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Facebook's Mobile Career

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Abstract

At the end of its first decade, Facebook's identity, popularity, and characteristics are shaped in important ways by its becoming a form of *mobile* media, as much as it as platform associated with Internet and social media. This paper seeks to explore and understand Facebook as the important force in mobile media and communication it now is. It draws upon and combines perspectives from technology production, design, and economy, as well as user adoption, consumption, practices, affect, emotion, and resistance. The paper discusses the beginnings of mobile Facebook, and the early adoption of mobile Facebook associated with the rise of smartphones. The second part of the paper explores Facebook's integration with photography (with Instagram) and social games (such as Zynga's *Farmville*). The paper argues that Facebook's mobile career is an accomplishment that has distinctively melded evolving affordances, everyday use across a wide range of settings, as well as political economies, corporate strategy, and design.

Keywords

Facebook, mobile media, youth, smartphone, apps, social media, Internet histories

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We're going to become a mobile company.

- Erick Tseng, Facebook head of mobile products (Needleman, 2011)

... Facebok is not one thing. On desktop where we grew up, the mode that made the most sense was to have a website ... So when we ported to mobile, that's where we started — this one big blue app that approximated the desktop presence. But I think on mobile, people want different things. ... So what we're doing ... is basically unbundling the big blue app.

— Mark Zuckberg, Facebook co-founder and CEO (quoted in Manjoo 2014)

Introduction

In the brief span of ten years, Facebook has established itself as a presiding online platform. Facebook has moved well beyond its North American origins, with considerable take-up internationally across many countries, in the face of many alternative, competing social networking system, social media, and app platforms. A central facet of Facebook's remarkable presence and 'success' as a new media technology is the way that it has recreated itself as a mobile media form.

Facebook's mobile platform was announced in 2007, and by its first decade anniversary, the majority of its adherents used this (Lee, 2013). For a range of reasons, not well articulated or foreseen in the corporation's original vision, Facebook is central to the mobile media experience of many. In addition, mobile is now key to Facebook's profitability, not least with the long awaited growth in the mobile advertising market (Goel 2014).

Accordingly, this paper offers a critical assessment of Facebook's *mobile* career. Such an exploration of the mobile face of Facebook is important, not only for our general understanding of Facebook as new media form and its specific social coordinates and entailments. Understanding Facebook as an important mobile technology often important insights for how we understand the social and cultural implications of this phase of the Internet, as it diversifies, stratifies, transmogrifies, and internationalizes (Goggin and McLelland, 2009 and 2015).

Facebook's mobile identity has been a decisive factor in the platform achieving the size, scale, and diversity of takeup internationally. Yet, the mere fact that Facebook become available on mobile devices is not the whole story. Otherwise, there would be many other social networking and social media applications that might have done the same. Indeed, there are many such applications that do have substantial take-up. So what is it about Facebook as a form of mobile media that proved compelling to a substantial group of users?

One approach to understanding Facebook's mobile nature is provided by Alexander Lambert, who argues that it is defined by a specific kind of mobility:

The distances bridged on Facebook result from the *movement* of social ties into different spaces and life-worlds ... This requires complex understandings

of how spatial ecologies are produced and transformed through mobile people and technologies. (Lambert, 2013: 78-79)

Lambert notes that Facebook has become very much a *locative* form of mobile media. That is, a form of mobile technology reliant upon and utilizing the possibilities of location-based, mapping, computing, and data processing technologies (Farman, 2012; Gordon and de Souza e Silva, 2011; de Souza e Silva and Frith, 2012; Wilken and Goggin, 2014). Lambert argues that Facebook is predicated on personal information being posted, shared, and harvested via mobiles:

Mobile phones are now used as a portal through which to access the comparatively 'fixed' online space of Facebook while on the move ... rather than a 'trans-local' space, Facebook is more of a 'trans-mobile' space. (Lambert, 2013: 79)

Like Lambert, I also think that the route to understanding Facebook's contemporary identity involves a journey through exploring and theorizing its relationship to mobility, and the forms of mobile communication and media. However, to understand Facebook as a distinctive, influential form of new media, I think it is important to pay attention to the political and cultural economies of global mobile media, in which it has evolved (Goggin, 2011).

To adequately grasp Facebook at the end of its first decade, we need to appreciate the complex interactions among: the media histories Facebook revises; the infrastructures that underpin it; its technologies and affordances; the cultural practices and significance; and the social functions it serves. Such things are not uniquely a possession or genius of Facebook. Facebook is clearly at the confluence of various socio-technical developments and dynamics, not least those represented by the mobile turn, and the emergence of social media. So Facebook is embroiled in, and benefits greatly, from smartphones and the 'apps' moment of online, mobile culture, as it adopts its distinctive shape.

In this paper, then, my theoretical framework involves the integration of various facets of Facebook's creation and itinerary as a new media form. My approach here, then, follows in the lineage of cultural studies scholars attempts to do justice to the many-sided nature of the cultural dynamics of new media technologies (Marshall, 2005). An important reference point here is the classic study of the Sony Walkman, in the study and pedagogical text Doing Cultural Studies: The Story of the Sony Walkman that bequeathed the useful notion of the 'circuit of culture' (du Gay et al., 1997). The circuit of culture indicates the need to take a rounded approach to understanding a cultural form or object, that involves different perspectives: production, consumption, regulation, identity, and representation (du Gay et al, 1997: 3). Alongside, and interwoven within, the role and shaping of media technology in everyday life (Haddon et al., 2005) and social practice (Couldry, 2012) are questions of how it is designed, marketed, priced, and offered to its users, including the complex yet probative issues of the kinds of infrastructure and affordances instantiated in particular locations (Goggin, 2012a; Larkin, 2008). This is especially important in the case of mobile technology, mobile social media, and mobile Internets, because in many global contexts the informal economy is the decisive cultural matrix (Lobato and Thomas, 2014).

A modified version of this framework was utilized in my 2006 *Cell Phone Culture* in order especially to analyze the 'wider configuration of businesses, industries, communications platforms, services, and networks that have made the cell phone possible' (Goggin, 2006: 8). Notably, since the original study of the Sony Walkman, itself an important portable, mobile technology, this and other research underscore the *mobile* character of the contemporary circuit of culture. Subsequently I developed this approach to better incorporate political economy and cultural economy perspectives to capture the complexity and hybridity of emergent convergences across 'traditional' media industries (such as the press, broadcasting, music, photography, cinema, advertising) with Internet (Castells, 2009) and now mobile communication and media industries (Goggin, 2011). Interestingly, there is a surprisingly slim literature on the structure and political economy of mobile industries (the standout work is that of Peter Curwen and Jason Whalley 2008, 2010, and 2013), or even the important areas of apps and software ecosystems (see, for instance, Goldsmith, 2014). Yet such perspectives are important to understand where how a technology like Facebook, originating in information technology, computing, and Internet industries, grapples with the possibilities of mobile technology.

Within this theoretical framework, to develop this argument in this paper, firstly, I discuss the antecedents and origins of mobile Facebook. Secondly, I look at the complex assembling of media technologies, affordances, infrastructures, media cultures, that saw mobile Facebook attract a critical mass of users, and adopt its now distinctive shape. Thirdly, I explore two particular case studies central to the next phase of development of ubiquitous, mobile media Facebook: photography and photosharing (in the case of Instagram); and social gaming (through Farmville). Finally, I offer concluding remarks on the significance of the mobile nature of Facebook, and what it portends for new media and society generally.

Becoming Mobile Facebook

Launched by Harvard undergraduate students Eduardo Saverin and Mark Zuckerberg in 2002 (Mezrick, 2009), Facebook claimed 300 million users worldwide by September 2009 (Johnson, 2009). It did so by tapping into, and facilitating, the new kinds of personal connections and social networks evolving in this phase of the Internet (Baym, 2010). Impressive as these early numbers were, Zuckerberg declared that Facebook was 'just getting started on our goal of connecting everyone' (Zuckerberg, 2009). From its now mythical beginnings in US campus culture, famously represented in the 2010 movie *The Social Network*, Facebook gathered momentum among deskop and laptop based users. Noneless quite early on Facebook also had a mobile interface:

Way before there was a Facebook application for the iPhone or the Blackberry, this was Thefacebook's mobile interface. You could send messages with a person's name to m@Thefacebook.com and include special codes to get friend's phone numbers or other information sent back to your phone. (Kirkpatrick, 2011: 50)

Surmounting technical and user experience problems Facebook launched a fullyfledged mobiles platform, making its bid in this steadily more lucrative market.

This was the Facebook Platform for Mobiles, announced in October 2007 (Facebook, 2007). Apple had just released its first iPhone to great fanfare. At roughly the same time, Research in Motion (RIM) launched its Facebook® for BlackBerry® Smartphones (Market Wired, 2007). By the time of Facebook's tenth anniversary, Canada's RIM was in considerable trouble. Four years earlier, however, with the vogue for smartphones still in relatively early days, Blackberry was riding high, capitalizing on its reputation as the cool, corporate device spreading into consumer markets (Middleton, 2007; on the later aesthetics of Blackberry in Haiti, see Taylor and Horst, 2014). RIM's Facebook product was the first successful Facebook application customized for a mobile handset. Other vendors also developed native or streamlined Facebook applications.

By late 2009, Facebook claimed to have 65 million users on mobile. Users still accessed Facebook via their mobile web browsers. However, the advent of smartphones and apps provided a much needed, relatively user friendly platform. Yet Facebook moved reluctantly to integrate its platform into key operating systems, such as the Apple iOS (it was not until late 2011 that Facebook extended to include Apple iOS for the iPad). At this time, Facebook also announced five social channels on mobile, to allow better interaction with bookmarks, friend requests, news feed, referrals, and credits (Protalinski, 2011).

Early on, Facebook's mobile strategy was very much to do with the internationalization of mobiles and the Internet. In 2007, there already existed substantial take-up of mobiles in a very wide range of markets outside North America, Europe, and East Asia. A key obstacle to growth lay in the relatively slow bandwidth in mobile networks, especially in markets where 3G was not available, or was relatively slow. In August 2009, the corporation announced Facebook Lite, 'a faster, simpler way to keep in touch with your friends.' As well as competing with bandwidth light applications like the fast emerging Twitter, Facebook Lite was also aimed at low-broadband users in developing countries and emerging markets, especially in its fastest growing markets in Asia — such as in Indonesia and the Philippines (Alampay, 2008). Later, the corporation re-titled this as 'Facebook for Everyday Phone' (Zuckerberg, 2013).

Not only did Facebook reach a tipping point in terms of the size of its user base, it also become a leader in many markets — popular across countries outside North America and Europe, including Asia, the Middle East, and South America. Indonesia, for example, has been one the countries where Facebook has been notably popular because of its mobile platform (Molaei, 2014), displacing the earlier Friendster platform (Kirkpatrick, 2011: 283). Larissa Hjorth and Michael Arnold's authoritative account of social networking systems in Asia-Pacific notes that 'Facebook was the most popular SNS [social networking system] for all their informants [from a range of countries], while Friendster had been their first' (Hjorth and Arnold, 2013: 75; on antecedents, see Hjorth, 2009).

While further research on the takeup and use of Facebook around the world is needed, it is worth considering in how exactly Facebook's shift to *mobile* platform contributed to its becoming a mass social media platform. As Hjorth and Arnold show, this phase of Facebook's mobile career saw its embrace by users: a complex and incompletely understood process of appropriation, consumption, adoption, experimentation, and co-evolution with the technology (Hirsch and Silverstone, 1994; Oudshoorn and Pinch, 2003), something I willl explore via an Australian case study in the next section.

'Jacked up to the Facebook': Facebook as Mobile Social Media

Thus far, I have depicted an interlocking, international set of developments in technology and design, business strategy, and economic models, that saw Facebook Corporation enter the mobiles market. New entrants from computing and IT, notably Google and Apple (Goggin, 2009 and 2012b) were changing the identity of the feature phone and smartphone, and finally opening up the mobile market to widespread software provision and development under the mantle of 'apps' (Snickers and Vonderau, 2012). Smartphones, apps, and mobile and wireless networks (for instance, the rollout of 3G, 4G and Wi-Max) co-evolved with user adoption and experimentation (Hjorth, Burgess, and Richardson, 2012).

Little has specifically been written about the user engagement with, and shaping of the emergence of mobile Facebook. So to explore this period, I will draw upon Australian research conducted in a key period of its diffusion and adoption. This research was qualitative, involving young mobile phone users, aged 18-30 years in various locations in urban, rural, and coastal Australia in the second half of 2009. The research forms part of a larger study of youth and mobile media in Australia, undertaken with Kate Crawford with the research assistance of Caroline Hamilton and Alice Crawford (for more details, see Goggin and Crawford, 2010). Clearly, this is but one limited, qualititive study set in and speaking to a specific locale, so it is neither generalizable nor does it provide (in the space available) a comprehensive narrative of adoption. However it does nicely captured an important moment in mobile and new media culture, in this place that users turned to, and were 'turned on' by, mobile Facebook (cf. three classic studies of earlier key moments in youth and mobile culture in Finland, Japan, and Canada respectively, see Kasesniemi, 2003, Ito, Okabe, and Matsuda, 2005, and Caron and Caronia, 2007).

When we interviewed our cohort of Australian mobile phone users in the second half of 2009, Facebook was well on its way to becoming a prominent feature of their media landscape. The majority of those we interviewed reporting using Facebook several times per week, such as two informants in the coastal South Australian town of Port Augusta:

... I didn't realise that you could go on Facebook, and all that, on my phone till someone showed me. Now that they've shown me, I'm like all the time on there.

Young female, Port Augusta

Among our participants, many reported that accessing Facebook via mobile was their online medium of choice, such as this pair of friends in the inner-city Sydney suburb of Marrickville:

Male 1:	They'd been on MSN or instant messenger and if I don't reply I'll probably get a text later on going, 'hey man I sent you a message where are you?'
Male 2:	Or write on your Facebook wall.
Male 1:	Yeah Facebook before email now.
Young males, Marrickville	

Another respondent also now felt that Facebook was his primary mode of mediated communication:

[Facebook]'s probably like 50 percent of my communication now. Which I had a problem with for a while but now I've just embraced it ...

Young male, Melbourne

Betokening the hold Facebook now exercised, some spoke of feeling 'obsessive' about, or 'addicted to', Facebook:

I fly out from Adelaide to Darwin when I go up to study in Darwin ... I get on the plane and I'm like — it's okay, it's three and a half hours without Facebook. You can live without that.

Young male, Port Augusta

In conscious opposition to Facebook's claim to be a 'normal' part of a user's repertoire, a number of users were nonplussed — including a handful who had made a conscious decision to not to use Facebook:

... I didn't have Facebook then and everyone was saying to me why haven't you got Facebook ... I don't want everyone to know what I'm doing. I like a bit of mystery.

Young female, Lismore

If Facebook quickly become adopted by the majority of our respondents, a key reason they gave for this had to do with price. Quite a number of users mentioned that their use of Facebook was due to it being 'free,' or offered as part of their mobile subscription package. Of course, the economics of mobiles is a complex area, especially when it comes to consumer perceptions and purchasing decision in response to price and quality signals. 'Free' in the case of Facebook's inclusion in mobile subscriptions, of course, meant that it was attractive to consumers able to afford the necessary expenditure on equipment and packages, but still well outside the reach of a significant section of the population.

For most of these users who could afford it, Facebook quickly become a 'standard' part of the mobile device equipment. However, the users offered some rich and interesting reflections on how they distinguished between the affordances of Facebook, and those they associated with the mobile phone (especially phone numbers, address books, and texting):

Facebook very quickly — not initially but very quickly — became clearly for me a tool of self-promotion and professional networking and creative networking.

Young male, Melbourne

I'd rather a Facebook update because you get a lot more scope to - to say stuff, whereas you've only got 160 characters [on Twitter]. I think it's cool but I do think it's a tiny overrated.

Young male, Marrickville

One informant also underscored that Facebook was helpful precisely, because it was went beyond the mobile phone as 'stand-alone' device or cherished object:

... if someone really does need to contact me they can and they know I will check my email or my Facebook so I can turn my phone off ... you have less dependency on phones because you're like jacked up to the Facebook.

Young female, Gold Coast

An important facet of mobile phone culture has been photos taken with cameras embedded in mobile devices (Gye, 2007, Daisuke and Ito, 2003, Mikko, 2010). There has been a rich research literature on mobile image-making, mobile photography and its significance for visual cultures (Rubenstein, 2005, Palmer, 2014). Smartphones heralded a new wave of camera phone culture, exemplified in the iPhone (Palmer, 2012, Cruz and Meyer, 2012) — the best celebration of which is Apple's own beautifully evocative, self-referential 2013 ad: 'Every day, more photos are taken with the iPhone than any other camera' (Apple, 2013). (Nokia's August 2013 parody ad retorted that 'at Nokia, we prefer to build for quality, not just quantity [Nokia, 2013]). The sharing of photos via the networking capacities mobile technologies support has been discussed by various scholars (Lister, 2013). It has perhaps been most fully captured in Sarah Pink and Larissa Hjorth's concept of 'emplaced cartographies' or 'emplaced visualities' (Pink and Hjorth, 2012).

Such emplaced visualities were present and evolving in our 2009 research. Many of our sample had uploaded photos to Facebook, some doing so quite often, feeling that ease of use with mobile device was a key factor in doing so:

I put most of my photos that I take on the iPhone onto Facebook especially stuff from like concerts or just around the mountains or whatever.

Young woman, Marrickville

However, for a surprising number of users, photos still proved awkward to upload directly from the phone to Facebook. This echoes Anna Reading's observation in an earlier study that the 'practices associated with memory sharing from camera phones are more complicated' than typically realized (Reading, 2008).

The new role of Facebook in mobile photography is something that was immediately embroiled in the divergent emotions raised concerning privacy (boyd, 2008). For some, one advantage of mobile Facebook was its potential for privacy, due to the smaller screen size of mobile device (compared to desktop computer), especially in environments where freedom of media use might be an issue:

The other thing is if you're at work, I don't want to be seen to be on Facebook ... because of self-consciousness about time wastage and so on I would prefer to look at it on my iPhone which no one else can see and yeah register it that way.

Young woman, Melbourne.

Interestingly enough, concerns regarding privacy can be interpreted in other ways also. In his study of Facebook in Trinidad, Daniel Miller observes that in terms of sexual relationships it is possible that 'Facebook and mobile phones work in direct opposition to each other' (Miller, 2013: 168). Miller discusses his earlier work on the impact of mobile phones in Jamaica (Horst and Miller, 2006) and how 'it seemed very likely that the increase in the ease in which people can have private personal conversations had, in and of itself, made illicit or multiple sexual liaisons more common and easier to get away with' (Miller, 2013: 167). By contrast, the publicness characteristics of Facebook, especially in relation to visual images, made such private activities more fraught (Miller, 2013: 167). Reflecting on Miller's analysis, I would suggest that the case of mobile Facebook involves a number of other things also. For instance, what Miller draws attention to is the implications for Trinidadians of the pervasive, networked camera phone culture. Facebook has powerfully amplified this. With mobile Facebook, however, we can also see contradictions and promises inscribed in the device itself: the potential privacy of mobiles for conversations versus the difficulty in proceeding with liaisons due to surveillance of others' everyday mobile photography.

As this comparison reveals, the practices, possibilities, imaginaries, and mobilities of mobile Facebook certainly take on different form in particular places and cultural settings. In some places, it appears that Facebook did manage to build on previous histories of social networking and mobile media — as it did in the Philippines and Filipino diaspora (Madianou and Miller, 2012). In many places, many other social networking applications that preceded Facebook continued to exercise their hold on users, such as the extraordinarily popular messaging application QQ in China (Wallis, 2013). In other places, Facebook quickly achieved a take-up and significance beyond precursors — such noted in earlier in relation to Indonesia. Finally, in a number of countries, including Indonesia but especially in the Middle East, the availability of Facebook was celebrated for its potentcy for catalyzing political participation and dissent, especially in the uprisings of the 2010-2011 'Arab Spring'. Research has debunked the myth of the 'Facebook revolution' (as the emblematic Egyptian case was often dubbed), and suggested the complexity of the relationships between mobiles and Facebook (Castells, 2012; Gerbaudo, 2012; Ghonim, 2012: Allagui and Kuebler, 2011).

Clearly, as the scholarly mantra goes, more research is needed here. One aspect of this is further consideration of the socio-demographic groups in and across the places and societies in which Facebook has unfolded. There is an interesting potential argument — echoes of contentions made in relation to other media and ICT technologies — that Facebook's transition to mobile as their primary platform may coincide with an important shift in the demographics using Facebook as well as changing attitudes toward it by young people. Consider, for instance, the typically neglected group in much technology adoption — older adults. At the same time, young people still rely on Facebook, its perception (whether cache or 'coolness') has been reshaped by its rising takeup in the latter years of its first decade by parents, grandparents, and older adults and their habits and cultures of use. The social imaginaries of both Internet and mobiles have been marked by rhetorics and discourses of generations — especially the valorization of certain ascribed traits of 'youth'. The interrogation of these social imaginaries and the materialities of ageing and older people and mobile and Internet technologies have not received much attention (cf. Crow and Sawchuk 2014) — yet the histories of Facebook, like other such new media, are likely to be very much coloured by these.

For the remainder of this paper, however, I'll now turn to the next stage of Facebook's development, in which it was positioned squarely at the centre of social media and Internet convergences — vaulting well beyond the role of Facebook as an integral part of mobile phone culture.

'Facebook Should Effectively Replace the Internet Itself': Seemingly Seamless Social Media with Facebook

In this late 2007 to early 2010 period, as I have suggested, Facebook was incorporated and shaped by a circuit of culture with a distinctive mobile character. Thus Facebook

was marketed in a number of key countries and customer segments as a key mobile technology. It was also steadily, if unevenly, incorporated into quotidian digital culture and everyday life. As with many technologies, mobile Facebook was praised and reviled by times; at times experiencing the fate of being a marooned media, unappreciated and steadfastly resisted; then fitfully taken-up; compulsively used, then neglected; taken up again and used for new purposes.

From about mid-2010, Facebook's mobile career enters a new phase. As I shall outline in this section, Facebook's strategy hinged on its platform becoming central to the evolving reference points of the mobile, online, and social media universe. In a way, Facebook's strategy is reminiscent of Nokia's approach in the heyday of mobile phone culture and the early days of mobile media (Goggin, 2006: 41-62): cover all bases, from Internet through photosharing and blogging, to games and anything else becoming popular in mobile and digital cultures. Where Facebook differed from Nokia in its classic phone of dominance (in 2G digital mobiles) was in the former's reliance on partnering, allying with, aquiring, but above all, integrating with, its key social media competitors.

As we shall see, to grow its own platform, Facebook took the view that it needed to become the default companion application for the other social media masters of the universe. In doing so, it hoped that its core proposition and value would be reinforced and enhanced. Rather than content originating via the use of apps by mobile users and then posted to the 'open' Internet, Facebook hoped the default (or at least significant share) of user-generated content would be data and material posted first to its own 'walled garden'. Or, as the second-best alternative, content shared via the social network of a trusted or wholly-owned commercial partner. While this is the 'supply' side of the equation, from the consumer or user perspective, there is also anecdotal support to illustrate why this might be welcome. Miller notes that his Trinidadian informants were much more explicit than counterparts in the UK about 'their desire that Facebook should effectively replace the internet itself ... What Trinidadians want from Facebook is a consolidation of all activities within a single site' (Miller, 2013: 202). The 'one-stop shop' of Trinidadian Facebook users is a vision which the corporation was keen to globally explore and capitalize upon. To explore this phase of mobile Facebook, and develop this argument, the two case studies I shall discuss are: mobile photography (particularly the Instagram application), and social gaming (via the briefly popular Farmville game).

Facebook's Mobile Photography: Instagram

The visual dimension is very important to how the vast majority of users encounter, address, and are hailed by Facebook, noting here that Blind users and those with visual impairments will have a significantly experience of the platform (Ellis and Kent, 2011). Via a mobile, Facebook is now a preferred, near-ubiquitous platform for uploading and sharing photos for many. Along with alternatives such as Google and Twitter, Facebook has eclipsed the popular photosharing sites — notably Flickr (acquired by Yahoo! in 2005) — that were synonymous with digital photosharing (Burgess, 2010). Key to Facebook's appeal are the affordances that encourage — and sometimes compel — users to interact with photos. For Lambert, this has to do with what he calls 'intensive intimacy':

Mobility and photography ... are both tied up with intensive intimacy, and neither began with Facebook. However, Facebook fixes the different characters met throughout a mobile lifespan in an online public space ... [and] turns photographs into complex objects which must be continually negotiated. (Lambert, 2013: 3)

Such 'intensive intimacy' takes on new meanings via the developments in mobile and social media represented by Instagram, which Facebook eventually acquired.

Launched in October 2010, Instagram claimed to attract 1 million users in its first two two months, rising to some 80 million users and 4 billion images shared a mere two years later (Laurent, 2012). In June 2014, Instagram reported 200 millions users and some 65% of its users outside the US ((http://instagram.com/press/). In April 2012, Facebook acquired Instagram for US\$1 billion. Staving off the fierce criticism by Instagram users, fearing loss of valued features, Zuckerberg's statement spoke of the need to be 'mindful' of 'the fact that Instagram is connected to other services beyond Facebook is an important part of the experience' (Zuckerberg, quoted in *The Guardian*, 2012).

Facebook had acquired its Instagram as a 'hedge' not only to deal with this particular competitor — but also with its giant rival Twitter. The Instagram buyout effectively disrupted Instagram's integration with Twitter. Notably, the ability for Instagram photos to appear as 'cards' on Twitter was removed by Instagram immediately after the Facebook takeover. In addition, the addition of Instagram allowed users to choose to automatically have their photos post to Facebook 'timelines' (Lafferty 2012).

The acquisition also helped Facebook to keep its own business model intact, as well as to incorporate new dimensions within it. Not least Instagram's affordances to better support mobile ads than competitor apps such as WhatsApp and SnapChat (Jackson 2013). Yet it ran the risk of alienating customers, for whom Facebook is an important but not sole part of their everyday social networking experience — let alone broader media and social lives. As Facebook sought to engineer as seamless an experience as possible in this phase of its mobile development, it clearly struggled with the challenge of figuring out what to leave intact, rather than simply ingest the larger digital cultural ecosystem. Facebook has flirted with many products and services including a virtual currency, money transfer service, and its own answer to Snapchat (the app that sends and disappears photos) in the form of Slingshot. One of its most lucrative ventures has been tranversing the fast, altering landscapes of mobile, social media via the realm of social games.

' Connect the World Through Games': Facebook, Zynga, and the Pivot to Mobile

'Social games' is a long standing concept and history in the theory of games across various disciplines, including game theoretical models in economics, designating games with a pronounced social aspect (Jackson and Watts, 2010, Abramson and Kuperman, 2001, Ross and Kay, 1980, Neumann and Morgenstern, 1944). There is a burgeoning literature on such social games (Hinton and Hjorth, 2013; Wei et al., 2010), that uses the term to designate games played within a social networking application (Hou, 2011).

Social games become a subject for research and public interest, especially when a number of established games companies also saw the opportunity to benefit from extending their games via Facebook's platform. This was not always as lucrative as hoped. For example, reports suggested revenues of leading games company Electronic Arts digital revenues were on the rise in 2012 — but not apparently due to its Facebook games, despite the fanfare, such as 'The Sims Social' and 'SimCity Social' (Duryee, 2012, Sherr, 2012).

The firm most strongly identified with Facebook's social games has been Zynga. Zynga was founded in 2007 by Mark Pincus, who had been involved with previous Internet startups, including Freeloader (1995; the 'first web-based consumer push company') (Zynga, 2013c). Listed on NASDAQ, the US tech stock exchange, Zynga aspires to scale and scope as a social games platform:

... at Zynga, our vision for the future is to enable one billion people across the globe to play together each month ... when we say our mission is to 'connect the world through games', we mean everyone: our family, our friends, our communities. (Zynga, 2013a)

Zynga's best known game is *Farmville*, which in 2010 could be creditably claimed to be the 'most popular video game in America' (Liszkiewicz, 2010). In its first five years, Zynga did quite nicely. In 2012, Zynga's revenue was \$1.28 billion (Zynga, 2013b). In fourth quarter of 2012, Zynga claimed 56 million daily active users, 298 million monthly active users, and 167 million unique monthly users (Zynga, 2013b).

In no small part, Zynga's success was due to its symiotic relationship with Facebook. Zynga enjoyed an exclusive deal with Facebook, offering its games nested within the Facebook.com website (Shih, 2013). Users of Farmville and other Zynga games could log on and play these via their Facebook account, rather than having to log onto Zynga directly. With this easy access to Facebook users, Zynga rode the wave of popularity of social games. Virtual goods have been an important revenue stream in social games (Hamari and Lehdonvirta, 2010), and Zynga's in-game purchases were processed by Facebook for a handy 30 percent fee (Eha, 2013).

The Zynga-Facebook partnership offered benefits to both, with Zynga providing an estimated 12 percent of Facebook's revenue in 2011 (Eha, 2013). To gain some independence from the Facebook media ecosystem, in late March 2013, Zynga re-launched its website — especially to permit users to play Zynga games directly without logging onto Facebook first. With the new arrangements from 2013 Zynga no longer had full access to Facebook user data (Eha, 2013). Also, Zynga users were obliged to switch to the company's own currency for in-game purchasing. A highly publicized, new area into which Zynga is expanding in its own right is mobile gambling (Albarrán Torres and Goggin, 2014).

As Facebook advances into its second decade, it may be that the heyday of Facebook's social gaming has already passed. *Farmville* is no longer the most popular game, and Zynga struggles with profitability despite still some lucrative Facebook games. Its *Farmville 2* was the sixth top rated Facebook Social Game of 2012, but even then Zynga faced stiff competition from international games rivals (Codorniou, 2012).

Much of the effort on part of designers and businesses here is seeking to understand the emerging nature of mobile games to be played, for instance, in relatively short bursts of attention and opportunity. In subsequent releases, notably the 2014 *Farmville 2: Country Escape*, Zynga has also embraced mobile games. This the first version of *Farmville* that can be played offline, and its 'social features' are optional:

Rather than simply moving *FarmVille 2* to mobile devices, Zynga built *Country Escape* with the mobile gamer in mind. It does not feature quests that force you to ask an entire Facebook friend list for pieces of wood. There is no waiting for a well to fill to water crops. There are timers, but there's always something to do while waiting. (*New York Times* 2014)

It remains to be seen whether this pivot to mobile will resusitate Zynga's fortunes. In April 2014, Zygna reported a first quarter loss of \$61.1 million, and drop in revenue to \$168 million — and in the same week announced that Pincus would step down as CEO (whilst retaining the Chairman role) (Wingfield 2014).

For its part, Facebook is also sharpening up its engagement with mobile games. In July 2013, on its Developer Blog, Facebook announced a new 'Mobile Games Publishing' pilot program, to broaden its supplier relationships (Medeiros, 2013). Thus, in moving beyond Zynga, Facebook resembles other vendors and technology companies, such as Apple, Google, Samsung, or Windows. Thus Facebook too is changing its strategies to respond to the rapidly mutating practices and genres of social, mobile, and casual games — as well as new directions in mobile media, such as health and lifestyle apps, with its April 2014 purchase of the Finnish Moves fitness tracking app company (Kuchler 2014).

Conclusion

It is plausible to assert that in the minds, hearts, screens, fingers, and affects of hundreds of millions of social media users around the world, Facebook is primarily experienced through mobile technologies. In this paper, I have given a brief, specific case study of the everyday uses and social practices that quickly became associated with mobile Facebook when it emerged as a viable, relatively affordable and easy-touse platform supported by smartphones and the new features of the digital media environment associated with them, such as the apps ecosystems.

However, as I have observed, we still don't know as much about the users (and non-users), publics, and audiences of mobile Facebook as we need to, in order to precisely locate the cultural and social coordinates of the technology. Yet given the recognition that the Internet has moved into a phase in which different networks, technologies, and materialities are leaving their impress upon it (Hadlaw, Herman and Swiss, 2014) it is not a stretch to suggest that Facebook's identity is bound up with its mobile career. Specifically, the taken-for-grantedness of the mobile phone as a Durkheimian 'social fact' — as Rich Ling has argued (Ling, 2012) — offers an accepted, if still flexible and extensible, base for the development of social media, including Facebook.

I have also argued in this paper that to understand the 'circuit of culture' associated with mobile Facebook, we should attend to the design innovation and practices, industry structures, market formation, promotional literatures, and acts ingenious and banal by turns, that saw this particular technology and media form 'invented' (Abbate, 1990) by a range of corporate and business actors. Such a process of invention can be observed in the intial phase, from 2007 onwards, when Facebook becomes available on mobile platforms. In turn, this case study tells us something

important about the importance of understanding the *mobile* character of the general circuits of culture at this conjuncture.

We can also see it, in a very different guise, as Facebook pushes deeper and further into divining and monetizing the new media cultures associated not just with social media — but specifically with mobile social media. Here I've only discussed Facebook's embrace of photography, via Instagram, and the new turn to casual, social games, via Farmville and Zynga's other games. These investments (in all sense of the word) by Facebook, and the ways in which users interacted with, and shaped them (regarding which we have very little research) hinge on the fact that they were designed, marketed for, and consumed via mobile technologies.

As Facebook pushes into its second decade, it has struck out in new directions, embarking on highly publicized initiatives to solve the world's digital divide by dint of clever software engineering and better connectivity (Zuckberg, 2013), and, more outlandishly, by the use of drones (Miner, 2014), as well as virtual reality technology (with its March 2014 Oculus Rift acquisition). However, Facebook is very focussed on its core business prospects being in mobiles — and, that, as a corollary, some mobile experiences need to remain streamlined to be compelling and profitable. This is evident in the resurgent area of messaging, where internet forms of messaging are criss-crossing their mobile counterparts, and creating new forms of social, mobile, and internet media. A highly publicized move for Facebook was its February 2014 purchase of What's App. Yet more significant in many ways is the attention it have given to developing Facebook Messenger as a standalone app for messaging and photo and video sharing. This allows the conversational components of Facebook to compete effectively with Twitter but also various emerging messenging services and even SMS and mobile text messaging.

So, the future for Facebook is uncertain. Like any technology, its career and identity is never finished but is always mutable (Latour, 2006). In all this, it is not by accident, that mobile Facebook now unfolds as the majority world, the 'global south', and the titans of China and India, not to mention the rise of Latin America, Africa, and other regions, become the forces to be reckoned with, in the fully-fledged achievement of global mobile media (Goggin, 2011) — but also in the new directions remodelling the Internet.

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