

Intruduction to Electronic Participatory Culture

The Idea of Group Thinking. From Le Bon to Wikinomics

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„In crowds it is stupidity and not mother-wit that is accumulated. It is not all the world, as is so often repeated, that has more wit than Voltaire, but assuredly Voltaire that has more wit than all the world, if by "all the world" crowds are to be understood.”¹

¹Gustave Le Bon, La psychologie des foules, 1895

Smart mobs

Smart mobs

- The People Power II smart mobs in Manila who overthrew the presidency of President Estrada in 2001 — SMS (20 000 people in 75 minutes)
- <http://www.upoc.com> enables fans to stalk their favorite celebrities in real time
- In Helsinki and Tokyo you can operate vending machines with your telephone and receive directions (...) that show you how to get from where you are standing to where you want to go.
- Lovegety users in Japan find potential dates when their devices recognize another Lovegety in the vicinity (Tinder)
- SETI@home²

²Howard Rheingold, Smart Mobs: The Next Social Revolution, 2002

Wisdom of crowds

Madness of crowds

- economic bubbles,
- crusades,
- witch-hunts,
- prophecies,
- fortune-telling,
- popular admiration of great thieves,
- relics³

³Charles Mackay, *Extraordinary Popular Delusions and the Madness of Crowds*, 1841

Galton's experiment



Francis Galton's and weight-judging competition

- 787 guesses, average answer 1,197 pounds
- Actual weight — 1,198 pounds⁴

⁴James Surowiecki, *The Wisdom of Crowds: Why the Many Are Smarter Than the Few and How Collective Wisdom Shapes Business, Economies, Societies and Nations*, 2004.

Anatomy of a wise crowd

1. Diversity of opinion

- "each person should have some private information, even if it's just an eccentric interpretation of the known facts"
- to avoid "groupthink": Bay of Pigs Invasion

2. Independence

- "people's opinions are not determined by the opinions of those around them"
- Asch conformity experiments

3. Decentralization

- "people are able to specialize and draw on local knowledge"
- Linux: "Given enough eyeballs, all bugs are shallow."

4. Aggregation

- "some mechanism exists for turning private judgments into a collective decision"⁵
- "Who actually discovered the cause of SARS?"

⁵Surowiecki, op. cit., p. 10

Three Types of Problems

1. cognition problems ('Who will win the Super Bowl this year?')
2. coordination problems ("How can you drive safely in heavy traffic?")
3. cooperation problems (paying taxes, dealing with pollution)⁶

⁶Surowiecki, op. cit.

Four major contractor of Challenger projet

1. Rockwell Interna-tional (the shuttle and its main engines)
2. Lockheed (ground support)
3. Martin Marietta (manufactured the ship's external fuel tank)
4. Morton Thiokol (the solid-fuel booster rocket)

25 min. after the explosion...

Stock exchange:

1. Rockwell International -6%
2. Lockheed -5%
3. Martin Marietta -3%
4. Morton Thiokol -12%

6 monts later...

*"O-ring seals on the booster rockets made by Thiokol seals that were supposed to prevent hot exhaust gases from escaping became less resilient in cold weather, creating gaps that allowed the gases to leak out."*⁷

⁷Surowiecki, op. cit.

A coordination problem

Schelling points (Thomas C. Schelling (1958))

- *You have to meet someone in New York City. You don't know where you're supposed to meet, and there's no way to talk to the other person ahead of time. Where would you go?*
- — The information booth at Grand Central Station
- What time?
- — At noon.
- Heads or tails?
- — Heads.

A cooperation problem

They're given \$10 to divide between them, according to this rule: One person (the proposer) decides, on his own, what the split should be (fifty-fifty, seventy-thirty, or whatever). He then makes a take-it-or-leave-it offer to the other person (the responder).

Crowdsourcing

From the History of Crowdsourcing

- 1714 — The Longitude Prize by British government ⁸
- 1879-1928 — Oxford English Dictionary, James Murray⁹

⁸Dawson Ross, Getting Results From Crowds , 2012,
[http://www.crowdsourcing.org/editorial/
a-brief-history-of-crowdsourcing-infographic/12532](http://www.crowdsourcing.org/editorial/a-brief-history-of-crowdsourcing-infographic/12532)

⁹Simon Winchester, The Surgeon of Crowthorne: A Tale of Murder, Madness and the Love of Words, 1998

- National Health Museum in Washington: photo of sick people: professional photography - 100\$ — iStockPhoto - 1\$¹⁰

¹⁰Jeff Howe, The Rise of Crowdsourcing, „Wired” 2006
<http://www.wired.com/wired/archive/14.06/crowds.html>

Types of Crowdsourcing

- sci-sourcing (SETI@home: Search for Extraterrestrial Intelligence)
- crowdfunding (KickStarter, Polakpotrafi)
- implicit crowdsourcing (ESP Game, reCAPTCHA)

The Amazon Mechanical Turk (MTurk)

- a crowdsourcing Internet marketplace
- Requesters post HITs (Human Intelligence Tasks)
 - choosing the best among several photographs
 - writing product descriptions
 - identifying performers on music CDs
 - etc.