Your life in snapshots:
Mobile weblogs (moblogs)

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"We used to take some 300 family pictures in a year. Now, with the camera phone, I can reach that number in six weeks. When one of my children comes back from school, when we go for a walk or shopping—I'll always take a picture and publish it on my moblog. If I carry on at this rate and post on average 6.5 family snaps per day, then I'll have 2,372 images in one year. If I had them printed out in a 10 x 15 cm format it would cost me hundreds of dollars. If you put them back to back, there would be a chain of photos 14 miles long. And all of this in just one year!"

Exhibitionism or journalism?

Julián Gallo is the name of the enthusiastic moblogger quoted above. He publicly documents his daily life in minute detail using a camera phone and moblog platform. Might the cultural critics be right who deem amateurs' publications on the Internet—personal homepages, weblogs or moblogs—in the main boring, useless and often even embarrassing? Who on earth could be interested in where Gallo went for his walk yesterday? More contentious than the banal snapshots of the allotment back home are exhibitionistic photos. This has already led to more than one hundred mobloggers using the moblog platform Yafro to protest against other Yafro members who on a regular basis place online nude pictures of themselves and their partners.

Those criticising this tidal wave of personal content stand on the opposing side of the debate to the prophets of a new democratised civil journalism. They argue that if camera phones, radio networks and moblog platforms enable more and more citizens to participate at any time in a free exchange of information and opinion, reporting live from important events all over the world, the information monopoly of mass media and professional publicists could be broken. The concept of a

moblog carries associations not only with the mobility of keeping a mobile-based logbook but also with the mob as in a 'disorderly crowd of people'. According to Howard Rheingold this crowd may alter, through mobile communication and improved social networking, to become an 'informed mob' that exerts increased political influence (Rheingold 2003a). It was only natural for Internet pioneer Rheingold to encourage US citizens in the summer of 2003 to keep an eye on what was happening with the next presidential elections and to use their camera phones to report live from election events—"Moblog the Conventions!" (Rheingold 2003b). In the summer of 2004 this became reality. The University of South Carolina, among others, organised a major election event moblog—the Wireless Election Connection Moblog (http://wec.text america.com). Here, thanks to industry sponsorship, amateur reporters were given new camera phones, officially accredited as election reporters by both Democrats and Republicans, and interviewed by MTV as media stars in their own right.

From cult to commerce

The term "Moblog" or "MoBlog" (short for Mobile Weblog) was used for the first time by web experts Justin Hall (Hall 2002) and Adam Greenfield (http://www.v-2.org). In 2003, the latter organized the first *International Moblogging Conference* "1IMC" in Tokyo. Moblogs are regularly updated web publications comprising a series of chronologically ordered contributions. The crucial difference between moblogs and old-style weblogs that share the same structure is that moblogs may not only be uploaded from stationary computers but also, or exclusively, from mobile technology. This is usually a camera phone, sometimes a PDA or a notebook computer with a wireless connection. Moblog contributions usually consist of pictures taken with a camera phone together with some accompanying text. Only occasionally do they contain videos taken on the mobile or spoken word (videoblog, audioblog). Instead of "moblog", the term *wireless blogs*, *visual blogs* or *photoblogs* are sometimes used. For the latter, pictures from digital cameras are often fed in. So far, the reading or observing audience of moblogs is not mobile (via WAP or WLAN) but mainly seated at desktop computers.

In principle, moblogs serve personal publishing in the same way as homepages; allowing all media consumers to become media producers themselves. Also, Moblogs are part of the social media, as the content of a blog is not produced by a single person; normally several people participate directly and indirectly through links with other blogs and websites as well as public reader comments. *Collective blogs* are published by a team of authors, or are opened up to entries by third parties.

As with old-style weblogs, moblogs have access to specialized online platforms (Application Service Providers) enabling users to send in, save, edit and publish their contributions via e-mail or mobile messaging (SMS, MMS). *Moblog platforms* not only offer publication functions but also various community services. These enable moblog authors to establish personal profiles, exchange messages with other mobloggers (either direct or through forums), mutually list their names in public lists of friends, or form topical moblog circles. Not least, the platforms offer user statistics with information on which moblogs have the highest number of entries, the most up-to-date contributions, or the highest number of visits. The individual contributions eliciting the most comments, or users with the most comments, are registered in Top 10 or Top 100 lists.

Using a web template and mobile device, moblog platforms are relatively easy to use. They require very little knowledge of HTML and enable the user to immediately begin moblogging after entering the e-mail address and selecting a user name. All in all, however, basic moblog platforms offer more limited technical functionality than weblog platforms (see Sauer 2003). In moblog contributions, links to the web, so typical for weblogs, are fairly rare. No wonder: according to Justin Hall (Hall 2002). "A weblog is a record of travels on the Web, so a moblog should be a record of travels in the world".

However, on various platforms—such as German-language providers 20six.de, Blogg.de and Twoday.net—weblogs and moblogs are not accessed separately but in an integrated way. Whoever subscribes as a user for an *advertising-financed simple service* or a *payable premium service* can keep a logbook into which entries are fed by both stationary and mobile technology. Of course, moblogs are of economic interest not only for application service providers but also for the manufacturers of the mobile devices and the network providers who continue looking for killer applications for camera and video phones, broadband mobile phone networks, and related services. Meanwhile, with the 'Lifeblog' software for the Nokia 7610 phone, the Finnish information technology producer has also entered the moblogging market (http://www.nokia.com/lifeblog). Photos, videos, SMS, MMS and personal notes may be archived in chronological order.

Naturally enough, discerning mobloggers are not content with the standardized packages and design templates of the moblog platforms. They would rather use their own web servers to design their mobile logbooks with a higher degree of freedom. This has the additional advantage that they get to keep the exclusive rights to the content they produce, whereas commercial weblog or moblog hosts (e.g. Textamerica) often claim these rights for themselves. Standard blogging systems, typically through Perl, PHP and mySQL, either come with moblog modules (e.g. Pivot: http://www.pivotlog.net and WordPress:

http://www.wordpress.org) or complemented by moblog scripts including instructions offered by users with knowledge of programming (e.g. http://www.movabletype.org for MovableType). An open-source system with special moblog support is provided by EasyMoblog (http://www.easymoblog.org). Despite the trend towards commercialisation of the world of blogging, it is possible, with the relevant media expertise, to find and use free platforms, systems and tools. However, apart from the online costs, moblogging does involve substantial financial outlay for high-quality mobile technology as well as the costs of mobile communication.

Niche or boom?

Current surveys in the US reveal that weblogs are read, either frequently or infrequently, by 11 percent of Internet users, and written by 2-7 percent (Pew Internet & American Life Project 2004). Compared to a killer application such as e-mail, which is used regularly by over 90 percent of online users, weblogs are more of a niche medium. On the other hand, taken in absolute numbers, i.e. hundreds of thousands of bloggers and blogs, the blogosphere has attained remarkable proportions. The Blogcensus project (http://www.blogcensus.com) has registered over two million blogs worldwide, while the Technorati blog index (http://www.technorati.com) records as many as three million. German-speaking countries currently contribute just under 20,000 blogs (http://www.blogstats.de), many of which unsurprisingly progressed no further than the test stage or are barely maintained.

The world of moblogs overlaps to a certain extent with the world of the old-style weblogs, for instance where experienced bloggers now complement uploads previously made from a stationary computer by uploading contributions via mobile technology. Some mobloggers are committed camera phone users who never previously kept a weblog nor appeared in any other way as an Internet or web author.

In recent years, the number of moblogs has increased exponentially worldwide. Whereas in 2001 there were very few moblogs, in 2002 there were dozens, by 2003 hundreds, if not thousands, and now, in 2004, hundreds of thousands. The payable service provider Fotolog.net alone hosts just under half a million moblogs. The Photoblogs.org moblog index currently contains nearly 5,000 registered moblogs from 61 countries in 26 languages, clearly dominated by North America, Japan and Western Europe, and with English the most widely used language by a considerable margin. It is estimated that German-speaking countries are home to several thousand moblogs—with the trend increasing. It can be assumed that in the long term only a minority of Internet and mobile users will be moblogging. However, economically, a lucrative

market does seem to be opening up. To illustrate this, the Blog platform www.blogger.com, which also allows mobile add-ins of text, images and sound, was taken over by Google for around US $20 million.

Between breakfast and the front line

The diversity of the contents of weblogs and moblogs matches its quantity. The Austrian moblog index of SMS.at, for instance, is divided thematically into at least 24 main sections such as "Cars and Motorbikes", "Arts & Culture", "Religion & the Spiritual World", "Business" and "Science", with dozens of subcategories. The predominantly young authors of the moblogs administered through SMS.at decide for themselves whether, and in which category, to register their moblog. The 3,000 or so moblogs registered in the index are distributed unevenly between the various sections. The most common are "About Myself" (1,061 moblogs), "Youth" (509), "Sports & Fitness" (245) and "Love & Companionship" (239). On this teenager platform, the sections "State and Politics" (7), "Science" (6) and "Health & Medicine" (3 moblogs) understandably occupy the lowest ranks. What has to be taken into account here is that a thematic division of whole moblogs is problematic because different contributions to the same moblog can deal with very different topics.

Teenagers' moblog contributions—with pictures illustrating their breakfast, their journey to school, their last party, or their pets and siblings—might seem trite, but so is life. They are not targeting a mass audience: most bloggers write, snap and design for themselves, as well as for real-life family and friends and for online acquaintances. Given the subject matter, advertising-style glossy aesthetics or mass appeal are neither possible nor necessary. While many bloggers insist they are publishing for themselves and for a small circle of readers, there are others who aim to generate more *attention*. For example, the administrators of the Fotopages.com moblog platform complained that some users were choosing the sexiest image possible for their most current photo on the platform's start page in order to attract people, even if the picture did not otherwise fit with the rest of the moblog (see Figure 1).

In August 2003, as part of the Blogcensus project, 776 blogs were selected at random (NITLE 2003) from around 500,000 weblogs archived at the time. It became apparent that nearly half of these blogs (47 percent) could be categorised under the *personal diary* section. Significantly more female (56 percent) than male (28 percent) bloggers were documenting their own daily life, with the remaining 16 percent of diary blogs comprising unspecified genders, or collaborative blogs run by several people. The American *Katie*, for instance, has kept a diary moblog since November 2003 and has since produced over 800 text

image entries which document and comment on her professional and private daily life in graphic and humorous detail (http://steevie.text america.com/).

Figure 1: Start page of the Fotopages.com moblog platform.

There are *personal weblogs* and there are *topical weblogs*. Subjects around online and mobile communication are favourites; the medium shows itself to be highly self-referential. The scientific research on blogs is also mainly documented and discussed through blogs themselves. No wonder: blog researchers and bloggers are often one and the same person and connect theory to practice. Elizabeth Lawley, Professor of Information Science at the Rochester Institute of Technology and an active blogger herself, criticizes the fact that scientists with no real experience of blogging often view blogs as a homogenous mass and only skim the surface of the medium. To treat all blogs the same, she says, makes as much sense as judging the entire output of books without considering the different genres (Lawley 2004).

In the Blogcensus study, only 6 percent of all blogs surveyed were categorised within the *political blog* section; here the gender balance was reversed from the diary blogs (84 percent male authors, 4 percent female authors, 10 percent group, 2 percent unspecified). Apart from topic-specific asymmetries, the gender balance of the blogosphere is almost equal, which is in complete contrast to nationality or age. Most bloggers live in the western world and are in the first half of their lives.

Amateurs versus professionals?

A mixture of personal diary and political logbook, frontline moblogs by US soldiers in Iraq are generating considerable interest on the Yafro platform (http://www.yafro.com/frontline.php). The soldiers offer photos of themselves and their comrades, of Iraqi civilians, war wounded and the dead. Moblog readers contribute patriotic slogans as well as anti-war protests, accompanied by jokes, compliments and flirtations ("You look great in your uniform!"). "CrashTheSoldier", who offers his moblog under the keywords "war, Iraq, beer, kill" (see Figure 2) defends his bloody pictures of the dead and injured by claiming a desire to document the truth of war at close hand and to counter the distorted reporting of the news channel CNN. In this sense he does show the conscience of a civil journalist, although one who naturally is also lobbying his own cause; promoting a more positive image of the US soldiers in Iraq. The "CrashTheSoldier" moblog is registered with Blueherenow. Blueherenow (http://www.blueherenow.com) is a platform for open-source news and moblog journalism reminiscent of Indymedia, but run by a commercial company (http://www.phrint.com). It presents a thematically sectioned mix of links to articles from established press bodies, complemented by links to moblog contributions.

Figure 2: Frontline moblog by CrashTheSoldier.

Useful as photos by amateur reporters may be, moblogs alone do not offer a sufficiently sound information base: they can only be put into

perspective and interpreted in the context of other journalistic reports. In order for the three-step moblog process ("seen—snapped— posted") to become effective journalistically and politically, moblogs have to be promoted; they need readers in order to have any impact. Blogs only become known through recommendations on the Web and through reports in the mass media. It does not make sense therefore to celebrate moblogs as a replacement for professional journalism; both forms of publication complement and influence each other. It is no coincidence that moblog authors feature many professional publicists, authors, photographers and journalists. Through their personal popularity, as well as the quality of their blogs, they stand a good chance of being read, commented on and linked to frequently, thereby rising to the ranks of an A-list blogger.

Invariably, as in all freely growing networks with self-selecting links, there are a few dominant centres surrounded by large marginal zones. It is clear therefore that there can be no question of equal distribution of publicity influence amongst bloggers. This is not due to a failure on the part of the blogosphere, but more to a consequence of universal network laws (Barabási 2003). The Japanese Internet entrepreneur Joi Ito is without doubt one of the most famous A-list bloggers. Ito runs both a weblog and a moblog (http://joi.ito.com/moblog/) and according to press interviews spends some five hours each day reading and writing blogs.

The mutual surveillance and comments of active bloggers with each other is a form of quality control. For example, the team of the professional weblog *Phototalk* (http://talks.blogs.com/phototalk/) systematically examined Yafro's soldier moblogs in July 2004 in terms of their technical and photographic characteristics. The results showed that the vast majority of supposedly authentic front pictures from so-called amateur reporters in fact came from professional press photographers and had already been published online (Phototalk 2004). The spectacular first-hand reporting revealed itself as *picture piracy*. This means that fakes and falsifications are by no means restricted to the traditional media. To the extent that amateurs act as online and mobile publicists, they not only develop new expertise but also expose the failings that accompany it.

Alongside knowledge of and adherence to legal norms (in respect of issues such as copyright and privacy), arriving at an understanding of the ethical ground rules of blogging is equally important. An online survey conducted by the Massachusetts Institute of Technology in January 2004 amongst 492 bloggers (36 percent female, 84 percent under 40, 66 percent USA) showed that 36 percent of those surveyed had already encountered ethical problems (Viégas 2004). In addition, quite a few of the respondents knew other bloggers who had come into conflict with family and friends because of their blog con-

tents (36 percent), or had even got into professional and legal difficulties (12 percent). Rebecca Blood, who via her blog (http://www.rebeccablood.net) managed the jump to professional author, dedicates a whole chapter of her weblog handbook to blog ethics (Blood 2002). The moblog covering the election event of the University of South Carolina quoted above is already working to journalistic standards.

Freestyle photography

With camera phones readily on hand in everyday situations and usable where cameras are often not an option, the opportunities for image production increase significantly. This extends to an invasion of the privacy of other people, whether family members at a dinner party, friends at a party, or strangers on the beach who might not appreciate their sun worship being lodged for posterity and commented on in sexually motivated moblogs. On the other hand, Howard Rheingold makes a valid point by referring to the politically emancipating significance of unwanted mobile snapshots. If, for instance, violence against demonstrators or minorities is captured and immediately published on the moblog, then this information cannot be erased even if the camera is confiscated or destroyed.

In contrast to analogue photography, the costs for individual pictures and copies in digital photography are dramatically reduced. Furthermore, the results can be viewed immediately. This accelerates the learning processes of amateur photographers, encouraging photographic experimentation. The camera phone makes these advantages of digital cameras accessible to even more people, and a popularisation of amateur photography can alter the way people perceive reality. Keeping and regularly maintaining a moblog means being on the constant lookout for new subjects and becoming more sensitised to interesting details in the environment that might otherwise have been overlooked. While some amateur photographers only have a patronising smile for the snapshots of eager camera phone owners, others appreciate this development, as one of the mobloggers in our online-survey commented: "Moblogging means that more people take pictures and start looking at the world rather than just perceiving it. I think that's great because photography is my biggest hobby. When I look at moblogs I like posting motivating comments." Generally, most of us are culturally illiterate at expressing ourselves through pictures. Multimedia messaging, camera phones and moblogs can make a small contribution towards developing more active visual competence and a sense of our own visual voice. This should not be seen as a rival for linguistic competence; in moblogs in particular, choosing the right caption and formulating suitable comments involves an astute handling of text-

image combinations (Badger 2004). On the other hand, a purely photographic narrative promises an understanding across linguistic barriers not otherwise available on the text-dominated web.

The day-to-day photography popularised through camera phones and moblogs is mirrored in the current photo art. Under the title "Snooze Button", for instance, the Canadian photographer Dean Baldwin brings together a series of photos documenting his waking up every morning over the space of three years (see Figure 3). The snapshots, taken by a camera on top of his alarm clock, reveal the subtle differences in his daily routine. Baldwin deftly plays with the often-criticized banality of diary moblogs, opening up new perspectives on everyday life.

A detailed analysis of the content and formal structure of moblog contributions has not yet been conducted. Apart from their photographic content, one particularity of moblogs compared to conventional weblogs lies in their authors' mobility. The method of publishing straight after the event is particularly important for travel, major events, crises and disasters. It can, however, also be used for experimentation, to relieve boredom, to kill time, or to make further use of pictures already shot using the camera phone. Sometimes moblogging has a simple explanation—beyond headline-grabbing speculation about ethically dubious exhibitionism or recommended political activism: "It's a practical way of archiving the pictures taken when the mobile memory is exhausted," was the simple explanation one moblogger gave in our e-mail survey.

Figure 3: Snooze Button by Dean Baldwin (extract) (http://www.cbcradio3.com/issues/2004_04_30/index.cfm).

Mobloggers and their audience

Reading moblogs may be compared to leafing through photo albums of family and friends, or walking through a photography exhibition, or browsing in catalogues and coffee-table books. As there is no editorial selection or control, the differences in quality are as pronounced as on the web in general. Viewers have to decide for themselves what they deem to be *cat content* (bloggers' jargon for content of little interest) or relevant content. Naturally, for animal lovers, pictures of pets on a moblog are worth seeing as much as animals in real life. And apart from any moral criticism of adult content, in a cultural sense it is interesting to explore in more depth how and why men and women present their bodies and sexualities in moblogs. Not only in journalism, but also in the sex industry, online media contributes to increased participation by amateurs—offering specific opportunities and risks.

Moblogs that are regularly updated, gathering a loyal readership from both offline and online existence, develop regular, focused discussions about individual contributions and pictures. These include jokes and ribaldry, criticism and praise for photographers and subjects. "Well, it's just like looking at 'real' holiday snaps together—for instance, a place where you might ask 'where was that?' or comment on how slim the person looks or whatever," explains one female moblogger. For some, reading and commenting on moblogs is closely linked to personal ties; others use the medium out of curiosity or for entertainment ("because I enjoy thinking up 'intelligent' comments and making others smile or reflect", as one of the mobloggers we surveyed put it). The communicative function of moblogs is significant and can sometimes even take on the character of a lonely hearts service.

Other mobloggers are first and foremost interested in creative exchange, allowing themselves to be inspired by the photos other people have taken, and working harder on their own photography projects if they know that their moblog audience is waiting for new material. One of our moblog-survey respondents said: "For me the most important thing is the moment of the picture and the thought that goes with it. Also, I have all comments to my blog forwarded directly to my mobile; it's important for me to know who is following me 'live'." The desire to communicate cannot simply be dismissed as narcissism—it is one of the most fundamental needs humans have.

As with traditional online diaries (Döring 2001a) and personal homepages (Döring 2001b), moblogs are consciously used to acquire media competence and professionalism. It is no coincidence that the most committed mobloggers include many people involved in the media and photography profession. The compulsive picture-taking of the above-mentioned Julián Gallo is not just an obsession; in his role as photographer and lecturer in New Media at the Universidad de San

Andrés in Argentina, Gallo is reflecting the effects of photographic documentation in his moblog. In his own way, he is conducting a scientific experiment on his own person. A convincing moblog project may help a photographer establish himself or herself, as has been the case with some webloggers who are now published authors, have published their blogs as books, or report on blogging in magazines. After eight years of online publishing, Carola Heine (http://www.moving-target. de) describes her "private weblog value-added chain" as follows: "My own column in a PC newspaper, a non-fiction book on setting up a website, two non-fiction titles for young people, and again and again, with great pleasure, freelancing for the publications PCgo! and Internet Magazin."

From test account to moblog project

A public online logbook allows experiences to be shared with others, may open up new horizons, and can offer backup, encouragement and a sense of satisfaction. Just as in other aspects of life, the possibility of a lack of or undesired feedback cannot be excluded. Participants have the opportunity to operate using pseudonyms and/or to only allow selected persons access to their moblog in order to protect themselves from overexposure. This means that a certain amount of planning is required before launching into a blogging experiment with all its communicative and social dimensions. For pure documentation, traditional online photo albums are sufficient. These also offer the opportunity to order hard copies of the snaps (e.g. with Kodak, Foto Quelle, Media hype.de).

By no means all mobile users who start a moblog develop it into a long-term project. Of the 1,448 members of a popular moblog platform that had been active for more than a week, only 7 percent were still active six months later (Adar 2004). The average moblogger posts 14 images in the first week, one image in each of the second, third and fourth weeks, and none in the fifth week, suggesting that most lack the stamina needed for a continuous medium such as a blog.

However, this observation is no reason to dismiss moblogs generally as an aberration or mere hype. On the one hand, it is actually very sensible for users to say farewell to a medium after a short period if they see no added value in their day-to-day lives. On the other hand, it has to be conceded that meaningful and creative ideas only flourish when potential users are informed and inspired and find opportunities for social connection. Nobody knows how many good moblog projects would already exist if there were fewer financial and technical barriers, and if the blogging world, in some parts heavily characterized by academic discourse and insider jargon, seemed less elitist and more invit-

ing to newcomers and 'normal' users. So far, not even the network and service providers have seriously attempted to really make mobile multimedia services and their application potential accessible and more relevant to everyday practice.

Is the future photo mobile?

It is unlikely that moblogging addiction will become a problem for society. Some bloggers do have phases of devoting a lot of time and energy to their project, but normally follow this with breaks. As Carola Heine blogs: "Weblogging is addictive but it always calms down again—personally, I have never fought against it but rather just go with the flow. The main thing is not to spend my day running after situations that would be useful for my blog—but to live." And Elizabeth Lawley (http://www.mamamusings.net) recently used her blog to report: "Haven't been blogging much lately. Am busy in the real world and enjoying time with my family."

In a way, in the context of the whole blogosphere, moblogs might be described as "a niche within a niche". They qualify neither for highest praise nor for complete rubbishing. It is all about the details and nuances of this new technical, social and creative form of expression. It makes little sense to pit bloggers against professional photographers, authors and journalists. There is partly an overlap of people involved in any case, and the publication forms are dependent upon each other through co-citation. To a certain extent, mass media and personal publications pursue, independent of each other, completely different goals. If a moblogger says, "My 81-year old mother, who lives 3,000 miles away, is always so pleased to see my pictures", then for her that is the best reason to be moblogging, with no attached thoughts of market share.

The generalised reproach of exhibitionism and voyeurism does not stand up either. The borders of private and public spheres are subject to constant cultural shifts and are shaped very differently depending on the individual. Of course there are dubious moblog contributions, but that holds true for all media—and issues of moblog ethics are under intense scrutiny. Also, blogs should be measured by individual standards instead of overloading them with utopian ideas. Monika Porrman, author and blogger (http://www.dailymo.de), describes the nature of a blog as follows: "A small pin bord in a long virtual corridor, in front of which you can stop a while in order to read what's on those little bits of paper hanging there. What goes on there—whether high literature, superficial blah-blah, demanding subjects, jokes, notes or brilliant ideas—is down to the author. The same goes for what is taken off. Nothing has to stay."

References

Adar, E. (2004), 'Usage Patterns for Cameraphone Driven Moblogs', http://www.hpl.hp.com/research/idl/people/eytan/moblog/index.html (14 July 2005).

Badger, M. (2004), 'Visual Blogs', http://blog.lib.umn.edu/blogosphere/visual_blogs.html (14 July 2005).

Barabási, A.-L. (2002), *Linked: The New Science of Networks*, Cambridge, MA: Perseus.

Blood, R. (2002), *The Weblog Handbook: Practical Advice on Creating and Maintaining Your Blog*, Cambridge, MA: Perseus.

Döring, N. (2001a), 'Öffentliches Geheimnis. Online-Tagebücher—ein paradoxer Trend im Internet', *c't* (2), 88-93.

Döring, N. (2001b), 'Persönliche Homepages im WWW. Ein kritischer Überblick über den Forschungsstand', *Medien & Kommunikationswissenschaft*, 49 (3), 325-349.

Gallo, J. (no year), 'Moblogs: The Map of Time', *ZoneZero Magazine*, http://www.zonezero.com/magazine/articles/jgallo/moblogs_time.html (14 July 2005).

Hall, J. (2002), 'From Weblog to Moblog', *TheFeature*, 21 November, http://www.thefeature.com/article?articleid=24815&ref=1858826 (14 July 2005).

Lawley, E. (2004), 'Blog Research Issues', http://www.corante.com/many/archives/2004/06/24/blog_research_issues.php (14 July 2005).

NITLE (National Institute for Technology & Liberal Education) (2003), 'Equal Numbers, Different Interests', 14 August, http://www.blog census.net/weblog/ (14 July 2005).

Pew Internet & American Life Project (2004), 'Online Activites & Pursuits', 29 February, http://www.pewInternet.org/report_display.asp ?r=113 (14 July 2005).

Phototalk (2004), 'Soldier Photography/War Photography', 9 July, http://talks.blogs.com/phototalk/2004/07/soldier_photogr.html (14 July 2005).

Rheingold, H. (2003a), *Smart Mobs. The next social revolution*, Cambridge, MA: Perseus.

Rheingold, H. (2003b), 'Moblogs seen as a Crystal Ball for a New Era in Online Journalism', *Online Journalism Review*, 9 July, http://www.ojr.org/ojr/technology/1057780670.php (14 July 2005).

Sauer, M. (2003), 'Jeder ein Publizist. Individuelle Online-Journale mit Blogs', *c't* (3), 166-169.