April 2012. Instagram, a free photo sharing app(lication) for mobile phones, was bought by Facebook, the social networking giant, for $1 billion. Instagram is a small Silicon Valley start up with less than two dozen employees and 30 million users. Their elegant app lets you filter your photos, usually making them look like something taken on an old camera from the 1960s, and share them with friends. The typical user owns an iPhone, the most popular camera on earth. The 16 GB device holds around 15,500 photos and is in the pockets and purses of more than 100 million people. When the app was made available to the Android platform a month earlier, over a million were downloaded in 12 hours. Facebook was not buying into the photosharing world. At the time of the purchase over 250 million photos are uploaded daily by Facebook’s 800 million users. But the mobile app for Facebook is clunky; Instagram lets you simply and easily tell visual stories: visuality and mobile presence are the keystones of the online social experience. And Facebook has just bought the memories of those 30 million Instagramers — and thus owns the intellectual property. Each photo is geo-tagged: Facebook can tell what you like, when, with whom, and where — rather useful information for the advertisers that supply its revenue base.

Two months earlier, in January 2012, Eastman Kodak, the 113 year old pioneer of film photography, the company that dominated the photoworld of the twentieth century, inventor of the snapshot and popular photography, filed for bankruptcy.

**Mixed realities: the intertwinement of digital and physical**

Media have gone to ground. Media affect the way people make sense of the world, and with the spread of mobile media this power and function is ever more pertinent. Mobile media and ubiquitous computing create mixed and hybrid realities where the digital realm and physical environment are intertwined. The World Wide Web is everywhere: Omnipresent mobile phones with inbuilt sensor technologies such as location awareness, blue tooth and RFID, are creating a
massive, interconnected real time digital network. Every bit of digital information can be mapped back to the social and cognitive prosthetic device that we know as a phone (Davis 2012). An aspect of the intertwining of the physical and digital is that pervasive, multifunctional and internet capable mobile phones are used for frequent photographic engagements with the everyday. The internet and mobile media devices are translating photography into new media practices where the production and consumption of media content is accessible to large numbers of everyday users in all sorts of everyday situations and locations.

This evolution of media has, of course, been noted in the academy. A 'spatial turn' has been proclaimed in media studies (Jasper Falkheimer and Andre Jansson 2006), and more generally in the human and social sciences (Henrik Jøker Bjerre and Louise Fabian 2010). At the same time there is a reverse orientation towards media and mediation in traditional 'spatial' disciplines such as geography (Paul C. Adams 2010: 37; Tristan Thielmann 2011).

Outline

Our essay engages with phone photography. Studies of personal photography, digital photography and phone camera photography show that phone camera photography is a proliferating version of snapshot photography (Nancy Van House 2011). The camera is used as a means of personal expression and as a vehicle for the visual documentation of everyday situations, things and places. Phone camera photography does not radically change the genre, but the multifunctional and ubiquitous device does result in the making of more images of more mundane things.

This kind of personal photography has to be seen in relation to the ubiquitous handheld computing device which the phone is. The phone camera is not only a phone and a camera, but also an Internet capable portable minicomputer which has the ability to easily transform and disseminate various media formats and modes of communication. Mobile media photography operates in heterogeneous flows of linkage and exchange and making pictures with phone cameras is mediated by the pervasive, networked and multifunctional character of phones.

Digital media are conversational in character, they are time-based and in continual flux. This has implications also for photography. Although the image prevails, photography is also shifted towards process. Due to the incessant flow of images, photographic activity, the process of documentation and the deflective character of looking is highlighted. Mobile media photography marks a shift in orientation from the image towards photography as a mode of engagement. This leads us to explore the processes of experience and documentation which mobile media help constitute. We unfold two aspects of the process of photography: photography as temporal, archaeological engagement, and photography as spatial, geographical engagement. Finally, as a closing perspective we point out that vernacular photography may be read as an intersection between personal means of expression, and corporate financial interest where the images which are the output of personal photography, and which people upload and share, are used as trading
stock. A comment made by a new media blogger pinpoints this in relation to web based services: if it is free, you are the product (Tony Fannin 2012).

Two situations of mobile media photography

Imagine a situation where you are having dinner with some friends. At some point somebody pulls out their phone. Maybe they want to show you an image of a child, a friend, a memorable situation. At some point the phone is used to make an image, an image of this situation. This image then, in the moment, is shared. It is sent by MMS, perhaps, to the other two. They did not make an image because they were looking at an image of the food we are eating, which was made on the other phone and which now is being filtered in a particularly cool application. The image is sent to them so they can also see it, save it if they want, comment on it if they like, discard it if they do not care.

Image 1: An image of a dinner situation, shared instantly via the mobile media device. The second camera is being used to filter an image which has just been made of a glass of beer and some mussels.
Imagine another situation... In this situation I am having coffee on the street. I am visiting Stanford for two months, working at Michael Shanks’ lab. Seated outside Starbucks on California Avenue in Palo Alto, California, I take a picture of my empty cup, create a blog post called ‘cafe latte = paper cup + plastic lid’. The photography is carried out with a used 3GS iPhone, purchased upon arrival in Palo Alto. Information about the location where the image is made and at what time automatically shows up in the latest addition to my new and first wordpress photoblog. I could have been taking a picture of myself and uploading it to Facebook to share with my family and friends at home. I certainly did make a lot of those kinds of images, but this one was an image of rubbish, uploaded to a photoblog titled ‘My American Plasticscape’. Coming from Denmark for a two month stay in the US, a thing which struck me is the trace of plastic created by every meal I have while I am on the go. The blog documents the traces of plastic and other material remains from my eating food on the move.
Personal photography

Photography has been an integral part of popular culture throughout the 20th century, and with phone cameras are emerging new practices of vernacular photography.

The snapshot camera, which was introduced by Kodak in 1883, is an old portable medium that allows users to record personal experiences. The camera makes it possible for anyone to visualize his or her being in the moment, thus pursuing democratized aesthetics. However, these possibilities were not fully explored, as snapshot practices were institutionalized mostly as constituents of family rituals and tourism.

(Dong-Hoo Lee 2010: 266)

Photography is already a common cultural practice, but with mobile phones photography becomes an even more inherent aspect of everyday life (Dong-Hoo Lee 2010; Nancy Van House 2011). The number of mobile phones in use in 2011 was well above 5 billion globally. For many of these phones the camera is an integral function which gives people the possibility of taking pictures in all sorts of situations while going about their everyday activities. Mobile phone cameras give users the option of visually reflecting on and documenting their everyday. There is also the option of publishing and distributing images via messaging, publication on social networking, photo sharing and other web sites.

Pervasive phone cameras expand the genre of vernacular photography to include spontaneous and erratic photography of the everyday; the utterly mundane becomes notable, if not always
memorable (consider the new genres of photographs of ordinary meals, or of completely heterogeneous points of interest). These photographic engagements have not supplanted typical motifs in snapshot photography such as the family or situations of leisure or tourism, but phone cameras are used for taking more pictures of more ordinary things – a tree, the supermarket, the gym, me inside the elevator, and the like (Dong-Hoo Lee 2010).

From research into personal photography Van House reports that people pursue personal photography for four primary and overlapping purposes: for memory, for creating and maintaining relationships, for self representation and self expression (2011: 130). What do people do differently with digital technologies? Van House and colleagues report that people make better images, more images, more varied and more often.

Images can be made any time, any place, without prior planning. Digital cameras and especially camera-phones support spontaneous, opportunistic image-making and experimentation. While people still make traditional kinds of images, what is considered photo-worthy has expanded to include the everyday. (Nancy Van House 2011: 127)

The finding that the mundane, the everyday, increasingly is the object of phone camera photography is also reported in other studies. In a study of the use of cameras in Japanese everyday life Okabe and Ito found that phone cameras lead to more pervasive phototaking of ‘interesting or unusual things in everyday life’. Mobile phone cameras are used for taking photos of incidental occurrences and sightings. Pictures are taken of everyday things, situations, places and people (Fumitoshi Kato et al 2005: 305).

**Networked mobile devices**

The internet and mobile media devices are translating photography into new media practices. Users carry a phone-cum-camera-cum-computer with them all of the time, and one of the central things which the device does is to provide ‘fluid, individualized connectivity’ (Wendy H. K. Chun 2006:1). Mobile devices are central entryways to the internet.

Throughout the past decade, Japanese internet use via mobile phones has been a heavy counterweight to the otherwise perceived orthodoxy of stationary computer use, based upon desktop immersive engagements. Mobile devices in Japanese everyday life show patterns of use which are now also increasingly common in the US and Europe, namely internet access as ubiquity, portability and lightweight engagement (Mizuko Ito 2005: 6). Japanese mobile internet use is the highest in the world with more than 85 per cent of adults having a mobile phone, and 97 per cent of these are phones with access to minimum 3G internet. As of February 2012 46 per cent of American adults are smart phone owners, the same figure applies for the UK, which is the EU country with the highest rate of smart phones, seconded by Spain’s 45 per cent (Aaron Smith 2012). A tangible example of the growing importance of mobile digital culture also in the US and
Europe is that in the spring of 2012 for the first time it was reported that it is now more common for Facebook users to go online via their mobile devices than via stationary computers. The growing orientation towards mobile handheld devices as central entryways to the internet is also causing a shift in investments in digital services towards mobile based services (New York Times April 11, 2012).

So cameras are no longer cameras. They are hybrid, morphing, multifunctional devices. And they are not just devices. They are internet capable assemblages. At the heart of mobile media lies the interoperability of global networks, physical infrastructures of cabling, production and management facilities, server farms and satellites, and the standards upon which interoperability is established — agreements over data and transmission formats, regulation of patents, intellectual property, access to bandwidth. The mobile media device is, relationally, a sociotechnical assemblage. (Nancy Van House 2011). And more and more the visual is offered as a key component - pictures, moving and still, increasingly accompany every function. The camera has become a protean and invasive network. Its images are pervasive, viral, sticking to everything, propagating everywhere.

Photography has broken free from the networks of old snapshot photography (one of the features of the everyday in the twentieth century) where ‘easy’ picture taking depended upon infrastructures of manufacture and supply (cameras, film, chemicals), processing, distribution, standards of chemistry and format (35mm, Kodachrome, APS etc). Much of the value of photography now lies in instantaneous linkage – and the more heterogeneous connections the better.

*The photographic image is no longer a printed image, it is much more likely to be seen on a screen than on paper. Images can be easily shared and disseminated via the web, which has superseded the traditional modes of presentation and publication. They can be tagged and commented on and archived for prosperity. Photography has never been so instantaneous or so disposable, one click to capture and another to delete.*

(Richard Vickers 2006:9)

Photography carried out with mobile devices is one of various interrelated forms of multimedia communication. The device has the capability to interact with various modes of communication such as images, text and sound (Tomoyuki Okada 2005: 47). At the heart of the digital is fungibility: the ability to transform and morph from one form into another while retaining the fidelity of an original. Fungibility makes the original multiple. The choreography of previously diverse and discrete materials (image, text, sound, video) through the digital realm inevitably breaks down the structural properties of what have been commonly referred to as ‘media’. The term medium has usually referred to an institutional agency of communication, such as TV, or the materials and methods used in the production of an artwork, such as oil on canvas. Media have typically been seen as formalized methods for conveying specific kinds of information to specific participants, involving issues of control and negotiation, for example in relation to institutional control of technologies. This is changing (Henry Jenkins 2006).
Media as modes of engagement

Fungibility, the fluid manner in which visual material, for example, is turned into animation, photographic print, video, online album, blog and so on, means that material form is less and less important in defining the ‘medium’ of the product generated. Instead, and in celebration of Roland Barthes notion of the ‘death of the author’, the way a reader or viewer is engaged by those agencies which distribute cultural works, and the way authors/makers engage their audience in specific ways, occasions and sites is an increasingly significant factor in any attempt to mark the difference between given works. Hence we propose that the notion of mode of engagement offers a more accurate and useful way to categorize the format and placement of cultural works in the public or private arena. Crucially, these formats are not being driven so much by subject matter or discipline (one concern of academic discourse), nor the material or form (one concern of arts’ discourse), but by an interface or hybridization of distributing institutions, individuals, families and social or professional groupings, as we have illustrated with our two anecdotal examples. Media are now so evidently about social/cultural groups making themselves via things/interactions/information transfers. As the revenue problems of the traditional media industries like journalism and Hollywood show, media are less now material/technological forms or forms of discourse (TV, publishing, movies, the music industry). Media are not ‘media’ per se — coming between, mediating units that are given, a posteriori, primacy — but are intimate aspects of the fabrication of the social and cultural.

Consider the many modes of engagement with a digital image: projected on a large screen in a lecture room and viewed together with a large audience of enthusiasts for its subject matter, printed in a photo album and shared in the family kitchen, viewed absent-mindedly from a car on a billboard alongside a freeway, scrutinised on the high resolution screen of a mobile phone held in the palm of one’s hand as one walks a pet dog. An oil painting viewed upon a wall may have been copied as an engraving or a photograph and subject to different modes of engagement, for example in a book. What is different now is the ease of translation from one type of engagement to another. And the exact same (original) digital image file is shared among all the experiences that are otherwise very different in their location, circumstances, and in their rhetoric.

Mobile media are part of this new landscape of digital media production, dissemination, consumption and discard. Mobile phones form part of a new internet and network based, decentralised media reality, where the internet is both a central repository for known cultural forms (Vincent Miller 2010:14) and a constituent feature in new forms. One central aspect of this new media reality is that the production of media content (images, stories and such) is dispersed. Centralised media production and transmission is being supplemented with user driven media.
production and distribution, where the role of the user is to choose, produce and alter content as well as to consume it (Jens F. Jensen 2000:49).

A pertinent and major example here is that of journalism. From the point of view of news corporations, reporting is in crisis because people with mobile devices at the location of a news event can share that event, offering access, presence, a sense of authenticity, long before a professional reporter gets to the scene (consider the rationale behind CNN’s new distributed news service ‘Open Stories’ - http://ireport.cnn.com/open-stories.jspa; consider the range of debate evidenced by a simple Google search on "journalism in crisis"). The ongoing manifestation of a news event has come to take precedence over a scripted and polished report, as in the CNN initiative just cited. Twitter for example is often the quickest place to find first-hand news directly from the event as it happens. The result is that media companies cannot maintain journalism in the way they once did and have lost their monopoly on broadcasting stories about the everyday. Instead savvy newspapers and news agencies have turned to offering features analysis and the curation of news — organizing, packaging and presenting aggregates or assemblages of on-going documentation. Again, process, mediated experience of newsworthy event, real-time accounts of being there and witnessing, are taking precedence over media product, the news story. A central feature of digital media is this interactive, distributed and dynamic character.

**Processes of photography**

Digital media are processual, time-based media; they and their users are in continual flux. This implies that they are manifestations of flows of experience and conversation. The way photography is carried out as new media practice invites us to shift our understanding of photography from the image, the cleaned up reality of the mise-en-scène, the picture-perfect moment arrested for memory (Michael Shanks 1997), and consider photography as unfolding in the present, as a continuous process of looking. This takes us from the object, the document, towards event and processes of documentation, and it takes us from the image to the voyaging and deflective character of looking.

*In general, the bearer of the look, in traditional philosophy, does not move: it sits down to look, through a window at the blossoming tree: a statue posed on affirmations and theses. But we see things rarely in a condition of arrest, our ecological niche incorporates innumerable movements....*  
*The earth turns, our global position of vigil lost its stability long ago; even the sun, the giver of light, is in motion, en route to some other part of the universe.*  

(Michel Serres 1985/2008: 304)

According to Serres, vision is disparate, deflective in character. It is on the move, occurring almost in a haphazardly manner, again and again, as flickers of intensity, sensing, seeing, moving to and fro, displacing. Vision is intimately related to the changeable (Michel Serres 1985/2008; Steven Connor 1999), it is dialogical, in conversational flux, in oscillation between registering and moving...
We may connect this insight to pervasive mobile media photography: while each image is an act of marking out something as notable, what is most striking is not so much the singular image, but rather the stream of images, the continuous process of documentation.

Photography as temporal, archaeological engagement

Photography as process of documentation has relations to archaeology. In excavating a ruined site, the archaeologist does not discover the past, but mediates between the past and the present. The archaeologist establishes connections with what remains of what was, works on those remains, conserving, identifying, recording, displacing them into an archive or collection, transforming them into an account, a narrative, a museum exhibition. In searching through the ruins and everyday garbage of the past, anything, literally anything might be of interest, significant as information, as evidence. This is a forensic attitude and relates to proof in a manner which is parallel to criminal investigation – at a scene of crime anything might be relevant (Shanks 2012). Anything could matter; the key to a case may be an otherwise overlooked fragment or trace. The archaeologist scans a site looking to collect things that might matter. Everyday mundanity is charged with potential.

The homology between archaeology and photography concerns time, duration, materiality, memory and displacement (Laurent Olivier 2011; Michael Shanks 2012). The ruin, the archaeological find, the photographic image bears testimony to the past in the present. Materially, the past does not exist as a sequence of events, and never did. Archaeologists never encounter time as flow or sequence. Ontologically the past is all around us, mingling, merging, decaying, disappearing in the present. The past does not exist as a sequence in any consistent or coherent sense or indeed as past substance, but as intermingling remains that persist through time by virtue of qualities of durability. Every object, every site, every place contains vestiges of its history, because the past, in its materiality, hangs on. Not everything does: some things are more durable than others, or can be made more durable. Duration is one aspect of this archaeological temporality. The other is actuality: the conjunction of past/present at the site of encounter and recovery of the (remains of) the past, in working on the past-in-the-present, just as memory is not a coherent account of the past, but a process of discrete iterative acts of recollection, present moments prompting connections with something that remains.

So photography is part of a particular nexus of modern and postmodern engagements that make up memory practices, archaeology included. These articulations of past and present through moments of encounter and capture create an archive of lapidary material forms (even when they are digitally bitmapped silicon). Photos are taken and displaced into collection. However mundane the image is, it bears testimony to a past, a temporally located moment of capture. With digital photography the web has become a vast archaeological archive that begs acts of reconnection, in
Photography as spatial, geographical engagement

Photography is a spatial engagement: the ‘camera’ is a room. We can note its origin in antiquity – a small aperture in a temple wall projected an image of the outside world, upside down, onto a wall opposite: this is the camera obscura. Renaissance optics added a lens to the window or aperture on the world and shrunk the room to a wooden box. Modern photography added a means of fixing the projected image, but the architectural arrangement remains the core of photography.

The miniature 35mm camera of the twentieth century and fast image capture through improved film emulsions freed up capture to take on more of a nervous scanning character than had been possible with larger format tripod and studio based arrangements: the camera went out into the world. And this journey continues with the new dimensions of geo-tagged images, making it an option to view images sorted by location, instead of in the conventional camera roll mode of temporal organisation. There are variations in the relationships of viewer, window, viewed subject, room but the spatial, architectural and geographical dimensions of photography remain central.

The act of photography is a spatial practice - and photography is a way of experiencing physical environment, place and location. With reference to spatial theory across philosophy, anthropology and geography, Sarah Pink argues that the making, collecting and sharing of photographs may be seen as a way of perceiving and experiencing place (2011:93).

If we can, following Ingold (2000), take the idea as a starting point that we are moving perceiving beings, then the experience of place can be seen as the experience of moving through and participating in an environment. The taking, manipulation and viewing of amateur photographs is part of this perceptual and experiential activity.

(Sarah Pink 2011: 93)

Viewed in this way, photography is an experiential and perceptual activity. Making images of rubbish and instantaneously publishing them in a digital depository, as in 'My American Plasticscape', is a way of perceiving, experiencing and reflecting on an everyday situation in a specific kind of physical, social and cultural environment. The making and immediate publishing of images is a way of experiencing and enacting a place – although place here is not characterised by the specifics of locality, but rather is about the remains of mobility. Making and publishing images is a hybrid spatial and experiential encounter in which the social and cultural is both fabricated and reflected on.
Documentation, territory, commodity and the power of the vernacular

Networked mobile media photography may be seen as ongoing micro processes of documentation and territorialisation. Everything, every moment, every location is registered. Temporal registration goes on as photography is used to document even mundane moments, situations, objects, meals, traces of meals as memorable in one way or other. This propensity to document becomes an aspect of experiencing. The same applies for location, every location is worth registration, and with georeferenced images and web based services like Google Earth, it seems that not only is photographic documentation carried out as incessant flickers in every moment, but also – at least in principle — extended to every crook or nanny of the earth. This may be seen as the ultimate Enlightenment project: the categorization of everything, both spatially and temporally, is within reach. We now truly can say that we can see everything, we know everything; information is ubiquitous.

Vernacular expression and financial interest

There is an interesting intersection between vernacular creativity and the political economical aspects of this media-domesticated reality. On the one hand the digital is precipitating shifts in the balance of access to authorship and dissemination or publication. Howard Rheingold notes the rise of smart mobs (2002), Clay Shirky (2009, 2011) how crowd sourcing and collaborative authoring unleash the extraordinary creative potential of cognitive surplus, while lawyer Lawrence Lessig (2002, 2005) has pioneered new instruments for managing copyright and intellectual property rights so as to avoid their monopolization by wealthy corporations and institutions. At the core of these shifts is the quotidian – the creative constitution of the structures of contemporary society and culture in ordinary everyday practice. The concept of the vernacular captures well what is at stake. The vernacular, etymologically, is the world of the verna, the household slave. The term immediately, though implicitly, refers us to agency, dominance and subordinance in access to means of speaking, authoring, building, sharing. Public and private are (again) matters of dispute as web based media offer stages for self expression while the information generated achieves astronomical capital value, as in the example of Instagram, with which we began this paper.

Information generated in vernacular digital engagements is transferrable between parties. In other words: it can be sold. A lot of social media are free to the user, and this raises the question of how these media firms will make money. Their central asset is the personal data of millions and millions of users (Fannin 2012). And personal data is not just a record of sites visited through clicks and searches, but also location referenced photo, video and audio recordings. The millions of images which are created in mobile media practices are the documented memories, localities, likes and preoccupations of millions of people. Mobile media devices know where they are to within a few meters; locational information is a key component of many of their functions, whether that simply
is to offer maps of immediate and distant vicinity or a review of the restaurant across the road, or notification that a friend is around the corner. Each image is now typically georeferenced. Every bit of digital information on the world wide web can be mapped back to the user: to who you are, who your friends and acquaintances are, where you are, where you’ve been, where you plan to go, what you are interested in, who and what is around you and what you attend to, as you are there. This raises central and complex privacy issues: who has the right to this kind of information and what may it be used for? (Marc Davis 2012).

Vernacular photography thus constitutes an intersection between personal experience — where mobile media are used, as Nancy Van House and colleagues point out, for memory, for creating and maintaining relationships, for self representation and self expression (2011:127) — and corporate financial interest where the images which are the output of personal photography may be used as trading stock. All of this is embedded in the assemblage that is the Instagram snapshot of an evening’s restaurant dinner that looks as if it were taken on outdated film stock by a 60s plastic toy camera posted on a Facebook account for all to see in celebration of personal style, purchasing power and zipcode. Or in the georeferenced instantly uploaded blog post which bears witness to a plastic cup piled on top of a Palo Alto garbage can that is already filled to nausea.
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