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# 'Sharing Places', Digital Content and Lived Life

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## ABSTRACT

The generation and sharing of digital content is being transformed by new advances in mobile technology. Here we wish to reflect on and review blogging and pervasive image capture and sharing practices reported on in literature to gain new insights into future research of practices around the generation and sharing of digital content in the course of everyday lived life. Specifically we wish to stretch recently adopted rapid ethnographic approaches (i.e. probes), mobile blogs (moblogs) and the notion of 'digital document' to gain insights into real time capture and seamless publishing and sharing of digital content in different kinds of places (domestic, work, third-place and civic).

## Author Keywords

Pervasive image capture and sharing, blogging, probes

## ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

## INTRODUCTION

Bill Gaver and Tony Dunne [5], eloquently conjure a vision of Projected Realities: a networked system of electronic displays with which 'elders' in a large planned housing development just outside Amsterdam (the Bijmer) could share opinions and images over large areas. The vision described scanners and small mains radio devices embedded in the home supporting capture and display of "emotional content" along with "slogan furniture" and "image boards" positioned in the outdoor areas displaying provocative statements and value-laden images particular to the community:

*"This network of electronic displays would project an increasingly coherent expression of the Bijmer, encouraging inhabitants to reflect on their own values, those of the diverse cultural groups sharing the district, and those of the surrounding culture. A nervous system for the Bijmer, it would help to provoke awareness of the existing community both to inhabitants and to the surrounding culture."* [5:601]

In this paper and the research we plan, we wish to explore the possibilities that such "personal scanners", such as new blogging technologies, afford not only the capture but also

the sharing of digital content across different situations as people live their lives. Our first argument in this paper is that a useful way of viewing the capturing and sharing of digital content is across four different kinds of settings and these settings afford the use of particular technologies. We describe these settings as *domestic*, *work*, *third place* and *civic*. We describe each below. Our second argument is that the sharing of digital content should account for people's mobility in the future as they move across and among these settings. Our third argument is moblogs, because they enable the capture and display of 'life' as it happens, not only provide a useful paradigm for future sharing technologies but also are themselves a useful ethnographic instrument informing the design of these same technologies.

## APPROACH

Our approach in this work to date has been to issue Nokia mobile phones (namely Nokia's N series phones – the N80 and N93) to participants and engage them in informal conversations about their use of them with regard to how they have been embedded into their everyday lives. These phones are 'media phones' with high resolution cameras, extensive connectivity (e.g. WiFi, BlueTooth, and GPRS), and high storage capacity (2GBs of secondary storage). These phones also run and have in-built support for LifeBlog – Nokia's blogging and moblogging software. This software enables the seamless import and display of phone content (i.e. SMSes, images and MMSes) into a timeline that can be scrolled through. This timeline content can then be published from the phone through sending it across a 3-G network to a Weblog. We have also reviewed (We)blogging, moblogging and pervasive image capture and sharing practices reported on in literature to develop insights and generate questions which we will pursue through more 'formal' rapid ethnographic enquiry later in our research. We report on these initial enquiries below.

## SETTINGS FOR SHARING CONTENT

The introduction of cameras into mobile phones has brought about new social practices. For example, when members of a social network cannot be together physically, images captured and shared in real time via mobile phones not only can provide an authentic way to share the experience, but also, ultimately, reinforce real life friendship networks and social connectedness. As Ito [11]

notes, the introduction of image capturing and sharing into the social stream brings with it a lightweight visual communication, “an intimate visual co-presence”, which ideally, acts as an extension of SMS.

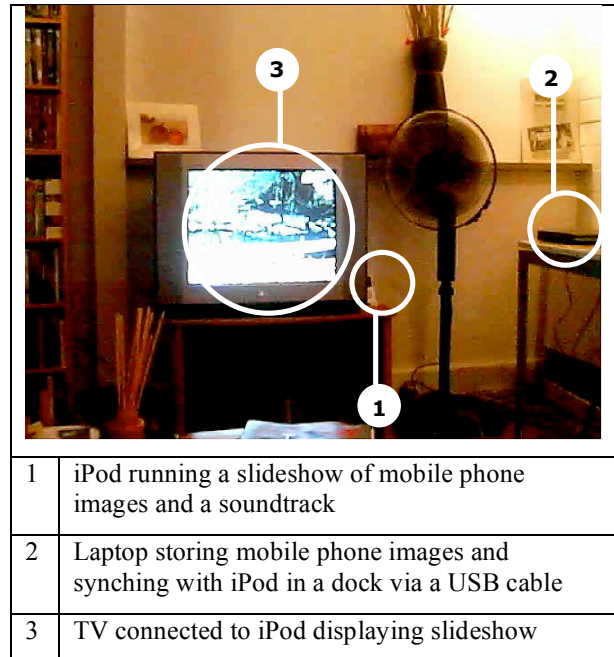
Indeed recent studies of mobile media have explored extensions of current technologies for sharing digital content (e.g. MMS) to support seamless sharing of media among groups. [17] describe MobShare, a mobile phone content sharing system that challenges the notion of the mobile phone as an artifact that facilitates only individual authorship of content by allowing for the management of images via shared digital albums within a social group. [12] describe how spectators can actively contribute to an event through a field study of a car rally. They utilize these insights in the development of mGroup, a content sharing mobile messaging system that converts “the mobile terminal into both a powerful means of expressing and learning supportive group experiences”. This is achieved through: story-based content structure; automatic album creation for post-event retrospection; and support for communicating that group members are “there”. Thus ‘the spectator’ is re-imagined through the use of novel technologies, becoming an active participant in the creation of an event. [16] report on a messaging application, Media Stories, that supports the immediate, collective construction of a blog. They describe how Media Stories allowed users who are co-present at an event to have an enhanced feeling of “being there”, creating a sense of “shared space”.

These studies show spontaneous sharing of digital content via mobile phones can be more than 1-to-1 and peer-to-peer exchanges (e.g. via MMS, Bluetooth, IR). These new technologies such as Nokia’s LifeBlog and Flickr, extend mobile phone image capturing and sharing capabilities beyond 1-to-1 sharing into more public networks (the Internet). These public digital spaces afford remote others having a sense of ‘being there’ and extended recall and reconstruction of events among distributed social groups.

Gaver and Dunne [5] constrain their use of display technologies to civic situations and are not specific concerning how generated digital content would be selected for display. As technology for sharing digital content such as moblogging software sees the personal becomes public, there is a need for an enhanced understanding of ‘public’ situations where people share and ‘consume’ digital content across devices. Broadly, we categorise these settings as *domestic*, *work*, *third place* and *civic*. ‘Third place’ draws on Oldenberg’s [14] notion of a space between work and the home – social spaces, such as cafes and bars, where anonymous company is enjoyed and conversation flows. Civic settings are locales [18] in an urban environment that are less social than public and converged on by various ‘social worlds’ [18].

The figure below shows an example of one participant’s domestic setting where ‘digital memories’ are shared via

shuffling images on an artefact with that has been domesticated: the television.



**Figure 1. Possible configuration of technology sharing moblog content in the home.**

This example shows how a technology that has been ‘made at home’ in the home is extended through the connectivity of ostensibly mobile, personal artifacts: a mobile phone, a laptop and an iPod. This allows experiences in-the-world, in this case third place and civic settings, to be shared in this domestic setting. The point is that the portability and connectivity of digital content enables boundaries among these classes of settings to be traversed and moments from each to impinge on the other. We believe, as wireless networks extend and proliferate, enabling this kind of traversal will be an essential requirement for devices supporting digital content generation.

### SHARING AND MOBILITY

Mobile blogging provides the opportunity to capture, store and share information not only based on time, but on many other aspects of situations, including place. Moblogs also permit the extension of personal social space [20] and the construction of a ‘digital narrative’ as it unfolds (through SMSes for example) that can, potentially, be shared and made public instantaneously (through a peer-to-peer network for example). Indeed, visions of blogging in the future extend to attaching digital memories to particular places that can be shared and act as a form of personal memorial after death [7]. A recently reported on prototype [2] exploits a hybrid architecture (peer-to-peer and client-server), RFID tag readers in Wi-Fi enabled phones, and RFID tags in place to enable tagging of particular things in the real world (e.g. a restaurant). These entities can be commented on and ‘read about’ through mobile phone posting functionality via a central ‘blog server’. This ‘blog

server' is used to store mappings between particular RFID tags and relevant posts. Individual clients (mobile phones) can access these postings through communication with the RFID tag and the server.

[1] describes a set of requirements for moblog clients emerging from a study of blogger's needs, including: the need for a mobile phone to converge blog and other phone functionality elegantly; the need for mobile blogging to integrate with other forms of blogging; the need to facilitate intuitive, seamless posting of images; the need to support management and editing tasks; the need to exploit cheap connectivity and manage broken connectivity transparently. He reports on a Symbian-based client that "provides a convenient, usable link between a mobile user, their immediate actions and thoughts, and the blog onto which they want to share things." An important additional function allowed users to develop user-defined labels or "categories" allowing blog entries to be clustered and viewed according to topic, not only according to temporality.

The key issue here is that, on one hand, moblogging technologies remove the need for close physical proximity between digital content and the individual and on the other support close proximity between digital content and the individual's lived life. John Urry in 'Sociology Beyond Societies' [19] argues for new research methods to take account of the diverse mobilities of peoples, objects, images, and information and their complex interdependencies. Moblogs, such as Nokia's LifeBlog running on a mobile phone, are an ideal technology for exploring these complex interdependencies: digital content can be captured and quickly shared, presenting a subjective account of an ever-changing, constantly evolving relationship between individuals as they traverse different places and share experiences, providing poignant accounts of unfolding events that, in turn, unfold with events and, become hyperreal accounts of real-life events.

### **MOBLOGS AS RESEARCH INSTRUMENTS**

We believe we can stretch existing, if recent, social science research techniques – in particular 'cultural' probes, the use of photos, and technology probes. In doing so, we wish to explore the potential for moblogs to be paradigmatic of and interface with a new breed of services which extend, converge and diverge across devices, in particular display technologies. Our particular interest is in probing the kinds of situations, and by implication, display (e.g. the television) and connecting (e.g. BlueTooth) technologies, that people might (want to) share digital content in. In doing so we so we suggest that moblogs are potentially 'socially translucent systems' [4], enabling people to draw upon their social experience and structure their interactions with each other through providing qualities such as visibility, awareness and accountability.

Both 'cultural' and 'technology' probes [6, 10] have already been used as 'inspirations' for design; and 'blogs'

have been shown to provide rich detail about everyday social life [8]. Studies of Weblogging show three primary types of blogs: individually authored personal journals, "filters" (because they select and provide commentary on information from other websites), and "knowledge logs" and that the majority of blogs are the personal journal "online diary" type [8]. [13] discuss how blogging is a social activity beyond diary-keeping that can be used for a number of objects including: updating others, expressing opinions to influence others, seeking others' opinions and feedback, thinking through writing to an audience and the release of emotional tension.

With moblogs, such as Nokia's LifeBlog, Plummer's [15] 'miscellanea' are converged into one artefact: a person's very personal possession becomes a tool for self-observation and potential technology probe [10] if deployed appropriately. The phones on which moblogs depend are both social and personal artifacts attached to the individual as they live their lives. Thus they present not only the opportunity to capture and gain insights into individuals' lives as they unfold across time (e.g. through time-stamping) and place (e.g. through images of places or 'place-stamping'), but also to potentially support social networks, connectedness to others and everyday work such as personal task management

We believe that the reflexivity, enforced by such approaches compels people to think about, write about and take pictures of aspects of their daily lives (e.g. places) they normally take for granted: 'fragmentary glimpses' that point to important technology design sensitivities. We are interested in the extent to which the moblog can afford this reflexivity and indeed become a form of "personal scanner" of everyday life – as well as facilitating and being married with other, more traditional research techniques such as interviewing.

The 'digital documents of life' generated via moblogs potentially provide us with a whole set of insight concerning the design of new generation digital content artefacts. We believe that certain issues have largely been neglected in research to date: *how these devices are used, what the consequences of their use are (e.g. in terms of changed practices), how these devices can be extended and what they are good for.*

### **CONCLUSION**

In this paper we have described our position on how we believe practices around digital content generation and sharing across different places can be investigated through 'digital documents of life' and some of the insights we have gained through our preliminary investigations. Our research aims to generate the following outputs:

#### **More detailed insights into 'sharing situations'**

We will 'flesh out' (through scenarios for example) and, indeed, evaluate, 'sharing situations' across domestic, work, 'third place' and civic settings through examining how

people mesh and converge technologies e.g. mobile phone cameras, moblogs, the Internet.

### Candidate domains for mobility and sharing

We will carefully consider problem spaces where different kinds of sharing might have positive impact, or at least warrant further research e.g. tourism (e.g. sharing traveling experiences with intimates as they happen), life change (e.g. getting support for giving up smoking), raising awareness to socio-political issues (e.g. ethical consumption of products), 'guerrilla journalism' through enabling the moblogger to become a form of vox populi, creating personal 'news' outside the broadcast paradigm (cf. Current TV - <http://www.currenttv.com/>, You Tube - <http://www.youtube.com/>).

### Methodological insights

We recognize that the mobile phone is in itself, a culturally loaded artefact and its introduction into peoples' lives as a form of probe requires critical reflection. One concern is that the use of a mobile phone blog as a probe potentially turns the participant into an 'instant celebrity' through documenting his/her life. Unlike traditional research where the data is hidden in a drawer, the detail of participants' lives can be broadcast live to the Internet, should s/he wish. This may have consequences. Could a participant terminate a potentially unwanted digital identity that was generated by participating in the study for? What are the digital consequences of someone's 'real' identity shifting? Another concern is that introducing mobile probes into an established physical community potentially provides a hyperreal account of the group's actions and interactions. What is the potential for this new digital element to alienate people in the group? What are the consequences of no longer supporting moblogging practices in the community e.g. when the technology is no longer supported?

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