Anti-Social | Asocial | Associated: Mapping the Social in Social Media

Sy Taffel
Massey University, Palmerston North, NZ

Abstract:

In numerous marketing materials, Facebook famously claims that it is making the Web more social. What is left to the reader's imagination, is quite what the use of the term 'social' – both in Facebook's marketing materials and other related applications of the term surrounding 'social media' – actually means. Following in the footsteps of related hype-filled terminology such as 'Web 2.0' and 'interactive multimedia', the term 'social media' has become a seemingly ubiquitous part of communicational ecologies, yet it is often difficult to arrive at a clear understanding of what the term denotes.

This paper explores a range of ways that we can make sense of the 'social' in 'social media', exploring existing definitions of the terms alongside the range of online content to which the term is understood to refer. These categorisations form a point of departure for considering social media through three overlapping apertures derived from political economy, software studies and Actor-Network Theory. These perspectives suggest that the social spaces performatively transduced by and through social media are ones where the commodification of communication, algorithmic filtering practices, and network topographies play increasingly prevalent roles, demonstrating a marked departure from previous notions of community and society.

Introduction

In numerous marketing materials, Facebook famously claims that it is making the Web more social. What is left to the reader's imagination is what the use of the term social actually designates within the context of 'social media'. Whilst 'social media' has become a seemingly ubiquitous part of contemporary communicational ecologies, it is often difficult to arrive at a clear understanding of what the term denotes. Consequently, the central aim of this paper is to map numerous ways that we can comprehend what the 'social' in 'social media' refers to.

This paper begins by exploring popular definitions of the term 'social media' and by examining the ideological and technological dimensions of these descriptions in order to highlight some of the issues with the uncritical adoption of marketing terms within Media Studies. It then goes on to map three alternative ways of approaching what constitutes the social within social media, adopting perspectives that are founded within political economy, software studies, and Actor Network Theory. It presents an overlapping range of apertures to investigate the types of contribution social media makes within contemporary techno-cultural assemblages. The paper's conclusion draws together the various threads contained within the four main sections, examining the ways that synthesising these perspectives provides a useful way of considering the cultural, social and political affordances of social media platforms.

Defining Social Media

Popular definitions of social media (Kaplan & Haenlein, 2010; Van Dijck, 2013) state that social media forms include the following: blogs, Social Networking Software, virtual social and game worlds, collaborative projects, trading and marketing sites and content communities. Alongside this broad range of media forms, existing definitions claim that:

> " Social media is a group of internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content (UGC) (Kaplan & Haenlein, 2010, 60). "

Defining social media then, requires an exposition of the ideology and technologies associated with Web 2.0.

The term Web 2.0 was initially devised during a meeting between executives at O'Reilly Media and MediaLive International. They were exploring a conference theme regarding the financial strategies amongst online businesses which had thrived during the dot-com crash (O'Reilly, 2005b). The ideology behind this shift is described as proceeding from understanding the Web as an extension of mass media, towards viewing the Web as a platform whereby success is dependent on 'harnessing collective intelligence' (Kelly, 2005). The phrase has since become a key concept within cyberutopian discourses over the last decade (Jenkins, 2006; McGonigal, 2007). The term originated within Pierre Levy's *Collective Intelligence (1999)*, which contends that the computerisation of society has the potential to 'promote the construction of intelligent communities in which our social and cognitive potential can be mutually developed and enhanced' (1999:17), with the internet permitting the development of a real-time, global democracy with egalitarian distributions of knowledge. Having been coined by Silicon Valley marketing men seeking to explore post dot-com crash business models, the underlying ontology behind Web 2.0 remains the techno-utopian brand of neoliberal cyber-capitalism which has dominated the pages of *Wired* magazine since the early 1990s, regularly proclaiming that technology will bring about democratic revolutions and prosperity for all, despite overwhelming economic evidence that neoliberalism has primarily benefitted global financial elites.

On a technological level, Web 2.0 applies the numerical generational indicator used by many computational systems. Web 2.0 however, does not represent a generational upgrade to either the physical conduits of the internet, or the procological systems (Galloway, 2004) on which it is based. Whereas some Web 2.0 advocates point to the introduction of Asynchronous JavaScript and XML (AJAX) as crucial to enabling advances from the static HTML of the early Web to the dynamic and participatory experiences offered by Web 2.0 (Graham, 2005), it should be noted that AJAX is not a unique piece of software, but a combination of pre-existing programs/standards, which allows online applications to update themselves in response to user feedback without the requirement to reload the webpage. Furthermore, a range of technologies such as CSS, PHP, XML, RSS, HTML 5, and JavaScript have, over time, enabled and enhanced the potential for dynamic and co-creative online experiences. Many of these standards are not particularly recent innovations, PHP having been introduced in 1994, with JavaScipt and XML following in 1995 and 1996, all long before the term Web 2.0 entered circulation. From this perspective, there has not been a shift from Web 1.0 to 2.0, but an ongoing piecemeal evolution of web standards, hardware, and protocols, affording the creation of increasingly dynamic, complex, and collaborative online environments. Positing a simple Web/Web 2.0 dichotomy then, is an overly reductive move which glosses over multiple changes to standards, protocols, and hardware which have gradually enabled the evolution of the Web.

Returning to Kaplan and Haenlein's definition of Social Media as Web 2.0 plus UGC, the centrality of UGC to Web 2.0 reveals such statements to effectively be tautological. Moreover, the claim that UGC is specific to Web 2.0 is highly problematic and ahistorical given the prominence of co-creative forms of early online media (Poster, 1997; Kellner, 1999; Papacharissi, 2002). In contrast to business-led Web 2.0 rhetorics (Tapscott & Williams, 2006; Leadbeater, 2009), there do exist multiple modes of pertinent criticism of Web 2.0 within Media Studies (Beer, 2008; Fuchs, 2009; Van Dijck & Nieborg, 2009) alongside associated post-Marxist critique examining the role of exploitation within the creative industries and participatory culture (Terranova, 2004; Berardi, 2009b). It is, however, worth recapitulating this history because of the influence that rhetoric surrounding Web 2.0 has upon contemporary discourses and definitions of social media.

Having examined the way that social media is currently framed, I next turn to an approach based upon political economy to consider some of the pivotal differences between the social space afforded by social media platforms, and pre-existing notions surrounding sociality.

Anti-Social

A key observation that can be made when considering ways that social media radically depart from previous notions of community and sociality, relates to the role of commodification and the privatisation of space and infrastructure. Whereas communal and social spaces are semantically and conceptually tied to notions of

communism, commonism and socialism (Hardt, 2010), the modes of community and sociality encountered within social media platforms are frequently predicated upon digital enclosure (Andrejevic, 2007). Indeed, one could understand the emergence of social media as a continuation of the drives towards the commodification of affective and communicative spaces that characterise the neoliberal economy (Bauwens, 2005; Hardt & Negri, 2005; Berardi, 2009a).

High profile examples of social media such as Facebook, Twitter and LinkedIn present obvious examples here. As of March 2015, the market valuation of Facebook, Twitter, and LinkedIn stands at US$234 billion, $US31 billion and US$33 billion respectively (NASDAQ 2015). This clearly denotes that these media platforms are significant generators of economic wealth, especially when their relative newness is considered, with none of these entities existing before 2003. The financial model commonly employed by these platforms is that of selling highly targeted advertising to users, who access the platforms for free. As a model of financing media platforms, this can be understood as an extension of practices common throughout the broadcast era, whereby commercial television and radio stations were free at the point of access for consumers, instead deriving their economic model from selling airtime to advertisers. This system was famously described by Dallas Smythe (1981, 22-51) as the creation of the audience commodity, whereby the product is the end user whose attention is effectively what is being sold to advertisers.

Indeed, recent work into the political economy of social media platforms (Manzerolle, 2010; Fuchs, 2012) has emphasised this continuity whilst also delineating important differences relating to the ability of contemporary social media platforms to deliver highly targeted advertising. Whereas broadcast media allowed advertising agencies only to purchase time based upon broad interests relating to the time of day and/or genre, social media can apply the vast quantities of personal information provided within UGC to very specifically cater advertisements towards particular niches. For example, if advertising a wedding photography business located in Auckland through Facebook, I could choose to only advertise to Facebook users located within a 50 kilometre radius of the city, and whose relationship status was set to engaged. Alternatively, I could advertise the same business using Google's Adwords system, so that my advert was exclusively served towards Google users who used the search terms 'Auckland', 'wedding' and 'photography'.

Being able to tailor advertisements so precisely is understandably conceptualised as a positive development for businesses, and can be understood within what Nigel Thrift has described as a move towards a 'knowing capitalism' in which:

> " … [C]onsumption in the West has been boosted to such an extent that it has begun to produce new commodity forms bound up with new kinds of relation. Most particularly, these forms are intimately bound up with the increasing mediatization of everyday life (Thrift, 2005, 7). "

By utilising the data provided by users, social media platforms find novel ways of extracting value from many forms of interaction and communications which were previously integral to the formation of social and familial networks, but occurred via face-to-face encounters or media such as the telephone, in which user surveillance and data harvesting were not routinely employed. Consequently, social media not only increases the scope of mediation within everyday life, but leads towards an increased commodification of communication. Social and familial interactions are now being monetised via the mechanism of refining material served to the audience commodity, whose limited attentional capacity is now the realm of scarcity within the contemporary context of informational overload (Crogan & Kinsley 2012; Terranova, 2012).

It should be noted, however, that there do exist economic outliers within the field of social media, such as Wikipedia, which do not adhere to a commercial model predicated on user surveillance and targeted advertising. While such examples demarcate the existence of viable non-profit based alternative models, Wikipedia is currently an outlier in such discussions, as the field is almost entirely dominated by sites such as Facebook, Pinterest, Twitter, Blogger, YouTube, Flickr, Instagram and other commercial platforms.

Asocial

The second approach to the particular type of sociality fostered by social media platforms uses an approach based in software studies to consider the asociality of media, examining how social media becomes a way of avoiding one of the hallmarks of communities – difference. Software studies is a relatively new approach (Fuller, 2008; Wardrip-Fruin, 2009) which contends that the impacts of software upon socio-cultural assemblages is a relatively underexplored area. Software studies seeks to enact a shift away from the study of content and user experiences associated with the interface between humans and software, towards examining the underlying agencies and power relations contained within the data processes, algorithms, protocols and other forms of code which create user experiences. Importantly, this paradigm shift challenges assumptions that software systems are ideologically neutral, utilitarian tools, instead proposing that a range of values are built into the ways software functions, and that this under-theorised area requires sustained analyses if we are to create more

realistic understandings of how software shapes contemporary societies.

We saw in the previous section that processes around harvesting data provided within UGC is central to the economic model of commercial social media platforms, with this model allowing the platforms to sell very specific audiences to advertisers, and on sites such as Facebook, YouTube and Google. This is accompanied by an algorithmic process which personalises data which the system decides is relevant for a particular individual user, using their past actions as a basis for decision making. In this section I will explore the usage of personalisation algorithms on Facebook as a way of introducing some of the issues associated with the personalised Web.

$$\sum_{\text{edges } e} u_e\, w_e\, d_e$$

Facebook uses the EdgeRank algorithm to discern which items ought to be syndicated into each user's newsfeed. The original EdgeRank algorithm was formally expressed as:

The three factors which together equal $\sum$, are user affinity (ue), weight (we), and time decay (de). Tania Bucher (2012, 1167) describes these factors thus:

1. *Affinity*: This pertains to the nature of the relationship between the viewing user and the item's creator. Here the amount and nature of the interaction between two users is measured. Sending a friend a private message or checking out his or her profile on a frequent basis heightens the user's affinity score to that particular friend.

2. *Weight*: Each Edge is given a specific 'weight' depending on how popular or important Facebook considers it to be. Therefore, not every Edge gets weighted the same. Some types of interactions are considered more important than others. Arguably, a Comment has more importance than a Like.

3. *Time decay*: Probably the most intuitive component relates to the recency or freshness of the Edge. Older Edges are thus considered less important than new ones.

The types of activity that feed into the weighting factor are themselves not neutral. It is possible to 'like' posts, brands, products and pages on Facebook, but not to dislike them. This enforced sense of positivity is no accident (Fuchs, 2013, 160). The risk of allowing dislikes (or something similar to) is that such a feature would allow users to mount campaigns against brands via the platform. Given that Facebook's economic model is predicated upon advertisement, the pursuit of strategies which could be utilised by users against those advertisers is unlikely and goes some way towards explaining the affirmative environment created through the practice of 'liking'.

When considering what type of social space this constructs, it should be noted that critical discourses and serious issues are likely to be under-represented, due to the fact that it is far easier to logically state that you like a cute cat picture or a witty meme than material covering child abuse or female genital mutilation. Danah Boyd (2010, 27) describes this as the 'psychological equivalent of obesity', whereby companies who have a financial interest in capturing attention achieve this through presenting the informational equivalent of fast food – celebrity gossip, sports, and sexualised imagery. The popularity of this digital junk leads personalisation algorithms to subsequently filter out alternative search results which present more serious discursive frameworks. Consequently, Facebook feeds are regularly filled with a combination of paid-for advertising and posts from commercial websites and blogs whose economic model is based on the creation of 'viral media' which is easily shared, and viewed alongside the adverts which fund the creation of this material. The result is a social space whereby the contents of user communications frequently bear little resemblance to the 'everyone a pamphleteer' model of the postmodern public sphere which animated early discussions about collaborative content creation and the   internet. Instead it consists of professionally created targeted advertising and

professionally created viral media.

The application of personalised search and newsfeed algorithms has also been criticised for creating what Eli Pariser (2011) terms 'filter bubbles'. Extrapolating upon a user's previous history to provide results effectively entails that the information you are provided with has a strong tendency to reinforce information you already possess. Whereas one of the hallmarks of a society is the inclusion of difference, with each individual having to interact and negotiate with an array of alternative perspectives, the social spaces created by social media are milieus within which difference is often suppressed by personalisation algorithms which serve a formulaic version of news and events that are designed to reinforce existing modes of subjectivity rather than to challenge them. Consequently, filter bubbles can create echo chambers in which confirmation biases are bolstered rather than challenged.

The utility of adopting an approach informed by software studies is that by analysing the algorithms which underlie the systems of personalisation within social media, we begin to comprehend some of the often hidden outcomes and agencies which operate behind the interfaces of these platforms. Pariser (2011, 15) convincingly argues that one of the key issues here surrounds the lack of transparency relating to filter bubbles – most users remain unaware of personalisation algorithms, so information they receive that confirms existing biases is mistakenly believed to be an objective representation of knowledge.

Associations

The final approach I want to employ derives from Actor Network Theory (ANT), and in particular from the reorientation of sociology proposed by Bruno Latour (2005). For Latour, the issue with sociology's disciplinary orientation originates with the term's definition as 'the science of the social'. This version of the social suggests a specific type of pre-existing relationship which can readily be applied as an adjective analogous to terms such as 'clever', 'large', 'metallic' or 'plastic', so that social media denotes media with added 'socialness'.

Within ANT, on the other hand, the social is not a defined descriptor that can be applied to various phenomena to produce social contexts, social factors and social media platforms. Instead, the term is adopted as a way of mapping heterogeneous connections between entities:

Redefining sociology not as the 'science of the social', but as the *tracing of associations.* In this meaning of the adjective, social does not designate a thing among other things, like a black sheep among other white sheep, but *a type of connection* between things that are not themselves social (Latour, 2005, 5).

Applying ANT's methodology to social media requires considering how the dynamic assemblages of users, code, content, technologies, designers, and economic and legal actors are creating new forms of connection within and across social media platforms, and how these novel associations impact upon the broader evolutionary trajectories of these actors. One of the crucial ways in which ANT signals a departure from the approaches of social constructivism is through the elevation of the nonhuman elements of these networks – such as software, servers and smartphones – to the status of active agents (actants). Whilst Latour does not claim this amounts to collapsing the differences between humans and non-humans, this move is explicitly designed to counteract dualistic modes of thought. Whilst questions have been raised over whether ANT presents a method which is too politically disengaged to be useful within media studies (Macgregor-Wise, 1997; Couldry, 2008), mapping the prescient features of the networks surrounding social media does, I feel, present a useful perspective in examining the politics such platforms embody.

Considering the agencies of nonhumans in tracing the associations surrounding social media can lead in numerous directions, indeed, the previous section's software studies-led approach demonstrates one way that algorithmic agencies impact upon the culture of connectivity surrounding these platforms. In this section, I wish to pursue this approach in relation to network topology, an area where interest has largely been instigated by the work of Alberto Barabasi (2003; Barabasi & Albert, 1999), which explores the topology of linking practices within the Web revealed the presence of a power-law distribution. Whereas a normal distribution forms a bell-shaped curve whereby the mean and median points are situated centrally, a power-law entails an exponential distribution, with a handful of nodes with extremely high values whilst the majority reside within the long tail of the curve, corresponding to the contemporary situation in which sites such as Google, YouTube, Facebook, Yahoo, and Amazon have hundreds of millions of users, whereas the vast majority of the Web remains unknown to virtually all users. Barabasi (2003, 56-57) consequently argues that:

> " ... the most intriguing result of our Web mapping project was the complete absence of democracy, fairness and egalitarian values on the Web. We learned that the topology of the Web prevents us from seeing anything but a mere handful of the billion documents out there. "

Barabasi and Albert (1999) additionally postulate a hypothesis contending that links made by new nodes are

overwhelmingly made to already existing well-connected nodes. This formulation, known as preferential attachment, creates a positive feedback loop in which a node's existing status as a popular site becomes an important factor in driving further growth and visibility. It must, however, be noted that preferential attachment is not the only factor that determines online popularity. If it was then older social networks such as MySpace and Friendster would still be the most popular social media platforms. There exists a broad range of nonlinear factors governing the dynamics of the Web, and whilst preferential attachment is one attractor, a multitude of issues more conventionally explored within media studies – such as the types of content on offer, user interfaces, website design, financial investment, and the amount and visibility of advertising are additional factors affecting a website's evolution. Network topology and preferential attachment do, however, represent important markers of nonhuman agency within online networks. No-one consciously designed the Web to exhibit this distribution.

Interestingly though, when we parallel this situation with contemporary economics, we find some striking similarities. Just as the network topology of social media creates a system of gross inequality, we see the globalised networks of neoliberalism in which the richest 85 individuals in the world own as much as the poorest 3.5 billion, and the richest one percent own 65 times the amount of the poorest 3.5 billion (Fuentes-Nieva & Galasso, 2014). Whilst neoliberal advocates posit that participation in markets is universal, and thus constitutes a form of democratic participation in society, the reality is that deregulated market and financial capitalism have created a society that rewards the richest one percent. In a broadly homologous manner, social media platforms use the language of social connectivity, inclusion, participation and democracy to create a similar situation – a handful of sites, users and content become hugely popular while most material is effectively invisible.

Conclusion: What Type of Social?

The three approaches pursued here, political economy, software studies and ANT present a series of overlapping apertures that provide us with related insights into the type of connectivity fostered by commercial social media platforms. Across all three approaches there is commonality in terms of the revelation of various aspects pertaining to the ways that social media present highly commercialised modes of engagement. This closely correlates with Thrift's (2005) arguments regarding the transition towards a more knowing capitalism, and Berardi's (2009b) claims that within an information society the affective elements of subjectivity increasingly form a source of surplus value. Whilst these positions are found in the post-Marxist left, they closely resemble arguments posited by cyber-utopian neoliberals (Shirky, 2010), whereby the marketization of what had previously been the leisure time of citizens is portrayed as a positive development in an evolutionary drive towards economic efficiency. Productivity is no longer limited to the working day, but every act of communication becomes a new source of potential value, unlike during the mass media age, when the limited interpretive activity of the audience commodity was not productive in and of itself.

Such a formulation of the social presents a significant departure from traditional connotations of the social which gesture towards modes of companionship and community. Indeed, from such perspectives, the manner by which social media platforms commodify everyday communications and notions of friendship and community can be envisaged as highly anti-social. Insofar as the (admittedly problematic) Habermasian conception of the public sphere (1991) posited a civic space that stood outside the direct influence of both commercial and governmental interests, this enclosure of communicative and affective activity effectively diminishes the space for independent public associations to form.

The filter bubbles and algorithmic agencies associated with the complex rule-based systems which act as the new gatekeepers of information on social media platforms expose a second important alteration to the type of connectivity experienced within social media platforms. These algorithms tend to create impacts that are both unseen and poorly understood by users. In terms of the type of communities created by personalisation algorithms, we see that this risks forming ghetto-ised communities who mistake the echo chamber of personalised material designed to conform to existing biases as an objective reproduction of information.

Following the methodological imperative of ANT – that we should not seek to explore whether media is or is not social, but must explore the networks of relations and actants which constitute the type of associations this particular assemblage is composed of – we see connections in which non-human agencies are at play. In particular, tendencies around the topology of scale-free networks and preferential attachment create media platforms whose highly inequitable distributions eerily mirror the economic distributions found in contemporary societies.

Considering these approaches together presents a significant departure from the marketing materials that claim that social media platforms are simply making the Web more social. Instead, we can see various ways that the associations surrounding these platforms contain elements that are antithetical towards traditional notions of sociability and the social sphere as a space which is demarcated through its separation from commodification. This does not mean to say that these platforms do not allow people to make novel connections, assist them to stay in touch with a diffuse and geographically distributed network of loose interpersonal connections, contain

an astounding array of inventive and innovative forms of UGC, or allow novel modes of organising political dissent. However, alongside these broadly positive elements, there exist a range of what we may consider antisocial and asocial associations which require attention if we are to conduct a critical appraisal of the social forms brought into being by social media.

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About the author

Dr. Sy Taffel is currently a lecturer in media studies at Massey University, Aotearoa New Zealand. His research interests include political ecologies of digital media, digital media and political activism, pervasive/locative media, software studies, peer-to-peer production, digital aesthetics and documentary film. In 2013, Sy completed his PhD at the University of Bristol, United Kingdom, exploring political, ethical and agential facets of digital media ecologies. He has also worked as a filmmaker and photographer and has been involved with media activist projects including Indymedia, Climate Camp and Hacktionlab.

Email: s.a.taffel@massey.ac.nz