

Facebook, Whatsapp and the Commodification of Affective labour

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Abstract

This paper addresses the question of how and to what extent social media networks have facilitated the commodification of the affective labour of consumers and workers through circuits of constant consumer feedback on commercial products and business networking culture. It provides a brief political economy overview of the role of targeted-advertising, particularly mobile advertising, in Facebook's business model and how this model necessitates user growth and user surveillance. Using as a case study Facebook's acquisition of the instant messaging (IM) company WhatsApp, I investigate how the IM market has changed Facebook's merger and acquisitions strategy, while continuing its reliance on capturing intimate user data for revenue. The monetisation of user data will be examined through a political economy framework; specifically, the broader economic circumstances that drive Facebook's business model and the process by which users' information is quantified. The final section of the paper will discuss the relationship between Facebook's business model and government surveillance.

Keywords: Affective labour, social media, big data, political economy

Introduction

The social media market over the last decade has been characterised by the rapid growth and successful monetisation of Facebook. Although a number of scholars have completed comprehensive work on critical theories of social media (Fuchs 2014; Scholz 2013), these works contemplate general theories of digital labour from a broad range of digital activities and platforms. This paper looks at the monetisation of data on Facebook, specifically, to elucidate the particular dynamics and contradictions in Facebook's business model and the implications of this new economic model for government policy and users' rights.

This paper conducts a political economy analysis of the merger of Facebook and WhatsApp to argue that its business model is to capture and quantify the affective activity of consumers and sell this data in the form of targeted-advertising. This development raises serious political questions about the regulation of user data. A major shortcoming of this paper is that it does not examine users' affective outputs. More empirical analysis of affective activity and its role in social networking sites would be valuable, but is beyond the scope of this article. Instead, this article focuses on the importance of the quantification of affective activity to Facebook's business model. First, I will briefly summarise the literature in critical social media to develop a framework for analysing the process of commodification on Facebook; second, I will provide an overview of the merger of Facebook and WhatsApp and a brief outline of the methodology employed before moving to examine the case study in detail; lastly, I will conclude with the

implications of Facebook's business model for users and government policy.

Digital Labour Debate

The digital labour debate has focused on understanding value creation mechanisms on corporate social media. Authors have discussed the expediency of Karl Marx's labour theory of value (Fuchs 2010; Arvidsson & Colleoni 2012; Fuchs 2012b; Scholz 2013), how the concept of alienation should be used in the context of digital labour (Andrejevic 2012; Fisher 2012), and if or how Dallas Smythe's concept of audience labour can be used to understand digital labour (Fuchs 2012a).

Fuchs uses Smythe's concept of the audience as commodity to argue that activity of Facebook and other social media platforms is a form of labour equivalent to Marx's theory of exploitation. Andrew Feenberg and Dal Yong Jin (2015) critique Christian Fuchs' concept of digital labour on social media sites and, in the course of their critique, Feenberg and Jin also address some of the issues raised by Adam Arvidsson and Elanor Colleoni (2012) on the source of economic value on social networking sites (SNSs). I will outline their critique before arguing the case for SNSs as affective networks.

Feenberg and Jin (2015, p. 53) argue that Fuchs' conception of digital labour simplifies the complex economic and commercial strategies of SNSs. They raise the question—to the extent that users can be considered a meaningful economic entity and, potentially, therefore a social actor as Fuchs suggests—who conducts the quantification of user participation and how important is it to Facebook's value? Indeed, Feenberg and Jin (2015, p. 53) identify Facebook as one of the most significant examples of the growth of a new economic form. Facebook users have been commodified via user-generated content and the monetarisation of this content, however; they point out that this has happened not only through users' free labour, but also as marketing and advertising medium labour, as well as financial rent. However, this is where Feenberg and Jin disagree with Arvidsson and Colleoni who contend that brand has become a source of value in itself to which Feenberg and Jin (2015, p. 55) reply that there is a direct correlation between Facebook's rapid increase in advertising revenue and its expansion of its user base; 'For Facebook, user activity is the source of profit, without which its financial value would be insignificant'. The work of Facebook's developers, programmers and advertisers is to quantify user content, to capture, aggregate and distribute it. At the heart of Facebook's sources of value (advertising, direct marketing, and the sale of stock) is data collection (p. 55); thus, user-generated data is what underpins this complex model. Feenberg and Jin (2015, p. 55) deduce that what is new about Facebook's economic model is that normally under capitalism use-value is realised by the consumer after purchase, while this temporal order is upset by Facebook where users engage in affective activities without necessarily buying or selling; it is through clicking on ads and creating data that users unintentionally commodity themselves. It is participation itself that allows for the form of surveillance that Facebook finds so profitable. 'Mass self-surveillance' is the 'shadow' of Manuel Castells' 'mass-self-communication' (Fuchs 2014, p. 164). Importantly, this new temporal ordering accords with the concept of the 'experience economy' (Pine and Gilmore 1999), as it extends the feedback loops of commodity production in time and space, and is quite different to the nature of the consumption and production of television audiences, which formed the basis Smythe's theory of the 'audience commodity' (Feenberg & Jin 2015, p. 56).

The Experience Economy

Nigel Thrift in his essay 'Re-inventing invention' (2006) describes a corporate desire to rework consumption to draw consumers closer to the process of production through 'leaching out their knowledge of commodities and adding it back to the system as a performative edge through an "experience economy"' (p. 32). Expressed simply, an experience economy is based on 'a particular mode of innovating...linked to constructions of the market framed by information about the consumer' (Lury 2004, p. 62). Project management teams continually modify products to consumer satisfaction in a permanent cycle of innovation that Thrift (2006, pp. 38-39) argues blurs production and consumption. Thus, Thrift conceptualises an *extension* of the commodity in time and space. Not only does this give an impetus to niche marketing, it engenders greater affective attachment and feedback for the proliferation of these commodities (p. 39). The usefulness of the vast reserves of pedestrian information that Facebook methodically archives becomes clear in the context of these perpetually evolving commodities. Consumers may reject the product, or the commodity system itself (p. 54), but this does not prevent companies such as Facebook compiling and making money from their personal data. There are also good reasons why consumers and knowledge workers might accept the new state of affairs. Business networking culture has to an extent driven the culture of social media. Through user profiles and social media accounts, users participate in the culture of self-promotion, brand creation and business networking online. Social networking is 'a highly developed technology of the self', which demands emotional investment in 'the construction, maintenance and performance of cultural identities' (Turner 2010, p. 146). The 'new media consumer citizen' gives up personal information 'to make brands of themselves, and to "work" for social media in exchange for opportunities for personal expression and social networking' (Sinclair 2012, p. 102). This work is the work of time and affective investment.

Affective Labour

Affective labour is the labour of human contact and interaction (Hardt 1999, p. 95). It is work that is intended to produce or modify emotional experiences in people. Health, education and other service sectors rely heavily on caring and affective labour and the cultural and entertainment industries focus on the creation and manipulation of affect (p. 95). Much of the work on affect and media theory extends from Antonio Negri and Michael Hardt's *Empire* (2000). Among the changes they identify in labour in the 'post-Fordism economy' is 'the production and manipulation of affect' (Hardt and Negri 2000, p. 293). Lawrence Grossberg, who Melissa Gregg (2006, p. 105) credits as recognising 'passion, emotion and affect as the new frontier for politics', laments the simplistic way that affect has sometimes been used to determine direct media 'effects', and instead proposes that there is a mediation process that passes through regimes that structure the body and discourses that organise everyday life and then produce specific kinds of effects; 'organizations of affect might include will and attention, or moods, or orientation, what I had called "mattering maps," and the various culturally and phenomenological constituted emotional economies' (Grossberg 2010, p. 316). Grossberg believes that all-encompassing theories of affect let theorists off the hook. Affect is not everything that is non-representational or non-semantic; 'emotion is the articulation of affect and ideology', and an 'ideological attempt to make sense of some affecting productions' (p. 316). Thus, affect cannot become simply a synonym for emotion. Grossberg seems to suggest—unlike the psychoanalysts whose narrow conception of affect reduces it to a static, base, libidinal desire—that affect is socially augmentable (p. 317). Capitalism has always commodified life; in the slave trade, forms of gender relations and sex work (p. 329). The difference now is that these

practices have become networked and ubiquitous. For many people, these social practices become taken-for-granted, even necessary, investments. Grossberg explains how affect points to ‘a complex set of effects which circulate around notions of investment and anchoring... Affective relations always involve a quantitatively variable level of energy (activation, enervation) that binds an articulation or that binds an individual to a particular practice’ (Grossberg 1992, pp. 81-82).

Jodi Dean argues that social media networks are affective networks. She states that although Hardt and Negri do not apply their analysis to the Internet, ‘their association of affective labour with the production of social networks opens up the possibility of conceiving communications networks not simply in terms of linked machines but as networks that are constitutively affective’ (Dean 2010, pp. 113-114). Although Dean employs the broad definition of affect, favoured by psychoanalytic theorist such as Jacques Lacan, and lamented by Grossberg, she nonetheless describes the way social media operate as affective networks in concrete detail. She surmises that blogs, SNSs and YouTube produce and circulate affect as a binding technique (Dean 2010, p. 95). Dean (2010, p. 96) describes how intense feeling accompanies and reinforces code; ‘even failures to forward and refusals to link have affective impact: *Why didn’t she friend me? Why didn’t he put me on his blogroll?* [emphasis in original] In a world of code, gaps and omissions can become knots of anxiety’. In social media networks it is not so much the entertainment industry that creates affect, but users themselves.

Increasingly, this content is being created and accessed through mobile devices, particularly smart phones. Mobile phones have become the intimate companions of our daily work and life. Thus, I argue that mobile devices have more ‘affective pull’ than computers. They are ubiquitous and demand our time and attention, often through audible alerts and notifications. Acquaintances, colleagues and friends know we are always contactable. People do not ‘shut down’ their phones. They are our constant waking companions and because they are carried everywhere in every social situation there is far more pressure to trade privacy for sociality; for example, ‘tagging friends’ at a nightclub or being tagged by friends on Facebook. To exclude oneself from this practice is to exclude oneself from an aspect of a social experience or interaction.

It is also important to acknowledge the ways in which users’ affective productions are shaped and even in some cases manipulated by the social media platform. Affective networks can be highly manipulative; for example, the ‘like’ button on Facebook. It is only possible to like a post, not to dislike it. Facebook wants to spread an affirmative atmosphere; ‘one can imagine that it could be harmful for Facebook’s profits if users would massively dislike certain companies that are important advertising clients of the platform’ (Fuchs 2014, p. 160).

There is also the well known case where Facebook conducted a study on its users, manipulating the newsfeeds of participants without their knowledge. One group was shown only positive posts from friends and another only negative posts. Although highly unethical, the results showed that people who were shown positive posts themselves posted more positive posts and likewise with those shown negative posts. This effect was statistically small but could have big consequences across the many interpersonal connections in an immense social web; the study concluded in the 17 June *Proceedings of the National Academy of Sciences* (Kramer and et. al. 2014). While the purpose of the study was to investigate whether emotions spread through online social networks, and also seems to suggest that Facebook is an affective network, what it also revealed was the potential for affective manipulation by social media companies. Furthermore, Gregg (2009, p. 210) contends that the ‘gift economy’ characteristic of online cultures ‘fits

neatly with the profit-seeking, crowd-sourcing aspirations of both established and budget-conscious start-up media companies'. Affective labour practices of peer-monitoring and self-surveillance, 'while ostensibly reporting activities and tastes for the knowledge of friends, such practices also provide an intricate archive of cultural preferences for savvy marketers to exploit' (Gregg 2009, p. 210).

Reification

Rather than applying a modified version of the labour theory of value to the monetarisation of user-generated data or inventing new laws of value, I argue that the exploitation of user's data on Facebook can be better understood as the abstraction of affect, behavioural patterns and cognitive information through reification. While on the one hand, 'the use values created by users circulate among themselves in an "economy" that resembles gift giving or barter rather than commodity exchange', on the other, 'exchange value is extracted from these use values simultaneously by the three procedures...advertising, direct marketing, and the sale of stock' (Feenberg & Jin 2015, p. 55). I argue that this gift economy is the exchange of affective productions that have been reified through users' interactions with technology, which are then quantified and commodified through the work of marketing and advertising medium labour.

David Berry (2014, p. 121) proposes that 'computational agencies act to transform social relations and labour into computational or code objects...we are therefore surrounded by code objects and a world that is transformed into code objects for processing or re-presentation to us'. Berry (2014, p. 121) argues that 'this is a process of reification, both ideologically and materially'. Particularly since the rise of the Internet of Things, new computational technologies increasingly colonize our urban environment; we live in computational ecologies, which we share with non-human actors; it is these structures that enable 'the re-representation of the world as discreet objects' (Berry 2014, p. 122).

In her book *Culture of Connectivity: A Critical History of Social Media* (2013), José van Dijck combines actor network theory and political economy to argue against the term 'social media' in favour of 'connective media'. She believes the term better highlights that friends, 'likes' and the social have 'increasingly been informed by automating technologies that direct human sociality' (van Dijck 2013, p. 13). Thus, it is human connectivity—of which affect is the connecting tissue—that is reified, along with a variety of non-human generated information, which is then quantified and transformed into 'big data'. Big data is datasets that cannot be managed with traditional data management tools and require new forms of processing to harness the information they contain to enable enhanced decision making to produce insights, goods or services of significant value. Big data uses inductive statistics drawn from vast datasets to infer patterns, relationships and casual effects. This is the broader definition drawn from business (Beyer 2011) and Viktor Mayer-Schonberger and Kenneth Cukier's important book *Big Data* (2013). Van Dijck (2014, p. 198) dissects Mayer-Schonberger and Cukier's framing of the concept, along with other proponents of the 'new scientific paradigm'. She argues that datafication, the idea that data can be used to understand sociality and social behaviour, is rooted in problematic ontological and epistemological claims (van Dijck 2014, p. 198). Data companies and governments, as well as some researchers, conceive of data and metadata as imprints or symptoms of people's actual moods and behaviour and platforms as neural facilitators (van Dijck 2014, p. 199). Van Dijck (2014, p. 200) points out that this view is at odds with our knowledge of 'well-known practices of data filtering and algorithmic manipulation for commercial and other reasons'. As well as the algorithmic manipulation of data, there is the algorithmic surveillance of data, 'dataveillance'.

Traditional surveillance implies monitoring for specific purposes, whereas dataveillance ‘entails continuous tracking of (meta)data for unstated preset purposes’ (van Dijck 2014, p. 205). Dataveillance goes beyond scrutinising individuals; it ‘penetrates every fiber of the social fabric’ (van Dijck 2014, p. 205). While the inherent value of datasets may be dubious, affective activity does create a large amount of content and affective investment in social media platforms, despite the fact that affect is mediated by commercial algorithms.

Background

In February 2014, Facebook purchased the mobile-messaging service WhatsApp with a final price tag of \$US22 billion dollars (Oreskovic 2014). The agreement, the fifth-largest technology deal to date, drew the attention of international business and technology circles alike. In 2013, Google mergers-and-acquisitions Chief Don Harrison offered WhatsApp millions in exchange for the ‘right to know’ if it entered into acquisition talks with other companies. WhatsApp rejected the offer. It is reasonable to imagine the offer was at least partially motivated by Facebook’s \$US1 billion purchase of Instagram in 2012, which caught Google off guard (New York Times 2014). According to *The Information*, after their initial unorthodox offer was rejected, Google went as far as to notify WhatsApp’s venture-capital investor Sequoia Capital that it was prepared to outbid Facebook regardless of the cost, however; WhatsApp again refused the offer (cited in New York Times 2 May 2014). These new-aged, high-tech corporate intrigues demonstrate the importance of market dominance in the digital domain. And, crucially, 66 per cent of customers now access social media through mobile devices (Vermeulen 2014). This might explain why Facebook CEO Mark Zuckerberg was willing to purchase WhatsApp at such a high price. Zuckerberg’s purchase of the application (app) has been hailed as a potential masterstroke by some in the business community (Shih 2014); one that simultaneously shut out rival Google and won a swathe of potential new users, as well as access to their data (Shih 2014). WhatsApp CEO Jan Koum and Zuckerberg have committed to keeping the app advertisement free. In discussions, Zuckerberg promised the WhatsApp founders ‘zero pressure’ to make money, saying, ‘I would love for you guys to connect 4 to 5 billion people in the next five years’ (Olson 2014b). What WhatsApp lacks in revenue, it makes up for in user reach. For Facebook, the attraction of the app is that it is the most popular of a number of emerging mobile-messaging services, including Canada’s ‘Kik’ and China’s ‘WeChat’. A complaint filed by two non-profit organisations, the Electronic Privacy Information Center and the Center for Digital Democracy, with the US Federal Trade Commission wanted US regulators to stop the deal until Facebook provided more information on what it plans to do with the personal data of WhatsApp’s users. The Federal Commission warned the two companies to respect users’ privacy, but allowed the deal to go ahead. Despite assurances from WhatsApp and Facebook that privacy policies will not change, the groups noted that Facebook has in the past amended an acquired-company’s privacy policies (Olson 2014a). These fears appear justified in the context of Facebook’s business model, which will be outlined in the case study.

Methodology

The political economy of communications has been institutionalised through research networks, such as the International Association of Media and Communication Research’s Political Economy Section; numerous journals, conferences, regular book publications and university subjects (Fuchs & Garnham 2014, p. 103). Political economy examines the relationship between cultural production and the social conditions that produce and determine the forms of cultural

distribution. It is important to study the objective economic realities and ideological discourses that are the background to the rise of social media. Therefore, it is necessary to adopt an approach that integrates both economic and ideological facets. I will therefore combine a statistical study of Facebook's accumulation model and revenue streams since 2012 with an analysis of Facebook's business model in the context of late capitalism.

Data was collected from three of Facebook's annual reports from March 2012 onwards, when Facebook implement mobile advertising and the year it became a public company, specifically, the three reports from 2013, 2014 and 2015. The specific data analysed is Facebook's revenue streams, numbers of monthly and daily active users, including number of active mobile users, the different classifications of mobile users and stock price. This data is compared over the three reports to determine patterns in Facebook's reliance on advertising revenue, specifically mobile advertising revenue and the correlation between advertising revenue and user base growth. Facebook's reliance on mobile advertising and the growth of active mobile users will be charted over time to contextualise Facebook's purchase of WhatsApp.

Evidently, there are problems using Facebook's data. Facebook has an interest in exaggerating metrics, such as its daily or monthly average active users. Nonetheless, the figures do allow for the extraction of general trends.

The acquisition of WhatsApp will be contextualise within Facebook's pre-existing business model, using data collected on the price of the acquisition and Facebook's estimates of the projected value of the acquisition drawn from its 2015 Annual Report.

Case Study: Targeted-Advertising and the Purchase of WhatsApp

Facebook's revenue in 2013 increased \$US2.78 billion or 55% compared to 2012. The increase was driven by a 63% increase in advertising revenue, primarily news feed adverts in both mobile and personal computers (Facebook 2013, p. 46), and also as a result of monetisation strategies, such as the implementation of mobile adverts from March 2012 and adverts tailored from users' web browsing history from June 2012. Advertising overall revenue in the fourth quarter of 2013 increased 76% compared to the same period in 2012. In the same quarter of 2013, mobile advertising revenue represented approximately 53% of total advertising revenue, as compared with 23% in the same period in 2012. Advertising revenues are traditionally strongest in the latter half of the year, but the mobile advertising trend is observable. Other factors that influenced revenue included a growth in marketers advertising with Facebook and growth in active daily users. Facebook's dependence on advertising has only increased from 85% of total revenue in 2011 to 89% in 2013 (Facebook 2013, p. 46). These trends have only been exacerbated. In 2014, total revenue increased to \$4.59 billion, or 58% compared to 2013 (Facebook 2015a, p. 43) and revenue generated from third parties advertising on Facebook accounted for 92% of total revenue (Facebook 2015a, p. 10). Facebook offers products to advertisers and marketers that leverage a combination of reach, relevance, social context and engagement using its dataset of over a billion monthly active users. Increasing, these users are accessing Facebook services through mobile devices and in the fourth quarter of 2014 approximately 69% of our overall advertising revenue was revenue from mobile advertising (Facebook 2015a, p. 11).

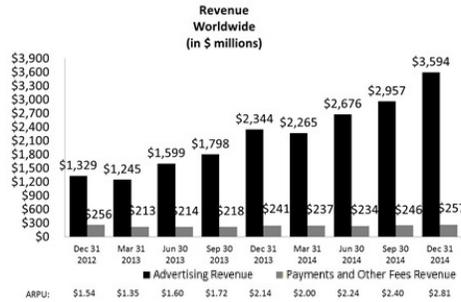


Figure 1 (Facebook 2015a, p. 37)

Facebook identifies a number of key metrics for advertising, which include daily active users (DAUs), mobile DAUs, monthly active users (MAUs), mobile MAUs, and average revenue per user (ARPU), as well as certain other metrics such as mobile-only DAUs and mobile-only MAUs. These metrics are calculated using internal company data based on the activity of user accounts and Facebook admits that there are inherent ‘challenges’ in measuring the usage of its products over its large online, global and mobile user base. While it admits that the existence of multiple user accounts, false accounts and automated accounts, Facebook estimate that duplicate accounts represent 5% of worldwide MAUs in 2014 and ‘user-misclassified’ and ‘undesirable accounts’ at less than 2% (Facebook 2015a, p. 20). These estimates are quite modest, which is in Facebook’s interest. Nevertheless, there does appear to have been a growth in active users. Facebook defines a MAU as:

a registered Facebook user who logged in and visited Facebook through our website or a mobile device, used our Messenger app, or took an action to share content or activity with his or her Facebook friends or connections via a third-party website or application that is integrated with Facebook, in the last 30 days as of the date of measurement (Facebook 2015a, p. 35).

Facebook (2015a, p. 33) views DAUs as a percentage of MAUs and see both as measures of user engagement. Mobile MAUs and DAUs are mobile users who ‘accessed Facebook via a mobile application or via mobile versions of our website such as m.facebook.com, whether on a mobile phone or tablet, or used our Messenger app’, during the period of measurement (Facebook 2015a, pp. 34-35). Mobile-only DAUs are users that access Facebook services solely through mobile devices. It is important to explain these metrics in some detail to demonstrate the importance that Facebook places on *active* users. This dovetails with the analysis presented earlier on user self-commodification on the platform; Facebook values ‘active’ users because they are more value for advertising purposes.

However, Facebook admits that some of its metrics are affected by applications on certain mobile devices that automatically contact servers for regular updates with no user action involved. This activity can cause its system to count the user associated with such a device as an active user on the day such contact occurs (Facebook 2015a, p. 4). Given these qualifications, the figures show that Facebook had 890 million DAUs on average in December 2014, an increase of 18% compared to December 2013; 745 million DAUs who accessed Facebook from a mobile device on average in December 2014, an increase of 34% compared to December 2013 (Facebook 2015a, p. 5). Significantly, ‘on average during the month ended December 31, 2014, there were 589 million DAUs who accessed Facebook solely through mobile applications or

Facebook’s mobile website, increasing 49% from 395 million mobile-only DAUs during the same period in 2013’ (Facebook 2015a, p. 34).

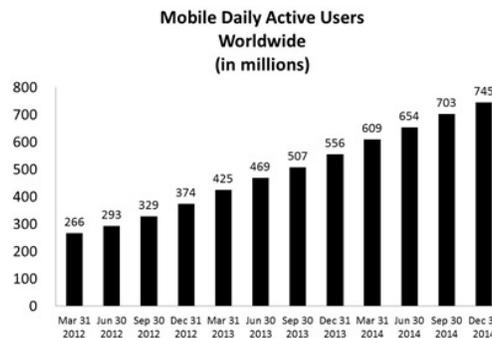


Figure 2 (Facebook, 2014a, p. 34)

When marketers design an advertising campaign with Facebook, they can choose the demographic they wish to reach, gender, age, location, education, interest, workplace and even relationship status of their audience, along with where the advert appears, varying in price depending on placement and prominence. Research has also found that ‘a wide variety of people’s personal attributes, ranging from sexual orientation to intelligence, can be automatically and accurately inferred using their Facebook Likes’ (Kosinski et al. 2013). Thus, advertising and profiling occurs on an inferred, as well as observed and volunteered user data. Advertisers can choose to either pay based on the cost per thousand impressions on a fixed or bided basis, cost per user ‘clicks’ on adverts or the number of actions taken by users, as specified by the client (Facebook 2013, pp. 66-67). Facebook click through rate (CTR) on advertisements is low because Facebook is used primarily for social communication, rather than browsing content. Facebook does not publish its CTR, for obviously reasons, but research has estimated that out of 1000 targeted adverts presented, on average, users only click on one (Fuchs 2014, pp. 115-116). Nonetheless, despite low average CTR companies continue to invest in Facebook advertising based on its ability to provide targeted adverts and leverage users’ connectivity. The price of different payment options is set by the amount of advertisers competing for a certain target audience and can vary over time. Advertising products offer social context, from a single ‘like’ button accompanying the advert to custom advertising, which allows marketers to highlight the interactions of users’ friends with the brand or product or market to existing customers based on actions they have taken on a marketer’s mobile app or website (Facebook 2014b). User engagement with advertising is encouraged in a number of ways, even in the services offered on the premise of minimising irritant adverts; the ability to hide advertisements that the user is disinterested in or finds offensive also generate useful data for marketers.

WhatsApp merger

Given the target-advertising model that has been examined above, I will contextualise the Facebook/WhatsApp merger within this framework to illuminate Facebook’s future direction. Facebook has promised that WhatsApp will remain ad free, as mentioned previously. This appears to contradict Facebook’s business model. While there are no guarantees that Facebook will keep its word, even if it does stand by its commitment the merger still fits within the business model outlined.

WhatsApp is a fairly simple, no-frills messaging app. Its business model consists of charging

users a nominal annual subscription fee of \$US1, after a year of free access. In 2013, WhatsApp reported revenues of \$US10.2 million and in the six months ending June 30, 2014, WhatsApp brought in \$US15.921 million in revenue (Facebook 2014c), a figure that represents just 0.3% of Facebook's \$US7.8 billion 2013 revenues. Thus, Facebook's valuation of WhatsApp substantially exceeds market value. Facebook's market cap at the time was \$US173.5 billion, thus; the acquisition represented approximately 10% of its total value (Preimesberger 2014). Upon closing the deal with WhatsApp, Facebook proposed to pay US\$4 billion in cash. The remaining US\$15million was to be paid in the transfer of Facebook shares to WhatsApp shareholders and employees (Facebook 2014a). Therefore, the bulk of the merger was paid in stocks. The price of the acquisition rose to approximately \$US22 billion by the closing of the deal in October 2014 due to the increase in value of Facebook's stock over the period of the acquisition. Citing its approach to Instagram's acquisition, Facebook stipulated in the agreement that WhatsApp's brand will be maintained; its current headquarters will be retained; Jan Koum will join Facebook's Board of Directors; and WhatsApp's and Facebook's existing Messenger app will continue to operate as standalone applications (Facebook 2014a). Facebook entered the IM market in 2011 with the launch of Facebook messenger. In November 2014, Facebook announced that the service had reached 500 million users (Martinazzi 2014). This is after the standalone app became necessary to access Facebook private messaging service through mobile devices, which was previously available through the Facebook app. Allowing WhatsApp to remain independent puts Facebook messenger in competition with WhatsApp.

As of October 2014, WhatsApp boasts over 600 million users in countries from Europe to India, Latin American to Africa (Shih 2014). Facebook values acquired WhatsApp users in monetary terms at roughly \$US2 billion (Facebook 2015a, p. 69). However, it is clear that this is a speculative figure based on potential opportunities. Facebook has included financial statements from what it deems non-material financial results from the WhatsApp acquisition from its respective date of acquisition in its 2015 Annual Report. Its 'total fair value consideration' stands at approximately \$US17 billion of which around \$US15 billion consists of 'goodwill' (p. 69). Goodwill generated from the acquisition 'is primarily attributable to expected synergies from future growth, from potential monetization opportunities, from strategic advantages provided in the mobile ecosystem, and from expansion of our mobile messaging offerings' (p. 69). The only other in-tangible assets identified besides user acquisition were trade names (\$US448 million) and acquired technology (\$US288 million) (p. 69). Thus, the vast bulk of potential value is estimated from user acquisition.

Discussion

The acquisition of WhatsApp instantly expands the amount of potential user data available for Facebook to mine. As smartphones and tablets overtake desktop computers as in demand technological products, mobiles have become essential to Facebook's business model. As social media platforms are generally free, popularity and relevance are also essential to Facebook's profitability; this is demonstrated by Facebook's purchase of Instagram and its failed attempts to buy Snapchat. The importance of relevance is in contradistinction to monetarising social media, as the most effective business model so far is targeted-advertising, which Facebook (2013, pp. 13-19) worries might alienate users. 'Relevance' is important for Facebook because it is directly related to the affective hold it exercises over users and the technology industry is marked by rapid developments and fleeting trends; for example, the rise and fall of MySpace. Companies that cannot hold users perish just as rapidly. Facebook's initial success was based on personal

computers. Facebook is now orienting toward the new trend in mobile media. Initially, acquisitions were primarily driven by the expropriation of talent. Now Facebook's strategy has expanded to focus on retaining its popularity by acquiring already popular platforms and allowing them a degree of autonomy. Although the average daily usage on Facebook has increased, demographic data shows that young teenagers have slowed their use of the platform (Facebook 2013, p. 15 and p. 24). With the resurgence of IM services, it is possible that the public nature of communication on Facebook could be exchanged for private messaging between friends. Additionally, the IM market is competitive and any changes to WhatsApp original privacy term would most likely lead to large numbers of users deserting to competitors. Facebook's ethos of 'connecting the world' and the ventures it invests in such as Internet.org—a project to connect the two thirds of the world that does not have Internet access—can be seen as aimed at acquiring more users and producing larger datasets. What social media and Internet companies can offer that print media cannot are highly sophisticated targeted-adverts. Therefore, the most successfully monetised social media business model to have emerged so far is predicated on surveillance.

Although WhatsApp is well on its way to reaching a billion users, these are not necessarily new users for Facebook, or even potential users for Facebook, as it is possible some users are attracted to the app because of its differences from Facebook. However, this is not entirely negative for Facebook as users who already have Facebook profiles yield more potential data, if Facebook can successfully commercialise the data without user or regulator backlash. Mobile technologies generate larger amounts of data on customers, coupled with Facebook profiles; this is a formidable data resource. The acquisition of WhatsApp could allow Facebook to offer users twin integrated accounts using an authentication program, which could provide Facebook with insights into user location and messaging patterns—all invaluable information to Facebook's marketing clients (Shih 2014). Because the app requires the phone number of both senders and receivers, and because of the annual fee, WhatsApp is linked both to users' mobile data and their financial data (Shih 2014). This is a virtual treasure trove of information for Facebook marketers and this is what has driven WhatsApp's acquisition price. WhatsApp is important to Facebook due to the increasing phenomenon of using computation devices for 'self-tracking', 'body hacking' or 'self-quantifying' (Economist 2012 in Berry 2014, p. 143), which is the next step in social media (Berry 2014, p. 143). This method of collecting data has been accelerated by the use of mobile apps, which provide geolocation data, as well as a wealth of related information (pp. 143-144).

Facebook's 2015 Data Policy (Facebook 2015b), updated 30 January 2015, claims that it is able to 'deliver' its services 'personalize content' and make suggestions to users by using information it collects about users. It also claims that when it locates location information it uses it to tailor its services to the user and others; for example, 'helping you to check-in and find local events or offers in your area or tell your friends that you are nearby'. Again, there is no mention of what these offers might be and whether advertisers have paid for the offer's display.

As Arvidsson and Colleconi (2012, p. 136) argue, Facebook can be conceived of as a financial venture. I argue the same logic can be applied to WhatsApp, which can help to understand Facebook's inflated valuation of the company. Similarly, 'relevance' is part of Facebook's business model because financial rent is related to the perceived ability to attract future investments (Arvidsson & Colleconi 2012, p. 145). A 'new Facebook' emerging in the form of WhatsApp could have jeopardised Facebook's stock price, which is one reason the social media market is so volatile. This is a contradictory model because Facebook attracts and maintains

users through the affective investments users make with the platform and other users on the platform; thus, popularity and relevance are essential to the monetarisation of these platforms, but the new economic model developed by Facebook is a threat to the platforms affective relevance to users. Affect is both what is quantified by social media companies and the product that is provided to consumers. When Facebook talks about ‘relevance’ it means the affective atmosphere of the platform, the accumulated affective interactions that make a platform relevant. Unfortunately for Facebook, the commodification of affect negatively impacts affective relevance or the affective ‘atmosphere’.

In the case of advertising, affect rather than intellect has long been the target of advertisers who seek to associate certain experiences with certain brands. In the case of governments, the commodification of affect/connectivity is important because in the context of depoliticisation in the West and the rise of anti-terror rhetoric, there has been an increased government attention on the social effects of affective networks, both how political parties can use social media to foster their ‘brands’ and cut through widespread cynicism toward politics, especially among the youth, and concerns about the ‘radicalisation’ of people through so-called ‘jihadist’ communities online. What does this mean for democracy? Mayer-Schoenberger and Cukier (2013, p. 184) address privacy concerns by calling for a new ‘caste of big-data auditors we call algorithmists’ to ‘secure a fair governance of information in the big-data era’. However, this relies on states to regulate data companies and assumes that the public, corporations and the state are autonomous, when the international controversy surrounding the Snowden files have illustrated the opposite, the interconnectedness of national security agencies, Internet businesses and even some researchers that engage in joint data mining projects with government and business (van Dijck 2014, p. 203).

It is unlikely that governments will regulate social media companies’ collation of user data because they increasingly seek to utilise this data. On 4 November, Facebook released its third Government Requests Report, which gives information about the number of government data and contents removal requests received within the first half of 2014. Facebook has seen an increase in government request for data and censorship of 24% since the last half of 2013 (Sonderby 2014a). In the United States, a New York court demanded Facebook turn over nearly all data from the accounts of 381 people, including photos, private messages, as well as other information. Facebook claims that this is the largest request they have ever received ‘by a magnitude of more than ten’, and Facebook argued that the request was unconstitutional and filed an appeal in a higher court to invalidate the warrants and force the government to return data it had seized. Of the 381 people who were subject to these warrants, only 62 were later charged in a disability fraud case (Sonderby 2014b). This demonstrates how governments can use social media datasets to their advantage. Governments’ willingness to spy on their populations has been demonstrated conclusively by the NSA scandal. Australia was also implicated in the scandal for using embassies in South-East Asia as listening post for a joint Defence Signals Directorate and NSA operations. The Australian government has also increased its surveillance powers, introducing new metadata legislation in the May 2014 budget. Governments in what are considered liberal democracies, let alone less democratic and dictatorial regimes, have no interest in curtailing the dataveillance business model of Facebook. In fact, they can be just as zealous in their hunger for data, albeit for different ends. This paints a bleak picture of digital and social technologies. But technologies are not inherently liberatory or oppressive. The use of social media during the ‘Arab Spring’, however hyperbolic the claims of Facebook revolutions by mainstream media at the time, demonstrates that these technologies can be appropriated by social movements for democratic reforms. There is an enormous affective

investment in social media networks. Perhaps more work could focus on how this investment is or could be articulated in contemporary political struggles, given the acquiescence of governments to the dataveillance model, it appears that only through social movements will users' privacy rights be redressed.

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