



Social Computing

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Definition



- Social Computing
 - Studying social behaviors in online contexts
- Social Media
 - Enabling anyone to publish and access information, collaborate on a common effort, or build relationships
- Social Network
 - Analyzing the structure of whole social entities and explaining the patterns observed in these structures

Course at Different Schools



- Harvard (EECS)
 - Game theory; prediction markets; social choice; peer production; human computation; reputation system; script system, etc.
- Berkeley (iSchool)
 - Web data mining, analytics, information retrieval; ranking, recommender; human computation; social networks; social marketing; security/privacy, etc.
- Princeton (CS)
 - Ethics; clickstreams and digital traces; experiments; mobile phones and wearable sensors; text as data; crowdsourcing, citizen science, etc.
- ...

Social Computing @ HCI



- Social relationship
- Social behavior
- Social context
- Social norms



Facebook



- Social capital
 - Favors from facebook friends: unpacking dimensions of social capital (CHI13)
- Social tie
 - Growing closer on facebook: changes in tie strength through social network site use (CHI14)
- Social support
 - Disclosure, Stress, and Support During Gender Transition on Facebook (CSCW15)
- Interaction
 - Changes in use and perception of facebook (CSCW08)
 - What do people ask their social networks, and why?: a survey study of status message q&a behavior (CHI10)
 - Facebook makes the heart grow fonder: relationship maintenance strategies (CSCW15)
- Emotion
 - Social Sharing of Emotions on Facebook: Channel Differences, Satisfaction, and Replies (CSCW15)
- ...

Experimental evidence of massive-scale emotional contagion through social networks

Adam D. I. Kramer^{a,1}, Jamie E. Guillory^{b,2}, and Jeffrey T. Hancock^{b,c}

Author Affiliations ↗

Edited by Susan T. Fiske, Princeton University, Princeton, NJ, and approved March 25, 2014 (received for review October 23, 2013)

A correction has been published
A correction has been published

- Abstract
- Full Text
- Authors & Info
- Figures
- Metrics
- Related Content
- PDF

Significance

We show, via a massive ($N = 689,003$) experiment on Facebook, that emotional states can be transferred to others via emotional contagion, leading people to experience the same emotions without their awareness. We provide experimental evidence that emotional contagion occurs without direct interaction between people (exposure to a friend expressing an emotion is sufficient), and in the complete absence of nonverbal cues.



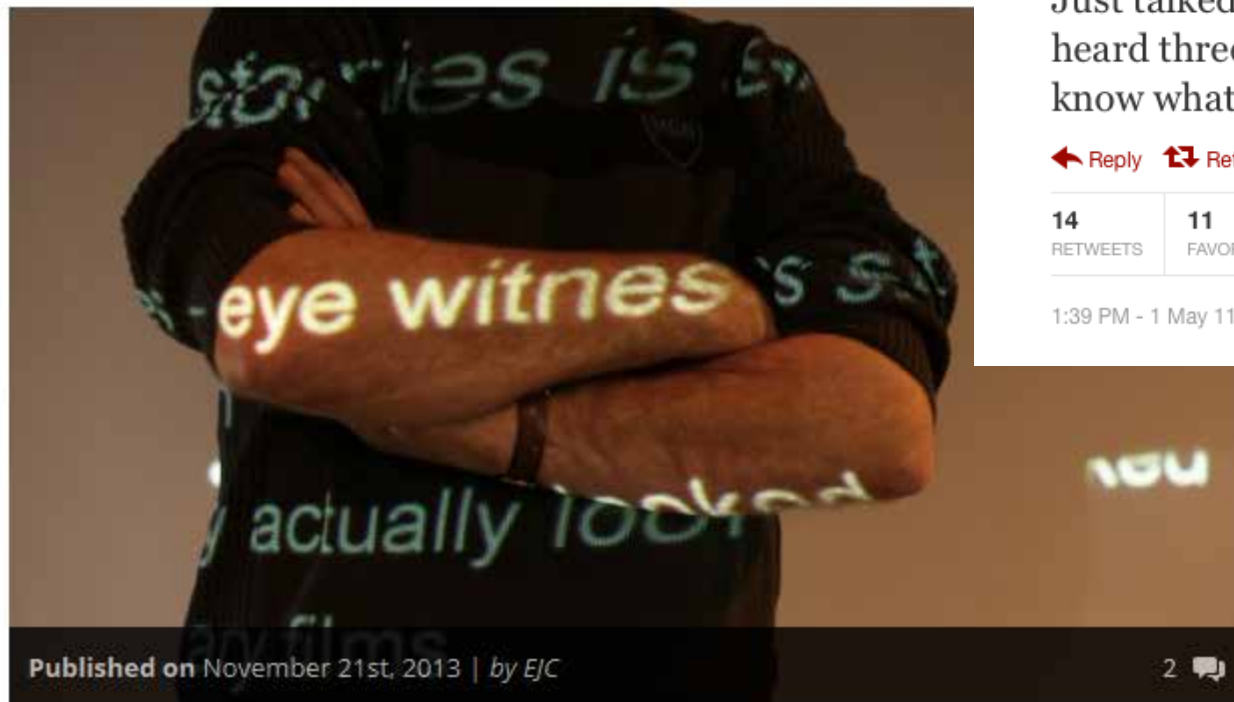
<http://www.theatlantic.com/technology/archive/2014/06/everything-we-know-about-facebooks-secret-mood-manipulation-experiment/373648/>

Kramer, Adam DI, Jamie E. Guillory, and Jeffrey T. Hancock. "Experimental evidence of massive-scale emotional contagion through social networks." *Proceedings of the National Academy of Sciences* 111, no. 24 (2014): 8788-8790.

Twitter



- Relationship
 - A longitudinal study of follow predictors on twitter (CHI13)
- Profile
 - Tweets from Justin Bieber's heart: the dynamics of the location field in user profiles (CHI11)
- Topic
 - Deep Twitter diving: exploring topical groups in microblogs at scale (CSCW14)
- Usage
 - @BabySteps: design and evaluation of a system for using twitter for tracking children's developmental milestones (CHI14)
 - Hybrid media consumption: how tweeting during a televised political debate influences the vote decision (CSCW14)
- Emotion
 - "i read my Twitter the next morning and was astonished": a conversational perspective on Twitter regrets (CHI13)
- ...



Published on November 21st, 2013 | by EJC

2



Mohcin Shah

@mohcinshah



Follow

Just talked to family in Abbottabad, say they heard three blasts one after another, don't know what really happened.

Reply Retweet Favorite More

14

RETWEETS

11

FAVORITES



1:39 PM - 1 May 11

<http://emergencyjournalism.net/automatically-identifying-eyewitness-reporters-on-twitter-during-disasters/>

Yang, Jiang, Scott Counts, Meredith Ringel Morris, and Aaron Hoff. "Microblog credibility perceptions: comparing the USA and China." In *Proceedings of the 2013 conference on Computer supported cooperative work*, pp. 575-586. ACM, 2013.

Automatically Identifying Eyewitness Reporters On Twitter During Disasters

Like 15 Tweet 17

Pin it Share 10

London G20 Protest



Paul Lewis



Who should be responsible for Mr. Ian Tomlinson's tragedy?



Wikipedia



- Coordination
 - Harnessing the wisdom of crowds in wikipedia: quality through coordination (CSCW08)
- Assignment
 - Coordinating tasks on the commons: designing for personal goals, expertise and serendipity (CHI09)
- Motivation
 - Keeping eyes on the prize: officially sanctioned rule breaking in mass collaboration systems (CSCW13)
 - Motivating crowds using social facilitation and social transparency (CSCW13)
- Diversity
 - The effects of diversity on group productivity and member withdrawal in online volunteer groups (CHI10)
- Leadership
 - Identifying shared leadership in Wikipedia (CHI11)
- ...

Article [Talk](#)

Bill Buxton

From Wikipedia, the free encyclopedia

William Arthur Stewart "Bill" Buxton (born March 10, 1949) is a [Canadian computer scientist](#) and [designer](#). He is currently a principal researcher at [Microsoft Research](#). He is known for being one of the pioneers in the [human–computer interaction](#) field.

Contents [hide]

- 1 Background and contributions
- 2 Notable honors and awards
- 3 See also
- 4 References
- 5 External links

Background and contributions [edit]

Bill Buxton received his [bachelor's degree](#) in [music](#) from [Queen's University](#) in 1973 and his [master's degree](#) in [computer science](#) from the [University of Toronto](#) in 1978.^[1]

Bill Buxton's scientific contributions include applying [Fitts' law](#) to [human-computer interaction](#) and the invention and analysis of the [marking menu](#) (together with [Gordon Kurtenbach](#)). He pioneered [multi-touch](#) interfaces and [music composition](#) tools in the late 1970s, while working in the [Dynamics Graphics Project](#) at the [University of Toronto](#). Recently, he is also known for his book *Sketching User Experiences: Getting the Design Right and the Right Design* ([Morgan Kaufmann](#), 2007).

Bill Buxton is a regular [columnist](#) at [BusinessWeek](#). Before joining [Microsoft Research](#) he was [chief scientist](#) at [Alias Wavefront](#) and

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☐ I have a relevant college/university degree

☒ It is part of my profession

☒ It is a deep personal passion

☐ The source of my knowledge is not listed here

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We will send you a confirmation e-mail. We will not share your e-mail address with outside parties as per our [feedback privacy statement](#).

William Arthur Stewart Buxton



Bill Buxton with a [Microwriter](#) chord input device.

Born	March 10, 1949 (age 66) Edmonton, Alberta, Canada
Residence	Canada
Citizenship	Canada
Nationality	Canadian
Fields	Computer Science and Design
Institutions	Utrecht University University of Toronto Ontario College of Art & Design

YouTube



- Content
 - Does content determine information popularity in social media?: a case study of youtube videos' content and their popularity (CHI14)
- Category
 - Knowing funny: genre perception and categorization in social video sharing (CHI11)
- Label
 - Learnersourcing: Subgoal Labels for How-to Videos (CSCW15)
- Comment
 - How useful are your comments?: analyzing and predicting youtube comments and comment ratings (WWW10);
- Collaboration
 - Margaret Gould Stewart, YouTube. Connecting the world through video (CHI12 Keynote)
- ...

THE JOHNNY CASH PROJECT

Explore ▾ Conl



THE JOHNNY CASH PROJECT

WWW.MCMILLANMAGAZINE.COM

A UNIQUE
COMMUNAL
WORK,
A LIVING
PORTRAIT
OF THE
MAN
IN
BLACK

Through this interactive website, participants may draw their own portrait of Johnny Cash to be integrated into a collective whole. As people all over the world contribute, the project will continue to evolve and grow, one frame at a time.



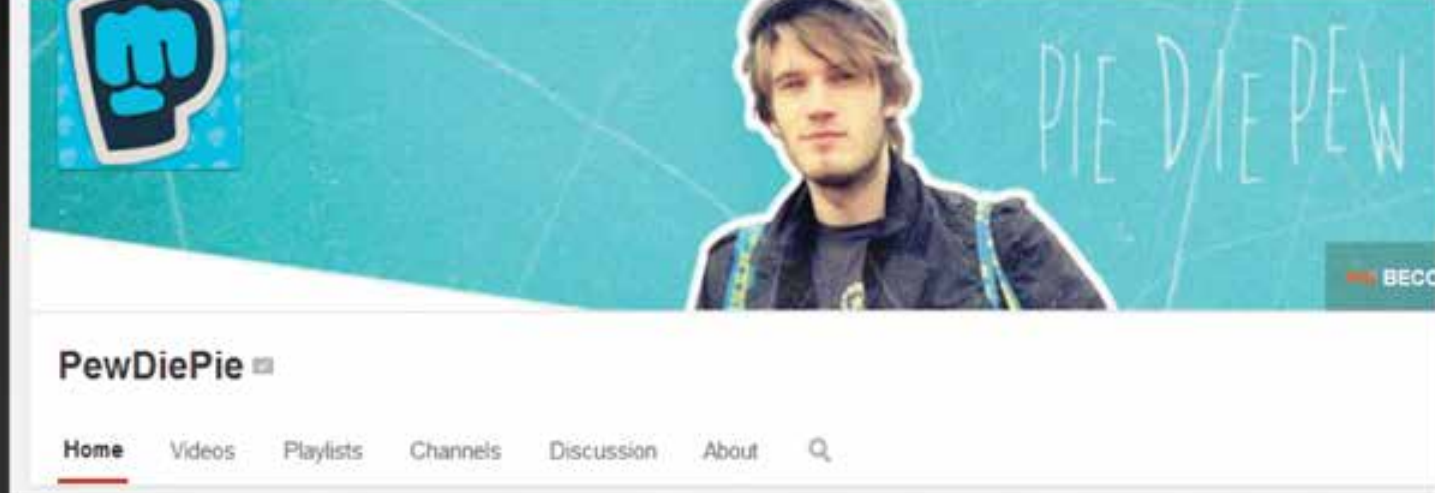
Submit your drawing to become a part of the new music video for the song "Ain't No Grave". Strung together and played in sequence your art, paired with Johnny's haunting song, will become a living, moving, and ever-changing portrait of the legendary Man in Black.



WATCH THE VIDEO

CONTRIBUTE

WATCH THE DOC



26

million subscribers

4

billion views



PewDiePie has more than 26 million subscribers and more than 4 billion views.

Estimated monthly earnings ranging from \$169,000 to \$1,400,000.

*SocialBlade estimate

Online Dating Sites



- Community
 - Understanding the Role of Community in Online Dating (CHI15)
- Online / Offline Activity
 - De-virtualizing social events: understanding the gap between online and offline participation for event invitations (CSCW14)
 - Enhancing Evaluation of Potential Dates Online Through Paired Collaborative Activities (CSCW15)
- Information Presentation
 - Perceptions of trustworthiness online: the role of visual and textual information book (CSCW10)
 - My Dating Site Thinks I'm a Loser: effects of personal photos and presentation intervals on perceptions of recommender systems (CHI09)
- Deception
 - Reading between the lines: linguistic cues to deception in online dating profiles (CSCW10)
 - The truth about lying in online dating profiles (CHI07);
- ...



Recommendation for Happiness

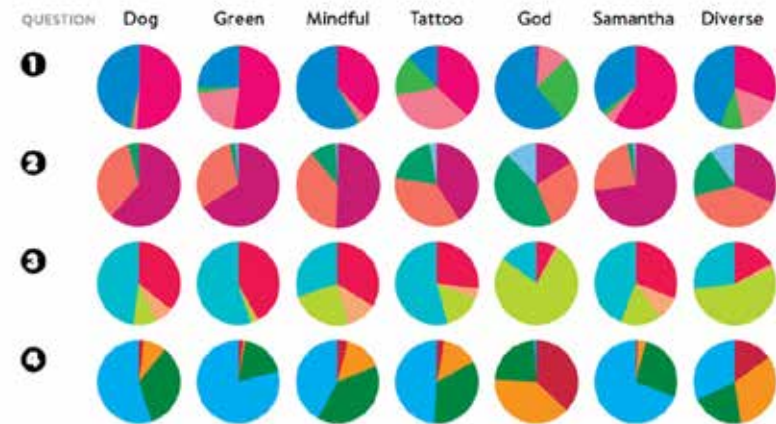
by **Yan Mu** (Co-founder & Chief Happiness Officer, Baihe.com, China)

Baihe (meaning Lily flowers, a pun for *happiness forever* in Chinese) is one of the largest online dating companies in the world (see www.baihe.com). Each day, we help millions of Chinese and international customers find their loved ones. An associated regular and popular television dating show, known as *Take Me Out* (fcwr.jstv.com), is watched by over 50 million TV watchers each time. With such immense popularity, we also feel the weight of full responsibility. In this talk, I will discuss the technical challenges associated with online and mobile reciprocal recommendation technologies underlying the service. I will discuss the issues of user modeling, search and ranking, as well as trust and user privacy in our total solution system. We hope to inspire researchers in inventing new algorithms to serve our users better, and increase the happiness of our ever-growing user base.

ABOUT THE SPEAKER

Yan Mu is the Co-founder & Chief Happiness Officer at Baihe.com, one of the largest online matchmaking sites in China. He specializes in managing the business strategy, marketing, product design, and overseeing software development. Prior to Baihe.com, he was the co-founder and president of United Info, then No.1 hotel network service provider in Beijing local market. Yan got his B.E. and Master's degrees from Computer Science in Tsinghua University in 1996 and 1999, respectively.

<http://recsys.acm.org/recsys13/keynotes/#content-tab-1-2-tab>



<http://www.wired.com/2014/01/how-to-hack-okcupid/>



3.5 million users

<http://www.nbcnews.com/tech/internet/how-people-are-juicing-their-online-dating-profiles-n26801>



80 million users

Algorithm for Love



Two Love Hackers



Chris McKinlay, Math PhD@UCLA



Amy Webb, Digital strategist

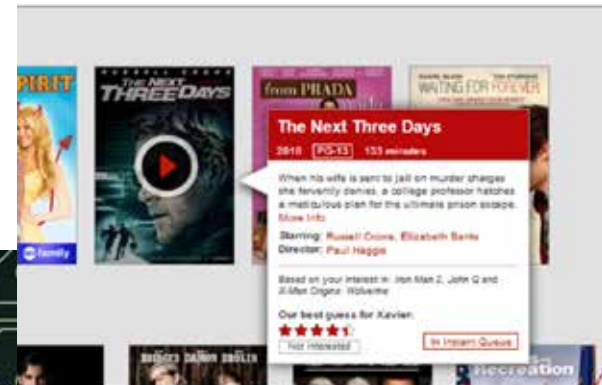
It takes 2.5 years for Webb to marry her ideal candidate. And for Chris, he has dated 55 times before he met his girl friend.

Online Review Sites



- Value
 - Understanding Online Reviews: Funny, Cool or Useful? (CSCW15)
- Quality
 - Analyzing the quality of information solicited from targeted strangers on social media (CSCW13)
- Reputation
 - Necessary, unpleasant, and disempowering: reputation management in the internet age (CSCW15)
- Transparency
 - The Perverse Effects of Social Transparency on Online Advice Taking (CSCW15)
- Recommendation
 - Demographics, weather and online reviews: a study of restaurant recommendations (WWW14)
- ...

NETFLIX



Social Support

$$\begin{aligned}
 & \text{BIG} + \frac{\text{Michael DOBBS}}{44,000,000 \text{ NETFLIX}} + \frac{\text{MORAL}(\text{MORAL})}{\text{MEDIER}} + \frac{\text{MEDIER}}{\{\text{POLITIK}\}} + \sqrt{\frac{\text{SEX}}{\text{LIGN}}} \div \frac{\text{HAPPY}}{\text{END}} = \$
 \end{aligned}$$

<http://www.nytimes.com/2013/02/25/business/media/for-house-of-cards-using-big-data-to-guarantee-its-popularity.html>

Online QA Sites




- Design
 - Design lessons from the fastest q&a site in the west (CHI11)
- Market / Business Model
 - mimir: a market-based real-time question and answer service (CHI10)
 - Is It Good to Be Like Wikipedia?: Exploring the Trade-offs of Introducing Collaborative Editing Model to Q&A Sites (CSCW15)
- Facilitation
 - Facilitating students' collaboration and learning in a question and answer system (CSCW13)
 - Towards crowd-based customer service: a mixed-initiative tool for managing Q&A sites (CHI14)
- Interaction
 - Redesign as an act of violence: disrupted interaction patterns and the fragmenting of a social Q&A community (CHI11);
 - To answer or not: what non-qa social activities can tell (CSCW13)
- Contributor
 - Contributor profiles, their dynamics, and their importance in five q&a sites (CSCW13)
- ...

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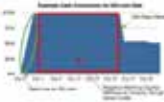
How much did it cost AOL to distribute all those CDs back in the 1990's?
 In AOL History: Answer added in topic Marketing. 6 Answers • Follow 

Steve Case, co-founder and former chief exec...
 A lot! I don't remember the total spending but do recall in the early 1990s our target was to spend 10% of lifetime revenue to get a new subscriber. At that time I believe ... [\(more\)](#)

Why does the Facebook Places icon so obviously contain a "four" in a "square"?
 Answer added in topics Graphic Design, Facebook. 1 Answer • Follow 

Aaron Sittig, Early employee and first Product...
 I drew this icon.
 Originally we had two straight roads crossing each other, but the icon looked too much like a package with ribbon around it. We tried adding water at one... [\(more\)](#)

How does Gilt's business model work?
 In Gilt Groupe: Answer added in topic Social Media Marketing. 1 Answer • Follow 

Matthew Carroll, Building fashion & footwear bran...

 I have worked with Gilt several times as a vendor. Here is their business model:
 They have excellent buyers - they find the best brands with great product. Once you have... [\(more\)](#)


<http://www.quora.com/What-does-Dustin-Moskovitz-think-of-the-Facebook-movie>

Quora [Add Question](#)

[The Social Network \(2010 Movie\)](#) [Facebook](#)

★ **What does Dustin Moskovitz think of the Facebook movie?**
 This is a follow-up question to [What does Mark Zuckerberg think of the Facebook movie?](#)
 3 Comments

1 Answer

Dustin Moskovitz, Co-Founder of Facebook
 424 votes by Chris Putnam, Tracy Cheu, Michael Wolfe, (more) 

It is interesting to see my past rewritten in a way that emphasizes things that didn't matter (like the Winklevosses, who I've still never even met and had no part in the work we did to create the site over the past 6 years) and leaves out things that really did (like the many other people in our lives at the time, who supported ... that it's just cool to see a dramatization of

<http://www.theguardian.com/technology/2011/jan/05/quora-question-answer-facebook>

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4 Answers



1

You're not doing anything wrong, that's just how CodeIgniter w

This function returns the query result as an array of objects, c

So the information you are looking for is contained in an object
thet

[mod](#) | [link](#) | [edit](#) | [delete](#) | [flag](#)

[add comment](#)

edited [yesterday](#)



[Sam Saffron](#) ♦

21.5k ● 2 ● 44 ● 118

answered [Jun 14 at 2:09](#)



[jeroen](#)

10.7k ● 10 ● 23



0

It is still a query so you still have to process the result, try changing your model to this...

```
function Dues_Paid_Tot($date)
{
    $query = $this->db->select_sum('Dues_Paid', 'Dues_Paid_Tot');
    $query = $this->db->get('Membership');
    $result = $query->result();

    return $result[0];
}
```

43

A few hidden features I've come across:

- `stackalloc` which lets you allocate arrays on the stack
- Anonymous methods with no explicit parameter list, which are implicitly convertible to any delegate type with non-out/ref parameters (very handy for events, as noted in an earlier comment)
- A lot of people aren't aware of what events really are (an add/remove pair of methods, like get/set for properties); field-like events in C# really declare both a variable *and* an event
- The `==` and `!=` operators can be overloaded to return types other than `bool`. Strange but true.
- The query expression translation in C# 3 is really "simple" in some ways - which means you can get it to do some [very odd things](#).
- Nullable types have special boxing behaviour: a null value gets boxed to a null reference, and you can unbox from null to the nullable type too.

[link](#)

answered [Sep 26 '08 at 15:28](#)

community wiki
[Jon Skeet](#)

Thanks Jon, this is pretty crazy list :) – [Joan Venge](#) Mar 2 '09 at 20:46

wouldn't mind a little elaboration on this post! – [Alex Baranosky](#) Aug 12 '09 at 14:55

@GordonG: Which bit of it? – [Jon Skeet](#) Aug 12 '09 at 14:58

Unfortunately, `stackalloc` requires unsafe context. – [RickNZ](#) Dec 19 '09 at 4:46

30 Yes, this post was useful. -- [Anonymous user](#) Jul 25 '11 at 6:30

Was this post useful to you?

Online Communities



- Member, e.g. MOOCs
 - Understanding Student Motivation, Behaviors and Perceptions in MOOCs (CSCW15)
 - The impact of membership overlap on the survival of online communities (CHI14)
- Social transparency, e.g. GitHub
 - Social transparency in networked information exchange: a theoretical framework (CSCW12)
- Shared understanding, e.g. copyright in design
 - Understanding Copyright Law in Online Creative Communities (CSCW15)
- Guanxi, e.g. in China
 - Virtual gifts and guanxi: supporting social exchange in a chinese online community (CSCW11)
 - Simulating Marriage: Gender Roles and Emerging Intimacy in an Online Game (CSCW15)
- Lifecycle, e.g. World of Warcraft
 - The life and death of online gaming communities: a look at guilds in world of warcraft (CHI07)
- ...

"Corrupted Blood" in World of Warcraft



- Model for Epidemic Research
 - Spread and control of infectious diseases
- Model for Terrorism Research
 - Society reaction and public policy

https://en.wikipedia.org/wiki/Corrupted_Blood_incident

<http://content.time.com/time/health/article/0,8599,1655109,00.html>

Recap



- Social computing, media, network
- Social computing @ HCI
 - Social relationship
 - Social behavior
 - Social context
 - Social norms



Thank you J

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