

BioEd Online (<http://www.BioEdOnline.org>)

January 6, 2006

Making friends and influencing people...

Looking for the point of seemingly pointless research.t

by Sybil
news@nature.com

COLUMN

2006, I have decided, is the year that I'll make it big. I'll get a promotion. I'll be wildly popular at parties. And in order to do this I'll meet lots of people - very important people - and make them my best friends.

I was keen to get started right away. So imagine my delight when I found a study that would help me make my new contacts sitting in my e-mail inbox at the start of the week. It sounded like a large and impressive investigation; it was, after all, published in the journal *Science*, which is one of my very favourite reads.

The two guys behind the research, at Columbia University in New York City, decided to analyse how people make friends and interact with each other. To do this, they sifted through some 14 million e-mail messages sent by over 43,000 students and staff in a large university (an institution that they decline to name, although I have my suspicions).

The pair spent three years or so building and running fiendish computer algorithms that could analyse who had e-mailed whom and how often. They assumed that two people who exchange e-mails have some kind of relationship, be they friends or acquaintances.

I know you're holding your breath, so here's what they found: two people are more likely to strike up a relationship if they go to the same college class or have a friend in common.

Duh...

Brilliant. Genius. Three years sifting through millions of messages and that's the result? My excitement made a nosedive towards depression as I thought of the poor people who set out with such a great project only to find... the obvious.

[needed to hammer home the 'duh' point a bit here I think. Ok?]

Were they depressed too? Or was there more to this than met the eye? I picked up the phone to find out.

Thankfully xxxxxxxxxxxx [I think we should name who you spoke to] was quick to reassure me that he wasn't depressed at all, thank you very much, but quite happy with his results. Turns out the key is not the obvious fact, but the slightly unobvious details behind it. Sure, I know that I'm more likely to get to know my friend's associates than to form a budding relationship with a random person on the street. But scientists want to know how much more likely.

For example, I suspect that I'm more likely to meet a friend of a friend, than a friend of a friend of a friend... you get the picture. The study shows this is true - but it also reveals that the former is 30 times more likely than the latter. I couldn't have guessed that.

These kinds of numbers are, apparently, gold dust for sociologists, who plan to devise cunning computer models that predict how a bunch of people will meet, talk and generally behave together over time. Armed with such information, researchers are setting out to reveal how an infectious disease, or rumour, is likely to spread. They might show public health officials how best to quench an epidemic - and viral marketers how best to spark one. Ultimately, it might even help us understand seemingly mind-boggling questions like how people get together to form societies or cult religions.

You say goodbye

And if you're not convinced by such (slightly science-fictionesque) grand plans [ok? This all sounds a bit hand wavy to me. Not sure we should acknowledge being positively impressed by it. Or are you really???], then the study had something of more concrete interest to say to me and my plan for social domination too. The scientists examined how the spaghetti-like network of friendships linking all these people changes over the academic year - and found it was surprisingly little. While one person is busy making new friends, another is busy dropping them. The people who are most connected one day may be less connected the next. Each person's connections are shifting around, but the network as a whole is in a kind of equilibrium.

So while I can certainly suck up to the person I think will be particularly useful for getting me that promotion, it's actually surprisingly hard for me to build an exponentially expanding address book. For all I know, my new best friend could be about to sever the very ties and influence I coveted in them.

So it's sort of pointless. Kind of. Which, to be honest, is a relief. Now I can sit back and enjoy being the lonely cynic I truly am.

And it leaves me plenty of time to look into the stories behind some of these other bizarre, seemingly pointless science headlines. So stick around. I'll be back. [can't promise weekly quite yet!]

Sybil writes exclusively for news@nature.com. Her column will be appearing regularly on our site.

Reference

1. Kossinets, G. & Watts, D.J. *Science* 311, 88-90 (2006). [I know this is house style but it seems so accademic in a silly column. Suggestions from subs???]

1 Name A., et al. *journal*, . - (2005).

Article Copyright © 2006 MacMillan Publishers Ltd. All rights reserved. This material may not be published, broadcast, rewritten, or redistributed.

Find this article at: <http://www.bioedonline.org/news/news.cfm?art=2252>