

# Facebook's Privacy Trainwreck

Exposure, Invasion, and Social Convergence

danah boyd

*Harvard University and University of California-Berkeley, USA*

**Abstract** / Not all Facebook users appreciated the September 2006 launch of the 'News Feeds' feature. Concerned about privacy implications, thousands of users vocalized their discontent through the site itself, forcing the company to implement privacy tools. This essay examines the privacy concerns voiced following these events. Because the data made easily visible were already accessible with effort, what disturbed people was primarily the sense of exposure and invasion. In essence, the 'privacy trainwreck' that people experienced was the cost of social convergence.

**Key Words** / convergence / exposure / Facebook / invasion / privacy / social network sites

On 5 September 2006, Facebook – a social network site primarily used by college students at the time – launched a feature called 'News Feeds'. Upon logging in, users faced a start page that listed every act undertaken by their Friends<sup>1</sup> within the system – who befriended whom, who commented on whose Wall,<sup>2</sup> who altered their relationship status to 'single', who joined what group and so on. None of the information displayed through this feature was previously private per se, but by aggregating this information and displaying it in reverse chronological order, News Feeds made the material far more accessible and visible. An individual did not need to remember whether or not someone indicated that they were 'single' or 'in a relationship' – the moment this bit flips, a state change is propagated to everyone's News Feed. At launch, this aggregated display outraged Facebook users (Schmidt, 2006). Users formed groups like 'Students Against Facebook News Feeds'<sup>3</sup> to protest against the feature; over 700,000 people joined the aforementioned group to express their frustration and confusion.

Less than 24 hours after the launch, Facebook's founder Mark Zuckerberg responded with a blog entry entitled 'Calm down. Breathe. We Hear You' (Zuckerberg, 2006). This did not allay participants' concerns and on 8 September, Zuckerberg returned to the blog with an apology and a peace offering in the form of new privacy options. He invited users to join him live on the 'Free Flow of Information on the Internet'<sup>4</sup> group so that he could explain the motivation behind News Feeds. While hundreds of messages whizzed by,

making it hard to follow any particular thread, Zuckerberg explained that News Feeds helps people keep tabs on their friends – and only their friends. He went on to argue that all this information is already public anyhow.

It is true that all the information made visible by News Feeds was previously available to any user who took the time to look. That argument, while understandable, fails to capture how the feature alters the social dynamic of Facebook.

The tech world has a tendency to view the concept of 'private' as a single bit that is either 0 or 1. Data are either exposed or not. When companies make a decision to make data visible in a more 'efficient' manner, it is often startling, prompting users to speak of a disruption of 'privacy'. This is not new. In 1995, DejaNews introduced a tool that allowed anyone to search Usenet, an early internet-distributed newsgroup system, similar to contemporary bulletin boards. Prior to DejaNews, those interested in motorcycles were likely to be found hanging around rec.motorcycle while those who did not share this interest stayed out. The regular posters framed the norms of each newsgroup. When search was introduced, it became much easier to stumble on a newsgroup and even easier to read messages completely out of context. Tracking who participated in what group no longer required an individual to participate in all of the same groups. While the walls that separated newsgroups were always porous – anyone could come or go – they completely collapsed when search came along. DejaNews disrupted the delicate social dynamics in many Usenet groups; to regain some sense of control and 'privacy', many groups shifted to mailing lists. Little did they know that, a few years later, Yahoo! would purchase two of the most popular free mailing list services and make them searchable.

Like Facebook, DejaNews did not make anything public that was not already public, but search disrupted the social dynamics. The reason for this is that privacy is not simply about the state of an inanimate object or set of bytes; it is about the sense of vulnerability that an individual experiences when negotiating data. Both Usenet and Facebook users felt exposed and/or invaded by the architectural shifts without having a good way of articulating why the feature made them feel 'icky'.

In this article, I want to examine how technology that makes social information more easily accessible can rupture people's sense of public and private by altering the previously understood social norms. Offline, people are accustomed to having architecturally defined boundaries. Physical features like walls and limited audio range help people have a sense of just how public their actions are. The digital world has different properties and these can be easily altered through the development of new technologies, radically altering the assumptions that people have when they interact online. As a result of new technological developments, social convergence is becoming the norm online, but people are still uncomfortable with the changes. What follows is a discussion of people's discomfort from two angles: exposure and invasion.

## Exposure

Imagine that you are screaming to be heard in a loud environment when suddenly the music stops and everyone hears the end of your sentence. Most likely, they will turn to stare at you and you will turn beet red (unless exposure does not bother you).

When the music was still chirping away, you were speaking loudly in a room full of people. You felt (and were) protected by the acoustics and you made a judgment about

how loudly you should speak based on your understanding of the architecture of the environment. Sure, if someone came closer, they could have overheard you. But you didn't care because (1) you would have seen the person; (2) it is not abnormal to be overheard; and (3) what you were saying would not really matter to them anyhow, right? Most people couldn't hear you even if they were visually proximate. This is security through obscurity.

When the music disappeared, the acoustics of the room changed. Suddenly, your voice carried much further than it had previously. Even if there was nothing embarrassing about the content of what you said, you are still startled by the change. Not only did you make a social *faux pas*, but you also lost control over the situation. The color of your face is a direct result of being unexpectedly exposed.

On Facebook, people were wandering around accepting others as Friends, commenting on others' pages, checking out what others posted, and otherwise participating in the networked environment. If you're a stalker or an anthropologist, you may have noticed that Bob accepted GirlfriendSally's Friend request after Justine's. You may have noticed that Ann wrote on Heather's page but not on Katherine's and you might have wondered why. You may also have caught that QuarterbackTed quietly accepted NerdGilbert's Friend request. But even you might not have realized that your officemate joined the 'If this group reaches 100,000 my girlfriend will have a threesome' group, simply because you didn't think to look.

Now, imagine that everyone involved notices all this because it is displayed when they login. Sally's pissed off at Bob; Katherine feels rejected; QuarterbackTed panics and deletes his Friendship. And you feel awkward the next time you talk to your officemate. By aggregating all this information and projecting it to everyone's News Feed, Facebook made what was previously obscure difficult to miss (and even harder to forget). Those data were all there before but were not efficiently accessible; they were not aggregated. The acoustics changed and the social *faux pas* was suddenly very visible. Without having privacy features,<sup>5</sup> participants had to reconsider each change that they made because they knew it would be broadcast to all their Friends. Participants had to shift their default expectation that each action would most likely be unnoticed to an expectation that every move would be announced.

In the late 1990s, researchers at AT&T placed a robot called Cobot into LambdaMOO to analyze the social dynamics (Isbell et al., 2000). Cobot quietly collected data for well-intentioned researchers. The researchers rationalized that everything that Cobot collected was public and visible to anyone present anyhow. Still, LambdaMOO users felt uncomfortable about the bot's silent presence and asked that it give something back. The researchers thought that this was fair and reprogrammed Cobot to answer questions about its observations. Unfortunately for both the researchers and the community, Cobot's answers disrupted the sense of community as people began evaluating others based on quantitative questions.

User: 'Who do I talk to the most?'

Cobot: 'Peter.'

User: 'Who does Peter talk to the most?'

Cobot: 'Dan.'

User (to self): WHAT!?!? Why does Peter talk to Dan more than me? \*\$%& him, I'm not talking to Peter anymore . . .

Just as with Facebook, all the data with Cobot was 'public'. While most people do not think of their relationships in terms of quantity, Cobot counted and provided this information. Such information allows users to rate and rank connections, and their interpretation of quantity as quality highlights how people can problematically interpret social information.

With Facebook, participants have to consider how others might interpret their actions, knowing that any action will be broadcast to everyone with whom they consented to digital Friendship. For many, it is hard to even remember whom they listed as Friends, let alone assess the different ways in which they may interpret information. Without being able to see their Friends' reactions, they are not even aware of when their posts have been misinterpreted.

Users also have good reasons for not broadcasting their participation in certain Facebook groups. When the feature first launched, a group of queer students were uncertain about whether or not they could leave the 'Queer This!' group. While they did not see themselves as closeted, discussing their sexual identity with everyone they knew was not something that they desired to do. Leaving the group would mean that previous affiliation was assumed and yet, what did it mean that they were leaving?

When the privacy features were launched, many exposure concerns were allayed. The queer students (and my officemate) could announce some things, but not announce when they joined or left groups. Others could turn off the ability to indicate when they befriended people within the system. At the same time, the noticeable lack of these data can make someone suspicious – what is it that they have to hide? An opt-out dynamic means that users have to consciously choose what it is that they wish to hide and then remember their choices as they are navigating the system. When the default is hyper-public, individuals are not simply able to choose what they wish to expose – they have to choose what they wish to hide.

## Invasion

I detest RSS feed readers – they play into my desire to read everything that anyone has ever written. I desperately want to see the cool things people I know posted over the weekend. And I want to follow all the links that they saved and suggested that I read. But I can't. I simply do not have enough time in the day to follow every blog, Flickr, and and del.icio.us of everyone I know. Feed readers make me feel guilty for being unable to deal with social information overload; as a result, I feel invaded by data. Unable to manage, I go cold turkey and read nothing.

My failure to cope is not simply a personal issue. Human cognition has a limitation to how much social information it can handle. In his work on social upkeep, evolutionary biologist Robin Dunbar found that humans gossip (as in they share personal information) for the same reason monkeys groom – to keep tabs on the social world around them (Dunbar, 1996). There is a maximum number of monkeys that other monkeys can groom and there is a maximum number of people that humans can actively keep tabs on (Dunbar, 1992).

Social network sites like Facebook imply that people can maintain infinite numbers of friends provided they have digital management tools. While having hundreds of Friends on social network sites is not uncommon, users are not actually keeping up with the lives

of all of those people. These digital Friends are not necessarily close friends and friendship management tools are not good enough for building and maintaining close ties.

While Facebook assumes that all Friends are friends, participants have varied reasons for maintaining Friendship ties on the site that have nothing to do with daily upkeep (boyd, 2006). For example, some users treat the Friends list as an address book. They may not wish to keep in contact with the girl that they knew from freshman psych, but having that connection may come in handy down the road. Yet, there is a difference between the ever-growing address book and the list of people that individuals pay attention to on a daily basis.

News Feeds does not distinguish between these – all Friends are treated equally and updates come from all Friends, not just those that an individual deems to be close friends. To complicate matters, when data are there, people want to pay attention, even if it doesn't help them. People relish personal information because it is the currency of social hierarchy and connectivity. Cognitive addiction to social information is great for Facebook because News Feeds makes Facebook sticky. But is it good for people?

At a base level, most people have a voyeuristic streak and want to keep up with the details of other interesting people just because they can. Biological programming makes us believe that individuals who are sharing personal details are indicating trust. In an unmediated society, social currency is a means to building a relationship. People reciprocally tell each other about their family, thoughts, and desires. Friendships are built on mutual knowledge of each other's lives and the lives of those they know. Social and emotional support is one of the outcomes of such friendships.

In June 2006, a group of sociologists argued that Americans have fewer friends now than they did 20 years ago (McPherson et al., 2006). This made me wonder whether social media might be detrimental to friendship maintenance. If social information is easily available, it seems natural that people would tune in. Yet, if social information is the human equivalent of grooming, what happens when a computer provides that information asynchronously without demanding reciprocity?

This conundrum pre-dates the internet. Over the last century, celebrity gossip rags have made it much easier to obsessively follow the details of celebrities' lives, or at least those published for enquiring minds that want to know. Just because I can follow every detail of Angelina Jolie's life does not mean that she knows that I exist. Furthermore, she has absolutely no reason to respond to me when I ask for her support.

Strangers and celebrities are one thing, but what about acquaintances and other weak ties? Studies of email have shown that the internet helps people maintain both strong and weak ties by making ongoing communication easy (Boase and Wellman, 2006). Does the same argument hold when it comes to social media that allow people to follow in lieu of reciprocal communication? My hunch is that the stream of social information gives people a fake sense of intimacy with others that they do not really know that well. If this is true, it could be emotionally devastating.

At a conference for women bloggers, I moderated a panel on 'Sensitive Topics' and one concern that the panelists raised was that it is quite difficult to handle the strangers who contact them seeking help. While those seeking help felt a connection to the blogger through extended periods of following their output, the bloggers knew nothing about them. This inequality in perceived connection upset both parties. The people wanting support felt shunned, but the bloggers were equally distraught. Most wanted to help

because they hated seeing someone in pain, but as their blogs grew in popularity, they were unable to handle the quantity of requests for support. Most went from trying to help everyone to not responding to anyone.

Unlike these bloggers, most connections on Facebook are at least weak ties, but power differences still exist. Unreciprocated romantic crushes highlight this dynamic as the crusher follows the crushed intensely without the reverse being true. Through the regular updates, the crusher develops a feeling that she knows her crush, but her crush is barely aware of her presence.

Facebook gives the 'gift' of infinite social information, but this can feel too much like the One Ring – precious upfront, but destructive long-term.

## The Costs of Social Convergence

Mark Zuckerberg has repeatedly stated that his goal is to help people share information more efficiently. By aggregating social information and broadcasting it, News Feeds takes what people can access and places it at the forefront of their attention. Zuckerberg claims that no privacy was compromised in the process and, from a zeros and ones perspective, this is true. Yet, privacy is not simply about zeros and ones, it is about how people experience their relationship with others and with information. Privacy is a sense of control over information, the context where sharing takes place, and the audience who can gain access.

Information is not private because no one knows it; it is private because the knowing is limited and controlled. In most scenarios, the limitations are often more social than structural. Secrets are considered the most private of social information because keeping knowledge private is far more difficult than spreading it. There is an immense gray area between secrets and information intended to be broadcast as publicly as possible. By and large, people treated Facebook as being in that gray zone. Participants were not likely to post secrets, but they often posted information that was only relevant in certain contexts. The assumption was that if you were visiting someone's page, you could access information in context. When snippets and actions were broadcast to the News Feed, they were taken out of context and made far more visible than seemed reasonable. In other words, with News Feeds, Facebook obliterated the gray zone.

In an era of convergence culture, it is easy to celebrate the shifts brought forth by media and technological convergence: participatory culture, user-generated content, connected communities of interest, destruction of the media industry hegemony, fluidity across platforms and so on. Media and technological convergence are introducing new practices and opportunities. Yet, as a direct result of these structural changes, another form of convergence is emerging: social convergence.

Social convergence occurs when disparate social contexts are collapsed into one. Even in public settings, people are accustomed to maintaining discrete social contexts separated by space. How one behaves is typically dependent on the norms in a given social context. How one behaves in a pub differs from how one behaves in a family park, even though both are ostensibly public. Social convergence requires people to handle disparate audiences simultaneously without a social script. While social convergence allows information to be spread more efficiently, this is not always what people desire. As with other forms of convergence, control is lost with social convergence. Can we



celebrate people's inability to control private information in the same breath as we celebrate mainstream media's inability to control what information is broadcast to us?

Privacy is not an inalienable right – it is a privilege that must be protected socially and structurally in order to exist. The question remains as to whether or not privacy is something that society wishes to support.

When Facebook launched News Feeds, they altered the architecture of information flow. This was their goal and with a few tweaks, they were able to convince their users that the advantages of News Feeds outweighed security through obscurity. Users quickly adjusted to the new architecture; they began taking actions solely so that they could be broadcast across to Friends' News Feeds. While search took a toll on Usenet and Cobot crippled the social solidarity of LambdaMOO, Facebook continues to grow with no sign of slowing down. Young users, in particular, are adjusting to a digital landscape where limited scope broadcast is expected, if not desired.

Many questions still remain. What's next? How will future shifts alter social interactions? How will we adjust to social convergence? What will the costs of such adjustment be? Social convergence is most likely here to stay, but are we prepared for what this might mean?

## Notes

- 1 The term 'Friends' is used in social network sites to indicate a consensual connection between two users. Not all connections represent a relationship that sociologists would recognize as friendship. For a deeper understanding of this feature, see boyd (2006).
- 2 The 'Wall' is a space on an individual's profile where their Friends can leave messages that are viewable to anyone who has access to that profile.
- 3 See <http://berkeley.facebook.com/group.php?gid=2208288769> (accessed 8 September 2006).
- 4 See <http://berkeley.facebook.com/group.php?gid=2208601394> (accessed 8 September 2006).
- 5 On 8 September 2006, after user outrage, Facebook provided privacy features that allowed users to control what would be announced to their Friends.

## References

- Boase, Jeffrey and Wellman, Barry (2006) 'Personal Relationships: On and Off the Internet', in Anita L. Vangelisti and Daniel Perlman (eds) *The Cambridge Handbook of Personal Relationships*, pp. 709–26. Cambridge: Cambridge University Press.
- boyd, danah (2006) 'Friends, Friendsters, and Top 8: Writing Community into Being on Social Network Sites', *First Monday* 11(12), December, URL (accessed September 2007): [http://www.firstmonday.org/issues/issue11\\_12/boyd/](http://www.firstmonday.org/issues/issue11_12/boyd/)
- Dunbar, Robin (1992) 'Neocortex Size as a Constraint on Group Size in Primates', *Journal of Human Evolution* 22(6): 469–93.
- Dunbar, Robin (1996) *Gossip, Grooming and the Evolution of Language*. London: Faber & Faber.
- Isbell, Charles, Kearns, Michael, Kormann, Dave, Singh, Satinder and Stone, Peter (2000) 'Cobot in LambdaMOO: A Social Statistics Agent', paper given at the 17th National Conference on Artificial Intelligence (AAAI-00). Austin, Texas.
- McPherson, Miller, Smith-Lovin, Lynn and Brashears, Matthew E. (2006) 'Social Isolation in America: Changes in Core Discussion Networks over Two Decades', *American Sociological Review* 71(3) June: 353–75.
- Schmidt, Tracy Samantha (2006) 'Inside the Backlash against Facebook', Time.com, 6 September, URL (accessed September 2007): <http://www.time.com/time/nation/article/0,8599,1532225,00.html>
- Zuckerberg, Mark (2006) 'Calm Down. Breathe. We Hear You.' Facebook Blog, 5 September, URL (accessed 1 October 2007): <http://blog.facebook.com/blog.php?post=2208197130>

**danah boyd** *is a doctoral candidate at the University of California-Berkeley School of Information and a Fellow at the Harvard University Berkman Center for Internet and Society, USA. Her research focuses on how American youth navigate networked publics like MySpace and Facebook for sociable purposes. Her research is funded by the MacArthur Foundation as part of a broader grant on digital youth and informal learning.*

**Address** *School of Information, University of California-Berkeley, 102 South Hall, Berkeley, CA 94720-4600, USA. [email: [dmb@ischool.berkeley.edu](mailto:dmb@ischool.berkeley.edu)]*