Everyday imagery

Users' reflections on smartphone cameras and communication

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Abstract

User-based research into the lived experiences associated with smartphone camera practices – in particular, the taking, storing, curating, and sharing of personal imagery in the digital media sphere – remains scarce, especially in contrast to its increasing ubiquity. Accordingly, this article's detailed analysis of open-ended questionnaires from 'millennial' smartphone users elucidates the varied experiential, compositional, and technological aspects associated with smartphone imagery in everyday life. It argues that the associated changes do more than just update previous technologies but rather open space up for emergent forms of visual communication. Specifically, our close interpretive reading indicates four key factors underlying the moments privileged when using smartphone cameras, namely: they deviate from the mundane, are related to 'positive' emotions, evince strong social bonds, and encompass a future-oriented perspective. Relatedly, in terms of photographic composition, visual content tends to circulate around: the social presence of others, boundedness of event, perceived aesthetic value, and intended shareability. Our findings question certain formulations about the gradual disappearance of media from personal consciousness in a digital age. If ceaselessness is a defining characteristic of the current era, our analysis reveals that the use of smartphone cameras is indicative of people affectively and self-consciously deploying the technology to try to arrest the ephemerality of daily life, however fleetingly. This article thus pinpoints the theoretical and methodological value of research approaches moving beyond a narrow focus on usage patterns to uncover the spatiotemporal specificities shaping (and being shaped by) smartphone imagery and its communicative resonances.

Keywords

Introduction

The creation, processing, curation and sharing of personal imagery in the digital media sphere is one of the manifest transformations of everyday communication practices over the past decade, with the rise of smartphones further accelerating the pace of change. The sheer volume of personal photography has rapidly proliferated; it is estimated that over 1 trillion photos were taken worldwide in 2015, 75% of which were captured via camera phones and smartphones (Heyman, 2015), with the latter technology rapidly replacing its precursor (eMarketer, 2014). Ostensibly normalized aspects of smartphones – to check the time, make roving phone calls, or send text messages – may seem relatively mundane, their remediation being so prosaic that they tend to mimic previous mobile technologies rather than dramatically refashion them (see Bolter and Grusin, 2000). At the same time, however, where the in-built camera is concerned, transitional features are more pronounced. Evolving enhancements, such as those pertaining to the quality of camera itself, the availability of accompanying 'filters', use of apps that facilitate the sharing of imagery, and capabilities for constant internet connectivity, shape incipient dynamics within emergent visual ecologies. These shifts are significant, yet our understanding of users' perspectives of smartphones' personal image-making and

photography-sharing capabilities is sparse. As a form of personal media impacting on social norms, behaviours and the broader media environment, there is little doubt that smartphones are 'change mechanisms' (Meyrowitz, 1986). However, scholarly insights are only beginning to uncover how these dynamics shape visual communication in everyday life.

Earlier studies of mobile camera practices pointed to various ways that increasing use corresponded with both social affordances and constraints (e.g. Goggin, 2006, Gye, 2007; Hjorth, 2007; Ito et al., 2010; Ling, 2004), presenting findings that clarified certain instabilities associated with their integration, such as issues surrounding self-presentation (see Ito, Okabe and Matsuda, 2006; Lee, 2009; Villi 2010). Camera phones, consistent with most 'new' technologies, tended to be experienced as most disruptive at the outset, before gradually becoming habituated as expedient devices in daily life. This article aims to enrich these earlier insights by investigating users' perspectives of smartphone cameras, building on recent efforts to elaborate conceptual frameworks that address smartphones' interactive capacities for visual communication (see Frith, 2015; Hand, 2014; Hjorth and Gu, 2012; Pink and Hjorth, 2013). We designed, administered and analysed findings from a qualitative, open-ended questionnaire with 'millennial' smartphone users in three countries (Canada, the Netherlands, and the UK), which are presented in terms of: experiential and social aspects, compositional content of photos, and technological affordances associated with this imagery.

Our close interpretive reading of this data advances the scholarly literature on smartphone imagery by helping clarify the impetus behind taking such photographs, illustrating the interplay between content preferences, coherence of event, and its communicative potentiality. By considering such photography in terms of its experiential aspects in everyday life, this article highlights the spatiotemporal hybridity and materiality underlying much personal imagery. In so doing, it invites us to reappraise broad formulations that assert the practices associated with new and evolving media technologies gradually normalize, almost to the point of disappearance (for an overview of this debate see: Deuze, 2011; Kubitschko and Knapp, 2012). Perhaps smartphones will eventually become like lightbulbs (McLuhan, 1964) or keys (Latour, 1990), 'media' that are remarkable only in their absence or dysfunction. However, our study reveals that the use of smartphone cameras is indicative of people affectively and self-consciously deploying the technology to try to arrest the ephemerality of daily life, however fleetingly.

Mobile Technologies and Everyday Life

Recent years have seen increasing scholarly attention devoted to examining the mobile within media and communication studies (Jones et al., 2013), particularly where young people are concerned (see Lillie, 2011; Rantavuo, 2008; Sarvas and Frohlich, 2011; Villi, 2010). The literature on mobiles extends beyond any one disciplinary purview, of course, and it is valuable to consider these efforts as part of a central analytic shift brought about from the rise of a broader 'mobilities paradigm' in the humanities and social sciences over the past 10-15 years. Looking to counter the 'sedantarist' approach of previous social theory (Sheller and Urry, 2006: 208), the 'mobility turn' advocates for theory that is non-static, situating the gradual integration of new technologies in a processural framework that emphasizes multiple, and at times conflicting, contexts. While too broad a literature to give fair treatment within this article, three interrelated aspects of the mobility turn – an emphasis on movement, on flow, and on the everyday – dovetail with

attempts to theorize the mobile phone. These are worth considering with respect to laying a foundation to conceptualize the communicative dynamics of smartphone imagery.

While some treat 'everyday life' as basically a synonym for a daily routine that can then be operationalized to find out people's 'actual use' of technologies (cf. Do et al., 2011; Shepard et al., 2011), sociocultural conceptualizations tend to treat it as a value-laden process, what we might call 'everydayness' (Bakardjieva, 2005; Calder-Dawe and Gavey, 2016; Highmore, 2011). Such an approach is found in research examining the rapid socialization of mobile phones, often privileging its status within the time-space of everyday life to attend to users' intimate imbrication with technology. Goggin (2006: 2) for instance, noted that a 'bewildering and proliferating' array of activities began to revolve around mobiles, impacting aspects of identity-construction, community-formation, and belonging to more quotidian aspects of life, such as keeping in touch, working, parenting, flirting, bullying, watching videos, or maintaining finances (see also Barkhuus and Polichar, 2011; Baym, 2010; Bian and Leung, 2015; Dimmick et al., 2011; Horst and Miller, 2006; Ling, 2004; Moores, 2012; Pearson and Hussain, 2015). Pink and Leder Mackley (2013: 683) offer a useful summation of three interrelated 'analytical prisms' to understand the mobile in everyday life, namely: 'environment/place; movement/practice; [and] perception/sensory embodied experience' (see also Campbell, 2013). While a rich and valuable literature, there is nevertheless a lesser focus within it that specifically attends to users' reflections vis-à-vis personal photography and its communicative implications.

Initial research into the precursor to smartphone cameras, the camera phone, typically focused on the affordances of technology rather than its everyday integration. Findings tended to chart dominant practices, such as enabling distributed co-presence from diverse locations and sharing unexpected news (Kindberg et al., 2005; Koskinen et al., 2002, van House et al., 2005). Efforts to conceptualize these practices gradually developed as scholars accentuated the 3 s's – saving, storing, and sharing – emphasizing that the majority of images were affective rather than functional (Ito, Okabe and Matsuda, 2006). As the image quality of camera phones improved, this coincided with the emergence of far faster, more powerful, and better 'interconnected' technology, paralleling a shift away from the technological focus of earlier work on image content and networks of sharing to questions centred on context and experience (Gye, 2007; Hjorth, 2007; Lee 2009). Gye (2007: 285) argued that 'the transitory nature of camera phone images means that self-expression [using personal imagery] is shifting away from "this is what I saw then" to "this is what I see now",' while Lee (2009) found camera phone use changed the way individuals were visually attuned to the world and ephemera around them. Ito et al. (2010: 255) similarly noted that as photos became more readily available in social contexts, 'young people take photographs with opportunities for near-term social sharing in mind', employing strategies for them to be smoothly integrated in the stream of everyday conversation.

In this respect, shifts in research parallel not only the development of mobile technology but are intertwined with changing photographic practices. The history of personal media is one where new technologies do more than simply replace the old – they open space up for emergent forms of communication. In terms of visual communication, whereas preservation and memory were the guiding impulses associated with personal photography in the analogue era, the rise of digital cameras (including on mobile devices) foregrounded a shift to communicative intent (Hand, 2012; van Dijck, 2008). Such

change was more gradual than often assumed, as earlier studies attest; although people increasingly took more photographs with digital technologies, they had to transfer these to computer, before uploading them to sharing sites such as Flickr or Picasa, which were not always easily adopted, given pre-existing media literacies (Burgess, 2006). Such platforms facilitated sharing more easily than within the analogue era, but only a small subset of users were what Mørk Petersen (2009: 28) called 'everyday photographers … People documenting their everyday life. Usual pictures are food, drinks, locations and their movement. There is a special fondness for pictures showing odd and unexpected things, such as a funny sign or a car parked in a funny way.' Others were typically professional photographers, 'photo-enthusiasts', or those using these platforms for digital storage. A critical shift began around 2010, corresponding to the rise and dramatic investment in developing user-friendly smartphone apps dedicated to mobile image-sharing, such as Instagram, Hipstamatic, and PicPlz (Miller, 2010). Taking, saving, and sharing everyday life via photographs could increasingly happen almost instantaneously and with relative ease, vastly expanding this as a cultural practice.

Coinciding with these developments, emerging studies of smartphone camera use – which advanced the camera phone in dramatic ways by augmenting it with apps as well as internet connectivity – emphasize this dynamic tendency. Not only must we consider similar questions to those outlined above, such scholarship points to the added complexity of smartphone imagery when it comes to memory (Hand, 2014; Schwarz, 2014), our sense of space and place (Farman, 2013; Frith, 2015), and the prevailing aesthetics and genres of personal photography (Keep, 2014). Pink and Hjorth (2013), aptly contextualize these concerns by advocating for an 'emplaced' conceptualization of smartphone camera use, namely one that considers it not just as a set of captured and shared moments but as communicative visualities consistent with the sensorial experience of moving through life. Such theorizing has gradually begun to formalize our understandings of smartphones' sociocultural significance, reflecting a broader consensus in media studies that people and their personal media devices are analytical inseparable within (Western) digital environments, which are increasingly – if not fully – mediated. In this respect, personal imagery has proven to be a heuristically-advantageous site for helping make sense of the varied, impromptu and uneven ways of documenting, witnessing, constructing, and communicating the social world. However, such studies are in their relative infancy and academic rigour demands theory-building that is subject to theory-testing. In this sense, while studies of previous camera phone technology and emerging research around smartphones are persuasive, it is at our peril to assume the project is complete.

Research Design: Interpreting Users' Reflections

Our commitment to advancing current discussions around smartphone imagery and communication demanded a research design attuned these specificities. The challenge was to create an instrument flexible enough to generate innovative, participant-driven premises, while maintaining sufficient systematization to uncover meaningful social norms and common sentiments. In this sense, approaches used in large-scale (mostly closed-ended) survey research, designed to measure etic rationales for use, were not fit for purpose. Similarly, our research aim was distinctly different than those which harness the availability of big data in an attempt to measure the 'real use' of smartphone cameras in a quantifiable sense, such as frequency, timing, and location of photographs (e.g. Hochman and Manovitch, 2013). We accordingly decided upon a qualitative approach, before determining desired population and data collection.

Participants were given space to articulate their own perspectives via a questionnaire comprised of 10 open-ended questions, formulated to ascertain detailed opinions while teasing out otherwise tacit impressions, assumptions, and expectations. Our interest centred not only on the potentialities of smartphone imagery within the lived contingencies of the ordinary (everyday life contexts) but its potential re-appropriation into projections of the extraordinary (possible use in 'crisis' situations). The progression of questions reflected this, with broad questions gradually becoming more probing. To illustrate, the first question asked: 'What sorts of instances and events make you typically want to take photographs and/or videos with your mobile/smartphone? What makes you think "I really want to capture this"?' while a later one queried: 'What sort of photos and/or videos do your friends take with their phones and what do they do with them? What do you think motivates them to use their phones in this way?'[1]

In terms of population, we limited ourselves to the demographic cohort of individuals born between 1980 and 1999. This group, often referred to as 'digital natives' or 'millennials', are typically assumed to 'think and process information fundamentally differently from their predecessors' (Prensky, 2001: 2). Their formative development is inextricably linked to the rise of information technologies and daily immersion in digital environments, a contention supported by the literature, which finds younger age cohorts tend to be early adopters and typically exhibit strong emotional attachments to technologies, not least with respect to creative innovations (Poindexter, 2012). 'We hit our peak confidence and understanding of digital communications and technology when we are in our mid-teens; this drops gradually up to our late 50s and then falls rapidly from 60 and beyond,' Ofcom's (2014) *Communications Market Report* notes for the UK. 'Almost nine in ten (88%) of 16-24s own a smartphone, compared to 14% among those aged 65+' (see also Pew Research, 2014). While our choice reflects a dominant categorization in contemporary media research, allowing useful comparison with other studies, we do not adopt such labels unreservedly. This delimitation helps sensitize us to characteristics shared by this cohort: using personal media devices in public areas to refashion private living, familiarity with multitasking between work/school responsibilities and social interaction using information technologies, documenting and sharing personal life, often via digital imagery, etcetera. However, our design and subsequent interpretations eschew (conservative) assumptions that often underlie discussions of 'millennials', such as: a lack of civic engagement, a trivialization of the cultural significance of their digital communication, and a generational devaluation of social norms, ethics, and empathy associated with 'growing up digital' (for broader review see Shah and Abraham, 2009).

Similar to age-based interpretive challenges, researchers of everyday contexts also tend to rely on their own experiences, which frequently take on a national flavour. In order to problematize this, we introduced a cross-country dimension to encourage further analytical reflection. In this respect, rather than emphasizing either end of the epistemological spectrum for comparative research models – between nation as object of study (attempting to reveal the impact of media systems or national culture) or nation as component of transnational systems (investigating the spread of globalized forces) – our design took a mid-way approach, using nation as an additional context of study to critically test hypotheses around these practices (Livingstone, 2003). Taking these pragmatic factors into consideration (pre-existent networks, feasibility of analysis) our data collection was operationalized in three countries: Canada, the Netherlands, and United Kingdom. We selected countries that would be moderately comparable in terms

of smartphone penetration rate (Google, 2013)[2] and relative levels of social affordances and constraints consistent with our target participants' likely forms of engagement (Frith, 2015; Frosh, 2015; Hjorth and Hendry 2015). Employing a non-representative, purposeful-sampling technique that combined aspects of snowball and convenience sampling (Marshall, 1996), we recruited participants ranging from 15-29 years, who were not known by the researchers, were not students from our university programs, and were not paid for participating. After making adjustments for clarity following a testing phase,[3] responses were collected from approximately 90 participants as detailed in Table 1.

Country	# of respondents	Gender distribution	Age distribution and mean
Canada	30	Female – 18; Male – 12	15 – 24; 18.0 years
Netherlands	31	Female – 18; Male – 12	16 – 29; 23.5 years
United Kingdom	32	Female – 17; Male – 15	19 – 29; 23.5 years
Total	93	Female – 54; Male – 39	16 – 29; 21.6 years

Table 1. Study on 'Mobile Images'.
NB. While each respondent noted gender, one Dutch and three British respondents did not fill in their age. Two questionnaires were excluded from the dataset as participants did not fit the age criteria for 'millennials'. Questionnaires were administered in July and August 2013.

Response length varied from short declarative sentences to longer paragraphs with detailed examples. These were analysed systematically (see Kohlbacher, 2006), with the first close reading resulting in empirical sorting documents for each county, noting age, gender, and recurrent themes. While we recognized possible distinctions based on national factors at this stage (i.e. WhatsApp seemed more frequently mentioned by Dutch respondents, Canadian and UK users tended to express more concerns over privacy, amongst others), these differences were, surprisingly to us, not substantial enough to assert robust country-based divergences. Similarly, gender did not appear as a salient factor governing our participants' declared engagement with smartphone imagery, while age only emerged as a factor with respect to the compositional content of photos (see discussion below). Accordingly, we undertook a second close reading that compared the first-phase documents against the original responses again, enabling us to generate a new list of consistently prevalent premises that formed the basis for three interweaving but, we would argue, analytically differentiable trajectories. Accordingly, the findings are presented along these dimensions.

Conceptualizing Smartphone Imagery and Visual Communication

Experiential and Social Aspects

While many studies of media technologies start from statistical abstraction – looking at frequency and other population-wide patterns – the experiential negotiation of specific devices seems far more closely tied to their relative integration within the ceaselessness of everyday life (Lüders, 2008). This is not to deny the value of recordable or self-declared measurements of usage rates; rather, it is to suggest that operationalizing questions about how smartphone camera use relates to sociocultural questions will necessarily complicate frameworks that presuppose the most telling aspects are also the most measurable. In this vein, we relate the experiential negotiation of the

communicative norms and cultural values surrounding smartphone camera use to the *'feel' of using smartphone cameras and the related belonging associations of the technology*. The feelings that prompt, sustain or discourage smartphone camera use – and the concomitant sociocultural strategies deployed around what to do with imagery – reveal that the everydayness of smartphone camera experiences highlighted by our participants were anything but neutral.

Their responses indicate that the (tacit) rules underwriting 'appropriate' smartphone camera practices are open to negotiation, with governing norms still consolidating. The thresholds are not yet clear, which makes them all the more challenging to discern as some respondents self-reflexively recognized. Throughout the data, across all three countries, there was a palpable sense that shared values or protocols were only gradually emerging. As one respondent noted, 'The new craze (in my opinion) is taking pictures of every semi-significant part of their day and posting them to things like Twitter, Instagram and Facebook, even if nobody really has any interest' [CAN, M, 18].[4] It was quite a common sentiment for respondents to feel others (including people identified as close friends) 'overshare' imagery, which seemed irksome. Moreover, such behaviours were often viewed derisively irrespective of national context. This was best illustrated by some of the Dutch responses that noted, in rather forthright terms, that oversharing demonstrated either narcissism or a lack of self-confidence:

> Some friends take a lot of pictures – from pretty much everything. … I don't know their motivation, maybe they sort of want to show off with their lives [NL, F, 21].
> Some of my friends are, or were, insecure so they would post many pictures of themselves to get 'likes' and feel better [NL, F, 18]

Intriguingly, while oversharing was viewed as a problematic behaviour in others, almost no respondents said this of themselves. Much like texting or checking email, an interesting question to explore vis-à-vis smartphones going forth would be how people negotiate these socially-acceptable levels of usage. While many of our respondents acknowledged they may 'overtake' in terms of frequency of photography, there was little indication they felt they overshare. However, there was a sense that the increase in their personal photography might impact its value. As one respondent conceded, because smartphones make it 'so easy to take pictures everybody is always taking them,' even to the point 'that photos aren't as valuable to me as they once were' [NL, F, 24].

Accordingly, while too much sharing was associated, sensually, with active feelings of irritation, too much photographing was equated, paradoxically, with decreasing or deadening many experiences, such as enjoyment of social contexts and personal involvement in events. Many argued that when they or others took an excessive number of pictures on their smartphones, it meant not experiencing an event, moment, or activity 'purely'. One participant noted, 'The disadvantage is I almost feel forced to capture everything' [NL, F, 18], while another stated: 'when you're filming something, you're not really experiencing it yourself. You're only looking at your phone!' [NL, M, 19]. Further anxieties were expressed regarding various perceived reputational risks, particularly where storage was concerned. One advised: 'If you have some photos which you don't want others to see, the mobile phone is not the right device to save them' [UK, F, age not given], which resonated with the experience of other respondents: 'The biggest disadvantage is that sometimes people look through your photos and some of my photos are personal' [CAN, F, 16]. Any 'loss of privacy' would be 'embarrassing', another added, when 'all your secrets are out' [CAN, M, 18]. A related aspect of reputational risk was underscored by fears about those deliberately intent on using smartphones to take

'inappropriate' images without consent. 'A random person could take a photo of you and just send it to everyone,' a respondent stated. 'I don't really like that idea' [NL, M, 16]. Several references to 'unwanted photos' being taken signalled this disquiet, when tacit, normative rules of social etiquette were felt to have been violated. These views were acutely felt by some, while others disclosed a resigned or blasé reaction. In this respect, a distinguishing aspect was the extent to which the 'private' was almost embodied in the phone for some, a potential concern exemplified by one respondent as: 'probably when you lost your phone and your private life will be leaked' [UK, F, 24].

Equally illuminating were our respondents' positive comments about the social aspects of smartphone imagery. While 'oversharing' may have been perceived as an issue, sharing in general tended to be described as an affirmative experience. As one noted, 'sometimes it's a "waterfall"-effect: someone sends a picture of what he's doing and in response friends (and me) send pictures back of what we're doing' [NL, M, 24]. Related comments repeatedly highlighted the availability of appropriate apps to share the ensuing imagery. 'Ease of use, always have phone, syncs with cloud, can automatically upload online' [UK, M, 22] was one summative response, while another simply stated: 'Easy to catch a moment and share it' [CAN, F, 16]. Largely speaking, there was an unambiguously optimistic rationale for using smartphone cameras to communicate by sharing imagery. 'I feel pictures and or videos are to a certain degree important for social identity and positivity' [UK, M, 20], one respondent surmised. Imagery was overwhelming intertwined with the social for most (being with others and wanting to record it) and while reasons varied we can confidently say the smartphone camera was predominantly a positively-felt technology. It would be interesting to tease out what impact the infrastructure of sites such as Facebook, which at the time of study only had a 'like' button, or Twitter with its 'favourite', have had in this respect (van Dijck, 2013).

Using their premises as our guide, smartphone camera use for our participants was purposeful and selective, privileging *moments visually perceived as special, sharable, and possibly memorable.* These moments generally:
   a) deviated from the mundane;
   b) were related to 'positive' emotions;
   c) evinced strong social bonds; and
   d) encompassed a future-oriented perspective.
In this respect, our empirical findings question certain formulations about the increasing mediation of everyday (digital) life. While we are generally sympathetic to theories emphasizing the fluidity of new media, which make the case that we live 'in, rather than with, media', it may be a step too far to claim this is 'exemplified by their [media] disappearing from consciousness when used intensely – by their logic of immediacy' (Deuze, 2011: 137). Smartphone camera use is certainly ubiquitous, so it meets this first aspect of this assertion; however, the responses from our study invite a qualification of the second facet. Use of these devices engenders a relatively conscious apprehension of immediacy, effectively 'seizing the moment', so to speak, to interrupt day-to-day normalcy or routines. This is increasingly reflected in the strategic design of smartphone apps, as companies marshal locative media to further personalize small screen technologies, augmenting use with a sense of place to 'heighten' everyday experiences (Wilken and Goggin, 2014). Such use has the effect and affect of marking out atypical configurations, which are not exactly uncommon or exotic, such as leaving from the airport, going to the pub, and so forth. In this sense, smartphone camera and media use in general use helps order the everyday, acting as a way to differentiate socio-temporal and spatiotemporal contexts (Peters, 2015). Put another way, *if ceaselessness is a defining*

characteristic of the current era, the use of smartphone cameras is indicative of users affectively and self-consciously deploying the technology to try to arrest the ephemerality of daily life, however fleetingly.

Accordingly, while our participants' reflections initially appeared related to their immediate context, we noticed the impetus to take a photo often escaped the bounds of temporal immediacy. Reponses frequently indicated that participants quick strategic gaze of the visible 'now' – its aesthetic or, more often, social and emotive elements – was negotiated cross-temporally. As one respondent noted: 'it will be a good memory and I really want to share them with all my family and friends' [UK, F, 24]. Work around 'mediated mobilities' posits that these technologies shift 'the experience of temporalities as multiple and intersecting' (Keightley and Reading, 2014: 295), and in our study taking a picture in the now was certainly articulated by many as a (future-glimpsed) reconstruction of a (not-yet-existing) past. Recent research has shown how digital technologies, especially in the area of image storage and curation, make memories connective and renegotiable, both by individuals, collectives and – quite crucially – the algorithms of platforms and databased which users do not control (see Hoskins, 2011; Schwarz, 2014). However, our study indicates a fairly passive, ephemeral sense of memory, namely its potential.

While a small number of respondents stated they look back at photos for reminiscing, quite strikingly, most indicated not much interaction 'after the fact'. Smartphone camera use appeared to be a very 'in the now' practice and the concern with capturing a fleeting moment bore little affinity to the impressionistic importance it actually achieved going forth. This supports the claim that smartphone cameras are closely intertwined with memory practices, intersecting in the micro-coordination of everyday life (Hand, 2014). Mobile technology creates the possibility of an 'always-on' connection, which means that different places were experienced by participants not just in terms of their immediate surroundings but in terms of the potential social and informational connections they enabled. This relates to de Souza e Silva's (2006, p. 262) notion of 'hybrid spaces', wherein the internet has the effect of 'enfolding remote contexts inside the present context'. In this regard, our participants' reflections indicate that the imagined future is another remote context that can be incorporated. As one respondent stated, 'capturing moments for memories is the advantage,' adding 'it is very convenient to not have to carry a separate camera everywhere. It is nice to have an easy go-to camera' [CAN, F, 18].

Compositional Content of Photos

Just as respondents' most frequently cited reasons for taking or sharing photos were fairly consistent – to capture happy, pleasant moments – the specific types of incidents they noted displayed a striking continuity. Their preferences resonated with everyday life debates quite closely in this regard (see Bakardjieva, 2005; Highmore, 2011), in that *traversing their daily rhythms and flows, smartphone easily at hand, helped mark out the ordinary from the extraordinary through their photographic choices.* More specifically, responses to further questions revealed that there was a perceptible lack of comfort using smartphones to capture crisis events, such as accidents, floods, violent crime, or acts of terrorism (Allan and Peters, 2015). Such possibilities were treated as hypothetical by almost everyone, with very few revealing firsthand experience. Even to imagine adopting this more citizen-centred journalistic role seemed difficult, with many respondents more inclined to see themselves lending assistance rather than documenting these exceptional moments as they unfolded. 'I don't think that at that very moment I would be thinking about taking a

picture,' one stated. 'I would possibly call the police or try to help. It is not my job to document anything' [UK, F, 19].

With the exceptional prospect of crisis photography helping to illuminate the quotidian rhythms of the everyday, it became apparent the compositional content of casual photography tended to circulate around four axes for our respondents:
1. social presence;
2. boundedness of event;
3. aesthetic value; and
4. intended shareability.

While not in a linear sense, the first two axes were suggestive of a relational spectrum. The greater the co-presence of (known) others (i.e. peer-groups, family), and/or the stronger the bond, the more likely respondents indicated a desire to take a photo. Similarly, the more clearly an event could be defined (holidays, nights out, festivals), the more likely it seemed to be stated as worthy of being captured. Pictures of strangers, 'the crowd', 'the street' or random moments offered little motivation, being almost never mentioned. The perceived aesthetic value noted by respondents might be regarded as conventional; sunsets, beaches, or a generic description of a 'beautiful scene' were commonplace. 'Social occasions (having a drink or dinner with friends, family meetings, anniversaries, clubbing, parties). Things I see when I am on the road (for example a beautiful sunset, a pretty flower, etc.) or when I am on a holiday' [NL, F, 24].

Whom the photo was intended for impacted compositional choices. For instance, amongst slightly older respondents, functional photos of things to remember – typically for work or home-life – were sometimes mentioned: 'Sometimes I use my camera as a kind of extended brain (like the rest of my smartphone of course). If I want to remember something, a book or product in a shop, I quickly take a picture of it instead of writing it down' [NL, M, 26]. For younger respondents it seemed their sense of what a specific peer group would be interested in – a (slightly) atypical moment – proved a strong motivator. As one explained: 'When I think that it's likely to get a lot of 'Likes' on Facebook, I will take a picture and share it' [NL, F, 18]. These four axes were evident to varying degrees in most responses, but one respondent's comments make them particularly straightforward to discern. She noted her inclination was to take images of:
-   Concerts (I love seeing my favourite artist perform)
-   Breath taking views (where I just think wow this is so beautiful I want to capture this moment forever)
-   Vacations (because I love having my memories captured)
-   Fun events with my friends + family
-   Sometimes I upload my photos to Facebook so I can share my wonderful experiences with my friends [CAN, F, 16 – bullet points in original]

In this sense, many respondents raised the theme that documenting what might be shared (immediately or later) or, perhaps more accurately, 'broadcast' as news in a personal sense, was paramount. Sometimes there was a desired intent behind such practices, as when one respondent stated: 'Typically special events like concerts, vacations and celebrations. But also things that would make "other people jealous", like sitting in the sun with a nice drink' [NL, M, 29]. Somewhat more altruistically, another noted: 'My friends usually take videos/photos of themselves or their company at the time doing silly things and then send via Snapchat … I think the desire to make their friends laugh motivates them, and also it is an easy way to stay in contact without the long catch up talks' [UK, M, 21]. These distinctions point to how conceptually,

photographic composition acts as bridge between experience (discussed in the previous section) and technology (covered in the following).

Also pertinent was the opportunistic sense of engagement that emerged from our participants, with little indication that pre-planning governed smartphones' photographic practices. Instead, much was made of the ways in which 'you can capture something that happens spontaneously and you can whip out your phone and record/capture it' [CAN, M, 17]. Mobile photography in – and of – the moment was prized, repeatedly signalled throughout the questionnaire data by phrases along the lines of 'catching moments instantly,' 'having a camera at your disposal to capture unplanned/unexpected moments,' or 'the freedom to take pictures at any moment,' amongst others. However, when it came to offering illustrations, our respondents specified events such as a good night out or taking a holiday, which are, relatively speaking, fairly typical for young adults in these three countries. Similarly, many genres associated with smartphone photography were cited as increasingly mundane. The 'selfie', for example, was mentioned in terms of its pedestrian appearance on social media, pointing to how many initial creative compositional tactics associated with smartphones are gradually rationalized (Frosh, 2015; Rettberg, 2014). This is something companies increasingly facilitate through strategic assimilation or extension; one can think of the introduction of the front camera on the 4th generation of iPhones, the Facebook app's identification of recently taken photos one might like to share, or the 'selfie stick'. In such cases, the compositional content of smartphone camera imagery has moved from the remarkable, through the everyday, to predictable or even cliché, being stabilized and incorporated in the dynamic processes of identity formation and socialization.

In this sense, when considering how smartphones seemingly shape 'seeing' itself, the idea of the 'tourist gaze' is potentially informative. While the tourist gaze serves to demarcate one's 'normal place of residence/work and the object of the tourist gaze,' in searching out such experiences an equally important component is tourism's function to 'contrast with everyday experiences' (Urry and Larsen, 2011: 13). Smartphones influence such normalcy; *the 'smartphone gaze', so-to-speak, turns many into flâneurs of their own lives, passionate yet casual spectators on the lookout for moments in daily life that register emotionally*. While many responses illustrate this, a Canadian respondent puts it succinctly when she explains she takes photos: 'If it is a moment in time that I want to remember. Whether it is a special event, family photo or a beautiful scene. I have to see the visual in front of me before I take my phone out' [CAN, F, 17]. These layered rationales for smartphone photography signal less a micro (immediate peer community) and macro (general public) level of analytic distinction, in our reading, but rather one around more precisely differentiated and situational intimacy levels (i.e. private memory, friends versus partners, 'only' Facebook friends, and so forth) underlying the communicative intent of visualization. These varied, yet consistently emotive registers appear to be key factors in our respondents' disclosures about when they chose to take a photo or share it (see also Madianou and Miller, 2013), as well as why certain types of moments warrant capture as personally meaningful.

Technological Affordances

It was striking how often technological affordances were emphasized by our respondents, often without prompting. Crucially, from a conceptual point of view, this was not synonymous with technical jargon or specifications, such as zoom, megapixels, or bandwidth; only a limited range of technological capabilities were mentioned, and

then only briefly. Instead, what technological affordances spoke to in our data was *what the device makes possible, associated expectations, and how it is then interacted with and thought of a technological artefact.* In terms of its material status, our respondents noted that the smartphone was highly portable, always carried on the person, and easy to use: 'whenever, wherever, it's useful & convenient just press the button' [UK, F, 26]. This perceived ease of use distinguished relative advantages over the need for a second camera: 'efficient and simple you don't need to bring [a] camera, and you can directly edit with applications, such as Instagram' [UK, F, 25]. Respondents recurrently emphasised the extent to which having their camera-equipped mobile phone with them was a near-constant feature of their everyday experience. 'I always have my phone with me, and therefore always have a camera at the ready,' [CAN, M, 16] was one typical disclosure. Suggestive was the importance of carrying the smartphone as a matter of routine, where portability was a key factor: 'You always have a camera with you, so even when you're not prepared to take photos you can capture nice/special moments' [NL, F, 25].

A recognition of these advantages was prevalent throughout the responses. That being said, while carried on their person, one might challenge the notion that the camera function of smartphones was integrated seamlessly. Although only a few respondents cited significant factors complicating the ease of capturing images, disadvantages around technical deficiencies, the most common of which included 'storage' or 'usage' limitations, were mentioned: 'My photos take up [too] much memory and space in my phone' [CAN, F, 18]. Plaintive comments also included: 'Resolution – the mobile cameras are not as good quality' [CAN, F, 17] or 'a camera has a lot of useful features, which my mobile doesn't have (e.g. photos during night!)' [UK, F, 19]. Related faults included 'bad zoom' [CAN, F, 17], 'wasting battery' [UK, M, 25] or needing to 'recharge' it 'when you use your camera often' [NL, F, 23]. Along with the need to interact with its interface for activation, our sense was that its tactile presence was often apparent, if generally unremarkable (see Farman, 2013). Outside these limited mentions, smartphone camera technology was seldom problematized in its own right. Instead, technological critique took two forms: relational (versus 'real' cameras), or by omission (capabilities which did not translate into affordances).

In terms of the former, we can question to what extent the imaging aspect of smartphone cameras is actually a 'successful' remediation of earlier digital camera technology, which has co-evolved alongside smartphones (Bolter and Grusin, 2000). Even though it was not mentioned in any question, a frequent distinction was made between smartphones and 'real' cameras, with the latter deemed more heavy and unwieldy. This might make it seem like the smartphone is more 'practical', however practicality was contextual. As one respondent noted:

> The biggest advantage for me is just taking one device with me and being able to take pictures without having a bulky camera around my neck. The biggest advantage is at the same time the biggest disadvantage as I often forget to take pictures. When I have the bulky camera hanging around my [sic] automatically feel obliged to use it and take a lot more pictures. [NL, M, 26]

Similar sentiments surrounded distinctions in terms of image quality, with dedicated cameras generally assumed superior to their integrated smartphone equivalent. As one respondent elaborated: 'I usually don't do anything with the pictures (besides post them on social media) because I assume the quality isn't good enough for print' [NL, F, 24].

Notably apparent were similar points of contrast between smartphone photography and that afforded by 'proper' or 'actual' cameras. One respondent said there were occasions

when she preferred to use 'a real camera, because of the better quality and because I'm old-fashioned' [NL, F, age not given]. From a user-based conceptualization, these assumptions about image quality translated into evaluations around the personal value of imagery. Various respondents noted that 'really good' pictures, in terms of their perceived aesthetic quality, were rarely taken. And only these gems 'deserved' editing or having something 'done' with them beyond sharing (like getting printed out, framed, collected in an album, and similar activities associated with, say, a DSLR camera). In this sense, artistic expectations of smartphone cameras appeared limited. Closely related to this was the sentiment in some responses that using a digital camera rather than smartphone to take photos elevated the practice (and perhaps the associated ritualistic value) of photography to something more exceptional. While documenting and posting or sharing were posited as unremarkable practices, key technological potentialities that smartphones posses, like editing, altering, or even composing pictures, were rarely mentioned.

Conclusion

The artist Paul Klee once noted that 'One eye sees, the other feels.'[5] Such a suggestive turn of phrase might encourage us to begin thinking through what the experience of visualizing and communicating life has become over the past few decades with the rise of popular, easy to operate digital cameras, then camera phones, and now smartphones. The ability to capture – and potentially share – any moment of everyday life without the hassle and expense of buying and developing film undoubtedly changes the significance of visual culture. The economic, technological and competence threshold for telling stories visually has been markedly reduced, almost to the point where the person not participating in these activities is regarded to be outside normative boundaries, at least amongst the respondents in this study. However, the emergence of smartphones has been far from seamless; disruptive experiences associated with its imagery were still reported. Others conversely alluded to routinization and standardization, with attendant feelings of familiarity, material incorporation, and even banality in its use. In this sense, this article highlights juxtaposing features of the evolving digital ecology. Its analytic trajectories indicate a need for greater attention to the spatio-temporal specificities shaping (and being shaped by) smartphone imagery, the affective significance of what counts as ordinary experience in this regard, and its communicative resonances (see also Keightley and Reading, 2014; Pink and Hjorth, 2013). Efforts to investigate these considerations, our evidence suggests, promise to reward us with more valuable experiential insights than may be otherwise anticipated by a narrow focus on technical competency or usage patterns.

When any observed scene can be quickly turned into a sharable image, the way social life is seen and felt becomes constantly intertwined with this potentiality. This is before we even begin to consider the broader implications for how newfound practices for visually mediating the world may transform how (and what) we see and the civic and socio-political implications therein (Allan, 2013). Important questions come to the fore concerning how, when and why social divisions and hierarchies – such as those associated with age, gender, class, ethnicity, sexuality and so forth – bear upon how we understand the adaptation and material integration of mobile technologies. Equally necessary, it follows, is exploring how individuals' engagements with smartphone cameras provides insight into the changing status of these lived inequalities themselves. To render problematic the uses of technology in everyday life demands multi-strand analyses, and thereby a commitment to discern visualities and their imbrication in a host

of demotic, frequently ephemeral forms and practices. In seeking to help formalize these lines of enquiry, this article invites a close interrogation of scholarly assumptions about mobile technologies and the ways users self-reflexively interpret their compulsion to generate and evaluate visual communication. In this respect, it illustrates why it is advantageous to explore smartphone imagery in terms of how it affords different perceptions of the world we move through and, correspondingly, the way we interact and connect with others in these shared time-spaces.

Acknowledgments

Notes

[1] While recognizing such an approach cannot match the depth of ethnographic studies (see Keightley and Reading, 2014; Pink and Hjorth, 2013), we believe our participants' reflections are honest and telling attempts to self-reflexively describe their daily experiences with smartphone camera imagery, its communicative and sociocultural aspects, as well as the circulation of such imagery within peer groups and broader social networks. This less temporally-demanding approach also provided the freedom to investigate a far larger number of respondents.

[2] According to Google's 'Our Mobile Planet' project, in 2013 81.6% of Canadians aged 18-24 (youngest cohort for which data is available) had a smartphone. The comparable 2013 figures for the Netherlands was 84.3% and for the UK, 90.7%.

[3] In pre-testing the questionnaire we found it took approximately 15-20 minutes to complete. Phrasing was adjusted where unclear.

[4] Quotations are noted in the format of [country, gender, age]. The following abbreviations are used: Canada – CAN, Netherlands – NL, United Kingdom – UK, Female – F, and Male – M.

[5] The English translation appears in *The Diaries of Paul Klee 1898-1918* (entry 937).

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