss their holidays and other important events, and this activity often leads to opening their photo album or switching on a video [39]. Alongside such traditional

<sup>7</sup> Abang = elder brother in English.

<sup>8</sup> Hensem = handsome in English.

sharing activity, the community now also share using photologs. Apart from looking at their own photographs, some of them, such as Participant 1, also visited strangers' photologs, as described below:

*“... If Participant 5 comes to my house, we will browse Fotopages together, we'll just do casual browse then gossips, gives our own critiques and laugh” (she laughed)*

Flicking through photologs has become one of the activities that may mediate their discussion while visiting each other. In one of our other studies, the participants squeezed together in front of the desktop, looking at different photographs and discussing them. For these people, it is not so much about the aesthetic features of the photographs, but more about what the photographs can tell them, to make them reflect on their own experience and to make them happy. For example, Participant 3 mentioned:

***Usually when you discuss with these people, what kind of discussion that takes place?***

*“Definitely what the pictures represents. We wouldn't discuss about the quality of the picture... Usually, we'll say something about the person-more like gossips.”*

All these kinds of interaction may happen in private settings or in semi-public settings such as a café or restaurant. Discussions about personal experience may also happen during community gatherings, usually organised by the Lancaster University Malaysian Students' Society. During these gatherings, everyone will tend to catch up with as many people as they can, regardless of their relationship. In a personal encounter when attending one of these gatherings [40], we observed how people in the group talked about one photologger, called TR, a stranger to them. TR is apparently very popular among the local group. She is like a celebrity whose life has come under scrutiny by others. Everyone in the group had something to say about TR, and they collected and combined their personal experiences to construct a story about her.

Offline communication about photologs involves *re-telling* experiences of browsing and looking at other people's photologs. It also involves re-telling the narratives written within photologs. This re-telling of experience offline involves reproduction of the story by a group of people collectively. In so doing, people tend to blend information and rumour... and the rumour induces further reaction. It may manifest malice but at the same time promote curiosity and excitement [41]. People who listen to this will want to see for themselves and justify the rumours.

This exemplifies how interaction flows from one point to another: from online interaction to offline interaction and

back to online interaction again. It also shows how the roles that each member has within the photologs have contributed to the ecology of experience: from personal experience to group experience and back to personal experience again. And as mentioned by Chan [42]:

*“... social interaction is ongoing. User actions don't end with a function or operation's conclusion; they solicit response from others. It is other users that pick up and continue a user's action”*

## 6 Photologging: motives, meaning and experience

In the previous section, we looked at the various inter-linked activities of photologging. However, these fit into the broader lives of the participants as well as creating a long-term experience of being a photologger.

### 6.1 Photologging for me

This is an obvious reason for using photologs. While targeted at anyone, from remote family members to local friends, in general photologs are used for self-representation, for self-expression and to archive important events in a person's life. These findings echo studies by Van House [23], Cohen [24] and Glotz [14]. These photographs include birthdays, graduation, holidays, and mundane photographs of day-to-day life.

#### 6.1.1 A Mundane Memoir

Photographs in the participants' photologs served as a mundane memoir. A traditional memoir is a piece of autobiographical writing, usually shorter in nature than a comprehensive autobiography. Similarly, the participants' photographs capture certain highlights and meaningful moments of their temporary lives in Lancaster.

Apart from publishing important events and holiday pictures, participants shared photographs of their day-to-day activities, for example going to class, their office layout, food that they eat, and shoes that they wear (Fig. 10). When talking about or annotating these photographs, the participants used phrases that emphasised their unexceptional nature: “*random*” (P3), “*events and anything that interests me*” (P4), “*stop, to snap picture*” (P5).

These mundane activities and objects were also considered important and meaningful. For example, participants 3, 4 and 5 have all taken and posted photographs of bus number 2A, the bus they usually take to the university. Figure 11 shows extracts from Participant 5's narrative of a particular bus journey. These apparently ad hoc images, though more controlled, are reminiscent of Cooley's

**Fig. 10** Images of day-to-day life



**Fig. 11** Riding the bus to class



observations of ‘haphazard’ camera phone imagery and the way it forms a self-recorded ‘autobiometry’ or “*account(ing) of one’s life*” [43]. In “*The Design of Everyday Life*”, Shove et al. [44] note that digital imaging “*unsettled the routines*” of amateur photography (p. 75). Interestingly, the focus of their analysis is the way ordinary things can be extraordinarily important in the practise of one’s everyday life, whilst in our observation of the photologgers’ mundane images we see the digital camera, just one of those artefacts woven into life, becoming the means to highlight and record other ordinary things made special.<sup>9</sup>

Urry talks about the ‘tourist gaze’ [45], how people who are far away from their homeland will see ordinary things as extraordinary. While these have some of that element, it does not fully capture the sense of these images. Participant 3’s log entry for a series of photographs that includes Fig. 11 says:

*“I got bored on the bus back from Lancaster to the Uni on the 2A, so I captured what I saw from the front most seat of the top deck of the double decker bus I took.”*

It is not that the bus seemed special to her at the time, she was just “bored”... yet she posted these ‘random’ images on her photolog. This is an example of the reflectivity discussed in Sect. 5.1.1; although ordinary to her, she was aware that they might be extraordinary to others back

<sup>9</sup> There is an additional reflexiveness in the role of the camera in these ‘ordinary things made special’. In some cases they have already been given significance by the attention paid to them and the subsequent realization of that significance captured ‘on film’ (or at least pixels). However, equally often, it is the act of *taking a photograph* that is itself instrumental in the ‘making special’.

in Malaysia, a prospective tourist gaze *for others*, recognising that the quotidian may be a curiosity for those far away. This example also illustrates how meanings change over time: riding the number 2A was mundane at the time the photographs were taken, but retrospectively it can become something meaningful and valued when the photographer returns to her own country. The participants are able to understand this dynamic sufficiently to record events and images that appear trivial at the time, but will become treasured memories; seeing what will have been, premonitions of nostalgia.

### 6.1.2 A symbol for family cohesion and progress

As all the participants are away from the rest of their family, their photographs are used to show how they and their immediate family progress. Participant 1, who is married, tends to focus more on her family photographs, especially photographs of her children. We argue that Participant 1’s family photographs resemble renaissance family portraits that show family “*as a self-contained institution, the relationship within the family, the unity and a bond of nurturance*” [46]. This is because many of her photographs show obvious landmarks and events in her children’s development; birthdays, friends and their interaction with parents. However, unlike the traditional family photo album, as well as these happy moments her photolog also shows photos of being grumpy or angry, of fights and illnesses, as demonstrated in the pictures in Fig. 12 taken by Participant 1. According to Boerdam, these kinds of subjects are practically never encountered in the family album [47] and family snapshots always ‘*depict happiness*’ [48].

**Fig. 12** Part of ‘Legoland’ entry-by Participant 1



Many of Participant 1’s photographs also showed the bond between her children and their father, and the relationship between her daughter and son. From her photographs, we also observed that the role of photographer was shared between her and her husband. Compared to the early age of photography [46], the responsibility for taking pictures is now shared by both mother and father in a family. This may be because the affordances of digital camera technology have allowed women to take on the photographer’s role. While this role of the *taker* of the photograph has shifted, the role of *keeper* of photographs and *archivist* of family history was and is, as we discuss later (Sect. 6.3), still maintained by women.

### 6.1.3 Audience and self-presentation

As noted, the use of photologging, and indeed other social media, for self-presentation and self-expression is widely reported [14, 23, 24] and this is often based on, or relates to, Goffman’s concept of ‘face work’:

*“if a person wishes to sustain a particular image of himself and trust his feelings to it, he must work hard for the credits that will buy this self-enhancement for him”* [49]

Goffman’s dramaturgical metaphor [50] has also proven useful in analysis of Facebook [37], and the reported distinctions noted in Facebook between front and back stage behaviour (before an ‘audience’ and preparing for the audience) are also evident in the second-order and higher-order behaviours described in Sect. 5.1.1. In more extensive analysis of these issues elsewhere [51], we have elaborated further on distinctions between audience and bystander, developed to deal with interactive art performances [52]. In order to make sense of some of the more complex utterances found in photologs, we have found it necessary to distinguish the addressee (to whom an utterance, photo, narrative, or comment on a photo, is ostensibly addressed), from the audience (for whom the utterance is principally framed), and the onlookers (who may see/read/hear the utterance and thus must be taken into account in its formulation). The situation where Participant 2 was worried about the impression given to work colleagues at home is precisely one where onlookers have to be taken into account.

## 6.2 Photologging for ‘my community’

Some participants started to use the photolog because of the community. Participant 4, for example, was advised by Participant 2 to use a photolog rather than an online album because the quality of photographs posted is not compromised and a large number of photographs can be shared. Participants 1 and 3 have a photolog ‘for the sake of the people here’. Participant 3 further states: ‘ironically, none of my family members know about this photolog’.

### 6.2.1 Nurturing friendship in the community

As previously described, in the community there are various small groups based on similarities and interpersonal attraction [53]. Many photographs contained images of friends: on holiday together, at dinner or watching football on television. Duck [54] describes how friendship needs effort to establish, develop, maintain and preserve. Sharing photographs in photologs for friends to see and download is seen as a good way of maintaining a friendship. According to Participant 4:

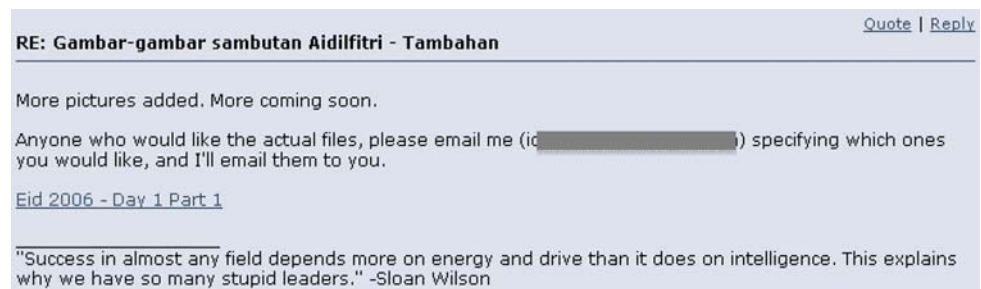
*“This Fotopages is very useful to update our activities with friends... instead of promised them to send, just tell them to download it from my site”* (sic)

In some of the entries we observed, participants explicitly expressed their feelings towards their friends. For example, Participant 5 tells her audience about FD, a close friend in the community, who had just passed her viva and was to return to her home country soon. Participant 5 was overwhelmed by FD’s success. She reflects on her memories with FD while they were in Lancaster. Photographs were cropped and taken from other entries to post in this entry. At the bottom of the entry, Participant 5 wrote:

*“It’s been nice to know you... we laughed together, we cried together and yup... we did gossips together, whatever it is let’s share the sins..., hehehehehe. Thanks for everything, sorry if I’ve hurt you in any way and hopes to see you in Malaysia”* (sic)

As mentioned earlier in this paper, most of the participants did not know each other before coming to Lancaster. When arriving at a new destination, people like them will establish new friendships. This entry and many others show

**Fig. 13** Online forum is used to announce new photos being uploaded



how photologs are used to demonstrate friendship, express feelings, and generally maintain and nurture *local* relationships.

### 6.2.2 Archive the local community history

A further social use of photographs in photologs is to show social responsibility towards the local community. Participants always bring their cameras to local community events and, since they have photologs, people have identified them as recorders and the photo repository for the community. The participants are then obliged to fulfil this community need. Participants act as a repository for the community by preserving and publishing community history for future reference. This finding echoes the study by Taylor et al. that looks at how people in Wray village used their photo display to share pictures of the community, past and present [25].

Among the photologgers, telephone or text messaging is used to remind each other to post community pictures online. Apart from that, a community forum (Fig. 13) is used to announce updates:

Photographs in the photologs showed the progress and cohesion of the community. Because this is not a permanent group, the many events held every year are important in maintaining their sense of being a community of the same culture and country of origin. The pictures of community events were mostly candid; stressing feeling and comfort rather than formality and etiquette: children running, queuing for food, group pictures, and playing games (see Fig. 14). These community photographs express unity, private cliques in the community, families, co-operation, happiness and community leadership. However, every year, the community will also have a portrait photograph with everyone in it (see Fig. 15).

People in the community come and go but their history in this temporary location remains in participants' photologs. Here, photologs are data-gathering devices that act to capture the moment and will be *traces of the past* [55]. Perhaps, one day, if members of the community want to recall their past and activity in this transient group, the

participants' photologs will be one of the crucial archives.<sup>10</sup>

### 6.3 Who is the photologger?

The participants in this study are all women. This could be seen as a limitation to the study. However, it can also be seen as an interesting issue to be considered. At the time the study was conducted, there were 51 students and 15 spouses in the local community. Of these, 14 had photologs, but of these 14 photologs, 13 were kept by women. This raises an interesting question: are women the photokeepers and is photologging a female activity?

The preponderance of female photologgers might seem a little surprising, given the connection conventionally assumed between men, photography and computer technology. However, it may be that gendered attitudes towards perceived role and social comfort override gendered attitudes towards computer technology. Historically, women are perceived as the photokeeper of a family. According to Spence [7], it is the women who maintain photo albums, keeping photographs in boxes and frames, and writing on the backs of photographs, and Shove also notes that "*women tend to be responsible for making and keeping the family album*" [44]. Thus, it is not surprising to see the number of women exceed the number of men when it comes to archiving their personal memory and sharing it in photologs. However, it is interesting to see that some women are more open in sharing their personal memory with public audiences. It may be because the joy of social comfort overrides the fear of privacy.

### 6.4 Being a photologger: the essence of extended episodic experience

In this paper and elsewhere [24], we have discussed the often intense emotional impact of posting or viewing an

<sup>10</sup> However, a follow-up study found that several participants had migrated to Flickr, leaving Fotopages as a 'dead' archive. What seems like a crucial archive may not be so permanent if accounts lapse, or if, in harsh economic times, the company hosting the photolog fails.

**Fig. 14** An entry of a community event



**Fig. 15** Formal portrait photograph of the community

image. However, being a regular photologger (or pholurker) is not merely the accumulation of individual experiences of posting or viewing photographs, any more than being a football supporter is merely watching a match or applauding a goal. It is the way, these individual experiences mutually influence and interrelate

with one another that threads these disparate events into coherence.

In the case of photologging, we have seen that moments of online activity (posting, browsing, and commenting) and offline activity (chatting, gossiping, photographing) feed into one another: images are posted, viewed, perhaps commented upon. The poster can read the comments to see how many visitors there have been to the photolog and obtain a sense of satisfaction, or even annoyance (fingerprints on the photo, see Sect. 5.1.3). These events are linked retrospectively, both through the technology as viewers browse previously posted images, and through individual or social experience as photologs are discussed. They are also linked prospectively as photologgers envisage the impact of each image on their viewers, or as today's mundane images are preserved for the future. We have even seen second-order reflection as viewers judge photologgers based on the perceived intention of the photologger!

Many of the methods and theories adopted for analysing and designing user experience are focused on relatively

short moments or periods of activity. For example, Csikszentmihalyi's flow [26] is about intense engaging activity requiring, *inter alia*, focused attention, immediate feedback and a loss of sense of time, certainly exhibited during some of our participants' individual interactions with photologs, but not applicable to the ongoing experience of *being* a photologger. McCarthy and Wright's framework for analysing experience [56] includes prospective and retrospective elements (anticipating, recounting), but is still focused on a single central 'experience'. Even Dix's deconstruction of the virtual crackers experience [57], whilst applied to an asynchronous social application, still focuses on the interactions surrounding the single event of receiving a cracker. Chan's *Social Interaction Design* [42] foregrounds the flow of individual actions, and, like our own studies, points towards the need for a more comprehensive theoretical understanding.

Although we will not attempt to construct such a theory of extended episodic experience here, we can identify at least some of the essential elements.

First, it must take seriously the different levels in which linked episodes have an experiential effect, as outlined in Sect. 5.1.4: direct, reflective and reflexive. The examples we saw in Sect. 5.1 were principally about deciding how to act by envisaging future episodes involving others (e.g. X considering how Y will feel if a picture is posted). However, the photograph of the number 2A bus also demonstrates similar kinds of reflective decisions when the future viewer is oneself. Reflective or reflexive thinking may also include actors outside the immediate episode, as in the case of people pictured in photos who are not part of the actual photolog social interaction.

Secondly, such a theory must also acknowledge the different long-lasting threads, the extended nature of experience. Interactions with an individual may cross between the physical and the virtual and between different media (photolog, IM, mobile phone, Facebook). Threaded episodes are thus intimately related to developing personal relationships, and, as we have seen, these experiences often include elements of reciprocity arising both from social exchange, and also from open generosity. However, the episodes within particular threads of experience are themselves intertwined and situated, photolog browsing often happens 'when there is time' or 'to take a break'; so it is already occurring against a matrix of, and (in the case of web-based social networking) often in the interstices between, other activity that may affect the subject's mood or attitude. While offline social activity also has this sense of picking up threads of relationships over a period, the rapid switching in the online world is much faster, and, in particular, faster than the timescales of the chemical processes in our bodies that regulate mood.

Thirdly, it must also take on board the way that ongoing experiential episodes occur within a specific virtual location (Fotopages in this case, but likewise Flickr, Facebook, MySpace), creating a sense of 'past'. Issues of placefulness have long been important in architecture and cultural geography, where 'place' is taken to denote a sense of shared culture and history as opposed to the more metric/geometric notions of space; and these notions of place were popularised within the CSCW literature by Harrison and Dourish [58, 59]. Augé [60] talks about physical locations such as supermarkets and airports as non-places; too new, identity-less and reproduced to have sufficient cultural significance to count as places. Social networking sites per se often have similar facets: standardised interfaces and, in the case of Facebook, 'applications' betraying all the frippery of plastic toys in a shopping mall. While social activities may happen in these virtual spaces, this does not make them social places, any more than sharing coffee in an airport departure lounge necessarily invests it with any lasting significance. On the surface it would appear that only the skinned and decorated personal pages within these sites could become 'places'. However, the experiences of the participants in this and previous studies [5] reveal a sense of deep personal connection when 'visiting' the photologging site Fotopages. The ongoing social interactions with multiple people, friends and strangers, within the single virtual 'space' have, after a time, created a sense of associations and expectations, the space becomes a place.

## 7 Conclusion

This study involves a number of people from a specific community and undoubtedly some of the behaviour is due to the particular cultural, religious and social situation. For example, the avoidance of images of alcohol drinking is related to Islamic practise, and the importance of community support to their expatriate status. However, other aspects strike chords that transcend cultural boundaries: the use of photologs as a topic for local discussion, while unexpected, is immediately recognised, reminiscent of ageless gossiping round the village well and a more current shared interest in celebrities' lives. Even the more culturally specific points highlight general issues: conflicting notions of acceptable behaviour and imagery in open global systems; the needs of local but not neighbourhood sub-communities who may have no physical base, and the problems of dislocated professional diasporas in our global digital economies.

Much of the participants' photologging experience is as one might have expected: images of family and friends uploaded for the sake of those far away, with a strong element of self-presentation in the selection and narration



of images. However, this paper has also revealed a richer web of interactions both on the Internet and with local friends and community. Like the net-savvy and bio-technically extended citizens of cyber punk, our more ordinary participants manage not only to inhabit digital and physical worlds, but also to seamlessly interrelate and enmesh them.

As web-based applications, photologs at first appear to be simply a means to share carefully chosen photographs with family, friends and strangers far away. However, we have seen how the photolog acts as a topic for local communication, about local friends, remote friends and total strangers, and how it is appropriated for supporting the local community, with the photologgers enlisted as archivers and preservers of the community history. It is also used to record and publish the mundane, everyday and apparently trivial aspects of life, and yet for those moving between homes and countries and continuously decluttering en route, these may form their only tangible tokens for reminiscence in years to come.

So, the photolog is a locus of duty: keeping family and friends up to date and uploading community photographs; a place of hazard: ensuring that the images we portray do not let us down or suggest that we are not working hard enough; a source of joy and recreation for photologgers selecting and reviewing their own photos, and viewers seeing them; and a resource for maintaining social relationships with those near and far. Understanding these interlinked moments of individual experience and social interaction appears to call for new ways of thinking about user experience that take into account the long-term use of social technologies.

**Acknowledgments** We would like to thank John Rooksby, Simon Kelly and Dave Martin for their valuable insights and constructive feedback during our data analysis stage, Fiona Dix for proofreading this paper and last but not least, all the participants and the Malaysian community in Lancaster. This research is partially funded by the Peel Studentship Trust, Lancaster University.

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