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MORE THAN JUST FRIENDS? FACEBOOK, DISCLOSIVE ETHICS AND THE MORALITY OF TECHNOLOGY

Plus que de simples amis? Facebook, l'éthique de la divulgation et la moralité de la technologie

Completed Research Paper

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Abstract

Social networking sites have become increasingly popular destinations for people wishing to chat, play games, make new friends or simply stay in touch. Furthermore, many organizations have been quick to grasp the potential they offer for marketing, recruitment and economic activities. Nevertheless, counterclaims depict such spaces as arenas where deception, social grooming and the posting of defamatory content flourish. Much research in this area has focused on the ends to which people deploy the technology, and the consequences arising, with a view to making policy recommendations and ethical interventions. In this paper, we argue that tracing where morality lies is more complex than these efforts suggest. Using the case of a popular social networking site, and concepts about the morality of technology, we disclose the ethics of Facebook as diffuse and multiple. In our conclusions we provide some reflections on the possibilities for action in light of this disclosure.

Keywords: Social networking, ethics, design, consequences, Latour

Résumé

Les sites de réseaux sociaux sont devenus des destinations très populaires pour se faire de nouveaux amis ou rester en contact entre amis. Néanmoins, leurs détracteurs les présentent comme des espaces où règnent le mensonge et la tromperie. De nombreuses recherches dans ce domaine se sont focalisées sur les objectifs des personnes lorsqu'elles utilisent une technologie et les conséquences qui en découlent. Dans cet article, nous avançons que le repérage des mensonges est une tâche complexe. Nous mobilisons les concepts liés à l'éthique de la technologie et révélons que l'éthique de Facebook est diffuse et multiple.

Introduction

The phenomenal success of Internet sites such as Bebo, Facebook and MySpace has meant that social networking has become a ‘hot’ topic for academic researchers, business leaders and social commentators. In broad terms, social networking involves social relations between people who have some type of relationship or affiliation (Wellman 1996). Thus, social networking technologies are often conceptualized as providing support for such activities. Prior technologies such as chat rooms, mobile phones and landline based telephones all hold, and continue to hold the potential to facilitate social networking. However, the potentialities afforded by particular social networking sites have captured the public’s imagination leading them to be defined as different or even new. The features on offer vary among sites, but often include a facility for creating profiles, which in addition to text, images, and video created by the member, also contain content provided by other members, and a public list of the people that one identifies as friends¹ within the network. From around 1997, with the launch of Sixdegrees.com, social networking sites have become a popular online destination for many people (boyd 2008b; comScore 2007a; comScore 2007b).

In terms of the research agenda in this area, unsurprisingly some of this work resonates with earlier and concurrent research on online communities and networks. For example, Carter (2005) comments upon the validity of friendships in ‘virtual communities’, while Larsen (2007) discusses the strong sincerity discourse that exists within Arto, a Danish social networking site. Indeed, Nancy Baym (2007) ‘goes back to’ other forms of online networks to critique danah boyd’s (2006) pronouncement that egocentric networks – as exemplified by social network sites – are replacing online groups. Still, much research on social networking sites is concerned with areas such as identity work (boyd 2006; Donath 2007; Light 2007; Liu 2007); motives for/things gained from use, privacy/surveillance issues and profile completion (Donath 2007; Ellison et al. 2006; Gross and Acquisti 2005; Joinson 2008; Lampe et al. 2006; Lampe et al. 2007); friending (boyd 2004; boyd 2006; Donath 2007; Joinson 2008; Lampe et al. 2007); and how such spaces are (Golder et al. 2007; Hargittai 2007; Lange 2007), or are not (Byrne 2007; Hargittai 2007), integrated into people’s everyday lives. This has resulted in a rather asymmetrical approach to the area with emphasis often placed on human agency over technological affordances. Thus, research on social network sites frequently addresses how users make the technology work for them beyond the designer’s original intentions. Whilst this is a valuable line of inquiry, it does mean that minimal attention is given to the role of technology in shaping such spaces and interactions, although a few studies do run counter to this trend. For example, Kim and Yun (2007) highlight how the functions and features of Cyworld shape user’s relations with themselves; Kendall (2007) points to the way that the technological features of Livejournal make explicit the tensions in social interactions; Ahern et al. (2007) raise the possibility of networking technologies providing warnings regarding postings; and boyd deals with the mediated nature of interactions in social network sites (boyd 2008b) and the issue of social convergence brought about by the Facebook newsfeed application (boyd 2008a). Nevertheless, even research that addresses the role of technology often presents the technological functions and features as properties designed in by developers, so that, again, the focus is on human agency. Technology as an actor is downplayed or ignored.

Directly or indirectly, this work raises ethical questions. For example, researchers who consider the role of designers in shaping networking spaces invariably examine issues of commodification and/or the exploitation of users and user generated content (Fernback and Papacharissi 2007; Griffiths and Light 2008; Light et al. 2008; Magnet 2007; Petersen 2008; Röhle 2007). In this work, ethics and design are generally related in a consequentialist argument which holds that what makes an action (design) right or wrong is its ultimate consequences. From this perspective, the emphasis in technology design should be on achieving the greatest good for the greatest number, and developers of social networking sites are seen to have ethical responsibilities for ensuring that their designs are oriented towards achieving the desired goal. The developers, on the other hand, appear to hold a user oriented view – they make social networking sites for people to play with. Although they choose, or are compelled, to regulate particular aspects of interaction through privacy and acceptable use policies, such approaches are targeted at the members of sites in terms of what they can and cannot do, what might be done with their data and by whom. In this case, the ethical focus switches to what people should do and expect in terms of their moral obligations and rights. Such utilitarian views of morality attribute agency to humans (in this case, the designers and users), while information technology is seen as an object in their hands which may be fashioned in ways that are morally acceptable or not. Overall, technology is seen as a neutral actor and hence questions about the morality of technology do not arise.

¹ There is debate regarding what constitutes ‘a friend’ in these spaces, especially since some people may have thousands of such friends.

In this paper, we will challenge this separation between the 'social' and the 'technical', and thus question the view that moral behaviour attaches only to the former. Drawing from the recent work of Bruno Latour (2005), we will explore the social networking site, Facebook, in terms of what he refers to as four sources of uncertainty about the social. These ideas about the nature of actions, objects, groups and how they interact to make a difference to a state of affairs highlight the hybrid nature of entities and thus the view that artefacts, and in particular information technology, can have a moral character. Following Introna (2007), we argue that this position offers an alternative to the tool view of technology and utilitarian notions of ethics such that, from our perspective, objects have a mediating rather than an intermediary role (that is, an ability to transform rather than merely transport the meaning of what they carry). The ethical nature of this view is that it is problematic to trace the interests, intentions and potentialities that come together in the process of social networking, and hence that it is simplistic to attribute responsibilities for its consequences to *a priori* determined categories of humans identified as designers, suppliers or users of particular Internet sites. This perspective raises important and controversial questions about the extent to which intervention is possible in social networking activities, however morally desirable it may be in some cases.

The remainder of this paper is organized as follows. In the next section, we situate our research within the major bodies of work on ethics and outline how our concern to explore the ethics of information technology may be addressed by drawing on concepts and ideas from Latour's recent work and its development by Introna in the notion of disclosive ethics. Then we present an empirical example drawn from an ongoing research programme into social media which is being conducted by Griffiths and Light. Drawing from this work, we make visible some of the strategies used to enrol members of the Facebook network and the potential implications of their enrolment. Methodologically, for the purposes of this paper, our approach relates to that of other researchers (Faraj et al. 2004; Introna 2007; Light 2007) whose focus is upon the analysis of a particular artefact in the Science and Technology Studies (STS) tradition. Such an approach requires recognition of the problems of technological, and increasingly in contemporary STS work, social determinism (Sørensen 2002). STS approaches recognise the indeterminate and unpredictable nature of technological appropriation. In our conclusions, we suggest some ways forward and outline the conditions of possibility for such action.

Ethics and ANT

The emergence of new technologies inevitably raises ethical questions. Thus, the phenomenal success of social networking sites has made them a focus of such attention, with concerns raised about the potential for deception, social grooming and the creation of defamatory content, amongst others (Bahney 2006; Fox News 2007; Sweney and Gosden 2006). Within the IS field, and more generally in business and management studies, the dominant position on ethics is informed by normative theories that aim to develop a set of best practices governing human conduct. Dependent on the particular concepts or system of ethics applied by the researcher, attention may focus on the consequences of action (consequentialism); the nature of the act, in terms of one's duties and others' rights (deontology); or the moral character of the agent (virtue ethics) (Johnson 2001). From this perspective, individuals engage in moral conduct by following principles and rules, or adopting habits and behaviours seen as virtuous. This position is consonant with a tool view of (information) technology (Orlikowski and Iacono 2001), in which people have control over the ends to which the technology is deployed and thus they are able to design systems and employ preventative measures to guard against the likelihood of undesirable behaviours and consequences. The Kantian view of an individual, as an autonomous agent who makes decisions and moral judgements on the basis of rational considerations, has been a particularly popular form of the deontological tradition in research on business ethics and, to some extent, computer ethics (Bell and Adam 2004). The implications of research in this perspective are that it allows a consideration of the impacts of technology (Introna 2007) and how ethical issues may be addressed through, for example, policy interventions targeting governance of the Internet.

On the other hand, descriptive ethics is concerned with people's attitudes and beliefs about morality. By contrast with the prescriptive nature of normative ethics, descriptive ethics seeks to uncover people's values and ideals, their beliefs about which actions are right and wrong, and how they judge the character of moral agents. Such research requires empirical investigation rather than a priori judgements about the nature of right and wrong. Foucault's notion of ethics is an example of such a contextually dependent notion of moral conduct. Radically opposed to the Kantian view of rational, autonomous agents, who act in line with moral codes determined a priori, Foucault's notion of the ethical subject (Foucault 1985) sees human agents as subjects enmeshed in a network of moral relationships, where ethical behaviour is a matter of judgement subject to the power dynamics of an individual's social circumstances. This network of relationships (or discourse) involves an ensemble of actors, practices,

institutions and mechanisms, technologies, or *dispositifs*, which enable particular practices to be related to each other in a specific type of discourse (Foucault 1980). Such a collective of humans and non-humans is evident in many social constructivist accounts of technology. Nevertheless, proponents of the ensemble view (Orlikowski and Iacono 2001) have varied in the extent to which they theorize or acknowledge the agency and indeed the moral character of information technology. Drawing from Latour's recent work and developing Introna's (2007) line of argument, we outline some concepts from actor-network theory (ANT) that have informed our study of the ethical issues relating to the social networking site, Facebook.

ANT is premised on the view that technology and society are mutually constitutive. Thus we cannot attribute intentionality and purposeful action to humans alone. Rather, they are a property of institutions – hybrid entities of humans and non-humans (Latour 1999b). Thus when someone enters a site, such as MySpace or Habbo Hotel, a whole series of opportunities open up which prior to this encounter existed only as potentialities. Both they and the space are transformed – the member is now able to chat, play games or communicate with friends, while the possibilities of the space (some intended and some unintended) are also revealed. Furthermore, a range of possibilities are closed off. Latour (2005) addresses these potentialities and the way they are transformed into possibilities through four sources of uncertainty about the 'social' – the nature of groups, actions, objects and the way they associate to achieve a transformation.

Latour's central argument is that objects act to make a difference to a state of affairs. They are participants in any course of action. Thus when I sign on to my Facebook account, the possibilities I have – for communicating with others, for disclosing who I am or not, for making new friends – are revealed in a different way. A number of facilities are offered by the technology; I choose some and decline others, but the manner of their presentation, my adeptness in using the system, my original intention in signing on to my account, amongst others, all participate in the transformation (or translation of interests) that takes place. I may be distracted by an invitation from another member, or I may single-mindedly pursue my original goal. In the latter case, the unexpected opportunity offered by another actor (a combination of human and object) was not sufficiently attractive to deflect me in my course. However, this may occur for many reasons – I may not be interested in the specific invitation, I may have grown weary of accepting invitations because the opportunities they offer are over-familiar, or I may have pressing business and be unwilling to tolerate distractions. The way technology acts may transform my intentions, but equally what I do has implications for the potentialities of the technology – its capacity to make a difference. And, of course, these transformative effects extend across the network, not least to the actor that sent me the invitation.

Latour distinguishes between mediators and intermediaries – the former being the objects that make a difference because they transform rather than simply transport the meaning of what they carry. Two of his most well-known examples illustrate the point. The first case – of the way that a road bump disciplines drivers into observing speed limits (Latour 2002) – illustrates how a mundane object is able to transform intentions even when requests from officials fail to do so. In the second case – of a person holding a gun – he argues that the issue is not whether people are bad or guns are bad, but rather that we need to consider the entity of 'a person with a gun', that is, the way that a gun mediates the intentions of the person holding it (Latour 1999b). The issue of morality, and where it lies, is obviously raised by these examples. We shall return to this point later.

Thus, objects participate in the action, but how do they do so? Here, Latour's (2005) arguments about the nature of groups and the nature of actions are relevant. Groups are made, or performed, that is, actors are given an identity, and there exist many contradictory ways for this to be done. In other words, collectives of humans and non-humans come to stand for something through a negotiated process which renders the group capable of being represented. Representatives for the group need not have human form. For example, most of us at some time have been represented by a graph, a spreadsheet or a set of statistics that makes claims about our needs, wants, performance and so on. Furthermore, policy decisions affecting a wide population may be made on the basis of such representations. The process through which hundreds, even millions, of people come to be represented by some cells in a spreadsheet – the way that interests are aligned, that exclusions are made, that enrolments are strengthened – these are the concerns that may be addressed by ANT. It is in this sense that Latour (1999a) argues that ANT is a method – a way to trace social connections using the trails left by the controversies about group formation.

Objects may also act to displace an actor's original goals, as we saw in the invitation example earlier on. However, there we focused on the receiver of the invitation and some of the goals or interests she may have. What about the agencies of the sender, of the interface which notified the invitation, and of the other actors also communicating with sender and receiver? In short, in each course of action a great variety of agents seem to barge in and displace the original goals so that we never know for sure who and what is making us act (Latour 2005). However, the major

distinction is to decide whether the agency is treated as an intermediary or a mediator, which is not dependent on its figuration – in human or non-human form. Although objects have agency, their activity is only visible for a short while, before it recedes into the background – with technology, for example, as we get used to how it works. Introna (2007) suggests some ways of maintaining this visibility. We build on these suggestions in our conclusions. Overall, these arguments about the nature of groups, actions and objects suggest that, in an empirical investigation to trace an actor-network, the researcher needs to identify the entities involved without pre-judging their nature as mediators or intermediaries based on their figurations; to examine the associations they make, bearing in mind that such assemblages may fail; and to account for a difference in the resulting order in terms of new agencies, withdrawn agencies, etc. This is no small task in our increasingly technology-mediated world, in which computer programs that are inconspicuous to us may execute without our knowing and have effects that even designers could not predict in advance. And if agency is hard to trace, then so too is morality.

In short, the ethical implications of the perspective we have outlined are that, just as objects have agency they also have morality. Furthermore, a diverse group of humans and non-humans associate in any course of action, and agency and hence morality is diffused among them. So tracing intention and attributing purposeful action is not a small undertaking. ANT is a method for tracing the actors, but they cover a lot of ground (so actor-networks may be large) and actors can only be traced when they are on the move (so a priori judgements of their intentions are not possible). Thus, which actors can be held to account for the consequences of social networking and what type of purposeful action can be taken, and by whom, are complex questions. In a paper such as this, we cannot hope to give a full account of all of the agencies involved in the use of social networking sites, and the ethical issues arising. Nevertheless, in the section that follows we explore the Facebook site, tracing some of the key moments that a user of the technology can experience, aiming to disclose the ethics of the technology so that they may come up for scrutiny (Introna 2007).

A Facebook Case

Facebook (www.facebook.com) is a social network site that enables friends to stay in contact. Founded in the USA in 2004, by a Harvard University student, Mark Zuckerberg, the site initially targeted fellow students at Harvard but later expanded to include other universities, colleges and high schools. Initially users had to provide a university email address to register with the network, however Facebook later expanded to workplace networks, and in September 2006 granted access rights to anyone, regardless of affiliation. Facebook has over 70 million active users, with the United Kingdom having the second largest active user base (8 Million members) and the United States having the largest (Facebook 2008). Below we outline some of the key interactions a user can have with Facebook – creating profiles, making friends, publicizing activity – focusing on the extent to which the operation of these applications is transparent to the user and the potential implications for those that are enrolled into the network.

Creating Profiles during Registration

All users of Facebook must create a profile and they begin doing this during the registration process. Messages on the Welcome page emphasize Facebook's networking potential and make claims about its ethical nature as "*a social utility that connects you with the people around you*", enabling you to keep up with family and friends, share photos and videos, reconnect with old classmates, and also control privacy online. The sign up boxes ask you for the minimum information needed to set up your profile – name, date of birth, password and e-mail address – although it is not evident that you are doing more than registering at this point. You can ask why date of birth (labelled 'Birthday') is required, by clicking on the text "*Why do I need to provide this?*" underneath the 'Birthday' data entry point. A pop up replies:

"Facebook requires all users to provide their real date of birth as both a safety precaution and as a means of preserving the integrity of the site. You will be able to hide this information from your profile if you wish."

Facebook's terms of use for individuals require you not to "*register for a User account on behalf of an individual other than yourself.*" Nevertheless, Facebook does not validate a registrant's name, age or contact details when setting up a new user account (unlike Cyworld, a site popular with Koreans (Kim and Yun 2007)). You automatically accept Facebook's terms of use and privacy policy (discussed later) by clicking 'Sign Up' on the

Welcome page – there is no separate tick box to indicate that you have read and understood these conditions (terms of use and privacy policy are accessed via small text links on the Welcome page, and all other site pages, and together are over 10,000 words long).

Following ‘Sign Up’, Facebook asks you to confirm your email address by picking up a message from your email account and following the link it contains. This link directs you to the Facebook site. Here, a message informs you that someone/thing wants to add you as a friend. The Facebook application selects this friend. In the case of one of the authors, *Medics Index* wanted to be his friend. The author knew nothing of *Medics Index*, but accepted the friend request since he could not see any way to avoid it². On the next page, he realized that, in contrast to the large blue button for accepting whatever was being asked of him at that time, the word ‘skip’ appeared at the top of the page in small plain text, allowing him to decline particular requests. This page offered him the opportunity to find other friends, suggesting that he enter his email account details and password, if he had a Yahoo account or AOL instant messenger account³. The application then accessed the address book of his email account, found people who were already users of Facebook, added them as friends, and gave him the option to invite others who were not Facebook users to join. The next screen prompted him to enter personal details, including the schools and universities he attended with dates, and the name of his current employer. A message states: “*This information will help you find your friends on Facebook.*” The next prompt asked him to join a town or city’s network. These requests can be skipped, but it does require the user to identify this possibility. The interface draws you to the large blue ‘submit’ button rather than the distant ‘skip’ feature. At this point, the registration process is complete and users are directed to their profiles. In summary, a user may not realize that he is creating his profile during this process, believing instead that he is merely registering for the system. Rather, he is populating his profile with personal data and signalling initial agreement to privacy settings which are, by default, set for a high degree of openness (see the following sections for further detail on this point).

Enhancing One’s Profile

A basic Facebook profile includes a number of hyperlinked sections which appear as discrete ‘application blocks’ on the user’s page. The basic blocks are shown in Table 1. Aside from name, e-mail address, and user status, all data fields on Facebook may be left blank, so the creation of a very thin Facebook profile is possible. Profile details comprise what an individual is willing to enter into the system and make public, content generated by friends and content generated by Facebook applications. To friend with other members of the network, you need to action the “add to friends” application (by entering someone’s surname and/or forename) to link your profile with others on the website. The application then searches the Facebook database of profiles. Users may ‘friend’ other things too, but we shall consider this in greater detail later. Users can also add applications to their profile to network and play with their friends. All applications require your permission to “*know who you are and access your information*”. A message warns you against disabling this feature when installing an application, stating that “*Granting access to information is **required** to add applications. If you are not willing to grant access to your information, **do not add this application.***” What is less transparent in this interaction is how these data will be shared. Potentially, applications are able to access diverse data for a huge user base (depending upon the popularity of a given application), and then share them with the developers of the application and those for whom they have developed it.

Being Visible

The notion of making things public is central to the operation of Facebook. Thus, even though users may choose to be selective in what they share, it is important to consider the default settings that a new user will receive. When examining the privacy settings, we noted that the Facebook application gave every piece of information that could be shared the default setting of being permissible for sharing with ‘only friends’. With the exception of the profile itself which must be set to allow access to ‘only friends’ or ‘friends of friends’, all other features of the system can be further customized to allow different people varying access to personal information. However this is a lengthy, complicated process. The only applications that have the option to render invisible to everyone in the drop down menu (‘no one’), and thus give easy access to global privacy, are your online status and the wall. Two of the authors

² Once registered on the site he looked up *Medics Index*, eventually finding a link to an external site which showed it to be a UK/Jordan based organization whose aim was to create the first fully interactive, global, electronic database of medical practitioners!

³ When registered, Facebook presents users with this option again but includes further the email providers, Hotmail and Gmail.

have used Facebook for two years, during which time one might have expected them to have found users adopting these settings, yet such cases have been in the minority. Thus, it seems that many users either find the privacy settings difficult or clumsy to use, or alternatively have not even considered the issue of privacy or do not believe it is an issue.

Table 1: Basic Building Blocks of a Facebook Profile

Block	Information It Can Contain
Information	Basic – age, gender, religious and political views; Contact – telephone, address; Relationships – your status and what you are looking for – you can link profiles with your partner here; Personal – details of hobbies and interests; Education – where you have studied; Work – current and past places of employment; Picture – a place to store pictures you want to use as your profile image.
Status	A place to write what a user is currently doing/thinking.
Friends	A listing of 6 of a user's friends and their profile pictures and a link to a page displaying all your friends. The listing of 6 friends is randomized by a Facebook application.
Friends in Other Networks	A list detailing an analysis of the networks you have friends in.
Photos	A list of user created photo albums generated via an application that allows a user to upload photographs to their profile. Photographs in which a user has been 'tagged' that are part of another user's profile are also listed here. Typically, a user adds a name (a tag) of those individuals who appear in the photographs. Once uploaded, the tags attached to each photograph can then be searched via a dedicated search dialogue box. Individuals do not have to give permission for their name to be used in the tagging process and if they want their name removed, they have to either remove it manually or request that their friend removes the photograph. Users cannot prevent other users from tagging them in photographs. There is also the facility to comment upon photographs. Non-users of Facebook can be tagged in photographs, but they cannot be searched for using the search feature.
Video	A facility to post videos to a profile.
Notes	A place to write notes and import them from other spaces on the web, such as blogs.
Groups	A list of Facebook groups a user belongs to.
The Wall	A bulletin board where friends can leave messages, notes, good wishes and other comments

Beyond the access friends and friends of friends may have, there are broader issues regarding a person's visibility. Again, the application sets these by default to align with the spirit of openness. For example, a person's visibility in

searches undertaken within and outside of the site is set to 'everyone', and upon profile creation Facebook automatically submits your profile to other search engines. In this regard, the display on the privacy settings page states:

"Your public search listing consists of your name and the thumbnail version of your profile picture. This listing will be shown to people who search for your name when they are not logged in to Facebook [i.e. when they are using external search engines]. Use your search privacy settings to control whether your public search listing appears in searches from Facebook's Welcome page or external search engines. Changes you make will take effect immediately on Facebook, but there may be a delay before search engines are updated as well."

This information is only made available by the application once users have registered and only then if they look at the privacy settings rather than taking up the many, and seemingly more interesting, invitations that the profile offers – to add applications, add friends, post content and the like. Thus, users may post content before they examine the fundamental workings of the site, reassured by the message on the opening registration page which states "Use Facebook to ... control privacy online". Moreover, the opening page of the site draws upon vocabulary such as share and connect, and the nature of Facebook as a social utility, which commands a certain degree of openness. Unsurprisingly, then, people may not think twice about applications accessing and sharing their data.

Publicizing Activity

Publicizing activity is a necessary part of networking on Facebook. Upon logging into your account, Facebook displays your home page. This is an administration page that informs you about activity that has taken place since you last logged on and acts as a reminder of notifications not dealt with in the last session. Such notifications include requests from friends and other members of Facebook, for example, to add an application that a friend has on their profile or to add a friend. The page also reports things other members have done to you, such as who has poked [virtually prodded] you (and invites you to poke them back) and gives a list of recent friend status updates. This latter activity data is time stamped by the application, which makes the data publicly available unless the users concerned have enabled particular privacy settings for the News Feed and Mini-Feed applications. A further application suggests other members of Facebook you might want to be friends with. This feature was released in April 2008 and operates by making recommendations based on who you have friended already and who your friends have friended. While it is commonplace in online environments for applications to run automatically, monitor activity and send unsolicited messages to users, what Facebook does is to enable such processes to happen more rapidly, in a more ad hoc fashion and for the results of such activity to be made more public.

Publicity can also be a problem for one's friends. For example, it is possible to install an application called 'Top Friends'. This application is popular, having over 1.5 million active daily users. The application explains its purpose as: "Show your friends some love! Add your BFFs [Best Friends Forever] to your profile! Each of your pals is just one-click away! No more searching through pages of friends just to check up on them. The only question now is: Who's in your Top Friends?" The application requires you to select 32 people in your list of friends to become 'Top Friends'. Thus, the application invites you to play according to the norms of social networking activity – doing things with friends. When selected, the application places these 32 people in a block of their own on your profile page, thereby separating them from friends who are not deemed 'Top'. However, the application also has the facility to populate the 32 available spaces itself, automatically. You choose one of three approaches – taking a psychometric test, performing a test indicating how 'hot' your friends are, or opting for a random shuffle. In each case, the application draws upon another application to create the 32 Top Friends. Such delegation work complicates notions of friendship in that, for example, who you perceive to be a Top Friend may not be the one you believe is hot! The application also gives you access to your overall ranking in your circle of friends and this is displayed as a statement about your popularity such as "people like you". Applications such as this are often received by a user via an invitation from another user, since applications ask users to forward them to their friends. Often it is very difficult to see how you can choose not to do this. Furthermore, such invitations often contain standard unmodifiable text that plays upon notions of friendship and networking (see Figure 1). These publicly articulated, universalistic ideas about doing things with friends may be just play for some users, but can be threatening to others.

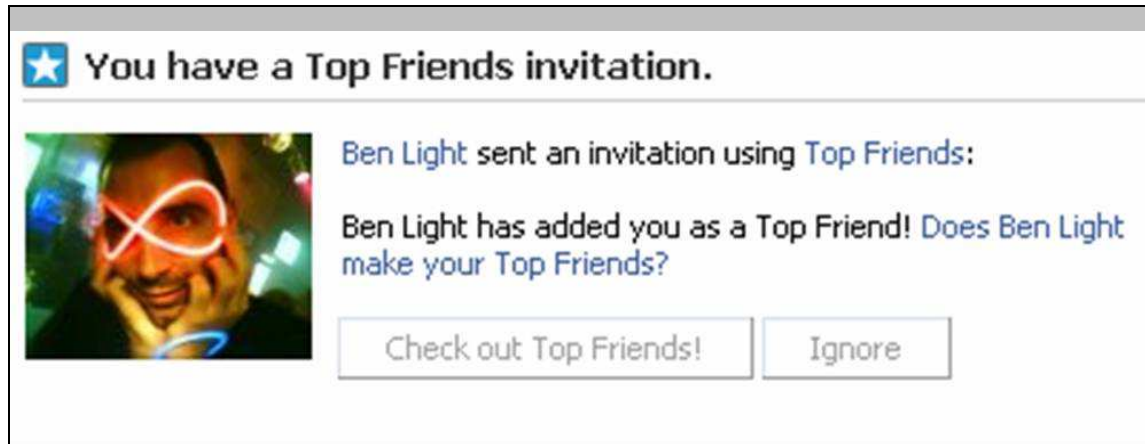


Figure 1: Example of a Top Friends Invitation

Discussion

Unpacking what happens in Facebook discloses many ethical issues and this is particularly important as some young people especially may feel left out if they do not join in (McMillan and Morrison 2006). For the purposes of this paper, we identify these issues as concerned with the processes of creating profiles, publicizing activity and the way that these data and images may be interpreted. Of course, these three areas overlap and are interconnected.

In contrast to Lange's (2007) study of the way that YouTube enables users to manage privacy through the clever deployment of technological features, we have highlighted how Facebook interweaves the creation of an initial profile with registration so that users may provide a good deal of personal data about themselves before they understand the consequences of their actions. In particular, we note that the registration application defaults a user's privacy settings to a high level of openness. Once registered, of course, the user can change some of these settings to enable a greater degree of privacy, but in our experience the default settings generally remain. Indeed, Sophos' (2007) study revealed that only 5 out of 87 users' profiles had privacy settings enabled and Gross and Acquisti (2005) also found evidence of minimal privacy settings. Moreover, it is well known that users often think of such sites as safe and closed worlds where they can publish provocative and controversial material, without being aware of the potential consequences (Donath 2007), and that some may underestimate the dangers of publicly posted material on the web (Jagatic et al. 2007). Yet, there is more at work here than a user's more or less 'socially' informed decision to publish. Once users are registered, they are instantly bombarded with pokes, friend requests, invitations from applications such as News Feed, Mini-Feed and search engine results (the feed features being subject to much controversy when they were released in 2006 (boyd 2008a; Sweney and Gosden 2006)). These invitations can seem more appealing and more pressing to deal with than the apparently mundane and time consuming backstage administration associated with configuring privacy settings. Interestingly, following the launch of a revised site in August 2008, the link to privacy settings on the user's welcome page has been demoted to a menu that only appears when you hold your mouse over it. Following Latour (2005) we argue that a great variety of agents seem to barge in and displace the user's original goals so that we never know for sure who and what is making us act. In this case, information technology does not simply transport the scripts of developers or users of the network, it mediates intentions through the intensity of the experience it makes possible. One may argue that Facebook users and applications require and thrive upon openness of access to one another. However, such openness has consequences in terms of the public and private activities it enables.

Unlike registering for Cyworld (Kim and Yun 2007), we highlight the lack of validation work by the Facebook registration application which presents users with an opportunity to create fake or bogus profiles affording them privacy – or more accurately anonymity. Such affordances need not necessarily be seen in a negative fashion. Fake profiles are often friended as informational objects – they are integral to identity work. For example, fans may friend a pop star, celebrity, politician or fictional character, knowing full well that they are not adding the genuine profile of that person or character (this is particularly the case for fictional characters!). However, such a lack of validation work during registration also allows for arguably less positive activity to take place. Given the prevalence of data about everyday people on the web due to the rise of blogs, organizationally based personal home pages and the like,

it is relatively easy to create fictitious profiles about individuals or Facebook groups about them. People can further enhance such profiles and groups, doctoring digital images by engaging software such as Photoshop. The ends for such applications can be seen as part of the experience of playing with Facebook. Indeed, the Facebook Group application requires that users enter a reason for the group when they engage the software to create it. Usually, when such groups are made about an individual, the criterion is 'Just for Fun.' The actualities of the outcomes are obviously subject to interpretation. We have to remember that Facebook is part of a much wider network of actors – human and non-human – something not always accounted for in 'single site' studies of social networking. Clearly, the software also has the potential to provide cover so that users can engage in cyberstalking and identity theft. Users can easily make a bogus profile to attain both. In the first case because an anonymous profile can be created due to a lack of validation processes and because Facebook does not, by default, record and communicate to a user who has looked at their profile. The second case is possible because users may friend non-human objects or fictitious characters and leave their privacy settings open.

It would be simplistic to suggest that ethical responsibility rests solely with the developers of Facebook for such negative consequences. The lack of validation functionality makes it easy to join Facebook and, arguably, some users with thoroughly benign intentions might be dissuaded from joining if registration were more cumbersome. Moreover, such functionality may have seemed unnecessary in the initial development stages of Facebook within the Harvard University environment before its rapid expansion on a global scale. As is well understood within Science and Technology Studies, the relationships amongst development and use are far from predictable and simple – we can only anticipate the ongoing design work put in by 'users as designers', particularly in Web 2.0 user generated environments such as Facebook. So, although gaining entry to this play space is easy, even questionably so, given the nature of the data sharing interactions it mediates, we argue, following Latour (1999b), that the issue is not simply about the morality of the designers, or the users, or even the technology itself, but of the 'technology user' – the user whose goals are mediated by the technology, often in ways other than the designers intended. Consequently, ethical responsibility is diffused among the developers, the users and the technology itself. In short, information technology transforms the intentions of those that use it, but how it does so is only evident after the fact.

Because Facebook is open to anyone, it merges with various aspects of people's lives and allows different aspects of people's lives to merge with each other. The most obvious candidates here are work life and home life. Such merging is not new, however what Facebook does is to accelerate and intensify such processes, making them more public as well as more difficult to manage. Many users of Facebook are not only affiliated with personal networks, they are enrolled in professional ones too. This has come about in light of mass media hype about social networking in general terms and as a vehicle for conducting work and, of course, because many of us work as well as play! Arguably, for many organizations, social networking technology has become an obligatory passage point in their marketing efforts. For example, many universities have a presence in order to keep in touch with current students and alumni; they may also use Facebook to attract new business. In this way, members of staff that already have personal profiles in the space may be required to enroll in professional situations – this is Griffiths and Light's experience. Moreover, those that have registered personally, rather than for work purposes, may find that they are presented to coworkers by the recommendation software that Facebook now incorporates – because one of their friends works at the same place they do. Rather than reject a coworker's or manager's request to become a friend, they may feel forced to accept someone into their network and, if they lack awareness of the privacy settings, they may find that their profile constructs a particular view of them that they may not want publicizing in a work context. In these circumstances, when users join Facebook they adopt an identity, but there are many conflicting ways in which they may do this. This identity work starts during creation of the profile but it is subject to an ongoing series of requests and invitations from other members of the network in which the users and the technology constitute each other. Moral dilemmas can arise when users' personal and professional worlds collide with consequences they did not intend.

As social networking sites evolve to mediate a variety of interactions, users increasingly stand the chance of applications revealing aspects of their lives to one another that they have kept separate for good reason. Di Micco and Millen (2007) point to the issues for those using Facebook, personally and professionally, while boyd (2006) states of Friendster: "It did not take long before the early adopters came face to face with their bosses and high school classmates. This created an awkward situation as participants had to determine how to manage conflicting social contexts." Add to this the fact that users often find it difficult to say 'no' to friend requests (boyd 2004), especially since there is some debate regarding how difficult it may be to leave one network in favour of another (Kazmer 2007; Petersen 2008). Technology plays a key role in these interactions. Specifically, the problems we highlight are further compounded by the features of networked publics (boyd 2008b) displayed by sites such as

Facebook. Such publics: are *persistent*, they lack the ephemeral quality of speech and acts in unmediated settings; display *searchability* so that users can be found; enable *replicability* in that posts can be represented out of context or doctored photographs can be posted; and are *invisible publics*, whereby it is difficult (if not impossible) to detect who might run across our expressions. The Facebook software does not allow users to see who has looked at their profile or particular features of it⁴. With this in mind, there are reported cases of recruitment firms using applications such as Facebook, Bebo and MySpace to attract and screen candidates (Rothberg 2006; Rothberg 2008) and of course the high profile case of University of Oxford Proctors using applications to actively seek out students who had engaged in trashing – an annual event involving students attacking each other with aerosol string, flour or high-power water-pistols following the completion of examinations (Mathieson 2007). In this sense, Facebook presents itself as open to anyone without providing minimal ethical guidance for its use in much the same way as unsecured domestic wireless networks offer themselves to, say, neighbours (Small 2007). Yet, such issues of publicizing activity are not restricted to the combining of work and home life. The role of the Top Friends application clearly highlights the difficulty of the mediated public articulation of friendship, particularly where the selection of ‘best friends’ is made by the application. Such applications make it difficult for users to be vague about the ranking of friends. In boyd’s (2006) study of Top 8, the equivalent application for MySpace, she uncovered users interpreting its effects as psychological warfare, political, drama ridden and passive aggressive powerplay. These examples highlight a darker side of being visible on Facebook, showing how the mere presence of your unprotected profile can connect you with people you have not sought as friends, exclude you from groups in which you wish to play a part, and have reputational consequences that you did not even consider.

The presence of fake or fictional profiles within Facebook gives rise to a different set of ethical consequences. On the one hand, friending such objects is a key mechanism making social networking sites work. Indeed, some users of Friendster ‘Fakesters’ posed as celebrities and iconic fictional characters in order to increase the number of ‘friends’ they had, and when the company removed the fake profiles (and some ‘genuine’ ones where members chose to have non-realistic photos), this was interpreted as not sharing users’ interests and, arguably, led to a shift of membership towards other user driven sites such as MySpace (boyd and Ellison 2007). The owners of Facebook have recently followed Friendster’s actions and deleted many fictional and historical characters from the system, resulting in users deploying the Facebook Group application to create the active group “Save the Fictional Characters!” Nevertheless, the presence of fake profiles in an environment conducive to anonymity and friending raises further issues with respect to the application mediated acquisition of users’ personal data and the representation, and reputations, of users. The case of Freddi Staur (Sophos 2007) illustrates the former point. Freddi was created in 2007 by the IT Security and Control Company Sophos in order to highlight the dangers of phishing⁵ and data sharing in social networking environments and, arguably, to promote their company. To do this, they created a profile for a toy Frog with the name ‘Freddi Staur’⁶ an anagram of ‘ID fraudster’ (see Figure 2). Freddi sent 200 friend requests to randomly selected users of Facebook across the globe. In return Freddi was friended by 87, of which only 5 had some level of privacy setting enabled. Of the 82 friending users’ profiles: 72 per cent divulged one or more email addresses; 84 per cent listed the users full date of birth; 87 per cent provided details about the users education or workplace; 78 per cent listed the users current address or location and 23 per cent listed the users current phone number. Freddi gained access to photos of family and friends, employer details and other personal information. He also used the friending application to discover the names of family members, including a user’s mother’s maiden name – a popular security question used to request account details and make transactions online and offline.

Like genuine profiles, fake profiles can have reputational effects. Such profiles can be created by means of readily available digital photography and the appropriation of personal details reproduced in the press or on organizational websites. In 2006 Anna Draker, who works at Clark High School in San Antonio, U.S.A. filed a lawsuit on the basis of defamation against two 16 year old students, and negligence against their parents, following the creation of a fake profile on MySpace. According to the Citizen Media Law Project:

⁴ At the time of writing, there is an application a user can download that allows them to see who has looked at their profile, but it does not specify which particular areas have been viewed, only that someone has looked at their profile.

⁵ Phishing involves someone acquiring data, electronically, from another person through the presentation of themselves as trustworthy (see Jagatic et al. (2007) for a fuller explanation).

⁶ It is not surprising people friended Freddi Staur given, in the UK at least, the public fascination with ‘The Crazy Frog’ a character developed by Daniel Malmedahl and Erik Wernquist and used with great success by ‘Jamba!’ the mobile phone ring tone provider in 2004. There are over 200 groups regarding the Crazy Frog on Facebook. Freddie Starr is also the name of a UK comedian, popular in the 1980s.

“Draker alleged that the parents negligently failed to supervise their children's use of the internet. She claims that both sets of parents knew of their children's animosity for Draker, and their tendency to misbehave, and had furnished their children with computers (the 'instrumentality utilized by their children to create the MySpace page'). Draker claimed that as a result of the publication, she had suffered emotional distress and mental anguish and had incurred medical expenses and lost wages.” (Dardia 2007)



Figure 2: Freddi Staur's Profile

Yet, it is important to note that the consequences of such acts may not be clear to those who undertake them (Griffiths and Light 2008). Many features of Facebook create play spaces, and engage users in them, whether it is playing Pac Man, Scrabulous or throwing sheep at each other. As we have mentioned earlier, Facebook groups' raison d'être is often 'just for fun.' Dr. Tijuana Julian, currently the Dean of Students at Drury University was subject to such activity in 2007 (Otto 2008). Someone created a profile of her containing a picture, personal data about her hobbies and her status as "hangin out in my office". A friend who 'found her' on Facebook realized that she would not use such language and notified her and staff and students who had friended her and posted comments on her profile. Julian had the profile removed and took no further action. However, Fouad Mourtada, who according to his sister created the fake profile of the Crown Prince of Morocco, Moulay Rachid, on Facebook as a joke, was arrested. Facebook denied passing personal details of Fouad to the Moroccan Authorities (Paczkowski 2008; Vara 2008).

Conclusion

To date a good deal of research on social networking sites has focused on how users domesticate them, thereby overstating the role of human agency. From this perspective, the morality of technology is a matter of the ends to which it is deployed by its designers and users. In this paper, we adopt a different perspective. Drawing on concepts from Latour and adopting the notion of disclosive ethics (Introna 2007), we suggest that technology mediates (that is, transforms) the meaning of what it carries, and hence that technologies as well as humans have a moral character that can be opened up to scrutiny. We situate our work within prior thought on descriptive ethics, which is

concerned with actors' beliefs about morality, and adopt ANT as an approach to tracing the actors and disclosing their ethics. Our perspective demands an empirical approach rather than reliance upon a priori judgements about right and wrong. With this in mind we provide a case study of Facebook which was conducted over two years by two of the authors of this paper who were registered as Facebook members.

We show that Facebook applications begin shaping the user experience at the very least at the point of registration (if not before, via either an email invitation to join the network or its role in generating peer pressure to join). This influence increases 'in-site'. In particular, we found that the default position of openness that applications require, combined with the outputs they produce, distract users from the seemingly mundane administration of privacy. Such actions, whilst a necessary and fun feature of Facebook, can place users in difficult positions without them even realizing that this is the case, the matter possibly becoming apparent as they gain experience with the system or face challenges from another source such as friends, foes, potential employers or even law enforcement agencies. However, in contrast to prior work, we point out that this is not just a matter of levels of user understanding about social network sites or even the ethics of the designers of such spaces. The Facebook applications are also actors in the process, with the potential to divert user attention from such things as privacy settings and, indeed, to make it difficult, if not impossible, for users to create privacy even if they desire it. Consider the way that Facebook showers you with invitations, requests and the like once you have signed up, even when you are still subject to the dangers of an open profile. Consider how easy it is for others to post photographs you are in, and tag (identify) you, even if they are not your 'friends', and even if you do not have a Facebook account, meaning that you do not know such photographs have been made public – however embarrassing or compromising! We also show that while Facebook requires openness, it allows anonymity, sometimes simultaneously. Facebook's lax user validation process makes it easy to create fake profiles which contain applications that share data with other users. Whilst some users might friend fake/fictional profiles to create an image of themselves, the software does not provide them with the means to distinguish between 'genuine fakers' and those who seek to do harm, such as identity fraudsters and paedophiles. Friending gives access to all user data entered into the system if it has not been made private. On this point we note that recent research suggests that, the greater the population of profile fields in Facebook, the higher the number of friends a user will have listed (Lampe et al. 2007) and further, that this may mean that people feel compelled to accept the default of openness due to peer pressure (Gross and Acquisti 2005). Following this line of argument, future profiles might transmit even more personal information to whoever asks for it.

So what can we do about this? As the title of our paper suggests, using Facebook is about '*more than just friends*', - it involves making associations with a variety of other actors, some of which might not be of our choosing. Thus, tracing agency and hence morality is a complicated task, in which blanket policy recommendations requiring the designers of the Facebook site to clean up their act fail to recognize the diffuse nature of ethical responsibility. We are sympathetic to work suggesting that a few simple mechanisms could be used to remove some of the ethical ambiguity in online spaces (Small 2007) and provide a degree of ethical guidance – for example, the use of warning messages regarding postings (Ahern et al. 2007). Nevertheless, we argue that, no matter how carefully developers try to imagine use contexts and ethical scenarios during the design process, their efforts will be incomprehensive (Albrechtslund 2007). Our findings suggest the need for an ongoing process of evaluating social networking sites, to which our work contributes. Opening up such sites to scrutiny on a regular basis in a disclosive ethics approach maintains public awareness of the issues. Indeed, while social networking remains a 'hot' topic, researchers may find an audience for their disclosures in a range of media outlets as well as in their published work⁷. Furthermore, site users might lobby for safer transactions, using the strengths of the technology to create momentum for a user group. And funding councils might make money available to fund research programmes that investigate the workings of such sites. Indeed, Latour has argued that the visibility of objects is enhanced in the early stages of an innovation; when they are approached by users made ignorant or clumsy by distance (in terms of time, space or skills); and in the face of accidents or breakdowns (Latour 2005). Thus, a potential approach is to study the development and use of technologies before they settle into place and become invisible, or in the case of an established technology, to study the experiences of novice users. Similarly, flash points in the trajectories of such technologies may also prove useful sites of investigation, as in 2006 when Facebook users protested following the roll out of News Feed and Mini-Feed functionality. Through such accounts we may trace the agency of opaque technologies and then strive for more visibility in the way that they function.

⁷ We acknowledge that the specifics of how a site works will change over time, so that issues we raise here may be addressed in the coming weeks and months. In our view, this does not invalidate our two central arguments about the need for ongoing scrutiny of social networking sites, and the role that technology itself plays in the diffuse pattern of ethical responsibility in such cases.

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