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A LIFE MORE PHOTOGRAPHIC

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A LIFE MORE PHOTOGRAPHIC

Mapping the networked image

Twenty-two years since the arrival of the first consumer digital camera, Western culture is now characterized by ubiquitous photography. The disappearance of the camera inside the mobile phone has ensured that even the most banal moments of the day can become a point of photographic reverie, potentially shared instantly. Supported by the increased affordability of computers, digital storage and access to broadband, consumers are provided with new opportunities for the capture and transmission of images, particularly online where snapshot photography is being transformed from an individual to a communal activity. As the digital image proliferates online and becomes increasingly delivered via networks, numerous practices emerge surrounding the image's transmission, encoding, ordering and reception. Informing these practices is a growing cultural shift towards a conception of the Internet as a platform for sharing and collaboration, supported by a mosaic of technologies termed Web 2.0. In this article we attempt to delineate the field of snapshot photography as this practice shifts from primarily being a print-oriented to a transmission-oriented, screen-based experience. We observe how the alignment of the snapshot with the Internet results in the emergence of new photographs in which the photographic image interacts with established and experimental media forms – raising questions about the ways in which digital photography is framed institutionally and theoretically.

Introduction

Recent changes in the production, distribution, consumption and storage of images caused by the merging of photography with the Internet have had a notable effect on varied and diverse social and cultural processes and institutions including medicine (Pap, Lach, and Upton), journalism (Colin; Gillmor), law enforcement (Cascio), tourism (Noah, Seitz, and Szeliski), space exploration (Lanzagorta) and fine art.¹ In all these areas digital imaging causes shifts in the way bodies are imagined and perceived, wars are fought, people are monitored, works of art valorized and the public informed of all of the above. Photography is now ingrained in so many processes that a scholar of photography must also be highly informed about industries and institutions that traditionally have had little to do with the study of photography. Conversely, researchers in the fields of cultural anthropology (Okabe and Ito), informatics and human-computer interaction (Van House et al.; Kindberg et al., "How and Why") are increasingly concerned with the importance of digital photography to their fields of study.

In this article we choose to focus on only one area of photography, which we consider to be key in understanding the shifts which are occurring in our perception of the medium. Popular photography was, for several decades, the focus of studies by cultural theorists and historians, curators and artists. But it is only with the dissemination of personal photography online that “Kodak culture” (Chalfen 8–18), augmented by “Nokia culture”, became distributed and shared on a scale comparable with news or commercial photography.

The distribution and sharing of snapshots online highlights a paradoxical condition that characterizes snapshot photography: it is both ubiquitous and hidden. Since the beginning of the twentieth century the snapshot has been the archetypal readymade image: placeholder for memories, trophy of sightseeing, produced in their millions by ordinary people to document the rituals of everyday life. And yet despite being the most mass produced photographic product, the snapshot has remained highly private, concealed from public eye, and quite often an invisible image. When snapshots do appear in public, whether in the context of fine art exhibitions and publications or in scientific journals, they are often presented as “found images” – stripped of notions of authorship or details about the original purpose of the image, its subjects and the circumstances of its creation. Even as the anonymous snapshot is used extensively as a metaphor or a sign in works of fine art from Jeff Wall to Nan Goldin, from Christian Boltanski to Gerhard Richter, these artists seem to be filling a gap left by the absence of genuine, real-life snapshots in the public domain. Looked at as a genre, snapshot photography seems to have many imitators but no recognized originals, many admirers but no masterpieces, many iconoclasts but no icons.

Inverting this paradigm, the 2007 exhibition “We Are All Photographers Now!” at the Musée de l’Elysée, Lausanne, Switzerland,² responded to the way in which the photography of “ordinary people” has achieved visibility and popularity, challenging the way in which photography is framed and consumed. Photo-sharing and social networking sites now provide a platform for photographers to deliver their images to locations where millions can view them simultaneously. Being in the right place with the right phone is now enough to make you a photojournalist, or give you access to gallery wall space. Snapshots now appear not only in web-based family albums and diaries but also literally cover the face of the Earth: augmented by geographic coordinates they are superimposed onto screen-based online maps of the world.³

Photography is dead, long live photography

If one looks back at the brief history of digital photography it becomes very clear that the issues that bothered critics and historians twenty years ago are significantly different from the questions we may need to ask now. For many scholars, the most pressing issues were those concerning the digital image’s ability to represent the Real (Mitchell 23–57; Ritchin 36; Rosler 50–56). The malleability of digital photographs was then seen by many as the central element of the digital revolution and caused some to herald the “death of photography”, shattering the privileged status of the photograph as “objective” truth (for accounts of this period see Robins 29–50).

Instead, we now see that the power of the photograph to document is not diminished due to digital technology. From CCTV stills, traffic control and

monitoring systems, to photo-reportage, the digital image plays a major role as “evidence”. The low-resolution, pixilated appearance of early camera phone photographs and video clips is now an accepted part of the syntax of truthful and authentic reportage in the same way that the grainy black and white photograph once was. The speed with which these highly compressed JPEGs are transmitted and amalgamated into news media is an indication of the acceptance of the explicitly digital image into the structure of news reporting while emergent practices such as citizen journalism and sousveillance (Mann, Fung, and Lo 177) rely on the instant distribution that the networked camera facilitates.

A typical example of this shift is the camera phone image taken by Adam Stacey on his way out of the underground on the morning of the 7/7 London bombings.⁴ Alongside other camera phone images, his picture rather than the photographs taken later that day by photo-journalists became iconic of the incident. Significantly, the picture that appeared on major news sites was a self-portrait of Stacey, one hand covering his nose and mouth, with the tube carriage in the background. Here, the camera phone provides the means of reporting from the perspective of the participant in the event, the ergonomics of the telephone even allowing for easy inclusion of the photographer in the picture. Compare that to the position of the photojournalist: whose professional ethics dictate the position of the *detached observer*, assisted by the adoption of bulky photographic equipment and long range lenses which create a physical separation between subject and object.

The mass-amateurization of photography, and its renewed visibility online signals a shift in the valorization of photographic culture. If, in the past, the arena of public photography was dominated by professional practitioners, currently the work of specialists is appearing side by side with images produced by individuals who don't have the same professional investment in photography.⁵ As a result, the roles of the professional photographic image and that of a snapshot are changing.

The early years of digital photography

During the first years of the “digital revolution”, digital technology was largely inserted into the framework of existing traditional photographic practice. Through the 1990s the dominant shift was marked by replacing the technology of the analogue photograph (film, chemical processing, darkroom practices) with the technology of digital capture, and image manipulation. But these technological changes did not radically alter the economy of production and storage of photographic images.

The arrival of digital imaging did not revolutionize popular photography but caused gradual shifts in the habits of hobbyists and middle-class amateurs who bought computers, scanners and ink-jet printers but used them within the old paradigms of analogue photography. The photographic darkroom and the photo lab were replaced by Photoshop and a colour printer. The ability to make prints without the need for a home darkroom, and the ease with which old, faded prints could be improved or restored convinced many photographers to swap the photo lab for domestic digital set-up. But during the first stages of penetration of digital photography into the amateur market (1990s) “going digital” was not about the acquisition of a digital

camera – which was at that time an expensive tool beyond the reach of all but the richest dilettantes. Instead, the flatbed scanner or the more specialized film scanner became the central hardware of the digital ‘lightroom’ as it provided a way of digitizing film negatives and old prints, correcting and restoring them beyond what was previously possible in the darkroom and printing them on inkjet paper which mimicked photographic emulsion. The digital print was considered a compromise: not as good as a darkroom print, but an acceptable surrogate. Here the print persisted.

Imaging software of that decade also simulated the tools and techniques of photographic craft; Photoshop was the software of choice, with its array of familiar darkroom tools for ‘dodging’ and ‘burning’, sharpening and blurring. Image management software (Thumbs Up, ACDSee) employed the metaphor of a light-box to display rows of images presented as a sheet of mounted transparencies.

Even when digital cameras became more affordable for the consumer market, the promise of immediacy that digital photography offered was frustrated by unsuitable methods for *instant* image sharing. Showing digital photographs to family and friends relied on being physically gathered around a single computer’s screen – and relied on the presence of a computer literate person to operate the software. Whilst sending photographs by email was possible and indeed practised, there were significant barriers to the uptake of this. Internet access in the 1990s was characterized by slow and expensive modem connections, accompanied by the popular adoption of low-capacity web-based email accounts. The practice of sending large attachments was quite risky, potentially condemning the recipient to an overflowing mailbox or terminal boredom whilst waiting for images to appear onscreen. Meanwhile, the publishing of images online was either a complicated or costly process, usually requiring a website domain, a hosting subscription, and a web designer or computer-savvy friend.

From print-based to screen-based photography

The advent of affordable, consumer-oriented digital cameras introduced amateur photographers to several technological innovations which contributed to dramatic changes in popular photographic practices. In 1995, the first digital consumer camera with a screen made it possible to preview an image before it was taken (Tatsuno 36). In addition to the screen, the digital camera also acquired a delete button, which provided a way of erasing unwanted shots from memory. With these two innovations, digital technology addressed the two significant barriers for engagement with photography: the delay between taking a picture and viewing it,⁶ and the cost of each exposed frame (Bourdieu 78).

From now on it became possible to engage with photography in a remarkably different way. The ability to take a picture, look at the screen, readjust the composition and correct the camera settings until the image is perfect created an environment of accelerated learning which gave amateurs the tools to compete with professionals. In the world of still film cameras, years of training were required to mentally transform a 3D view into a 2D plane, and translate light and colour into photographic (greyscale or colour) values in order to visualize the scene the way it would look in print. Ansel Adams famously attributed great importance to this skill:

I can not overemphasize the importance of continuous practice in visualization, both in terms of image values [...] and image management [...]. We must learn to *see intuitively as the lens/camera sees* and to understand how the negative and printing papers will respond. It is a stimulating process and one with great creative potential.

(Adams 7; our emphasis)

The little screen at the back of a digital camera made it possible to *see intuitively as the lens/camera sees* without years of training, dramatically narrowing the gap between the professional photographer and the amateur.

The ability to delete an image immediately after it was taken has intriguing consequences for the kinds of photographs that are left after the “on-the-fly” editing. Whatever seems imperfect, unflattering, or meaningless at the time the picture was made is now in danger of being deleted immediately in order to free some space in the camera memory for future, presumably better, photo opportunities. The delete button promises a set of selected and more perfect images while at the same time threatening a death blow to the traditional role of the photograph as memento and keepsake. The ability to edit in camera means that pictures that are deemed unsuccessful disappear for ever, thus eliminating the possibility of returning to them after months or years to discover redeeming qualities that compensate for their apparent imperfections. The delete button reduces the chances of discovering hidden truth in photographs: a blurred face that becomes a poignant representation of absence and loss; a bad expression that turns into a cherished quality; closed eyes that reflect the proximity of death; a stranger in the background that becomes a lover or a friend.

Today, the overwhelming majority of personal photographs are destined never to appear on paper. As computer processing power has increased exponentially, and as the price of storage has dropped, the ability to accumulate tens of thousands of images has become a reality for the vernacular photographer. For the accidental archivist, the familiar trope of the dusty shoebox stuffed full of neglected prints gathering dust has been reinvented as the hard disk cluttered by files. In 2005 one Internet survey stated that 11 per cent of respondents had more than 10,000 digital photos, whilst the largest group (27 per cent) had between 1,001 and 5,000 digital photos (“Do You Have 10,000 Digital Photos?”). Traditional models of handling photography had no way of coping with such dramatic increase in volume of photographic production.⁷

As the photographic print becomes an unwieldy vehicle for sharing this image explosion the snapshot is now commonly viewed via the screen of the camera, mobile phone or computer. As Daisuke Okabe has noted, currently the most fluid and immediate sharing of images happens when images are shared directly via the camera’s screen (2, 9). In recent years, the camera screen has grown in size from an electronic viewfinder into a portable viewing frame, designed not only to compose and review but to view, edit and share photographs without resorting to computers⁸ or photo-labs⁹ (see figure 1). Some consumer cameras now have screens which mimic the scale of a small photographic print, colonizing the entire back side of the camera, replacing the camera controls with a responsive touch screen (e.g. the seductive, shiny screen has also become a marketing tool for the camera; product shots frequently highlight the back, rather than the front of the camera, drawing attention to a large screen with



FIGURE 1 Camera screen image. Reproduced with permission of e-Photographia.com.

a bright picture on it. A similar development can be observed in the way in which the design of higher end camera phones and some PDAs almost eliminate the keypad, and therefore sacrifice some of the functionality, in order to maximize the screen.

The emergence of the digital lifestyle

As our viewing practices shift towards the screen, the photograph appears within the same space as other digitized information and entertainment. Christian Metz, in “Photography and Fetish”, points out the difference between a (traditional) still photograph and a movie film in terms of its “socialised unit of reading” or lexis (155). He goes on to observe that “... the photographic lexis, a silent rectangle of paper, is much smaller than the cinematic lexis” (155). But viewed on the computer screen, the amateur/family photograph occupies the same space as the video game, the film trailer, the newspaper and the artwork in a virtual museum. It becomes part of an endless stream of data, disassociated from the origins of the snapshot in the personal, the ostensibly real, and private life.

In 2005, Photobucket was registering 1.3 million images being uploaded to its servers each day, which were then being replicated to over 500,000 other websites (“Fun Statistics”). Flickr recorded its 100 millionth photo upload in 2006 (Champ). Here, we observe a transformation similar in magnitude to the one that John Tagg describes in *The Burden of Representation*, when the invention of halftone plates in the 1880s “enabled the economical and limitless reproduction of photographs” (55–56). The ease with which images replicate and transmit across telecommunications networks modifies the economies of photographic images just as drastically.

Intriguingly, there are protracted similarities between the present digital photography revolution and the events that shaped amateur photography at the turn of the nineteenth century. As John Tagg points out, all the technological innovations of George Eastman, the founder of Kodak, would have amounted to little if he had not thought to re-brand photography in a way which made it appealing to “a whole stratum of people who had never before taken a photograph” (54). Similarly, the technological innovations that made storing limitless numbers of images possible on cheap hard disks and memory cards, and fast and economical distribution of photographs through a high-speed Internet connection, would not have amounted to a restructuring of the place of photography in society if they had not been augmented by a shift in the marketing of computers. At the axis of this second digital revolution in photography¹⁰ was the re-branding of the home computer as the centre of “digital lifestyle”. Championed by both Microsoft (“Microsoft Digital Lifestyle”) and Apple (Redman), this concept aims to situate the computer at the heart of family life, replacing the television and the sound system, the coffee table,¹¹ the phone, the family album and the slide projector. Part of this re-branding exercise earmarked photography, together with music and video, as central to the “fun” things that the computer can do.

As part of the “digital lifestyle”, a new generation of consumer photographic tools (iPhoto, Picasa) avoids references to the darkroom and to the photographic skills and practices of old. Gone are the metaphors of the light-box and the filing cabinet; replaced instead by features more common to video software. Now, one is able to “scroll through” long sequences of photographs by navigating a timeline: as you navigate, the images flicker one after another. A whole year’s worth of pictures can flash in front of your eyes in a matter of seconds. When Steve Jobs, Apple’s CEO, unveiled the first version of iPhoto in 2001, he referred to the “chain of pain” involved in downloading photographs from the camera to the computer (Steinberg 1). In contrast with the past, Apple’s new software was offering a “zero configuration” environment for photography in which the camera model was recognized automatically, images stored according to date and time, and photos were “shared” as slideshows, photo books and webpages. The new breed of photographic applications did not emphasize the manipulation and the editing of images: these were activities requiring time to learn and execute; and made almost unnecessary due to the very high “success rate” of compact digital cameras. By discretely eliminating references to craftsmanship and specialist knowledge from digital photography software, photography is incorporated into the suite of friendly multimedia applications designed to appeal to every computer user.

This re-branding of photography occurred in tandem with a revolution in mobile telecommunications. The disappearance of the camera inside the telephone bonded photography to the most important device of personal communications that ever existed – the mobile phone. As Kristóf Nyíri observes:

Combining the option of voice calls with text messaging, MMS, as well as e-mail, and on its way to becoming the natural interface through which to conduct shopping, banking, booking flights, and checking in, the mobile phone is obviously turning into the single unique instrument of mediated communication,

mediating not just between people, but also between people and institutions, and indeed between people and the world of inanimate objects.

(Nyíri 2)

In the light of Nyíri's observations, it is not surprising that the influence of the camera phone on contemporary culture is the subject of extensive research by scholars in the field of human–computer interaction (HCI). Such studies respond to the demand of telecommunications conglomerates to know more about social uses of mobile photography with the view of developing additional services that will further deepen the bond between consumers and their phones (see, for example, Van House et al.; Kindberg et al., "How and Why"). Based mostly on the analysis of focus groups, these studies look at the things people "do" with their camera phones. Given the methodology, it comes as no surprise that most findings indicate that the main uses of camera phone photography are highly social. In the now celebrated analysis by Van House et al., "The Uses of Personal Networked Digital Imaging: An Empirical Study of Cameraphone Photos and Sharing", the four main uses of camera phone photography are creating and maintaining social relationships, constructing personal and group memory, self-presentation, and self-expression (1845).

What people do with photographs after they are taken is also the subject of acute attention. The emerging field of personal information management (PIM) addresses the personal photographic archive as another form of data which needs to be understood, managed and retrieved more efficiently. Rodden and Wood (409) have observed the ways in which pictures are stored, annotated, sent, shared and archived. Elsewhere, algorithms are being developed in order to assist in the creation of image collections which archive themselves (Naaman et al. 180–81). Surveying this growing literature on camera phones and photo sharing it becomes quite clear that the field is dominated by research that is not troubled by questions concerning the role of representation or the power structures which surround photography. Whilst references to the canon of critical writing on photography may appear in the occasional footnote, it is still remarkable that the new wave of works on photography (see, for example, Van House et al.; Van House and Davis; Okabe and Ito; Kindberg et al.) can do without the persistent questions about representation that fascinated writers on photography for decades.

Before we lament the indifference of these researchers to the theories of photography, it is worth remembering that the photograph that occupied the mind of Barthes is a different object to the photograph that Okabe, Van House and Kindberg write about. Where Barthes was turning the rustling pages of his family album, Okabe observes a formation of pixels on a 2×2 inch screen of a telephone. Where Sekula interprets the significance of the strips of light and dark in Stieglitz's fine print, Van House deals with an image that becomes illegible binary data at the press of a button.

As image data become a viable substitute for the printed snapshot, we see the material structures which supported the storage and display of personal photography (shoebox, album, photo frame) being sustained by range of different practices and forms. For an increasing number of consumers, the archival and sharing practices which surrounded the print are now provided via the transmission of photographs to networked locations. Through the relocation of the image collection online,

consumers are able to mitigate data anxiety by outsourcing backing-up responsibilities to the companies which maintain the massive server farms which host the images (“The Downside of Digital Snaps”). Significantly, whether located online or contained on a home PC, the digital snapshot collection now takes the form of a *database*. Borrowing Manovich’s definition, “they appear as collections of items on which the user can perform various operations – view, navigate, search” (*Language of New Media* 219). With the emergence of the photo-sharing platform, the photographs of millions of individuals are now contained within online databases connected to each other by hyperlink, tag, or search term. Within this context, the consumption of personal photography has become intimately linked with the software interfaces which mediate their display on-screen.

The social life of the networked image

The popularity of photo sharing needs to be considered alongside the processes that shape the World Wide Web, particularly in recent years where notions of “community”, “social”, friend”, “free” (as in free account) and “fun” are being reshaped through the rise of social networking and Web 2.0. Whilst often put forth as a problematic and controversial term, Web 2.0 was first coined in 2004 to describe shifts in the way in which “software developers and end users use the web as a platform” (O’Reilly). Instead of providing an interface for the navigation and display of interlinked documents, commentators observed that successful websites were appearing which mimicked the functionality and interactive possibilities more commonly found in desktop software applications. In terms of photography, it suddenly became possible to modify content online without programming skills; one could upload, rotate, annotate, distribute and organize images by interacting directly with the webpage itself. Whilst in the 1990s photo-sharing sites simply functioned as add-ons for online print finishing services, the new generation of sites such as SmugMug, Buzznet, Zoto, and Flickr (launched in 2004) functioned as interfaces which facilitated a playful engagement with one’s own snapshots and those uploaded by others.

The photo-sharing platform, like the software that supports blogging, makes the process of updating one’s page simple and intuitive. However, unlike a blog, photo sharing does not require the labour of writing entries on a regular basis, and it does not demand continual activity in the way that a social networking site does, and yet photo sharing offers to its members many of the benefits of blogging and social networking. As such, photo sharing provides a flexible model of participation which allows for regular updates in the form of online photo journals, but also accommodates users who only want to upload a few images as a permanent photo gallery or those who use photo sharing as a backup solution for the image collection on their PC. At the same time, a major appeal of photo sharing is the ability to connect with others not through writing but by posting images.

Van House notes in her study of Flickr users that many have given up blogging because it is “too much work” and now favour the photograph as a more convenient way of sharing their experiences (2720). The practices of moblogging (blogging with a mobile phone) and photoblogging (blogging with photographs rather than text)

further exploit the way in which mobile phone images have become a kind of visual speech – an immediate, intimate form of communication that replaces writing.

The networking of the snapshot provides something which vernacular photographers have always lacked: a broad audience. Don Slater has noted how marginalized the practice of *looking* at as opposed to *taking* snapshots has been, quoting a 1982 survey which stated that 60 per cent of respondents and their families looked at their family snaps once a year or less (Slater 138). Single images, uploaded to a photo-sharing site can accumulate thousands of viewings and long strings of comments. Whilst an invitation to someone else's "slide night" of holiday snaps has been something to be avoided at all costs, the photo-sharing environment encourages a prolonged engagement with the image, where the act of viewing other people's images online becomes a form of leisure and a social activity. Writing in 1995, Slater noted the way in which "actively using domestic photographs as opposed to taking them ... is marginal because it is not structured into a leisure event" (140). Within a photo-sharing platform, the viewing of photographs is now constructed as a creative pursuit, involving remixing, captioning and commenting upon images. At the same time, traditions of collecting, archiving, and scrapbooking have become re-branded as the marketing buzzword "life caching": a consumer "mega trend" coined by Trendwatching.com ("Life Caching: An Emerging Consumer Trend"). Consumers, or "anyone with even a tiny amount of creative talent", are also now re-branded as members of a "Generation C", for whom the *production* and *manipulation* of digital media "Content" is both "Creative" and inseparable from the *consumption* of digital storage, media players, and camera phones ("Generation C: An Emerging Trend and New Business Opportunity").

The photo-sharing interface provides a range of built-in features designed to make the viewing of photographs into a concrete, traceable activity, which is a source of anticipation each time a user logs on to their account. Within Flickr, Jean Burgess suggests that these interface features reward users for participation:

At the most basic level, each action of uploading an image contains a potential reward – there is always the possibility that someone will view and enjoy it; the reward is delivered in material form if another user leaves a comment or marks the image as a favourite.

(Burgess 140)

Viewer involvement can extend from leaving a comment at the bottom of the page to attaching notes to specific areas of the image, thereby making viewing into a creative activity that has the potential to support or subvert the intentions of the photographer. The face of the photograph can become a site of struggle between interpretations by various users, while at the same time generating layers of text that can be software read and used as a resource in search algorithms.¹²

The visibility of the networked image

A quick visit to the Flickr homepage reveals that over 3,000 images have been uploaded in the last minute.¹³ Within this avalanche of images, the practice of tagging

one's photos acts as a strategy for preventing them from disappearing from view. Tagging systems are a central feature of photo-sharing sites such as Flickr and SmugMug which promote the community features of their interfaces. The practice of tagging involves the addition of freely chosen words to an image – resulting in a bottom-up subjective categorization system known as a *folksonomy*. In a photo-sharing context, tagging serves a dual function of helping to classify a personal collection of images, and making the images available to search enquiries within the photo-sharing site. As such, tagging is both a part of personal image management and at the centre of the social aspects of photo sharing.

Within the Flickr environment, the practice of tagging is linked to the popularity and visibility of the image. Images which are highly ranked in search results may have been tagged with up to seventy-five keywords (the maximum allowed) through which they have attracted hundreds of hits and numerous comments. Within photo sharing, the practice of tagging becomes part of a strategy for self-promotion that allows the individual to rise above the anonymity of most users.

The reliance on tagging for organization and retrieval of images is an indication of the importance of textuality for online photographic procedures. Photo sharing is therefore not just a portal for photographs but an amalgamation of mutually dependent visual and textual practices. Matt Locke has observed that annotation “creates a kind of intimacy around the photograph, capturing some of the ‘murmur of laughing voices’ that surrounded their creation” (391). Tagging, commenting, titling and annotating of images are essential elements of participation in the social aspects of photo sharing which play a role in creating communities of users interested in specific images.

Tagging provides a substantially different way of viewing and interacting with personal photography. Batchen states “... when we ... touch an album and turn its pages, we put the photograph in motion, literally in an arc through space and metaphorically in a sequential narrative” (49). As a form of new media, the hyperlinked image enables the possibility of non-linear navigation, creating an environment where images can be connected and displayed according to an array of different categories. Significantly, as a tag is actually a hyperlink created by the *user*, tagging systems resemble more closely Vannevar Bush's conception of the Memex – where user-created links form loose trails between different documents (Johnson 121). Within Flickr, the simple addition of the tag “cat” to an image immediately connects the image to 100,000 photos of other cats, which can be called to the screen with a single click (see figure 2). In this respect, tagging subverts any attempt to impose narrative order on the snapshot collection, and calls into question a snapshot's specificity or individual mark of identity. As a process it acts to join images together as communal pools of tourist snaps, sunsets and babies.

Tagging is one system which rewards users by providing a tool for search and retrieval of photographs, while at the same time making large collections of photographs legible to other software. Tagging is crucial in helping computers to make meaningful selections of images that relate to its content or emotional significance. This stands in contrast to mechanically captured metadata: information which has been added by the camera concerning the technical context of the image (e.g. camera make, exposure). By assigning tags to their images, users are in essence describing their photographs in a way that the computer can understand.



FIGURE 2 Flickr screenshot. Reproduced with permission of Yahoo! Inc. © 2007 by Yahoo! Inc. YAHOO! and the YAHOO! logo are trademarks of Yahoo! Inc. Image credit: Annabel Blair.

The inability of computers to interpret pixel information in a way which would allow automatic cataloguing of photographs forces computer scientists to develop systems in which humans assist computers in “seeing” photographs. One example of such “human–computer” collaboration is a “Google Image Labeler”¹⁴ – an online game in which players score points while labelling elements of photographs presented to them by the software. Despite the fact that the only reward for the human players is the score they accumulate against others, the game is so addictive that it was estimated that it will take Google only several months to catalogue all the images on its servers (von Ahn and Dabbish 319).

As a means for giving machines the ability to interpret an image, metadata provides “a new paradigm to ‘interface reality’” (Manovich, “Metadata”), providing a means for the image to escape its original context. Stripped of their interfaces, photo-sharing sites function as vast databases of indexed photographs which can be remixed and remapped online as *mashups*. Hackers and programmers interested in new ways of navigating and visualizing images now create alternative interfaces which pull together images with maps, texts, ratings, newsfeeds and other content online. In this new context, the currency of the snapshot ceases to lie in its narrative or mnemonic value, in its indexicality, or in its status as a precious object. Instead, these

practices illustrate the way in which the networked image is data, that is: visual information to be analysed and remapped to new contexts via algorithms. With the mashup tools provided by “Yahoo! Pipes” it becomes possible to “read” “The Guardian” as a sequence of images pulled from Flickr. In this example, a news feed will undergo automated content analysis, a sequence of keywords will be generated, which are then used to pull out images via a tag search from Flickr (“Guardian’s Newsblog thru Flickr”).

I am the camera

The mass appeal of the camera phone as a platform for digital photography (Nyíri 1) could be partly explained by the promise to fulfil a desire for unmediated photography; photography that takes place without the intervention of the camera. As Erkki Huhtamo observes, photography was the first mass media that was susceptible to miniaturization; an inventory of nineteenth-century photographic apparatus includes bow tie cameras, bowler hat and walking stick cameras and suitcase and book cameras. In the twentieth century, subminiature cameras found their way into finger rings, pocket watches, mechanical pencils and pens (Huhtamo 1). Beyond addressing the voyeuristic urge to be able to photograph without being noticed, these devices indicate a wish for photography with everyday objects instead of a camera, and prefigure contemporary developments in the field of wearable electronics. This desire is motivated not only by the wish to make the act of photography invisible and mobile but also by the fantasy of blurring the boundaries between the act of living and the act of taking photographs. While examining photoblogging practices, Cohen identifies the yearning for photography without photography during an interview with a photoblogger called Ed, who expresses the wish to “... go around recording, taking pictures by [pause] blinking ...” (891). Cohen goes on to explain that Ed’s desire is to “augment his body with the means to generate photographs as he lives; remove duration from the process of taking a photograph; remove the need to reach out and grasp a separate physical device in order to fix the image” (892).

A camera inside a telephone seems like something that might have appeared in a Victorian catalogue of detective cameras – minute, invisible and much more convenient to operate discretely than a camera concealed in a bowler hat. Eliminating the camera from the practice of photography removed a barrier to spontaneous image capture, allowing anyone with a telephone to participate in the documentation of their immediate environment. The ability to take photographs without becoming a photographer is appealing not only because it makes photography less technological but also because with the absence of the camera the photographer does not become an observer but remains intimately connected to the subject of photography. At the same time, the act of wearing a camera at all times opens up a different relationship to space, turning everything in one’s immediate environment into a potential subject for a snapshot.

Digital image abundance

Whilst the traditional album provides a discrete framework for displaying a limited selection of images, photo-sharing websites exist as spheres of image abundance.

Accordingly, we see our attention shift from the singular photographic image to image sequences: the image “pool”, the “slideshow”, the “photostream”, the image “feed”. At the same time, images from camera phones and digital cameras are not “frozen moments in time” in the way photographs used to be understood. A recent offering from one of the leading camera manufacturers is a 6 mega pixel camera that captures sixty full resolution frames per second (“Casio Developing 300 fps CMOS Based Camera”); one can only wonder what is the meaning of the “decisive moment” in these circumstances and what is the difference between photography and video (beyond the fact that photography now has more frames per second). But even if the technological gadgetry does not seduce us, we are still left with an endless number of images available from photo-sharing websites. This inexhaustible stream makes it difficult to develop an intimate relationship with a single image. The assurance of infinite scopic pleasure online encourages a restless, continual search in which the present image, exciting as it is, is only a cover for the next, potentially more promising and thrilling. Caterina Fake, Flickr’s founder, argues that “the nature of photography now is it’s in motion ... It doesn’t stop time anymore, and maybe that’s a loss. But there’s a kind of beauty to that, too” (Harmon).

The possibility of snapshot photography not as composed of static, physical objects but as something more akin to live transmission is also seen in the emergence of screen-based electronic photo frames. The digital photo frame mimics the traditional photo frame, but replaces the print with a flat screen, displaying a constant stream of digital images within a familiar 8×10 ” proportion. Recent models are marketed for their ability to integrate wirelessly with photo-sharing sites, using RSS to suck down image sequences directly to the mantelpiece. Here, personal photography is imagined as an image “feed”: the image is presented as a shifting sequence, able to dynamically update itself within the frame as new images are posted by the user online.

Return of the anonymous snapshot

Within this flow of images the value of a single photograph is being diminished and replaced by the notion of a stream of data in which both images and their significances are in a state of flux. Disassociated from its origins, identified only by semantic tags and placed in a pool with other images that share similar metadata, the snapshot’s resonance is dependent on the interface which mediates our encounter with it. Corby and Baily (referring to earlier work by Johnson), explain:

While often presented as some form of untainted fact, statistical visualizations, database interfaces, etc., act as both a membrane for access, and a culturally organized surface that formulates perception of underlying data and informational structures. Simply put, there is no natural connection between the data and its representational form, other than the fact it is digital material.

(Corby and Baily 113)

Stripped of its original context, the personal photograph appears to be “authorless” and can function as a highly versatile vessel for ideological narratives from news

reports to fine art installations to programming experiments. The lack of significance represented by the authorless snapshot now has more to do with its belonging to a class of images that share similar metadata than it does to photography's intrinsic polysemy. Put another way, transmitted over networks, the snapshot image signifies an absence of meaning; it is the ambient visual background against which visual narratives are told, distributed and consumed.

The work of Paul Frosh (concerned with the online image banks through which stock advertising photographs are now accessed) is significant in this context because he develops a model of analysis for images which are intentionally made to be unseen. In "Rhetorics of the Overlooked" his analysis is focused on the generic images of "smiling, white middle-class families at the beach, well-groomed businessmen shaking hands, romantic young couples kissing" (175) manufactured by the stock photography industry, which he contrasts with the attention-seeking, highly visible and dramatic advertising images which attract most consumer and critical attention. As Frosh puts it:

... I hope to resurrect the significance of the ordinary, the unremarkable and the overlooked in our understanding of how many (if not most) advertising images communicate, and to replace the isolated object of the consumer-critic's specular interest with an unremarkable but enveloping visual environment.

(Frosh 173)

The distinction Frosh makes between the "isolated object" and the "visual environment" when talking about stock photography has clear implications for the way networked vernacular photography can be understood as ocular "white noise": "Stock photography ... emits the 'background noise' of consumer cultures: vast numbers of similar images which are repeatedly produced and preformed as ordinarily familiar and ordinarily desirable" (191).

Similarly, the networked snapshot is overlooked not simply because it is bland, banal and repetitious but also because it is a non-object. And it is not just in the sense in which photographs always had an insecure presence as an object through their role as signifiers that we tend to *look through* rather than *look at*. Within online networks the individual snapshot is stripped of the fragile aura of the photographic object as it becomes absorbed into a stream of visual data. By giving up the attributes of a photograph as a unique, singular and intentional presence, the networked snapshot is becoming difficult to comprehend with the conceptual tools of visual literacy and photographic theory. The comparative silence of photographic theorists in regard to vernacular photography online could, in part, be due to this.

By taking on the appearance of a snapshot, the networked image is camouflaged as a non-political, non-significant and non-ideological site that does not merit textual analysis. This is perhaps a source of the persistence and power of the networked image. Invisibility, of course, is not without its benefits; not only does it help to evade analysis, criticism and deconstruction that are the fate of the louder, more visible images, but through being unnoticed, vernacular images appear normative, all-encompassing, and inherently benign. In their capacity as readymade, mass produced and slightly silly, the snapshot perpetuates the notion of the world going about its

business in a natural way. The practice of tagging, which results in millions of images identified with “holiday”, “party”, “wedding”, “family” reinforces a sense of identity and unity which overwhelms differences and distinctions. They advance a sense of uniformed, global satisfaction with the way things are without being called to account for their lyrical promotion of “universal human nature” (Barthes, *Mythologies* 101). The self-image of the deprived, the cut-off, the bombed out, does not exist online because the rhetoric of personal photography is anchored in a sense of individual and social identity and the pathos of control over the means of image making. Within the context of the networked snapshot, this means access to the Internet, to electricity and to mobile telephone networks.

The great talent of the online snapshot is to make specific historical conditions appear natural and universal. What Paul Frosh says about the stock image rings true about the vernacular photograph too: “it erases indexical singularity, the uniqueness of the instance, in favor of uniformity and recurrence – the systematic iconic repetition of staged image types” (189). Through the semantic mechanisms of tagging and metadata, the specificity of each online snapshot is obliterated by the way in which a single hyperlinked keyword can group together thousands of disparate images. Can 4,150,058 photographs tagged with “party” be wrong?

Notes

- 1 Members of the public were invited to contribute to the exhibition “How We Are Now: Photographing Britain” at Tate Britain, London, UK, 22 May–2 September 2007, by submitting photographs to a Flickr group, <<http://www.tate.org.uk/britain/exhibitions/howweare/slideshow.shtm>>.
- 2 “We Are All Photographers Now!”, Musée de l’Elysée, Lausanne, Switzerland, 8 February–20 May 2007. <<http://www.allphotographersnow.ch/>>.
- 3 See examples at the Panoramio website <<http://www.panoramio.com>>; Flickr’s image map <<http://www.flickr.com/map>>; and Woophy <<http://www.woophy.com>>.
- 4 See the image in its original context, posted by Alfie Dennen to his blog at Stacey’s request: <<http://moblog.co.uk/view.php?id=77571>>.
- 5 In studies by Van House et al. (“The Uses of Personal Networked Digital Imaging” 1856) and Okabe and Ito it is suggested that the camera phone has enabled the freedom to explore new paradigms of visual storytelling and personal expression.
- 6 Roland Barthes sums up this sentiment in *Camera Lucida*: “I am not a photographer, not even an amateur photographer: too impatient for that: I must see right away what I have produced[.]” (9).
- 7 Only a generation ago the average number of photographs taken by a family during one year is estimated to have been three to four rolls of film (King 9; Chalfen 14).
- 8 At the same time, the marketing of recent camera phones suggests that the mobile phone is now being re-constructed as a mobile multimedia computer. The latest phones from Nokia are described in promotional literature as “multi-media devices” and elsewhere as “multi-media computers” (“Nokia Introduces the Next Story in Video with the Nokia N93”).

- 9 For an evaluation of on-camera sharing practices, see E. Salwen, “Beyond Chimping”, *AfterCapture Magazine* June/July 2007. 4 Aug. 2007. <<http://www.aftercapture.com/print-archives/564/beyond-chimping>>.
- 10 In this respect 2004 perhaps marks the beginning of this shift: it was a year of massive growth for digital cameras, as was the year in which sales of camera phones outstripped sales of digital cameras (which outsold film cameras) (Raymond). In the same year, the term Web 2.0 was coined (O’Reilly), and Google revolutionized online storage with the introduction of 1GB email accounts.
- 11 See Microsoft’s multimedia coffee table covered in *Popular Mechanics*: <<http://www.popularmechanics.com/technology/industry/4217348.html>>.
- 12 Compare Flickr’s “interestingness”, a ranking algorithm for seeking out the “best” images on their servers: <<http://www.flickr.com/explore/interesting/>>.
- 13 Flickr website: <<http://www.flickr.com>> (accessed 16 Oct. 2007, 5:15 p.m.).
- 14 To play Google Image Labeler, visit <<http://images.google.com/imagelabeler/>>.

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