When Your Profile Knows More about You than You Do

The Power of Cognitive Computing, or Why I Left Facebook
Five “Ethical Issues” concerning Facebook

1) Does Facebook redefine friendship in ways that are potentially helpful or harmful?
Five “Ethical Issues” concerning Facebook

2) Does Facebook’s algorithm for determining what goes into a user’s newsfeed and in what order it appears influence which friendships will develop and which will not?
Five “Ethical Issues” concerning Facebook

3) Does Facebook play a positive or negative role in helping users attain a meaningful sense of purpose, community and self-identity?
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3) Does Facebook play a positive or negative role in helping users attain a meaningful sense of purpose, community and self-identity?

This issue divides into three separate questions
Five “Ethical Issues” concerning Facebook

3a) Does the opportunity for self-disclosure on Facebook put us more in touch with ourselves, as we struggle between a representation of self that is something we ourselves can accept and that others will also accept?
Five “Ethical Issues” concerning Facebook

3b) Is it possible that the opportunity for constructing a public self-portrait in front of multiple constituencies carries with it the necessity of accountability?
Five “Ethical Issues” concerning Facebook

3c) Might authentic self-identity be established in the interactivity between persons and less so in any finished self-representation?
Five “Ethical Issues” concerning Facebook

4) Does Facebook contribute to remembrance and the coherence of one’s life for older users and will it eliminate the need for this for younger users?
Five “Ethical Issues” concerning Facebook

5) Will the openness of our private lives on Facebook lead to restructuring the social and moral expectations placed on us as human beings …

… and, in turn, help us better understand and accept ourselves for who and what we are?
“Does the opportunity for self disclosure in Facebook put us more in touch with ourselves, as we struggle between a representation of self that is something we ourselves can accept and that others will also accept? Is it possible that the opportunity for constructing a public self-portrait in front of multiple constituencies carries with it the necessity of accountability? And might authentic self-identity be established in the interactivity between persons and less so in any finished self-representation?” (Wandel and Beavers, 2009)

Quoted in the Huffington Post, June 24th, 2010 in an article addressing, “What Would the Budda Say to Mark Zuckerberg?”
“In our quest for who we are and what our purpose is, we should not lose sight of the spirit of the game. We allow toddlers to play, to experiment and to try on roles. As lifelong learners, should we not be afforded this same level of experimentation? One could argue that Facebook is shaping our cultural norms by forcing binary choices of gender or providing limited categories of what is considered important—movies, books, etc. However, a more expansive way of looking at this is to see that the very idea of looking into what others have chosen to emphasize in these categories allows us to question our own unique interests, hobbies, political ideals, religious beliefs and sexual preferences. And if we enjoy ourselves as we explore the diversity of opinions that exist on Facebook in a range of frivolous to serious subjects, let us relax. As Plato is widely quoted as saying, ‘Life must be lived as play.’” (Wandel and Beavers, 2010)
May 2010 / CMU Network Model

“More Fun with Jets and Sharks: Typicality Effects and the Search for the Perfect Attractors” – Presented at Carnegie Mellon University, July 26th, 2010

The computer model I presented at CMU was basically a network profiling machine, and in early May, 2010, while preparing my CMU presentation, I realized something of vital importance …

… and dropped off of Facebook.
In our quest for who we are and what our purpose is, we should not lose sight of the spirit of the game. We allow toddlers to play, to experiment and to try on roles. As lifelong learners, should we not be afforded this same level of experimentation? One could argue that Facebook is shaping our cultural norms by forcing binary choices of gender or providing limited categories of what is considered important—movies, books, etc. However, a more expansive way of looking at this is to see that the very idea of looking into what others have chosen to emphasize in these categories allows us to question our own unique interests, hobbies, political ideals, religious beliefs and sexual preferences. And if we enjoy ourselves as we explore the diversity of opinions that exist on Facebook in a range of frivolous to serious subjects, let us relax. As Plato is widely quoted as saying, “Life must be lived as play.” (Wandel and Beavers, 2010)
Just Say No to Facebook

If I can build a network profiling machine, so can Facebook ... and Google.
NEH Institute for Advanced Topics in the Digital Humanities

Networks and Network Analysis for the Humanities

August 15th-27th, 2010 at UCLA

NEH Institute for Advanced Topics in the Digital Humanities

Speakers included representatives from Google, Yahoo and Facebook, along with leading experts in network science from mathematics and computer science.

Aaron Koblin from Google showed us some of the most fascinating information visualizations imaginable. Jonathan Berger introduced us to information sonification.

Just what are these people and organizations up to?
Escalation in Digitized Information

1 Exabyte = 50,000 years of information in DVD format

5 Exabytes = Every word ever spoken in a human language

1,800 Exabytes = 90 million years of continuous DVD play

Interpretations courtesy of Luciano Floridi, UNESCO Chair of Computing and Information Ethics, University of Hertfordshire, United Kingdom
The NCSA computer uses more than 300,000 processors in parallel to process information.

The Blue Waters Computer to be completed in 2011 will process information at the rate of 10 petaflops (10 quadrillion calculations) per second.

That’s ten thousand million million calculations per second!

10,000,000,000,000,000
10 peta-units = $10^{16}$ and 1 exa-unit = $10^{18}$

So, in 2011, Blue Waters will still take years to crunch its way through all of the digitized information in the world looking for patterns.

However ....
“By the mid-2040’s … one thousand dollars’ worth of computation will be equal to $10^{26}$ cps, so the intelligence created per year … will be about one billion times more powerful than all human intelligence today” (Kurzweil, 135-136)

That’s one hundred septillion calculations per second on your laptop!

If you’re trying to keep track 1 trillion times 1,000 = 1 quadrillion, which times 1,000 = 1 quintillion, which times 1,000 = 1 sextillion, which times 1,000 = septillion. 100 septillion is 100 yottaflops per second.
“Advertising on the Web is less about just hitting someone with a message... It's about engagement [with that user].” — Mark Zuckerberg

“In reality, we wouldn't share your information in a way you wouldn't want ... The trust you place in us as a safe place to share information is the most important part of what makes Facebook work.” — Mark Zuckerberg
"They trust me — dumb fucks," says Zuckerberg in one of the instant messages, first published by former Valleywag Nicholas Carlson at Silicon Alley Insider, and now confirmed by Zuckerberg himself in Jose Antonio Vargas's *New Yorker* piece. Zuckerberg now tells Vargas, "I think I've grown and learned a lot" since those instant messages. – September 13th, 2010
With over 500 million members, Facebook is the largest social science database that has ever been compiled in the history of the world …

… and Facebook as a corporation knows this, which is why there is no dislike button.
NEH Institute for Advanced Topics in the Digital Humanities

“Isn’t it cool that we can tell the political leanings of every individual in our 500 million person dataset.” – Jonathan Chang of Facebook, August 20th, 2010
“Facebook, which more than any other company aspires to usurp Google’s dominant place on the Internet, hopes to avoid that problem. Already on the path to becoming an advertising powerhouse, the social networking company is laying the groundwork for its second act: a virtual currency system that some day could turn into a multibillion-dollar business.” – NY Times – September 22nd, 2010
More than half (57%) of the women polled said they communicate with people more online than they do face to face, and 39% called themselves Facebook addicts, according to a report from The Oxygen Media Insights Group, which is part of a company that focuses on television channels and Web sites for women. Moreover 34% of those between 18 and 34 said that checking Facebook is the first thing they do in the morning -- even before brushing their teeth or using the bathroom.

"Even more surprising is the 26% of women 18 to 34 who get up in the middle of the night to read text messages and the 21% who confessed to checking Facebook during the night," the report noted.

According to the survey, 31% of those polled said they are more confident about their online personas than they are about their real-life selves. Nineteen percent said they've gotten into arguments with loved ones about how much time they spend using their cell phones and PDAs (personal digital assistants).

A full 37% of women between the ages of 18 and 34 reported falling asleep with their PDA in their hands.

- Computerworld – July 12th, 2010
“More than 175 million people use Facebook. If it were a country, it would be the sixth most populated country in the world” – Mark Zuckerberg

On May 18th, 2010, Facebook passed the 500 million member mark, making it the third largest “country” in the world after India and China.
“Both U.S. President Barack Obama and French President Nicholas Sarkozy have used Facebook as a way to organize their supporters. From the protests against the Colombian FARC, a 40-year-old terrorist organization, to fighting oppressive, fringe groups in India, people use Facebook as a platform to build connections and organize action” — Mark Zuckerberg
Facebook is a country, the first virtual one of its kind, a complement or corollary to other virtually-organized nations (e.g., Al-Qaeda?), that, in the modern world, have necessitated military action over civic control. It has its virtual citizens who are more loyal to Facebook than they are to their own “real-life” governments, with an emerging currency, and hence, its own emerging economy.

But as its citizens engage in political, social and economic action, playing around on Facebook, just what does big brother, Mark, know about you, and what can he do with that information?
Privacy is not the problem. Who cares about privacy? Power is the problem, and no one man should have all that power. So, if we’re not going to care about privacy, should we no longer care about power? Can we, especially if we can’t see it? And, btw, it doesn’t matter if you delete your profile.

“It’s too late now. It will always be too late. Fortunately!” – Albert Camus, *The Fall*, 1957
Shameless Plugs

Cog 498h – Spring 2011 – Information and the Information Society – limit 12 students

Watch for “When Networks Know Us Better than We Know Ourselves: Information Monopolies, Information Brokering and the Need for Public Policy Governance,” with former UE Student, Jesse Miller. In Ethical Guidance for Emerging Pervasive Information and Communication Technology (PICT): Challenges, Opportunities, and Safeguards, to be published by the Poynter Center for the Study of Ethics and American Institutions.
Credits

National Endowment for the Humanities
Office of Digital Humanities

National Science Foundation

Institute for Pure and Applied Mathematics,
University of California, Los Angeles

Cognitive Science and Library Science Programs
Indiana University, Bloomington