

How photologs influence local social interaction

Haliyana Khalid

Computing Department, Infolab 21
Lancaster University,
Lancaster, LA1 4YW
h.khalid@lancaster.ac.uk

Alan Dix

Computing Department, Infolab 21
Lancaster University
Lancaster LA1 4YW
alan@hcibook.com

ABSTRACT

This paper describes a link of studies that shows how photologs, a social mediating technology has been re-purposed for local usage. 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

Photologs, photo sharing, photologging, photolurking, social mediated technology.

1. INTRODUCTION

When it was first launched, a lot of people including us see photologs as a place to share our massive collection of digital photographs. Little did we know that it will revolutionize our traditional photo sharing practices. In our first publication[1], we describe how photologs have changed the way we share our personal photographs. What is personal now, has become a public property.

A photolog is a web-based photo-sharing application that allows users to mass upload and publish their photos. It is one of a number of ways to share photos online including web galleries, online albums and moblogs (mobile blogs). As a fairly direct alternative, the photolog had to compete with the online photo album, which had been introduced earlier and was, at the time, more familiar to most online users. 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 also include social networking features, but are more focused on instant, candid camera-phone shots uploaded at the moment of taking. 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.

Research in photologs has started to get attention of researchers, mostly focused on Flickr, which has become the most well-known photolog hosting service on the Internet. Some research studies on Flickr such as [2], [3] and [4] have concentrated on tagging. Zwol [5] conducted a study to investigate the user

behaviour in Flickr based on sub-set of uploaded photographs onto the site. Negoescu and Perez [6] investigate group behaviour in Flickr; they explain how groups in Flickr are self-organized communities, created spontaneously and unite based on specific topics and themes.

Van House et al [7] 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 the other hand, Cohen[8] talks about photoblogs from media and culture study perspectives. 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 experiences. Some of these findings were echoed in our study. However, the significant new finding of our study lies on how photologs has been repurposed for the local usage.

There are some studies on supporting photo sharing in a local community, notably work by Taylor et al [9], who developed a public Photo Display for the people in Wray Village to share their photographs; from personal to community photographs. The Wray display was cited originally in a Village Hall and later 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 did not have a dedicated facility such as the photo display and did not have a common room or society room for them to socialize. Thus, photologs are an alternative way to share their community photographs.

Our research on photologs began with the expectation that this is yet another photo-sharing application to be used for remote sharing, just like an online photo album or web gallery. However, further exploration has unearthed less-expected findings; in particular how photologs are not only used for remote sharing but are also appropriated for local social interaction: people who live near one another may prefer to use this global mechanism (photolog) to share pictures and then subsequently communicate their experience locally with their friends. In general, we have been intrigued to see how online photologging and visiting photologs interact with day-to-day life.

This research began in 2004, when photologs were still in their infancy stage and before Flickr had become a household name. The level of sophistication in use is still surprising now that the technology is well known and well understood, but given that the study began when the technology was still new, emphasises the ability of ordinary users to appropriate novel technology. We will see how photologging, photolurking and offline communication influence each other to create a flow of

experience of photo sharing so that interacting with photologs becomes the stimulus for social interaction of a local group. Rich emotions, memories and personal curiosity are brought into local groups to form a co-experience [10] of photo sharing.

Photologs represent part of social mediated technologies which are now heavily used in our daily life. Photo sharing practice is revolutionized. However, after several years on the Internet, some people begin to argue its purpose. Is the social web like photologs designed for global network or is it for private cliques? This question was delivered by Shyong and Churchill [11] in their paper regarding some social web application such as Flickr. Our exploratory research has provided some answers to this question. In this paper, we describe how photologs has been re-purposed for local usage.

2. THE STUDIES

This research is exploratory in nature. The data for this research has been obtained from 5 different studies. This research employs multiple approaches in data collection technique and analysis. Data gathering methods include observation: both in the application and outside the settings. In addition, in-depth interviews, questionnaires and a survey have been used. This approach is similar to Kendall, where she studied how people construct their identity and self-presentation online [12]. The use of multiple data collection methods permitted triangulation of data to improve validity and to have a greater inference of the results. In the following section, we present each study and we explain the data collection method/s. We also highlight interesting findings for each study.

2.1 Study 1: Preliminary investigation of photologs

Our work began with a preliminary investigation on photologs hosted by Fotopages. We noted its features, type of photographs shared on the sites, comments in the comments box and the interaction between users. Although there are some usability concerns with the application, it proves popular among people. We observed how online friendship was initiated. We also noted how some photologgers extended their online interaction to some social gatherings and vis-à-vis. We also noted the various types of photographs and photologs. This observation serves as groundwork for our subsequent studies.

2.2 Study 2: Photologgers, photologging and the content

Study 2 seeks to understand why people use the application despite some concerns such as privacy issues, asynchronous communication and poor arrangement of photographs. All the participants came from the Malaysian community at Lancaster University. This was partly through convenience, but also because they are a group we expect would be using the photolog for its clear purpose of sharing with family and friends back in Malaysia. In order to allow an 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 5 participants- all women, 4 of them single and one with a family. All were students at the university, but with different discipline backgrounds: one each from computing, management, and environmental science, and two from

linguistics. All are originally from Malaysia and have been here to further their studies averaging 3.5 years in the UK. None of them know one another prior to coming to Lancaster. These participants are known as Zoë, Tina, Ruth, Molly and Emma for purpose of anonymity.

The Malaysian community at the university consists of students, spouses and children. Although this is a temporal community, the sense of community is very strong. Strong co-operation among the community can be seen through gatherings, welcoming new comers and assistance during illness. The degree of relationship among them varies. There are many private cliques in the group, normally formed based on common interests and age.

Participants were visited at their place. The home visits consisted of in-depth interviews and questionnaires. Apart from that, participants' photologs were observed prior and after the home visits to see types of photos that were posted. Photographs from their first posting (which varied between March and April) until August 2004 were quantified and analysed. During this period also, telephone conversations and emails were used to gain any further explanation from the participants. In March 2005, we revisited their photologs, this time to identify comments that they had received also from their first posting until August 2004.

Photologging consists of posting, browsing and commenting. Posting activity includes uploading photographs, writing narratives to describe the photographs and writing captions of the photographs. Most of the participants are occasional photologgers. They upload their photographs based on occasions and activities during moments of spare time. Not all of their photographs were shared publicly. They selected what they wanted and could share with their audiences. Photos uploaded hence 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 photologs. Tina describes how she makes sure everyone in her photos looks nice. She wants everyone who looks at their photographs in her photolog to be happy. 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.

Realizing that anyone could watch the participants and judge or misjudge the photos, most of them exercise caution in selecting pictures to post. Zoë, for example, did not put pictures that have her in. Instead, she only posted pictures of her children and her friends. Tina describes how she has to compromise between her desire to share her holiday experience and being misjudged by some 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."

Apart from posting, they also actively browse the photologs of others'; this could be their local friends, remote friends, families and even strangers. Although there are numerous photologs available, these participants select what they like to see. Their preferences differ from one another: some browse photologs that they know have good quality pictures and provide photography techniques; others prefer to look at photologs of strangers that were in the service homepage (usually among the 99 most popular in the service). However, our participants only look at photologs that are from their country or from the same culture. Zoë further responded on the following questions:-

How often you browse through FP?

"Twice a month, before it was like everyday. But if someone like participant 5 tells me something exciting, I can go there everyday." (sic)

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." (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!"(sic)

Her reaction reminds us of Barthes [13] theory on photography gaze. According to Barthes, when seeing a photograph, a viewer could 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 it as "subtle beyond which is the source of the shock and thrill of the photograph as located in the viewer."

2.2.1 Their photographs

The photographs from the participants' first posting until August 2004 were quantified and analysed. Most of the photographs are 'people' photographs: posed, candid and crowd. There are also a lot of self-posed pictures; where they took their own picture.

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 their life. These photographs include birthdays, graduation, holidays, and mundane photographs of day-to-day life. Participants had been re-located to Lancaster temporarily to pursue their studies. Thus, living far away from their family members and close friends, they formed new groups, found new close friends, adapted to a new culture and learnt new interests. Apart from publishing important events and holiday pictures, participants shared photographs of their mundane day-to-day activities, for example going to class, their office layout, food that they eat and shoes that they wear.



Figure 1: Images of day-to-day life

These mundane activities and objects were also considered important and meaningful. For example, Molly, Ruth and Emma have all taken and posted photographs of bus number 2A, the bus they usually take to the university.



Figure 2: Riding the bus to class

This example illustrates how meanings change overtime: riding the number 2A was mundane at the time the photographs were taken but retrospectively, it will become something meaningful and valued when they return to their own country. Furthermore, the participants understand this dynamics sufficiently to record events and images that appear trivial at the time, but will become treasured memories.

As all the participants are away from the rest of their family, their photographs are used to show how they and their family progressed. Zoë, who is married, tends to focus more on her family photographs especially photographs of her children. Bourdieu [14] pointed out that the emergence of child photographs was indicative of the important role children play in the modern family.

Many of Zoë photographs showed obvious landmarks and events in her children's development: birthdays, friends and their interaction with parents. However, apart from these happy moments, photos of being grumpy, angry, fights and illnesses were also shared. This is somewhat different from the traditional photo album, where we tend to share only good experiences and try to hide the unpleasant.

2.2.2 Comments received by the participants

We looked at comments received by the participants too. There are many studies done on photologs, mostly concentrated on

photographs and tagging. So far, little is known about comments in photologs. In our preliminary investigation, we apprehend that comments are part of the social content in photologs. Comments in photologs tell us about people who visit the photologs and their relationship with the photologgers. Comments also tell us about the kind of interaction that happens on the site. Thus, knowledge about comments and their contributors is essential in order to complete our exploratory research. Overall there were 142 comments collected. We used content analysis to define the types of comments received by the participants. Content analysis is usually used in qualitative study to examine documents, text and interviews. In this study, content analysis is used to describe the communication, the poster and their relationship with the photolog owner.

We categorized the contributor of the comments into 7 groups; local friends, remote friends, strangers, online acquaintances, remote family members, local family and owner of the photolog itself. Comments collected were mostly given by remote friends with 39.4%. Owners of the photolog are the second highest with 26.7%. Local friends is the third highest category with 28 comments. The least comments received by the photologgers were from family members with 1.4%.

Comments written in the discussion box are usually short somewhat like instant messaging. We categorized comments received by them into 6 categories: humour and teasing, inquiry, Information and explanation, reflecting and remembering, inspiration and complimentary, motivation and support. 33 from 142 comments collected were humour and teasing. Teasing and jokes usually were posted by local friends. We also noticed that, humour and teasing were given to certain friends which are close to them. Inquiries are usually about the content of the photographs. Most explanation was given by the owner of the photologs. Photolog owner will reply to any inquiries, mediate jokes and gives announcements. A photologger acts as a moderator in her photolog.

We observed how people exchanged compliments and motivate each other to produce nice pictures. This type of comments was usually given by online acquaintances and remote friends. This is not surprising as this is one way (by giving good remarks) for people to start online friendship. Some of the comments were given to recognize the photography talent that the photologgers have. Strangers and remote friends usually contributed to such comments. *'Keep up the good work'*, *'nice photos'* and *'awesome'* are some examples of praises that were given to them. Sometimes, it is interesting to see how some strangers can be so polite by complimenting something that they vaguely know about, but doing so to establish a friendship. For instance they complimented about the food that they never tasted or they complimented a place that they never visited.

2.2.3 Who is the photologgers?

The participants in study 2 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 have photologs, but of these 14 photologs, 13 are kept by women. This has raised an interesting issue. Are women the photokeepers and is photologging a female activity?

This might be a little surprising given the connection conventionally assumed between men, photography and computer technology. However, it may be that gendered attitude towards perceived role and social comfort overrides gendered attitude towards computer technology. Historically, women are perceived as the photokeeper of a family. According to Spence [15], women always keep and maintain photo albums, keeping photographs in small boxes and frames, and writing on the backs of photographs. 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.

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 environment. For example, the avoidance of images of alcohol drinking is related to Islamic practice and the importance of community support to their ex patria status. However, other aspects transcend cultural boundaries: the use of photologs as a topic for local discussion, whilst unexpected, once seen is reminiscent of ageless gossiping round the village well and 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 a dislocated professional diasporas in our global digital economies.

Another aspect that is worth to highlight here is about the people in photologs. Although, photologs is a public place, it is apparent from the findings that the discussion box is dominated by people who are in the close circle with the owner. This is to show how photologs works for private cliques although it promotes and is intended for mass networking and global community. Although some strangers visit the site regularly, they stay at the edge and do not participate, and if they do, it is minimal. This insight echoed our photologgers' visiting experience. They always remain silent when visiting some strangers' photologs. This finding provokes some questions: whether it is the technical incapability of the application to support the need of certain people or is it the personality of the people that limits their own interaction?

2.3 Study 3: Sharing photographs using MSN Messenger in a local settings

Study 3 was conducted as a comparison to study 2. In the previous study, during interviews, we noticed how participants were excited when discussing certain photographs. They also told us how they used other technologies such as instant messaging to communicate their photologging experience.

In this study, we wanted to see how people are sharing photographs using synchronous communication in a local setting. Participants in the study used MSN Messenger for sharing their photographs. We wanted to understand how

photographic content can provoke user emotions and entice discussion. We used video camera to record the experiment.

In this study, participants discuss more about ‘people’ pictures as opposed to ‘non-people’ pictures. We see this experiment as a private interaction. However, the participants thought otherwise. They were aware that they are being watched and recorded, thus they are conscious of what they shared. One participant was observed to pull out a photograph which she thought will jeopardize her privacy. The photograph was intended to be shared with her next door friend (another participant) but not with the researcher. We also noticed participants were doing some screening of their photographs before sharing them. In this study also, we highlight the immediacy or spontaneity in photo sharing. Although immediacy or spontaneity might not be the requirement for remote sharing (as in photologs), some studies for example in [10, 11] have shown people using other medium to receive affective response. Our studies also (study 2 and 5) have identified the need to share instantly from using remote application (photologs).

Although instant messaging is a synchronous communication and support immediacy as oppose to photologs, the response is not always immediate. There are few seconds if not minutes to receive response from the other end; be it because of the application or the users were occupied with something else. Participants found this silence as disruptive to the flow of the conversation thus shouting to the other end for immediate response. Overall, just like our previous studies, this pilot study has identified photo sharing as highly relationship specific, a self-presentation, contain some elements of surprise which requires immediacy for sharing.

2.4 Study 4: A public domestic photography

A survey to see types of photographs posted by other photologgers was conducted later. This was done to strengthen our findings in study 1, 2 and 3. Photologs were chosen from the same service provider as previous studies. Random photologs were chosen and type of photographs posted was analysed and quantified. Permission was asked from photolog owners when we found the need to download photographs from their photologs. 255 photologs from Fotopages were visited and 4864 photographs were collected from the photologs. There are some concerns with the number of photologs observed and photographs collected given the population in Fotopages. The small number was due to the problem of accessing the service at the time this study was conducted.

The combination of people and non-people makes photologs differ from traditional photo album, which keeps mainly ‘people’ photographs. The other thing that makes photologs different from traditional photo album is it stores many self-posed photographs. People re-purposed their photologs for various means. From the data, more photologs represent traditional photo album. It stores more domestic photographs that include family photographs and close friends. Other photologs act as a business parlour, travelog, recipe hub and exhibit arts and abstracts.

Photologs also published other people’s images; people who are not related to the photographer or the photologger. This is the case with some business-photologgers who take pictures of others’ personal important events such as weddings. Although

their main purpose is to exhibit and promote their work, implicitly, these business-photologgers act as digital archivers for their customers. Visitors will not only see how good the photologgers’ work is, but at the same time remember details of the content of the photographs. As well as the workmanship that inspired the visitors, so did the event.

There are some photologs dedicated to non-people photographs; artists who display their art work or photologs that have an entry entirely on non-people subject like food. Most photologs combine both non-people and, people type of photographs to represent the photologgers memorable and meaningful experiences. Photologging is for today but photologs can be about tomorrow as described by Ms E in her photolog:

“.....Anyway, this is for the sake of our family’s memories. It is my intention to make this FP¹ to be our family’s diary. When Dania and Danish grow up or when we are not around anymore, they can browse through this site. If we used photo album, our photographs might get old and lost. So hopefully our photos in FP will last until the children gets older...” [16]

2.5 Study 5: Photolurking

We expand our exploratory research by emphasizing on photolurking; behaviour of visiting but not commenting online whilst actively discussing what people have seen and remembered with their friends outside the ‘space’. Snowball sampling strategy was used to recruit participants for this study. We recruited people from the community that we knew were engaged with photolurking. These participants are known as JN, FN, AZ, ZR, MD and AL for the purpose of anonymity. In-depth interviews were conducted at their home and at the end of the session, questionnaires were given. Emails and telephone were again used for follow-up. Some photologs that were mentioned by participants during the interviews were visited and observed.

In this study, the participants described their photolurking experience, their preferred photologs and their browsing strategies. They were attracted to certain strangers’ photologs because of the photographs and the photologgers personality. People whom they perceived as warm, friendly and competent in photography are usually became their favourites. Some of the participants established a friendship with some photologgers that they admired. However, most of them did not participate in stranger photologs because of shyness, concern of their privacy, conscious about writing in the public and observing some photo sharing etiquette.

The participants also visited their local friends’ photologs frequently because these photologs act as downloading points and gateways to other photologs. Most of them remain silent in these photologs too, if not, prefer to become anonymous in the comments box. In this private-public interaction, only the photologger and the commenter know each other.

Despite some sensational media exposure on photolurking, it is not entirely negative. Findings from this study, has suggested

¹ FP- Fotopages.com, <http://www.fotopages.com>

the participants did not comments because of their personality traits, the publicness of the application and their photo sharing ethics. Participants felt happy when photolurking, found ex-schoolmates, established new friendship and learnt some skills such as cooking and photography.

Photolurking enliven local community interaction. Their day-to-day interaction includes discussing what they have seen in photologs. Gossips, facts and latest information were shared among people in the community. Some of them will visit photologs that their friends have recommended during the discussion. Photolurking can create spontaneous intriguing emotions that lead to ad-hoc gathering or discussion. For instance FN explained to us how one night she was browsing and suddenly found a celebrity photologs. This encounter really excites her because she did not expect to see a celebrity to share his photographs using the same platform like the rest of them. She immediately called all her friends in the block to her room. Everyone rushed in and they look at his photographs together. Giggling, talking and gossiping were made during and after the session. Later, everyone resumed to their room. Photolurking is similar to lurking in a way that it did not contributing or commenting to online community. However, photolurking does contribute to the success or fame of certain photologs, which will be discussed next.

2.5.1 DIY photologs celebrity

The idea of photolurking other people's photologs, looking at their photographs, engaging with them and talking about them has interesting consequences. Photolurking encourages some people to become a DIY celebrity. The term DIY celebrity or "Do-it-Yourself" celebrity was first used to describe the sensation caused by a website called "Jennicam". The web site published live photos from Jenni's room showing every aspect of her day-to-day life and thus including, most famously, occasional nudity. Jennicam is one of the many cam-girl websites that published their own content. According to Turner [17] cam girl websites like Jenni's constitute a form of DIY celebrity. He further explains:

"...they create their own sites, generate their own content and they design their own performances of themselves. Also, most seem to accept that their celebrity depends upon maintaining their site popularity...."

In our study, we have seen how participants talked about some famous photologgers for instance SN. SN owns two photologs; one for his photojournalist-cum-wedding photography business and the other one are for his personal life. People refer to SN's photologs for photography techniques, to learn business tips and for leisure. Some people look for ideas for their own wedding. Earlier in this paper, some participants such as JN and AL explained how they like to visit SN's photolog to fantasize their own wedding.



Figure 3: Wedding pictures by SN²

So how do people know about SN? SN photolog, especially his wedding photolog, is always listed in the most famous photologs list. This ranking is given based on the number of visitors in a photolog. SN can know how many visitors have visited his photologs. He used his popularity to produce more quality content and attract more and more visitors and potential customers. From a small business, SN has landed many mega photography projects including main photographer for Royal Brunei Wedding. His supporters include his silent visitors who admire his work and dedication. People in this local community talked a lot about him; from his work, his appearance to his love life. They also discussed about comments received by SN including negatives feedback and some people's jealousy on his achievement.

3. INTERMISSION: DATA ANALYSIS

Interviews were transcribed and translated. In much of our work, we left the quotation as it is, as to show the naturalness in the interaction. Photographs were analysed using visual methodologies which include descriptive and reflective analysis. We also used content analysis for photographs and comments. Coding was done several times. Data from all studies was combined to highlight interesting findings and we weaved them to form the 'bigger picture'. Studies that we have conducted so far are without its limitation. Nevertheless, we hope its findings will contribute to the understanding of the uses of social mediated technologies in people's lives.

4. THE BIGGER PICTURE

This research has contributed to the knowledge of the social uses of social mediated technologies. We concentrated on photologs, which appear to be simply a means to share carefully chosen photographs with family and friends far away. And it really fit with the nature of the expat community; photologs can be a place to show their progress, to stay connected and maintained the relationship. However, the data tells us otherwise.

Although it is still used to share photographs with family and friends in their homelands, it is also heavily used to maintain relationship with the local community. It is used to show how the community progress, to show the people in the community and their relationship. It provides a place for the community to relax and reflect. Photographs play a role in enticing communication. The photographs also usually are a compromised between the need to self-exhibit and their audience's perception.

The publicness of photologs allows the participants to explore. The interaction now expands beyond the local and the known; it also includes the unknown. This diversity produces a string of interaction that flows to mediate their social life.

² Published with permission

4.1 An episodic experience

We suggest photologging, photolurking and offline discussion as influencing each other to make the social interaction as ongoing and episodic. It is an episodic experience that flows from one point to another and influence other reactions and it flows again. We share our action and experience and these has influenced others' reaction. When one of the elements of the photolog stops, it does give effect to the flow of interaction involving photo sharing in the community as we will see later in this paper.

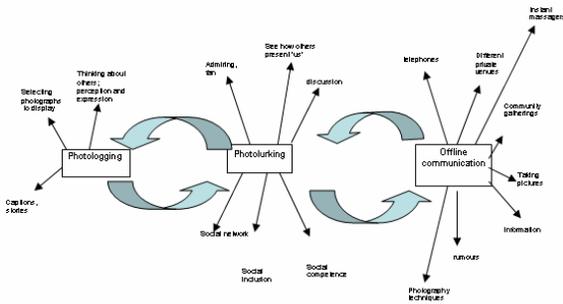


Figure 4: The flow

In this research we have discussed the, often intense, emotional impact of posting or viewing an image. However, being a regular photologger (or photolurker) 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 thread these disparate events into coherence.

In the case of photologging, we have seen that moment of online activity (posting, browsing, and commenting) and also offline activity (chatting, gossiping, photographing) feed into one another: images are posted, viewed, maybe commented upon. The poster can read the comments to see how many visitors to the photolog and obtain a sense of satisfaction ... or even annoyance (fingerprints on the photo!). These events are linked retrospectively both through the technology as viewers browse already 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 analyzing and designing user experience are focused on relatively short moments or periods of activity. For example, Csikszentmihalyi's flow [18] 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's and Wright's framework for analyzing experience [19] 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 [20] whilst exemplified on an asynchronous social application still focuses on the interactions surrounding the single event of receiving a cracker. Chan's Social Interaction Design [21] foregrounds the flow of individual actions, and like our own studies points towards the need for a more comprehensive theoretical understanding.

4.2 Migration and de-photologging

What if one of the elements that we suggest stops? Will it give any consequences to social interaction of this community? Data collection for study 2 was completed in August 2004. Nevertheless we still keep contact with the participants. Casual conversation with them and their interaction in the community events or private gatherings were still noted by us. One of the things that interest us is how over sometime, these participants were either migrated to other photolog hosting services or stopped photologging-de-photologging.

In this subsection, we are not talking about a physical migration; where one moves from one place to another in a physical world. The geographer's defines migration as a change in the place of residence which necessitates movement [22]. In the virtual world, virtual migration is defined as online labour migration; where workers are based in one country to provide a direct service for customers in another part of the world [23]. For example a programmer sitting in India and working for a local firm and provide services in the United States.

However, our virtual migration should be seen distinguished from above definition. We are concerned about migration of the people from one service to another in the virtual world. As we have understood, the Internet is a big virtual 'geographical' space. It contains abundance of sites which are unique from each other. Take for example, a photolog hosting service. There are a number of photolog hosting services for example Flickr, Fotopages, Fotolog and Textamerica just to name a few. This number should also include social network application that provide photo sharing facilities like Friendster, MySpace, Facebook and Multiply. Each service named above provide unique features and resources to its user. Groups and community are formed in the site. When people decide to leave a site for another, it gives impact not only to them but also to their resources, their online interaction and their existing social networks. Just like in physical migration, migration from a site to another will involve restructuring groups, its relationship and the social interaction patterns.

In August 2004, Ruth (participant in study 2) moved to Flickr, a household name for photologs. Flickr was first introduced to the Web user in early 2004. Unlike Fotopages, Flickr offers better photo sharing features, in terms of uploading and downloading tools, quality of pictures displayed and page layout. These are some reasons for her migration to Flickr. However, we think that the motivation to move to another photolog hosting service extends beyond this. Just like physical migration, people migrate because they want to fulfil self-competence, self-actualization and fulfilling social support.

Ruth's migration to Flickr has divided the local community in terms of their preferred photolog application. Historically, most people in the community used Yahoo! album to share pictures with their friends and family. Then, when Tina started to use Fotopages, others such as Ruth, Molly, and Emma follow. Ruth's migration to Flickr has influenced others in the local

group. Some of them moved to Flickr while some remain in Fotopages. People who remained say they are not willing to pay for the service. Although Flickr provides better service in terms of downloading, uploading tools etc. they come with a price. Their free account has limited features, almost similar to other online albums and photologs.

Molly followed Ruth's step but still maintained her Fotopages photolog. She mentioned to us how her photolog in Fotopages is for sharing her activities; holidays, community gatherings and progress. Her Flickr photolog was used to showcase her fine and abstract photographs. However, when she completed her studies and returned to her country, she completely migrated to Flickr. Her photolog in Fotopages was locked with password; allowing certain visitors to view them. Her Fotopages is her past and her Flickr is her present.

Most photologgers that participated in our research stopped photologging or de-photologging when they went back to their home country. Molly's entries are now minimal. This situation provokes some questions. Does this mean participants don't have time to upload their photographs on the site? People take fewer photographs when their life is hectic, when they have problems and when they have less interesting activities to share. Or does this mean that the need to feed information for the local community has subsided? Perhaps, when there is no local community events there will be no responsibility and no excitement to share. Each of the participants has lead their own way, the sense of community that they used to have has now gone since everyone is back home. And the need to share with family is perhaps fulfilled using the same old traditional method of photo sharing.

How about the current community? Since the entire participant left, less and less people maintained their photologs. Some of them posted one entry and stopped. During gatherings, there were a lot of people taking photographs but they hardly uploaded the photographs in photologs. We hardly heard people talking about other strangers' photologgers now. And there is no excitement photolurking friends' photologs, waiting for current photographs to be uploaded. A lot of them now are using social network application especially Facebook to share their photographs. With almost similar features in terms of downloading and privacy, the application is no doubt getting attention by a lot of people. Furthermore, it is free. However, sharing photographs in Facebook could be highly audience specific (usually private cliques) and people need to have an account. Of course this is good especially in terms of privacy, but it is not suitable to feed the local community. Not everyone has a Facebook account. If they post their photographs of recent community events, the photographs are usually 'about them'. Details of others are often left-out. No candid snap-shots that show progress. Posting photographs in Facebook is more about telling their friends especially ex-schoolmates and ex-colleagues who usually live remotely about their recent activities. This is something missing from the previous photologgers in the community-where their photologging is both for them and the local community.

5. CONCLUSION

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 research has also revealed a richer web of interactions both on the web 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.

The publicness of photologs invites photolurkers. Through greater understanding of the nature of and reasons for photolurking, we can start to consider ways in which systems can support better existing practices[24]. Furthermore, we have seen a picture of rich face-to-face and local interactions that relate to photologs and yet lie outside the formal photolog site itself; and so are in a position to consider whether new designs could allow remote friends to have similar experiences mediated by technology. In short, far from being a menace or at best social loafer, the photolurker is seen as being part of a rich and complex activity which contributes to both the digital world of the photolog and to the physical world of day-to-day friendship and community.

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.

This research offers niche example of the social uses of social mediating technology. It offers some methodologies in studying user experience in social application, which of course, is open to constructive comments. It also offers some challenges in constructing theoretical understanding and design development to support its continuity.

6. ACKNOWLEDGMENTS

This research is partly funded by Peel Trust Studentship, Lancaster University. I would like to thank Sheena for proof reading this paper.

7. REFERENCES

1. Khalid, H. and A. Dix. *From selective indulgence to engagement: exploratory studies on photolurking*. in

- British HCI 2006 Conference. 2006. Queen Mary, University of London.
2. Garg, N. and I. Weber, *Personalized tag Suggestion for Flickr*, in *WWW 2008*. 2008, ACM: Beijing, China.
 3. Marlow, C., et al., *HT06, Tagging Paper, Taxonomy, Flickr, Academic Article, To Read*, in *HT06*. 2006, ACM: Odense, Denmark.
 4. Sigurbjornsson, B. and R.v. Zwol, *Flickr Tag Recommendation based on Collective Knowledge*, in *WWW 2008*. 2008, ACM: Beijing, China.
 5. Zwol, R.v., *Flickr: Who is Looking?*, in *International Conference on Web Intelligence*. 2007, IEEE Computer Society: Washington DC.
 6. Negoescu, R.-A. and D. Gatica-Perez, *Analyzing Flickr Groups*, in *CIVR'08*. 2008, ACM: Niagara Falls, Ontario, Canada.
 7. House, N.A.V., *Flickr and Public Image-Sharing: Distant Closeness and Photo Exhibition in Computer Human Interaction 2007*. 2007, ACM: San Jose, California, USA.
 8. Kris, C.R., *What does the photoblog want?* *Media, Culture and Society* 2005. **27**(6): p. 883-901.
 9. Taylor, N., et al., *Probing Communities: Study of a Village Photo Display*, in *OZCHI 2007*. 2007, ACM: Adelaide, Australia.
 10. Battarbee, K., *Defining Co-Experience*, in *DPPI'03*. 2003, ACM: Pittsburgh, Pennsylvania, USA.
 11. Lam, S.K. and E. Churchill, *The Social Web: Global Village or Private Cliques?*, in *2007 Designing for user experiences*. 2007, ACM New York: Chicago, Illinois.
 12. Bryman, A., *Social Research Methods*. 2nd ed. 2004: Oxford University Press.
 13. Barthes, R., *Camera Lucida, Reflection on Photography*. 2000: Vintage Classic. 119.
 14. Bourdieu, P., *Photography, a middle-brow art*. 1990, Stanford, California: Stanford University Press. 218.
 15. Spence, J. and P. Holland, *Family Snaps; The Meanings of Domestic Photography*. 1991: Virago Press Limited.
 16. Khalid, H. and A. Dix, *I know what you did last summer: What can we learn from photolog?*, in *Workshop: Why CSCW? Web 2.0 and Social Software solve our problem anyway in the 10th ECSCW Conference 2007*: Limerick, Ireland.
 17. Turner, G., *Understanding celebrity*. 2004, London: Sage Publications Ltd. 148.
 18. Csikszentmihaly, M., *Flow: The Psychology of Happiness*. 1992, London: Harper & Row.
 19. McCarthy, J. and P. Wright, *Technology as Experience*. 2004, Cambridge, Mass: MIT Press.
 20. Dix, A., *Deconstructing Experience: pulling crackers apart*, in *Funology: from usability to enjoyment*, M. Blythe, et al., Editors. 2003, Kluwer: Dodrecht, the Netherlands. p. 165-178.
 21. Chan, A. (2006) *A Social Interaction Design (SxD) Guide: Social Media, Social Practices, Social Content*.
 22. Lewis, G.J., *Human Migration: a geographical perspective*. Croom Helm series in geography and environment. 1982, London: Croom Helm. 220.
 23. Aneesh, A., *Virtual migration: the programming of globalization*. 2006, Durham: Duke University Press.
 24. Khalid, H. and A. Dix, *Designing for photolurking*, in *Human Computer Interaction*. 2007, British Computer Society: Lancaster University, United Kingdom.