

The New Paradigm Shift: The Emergence of Social Computing

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Social Networking

HOW TO USE WEB 2.0 IN THE ENTERPRISE

*PART 1:
COMMUNICATE WITH YOUR EMPLOYEES*



Billionaires' Shuffle

2008



Facebook in 2004.02

2008

at **23** and \$ **1.5** billion later...



2009



Alexa as of Nov. 2008	China	USA	Japan	India	Brazil	Global
1	Baidu	Google	Yahoo.jp	Google.in	Google	Google
2	QQ	Yahoo	FC2	Google	Orkut.br	Yahoo
3	Sina	Facebook	Google.jp	Yahoo	Windows Live	YouTube
4	Google.cn	YouTube	YouTube	Orkut.in	Universo Online	Facebook
5	Taobao	Myspace	Rakuten	YouTube	YouTube	Windows Live
6	163	MSN	Livedoor	Blogger	Globo	MSN
7	Google	Windows Live	Ameblo.jp	Rediff	MSN	Wikipedia
8	Sohu	Wikipedia	mixi	Facebook	Google	Blogger
9	Youku	Craigslist	Wikipedia	Wikipedia	Yahoo	Baidu
10	Yahoo	EBay	Google	Windows Live	Terra	Myspace

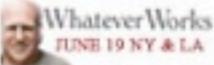


China's Great Firewall

HOME PAGE TODAY'S PAPER VIDEO MOST POPULAR TIMES TOPICS

The New York Times
Friday, June 19, 2009

News

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The Lede 

The New York Times News Blog

June 2, 2009, 7:05 PM

China's Great Firewall Blocks Twitter

By ROBERT MACKEY



Catherine Henriette/Agence France-Presse — Getty Images

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Next Post: [Punditry From Bin Laden and Zawahiri on Obama's Trip to the Middle East](#)

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June 18 (38 comments) **Latest Updates on Iran's Disputed Election**
To supplement reporting from New York Times correspondents inside Iran on Thursday, The Lede will continue to track the aftermath of Iran's disputed presidential election online.

June 17 (129 comments) **Wednesday: Latest Updates on Iran's Disputed Election**
On Wednesday, The Lede will continue to track the aftermath of Iran's disputed presidential election online, to supplement reporting from New York Times correspondents inside Iran.

June 16 (198 comments) **Tuesday: Latest Updates on Iran's Disputed Election**
To supplement reporting from New York Times correspondents inside Iran, The Lede



Twitter in Iran's Revolution



Login Join Twitter!

Rallying Iran: Time Tempers a Challenger Forged in Revolution

<http://bit.ly/epfBT>

5:45 PM Jun 17th from web



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The New York Times

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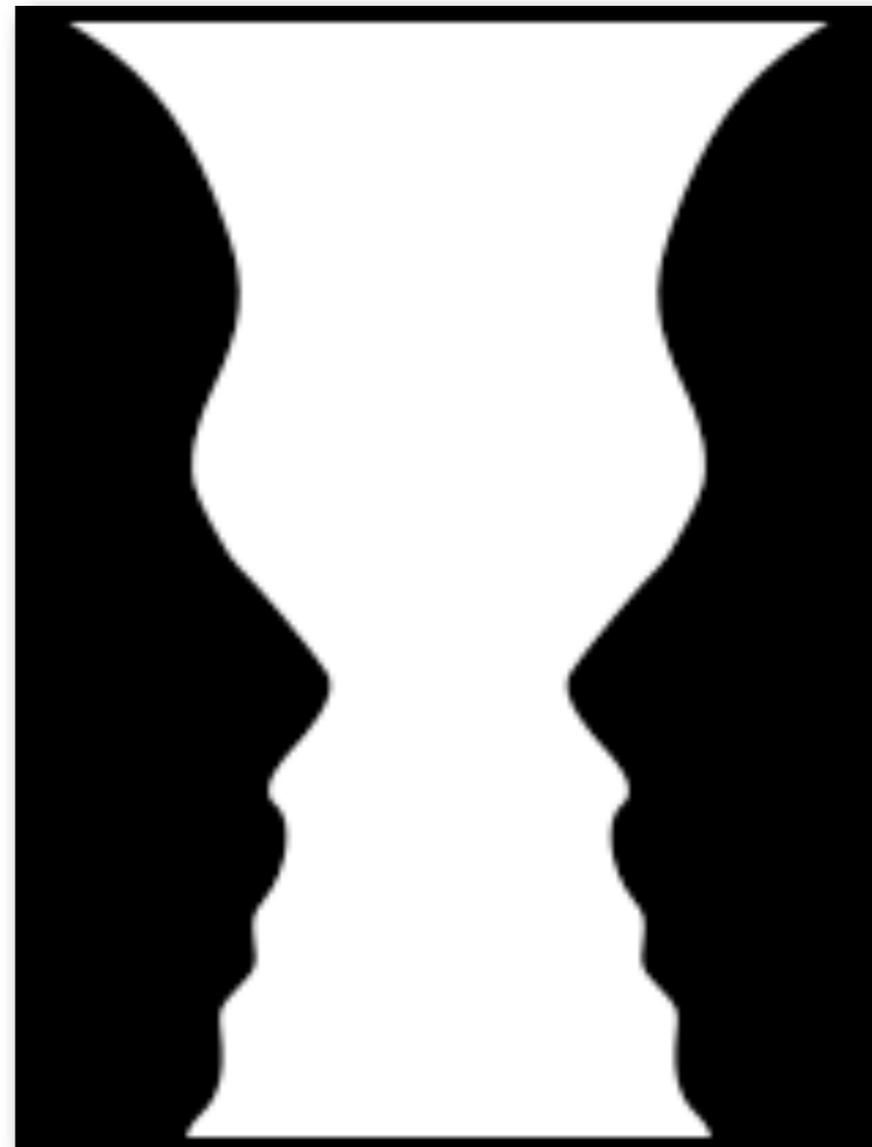
Web 2.0

- Web as a medium vs. **Web as a platform**
- Read-Only Web vs. **Read-and-Write Web**
- Static vs. **Dynamic**
- Restrictive vs. **Freedom & Empowerment**
- Technology-centric vs. **User-centric**
- Limited vs. **Rich User Experience**
- Individualistic vs. **Group/Collective Behavior**
- Consumer vs. **Producer**
- Transactional vs. **Relational**
- Top-down vs. **Bottom-up**
- People-to-Machine vs. **People-to-People**
- Search & browse vs. **Publish & Subscribe**
- Closed application vs. **Service-oriented Services**
- Functionality vs. **Utility**
- Data vs. **Value**

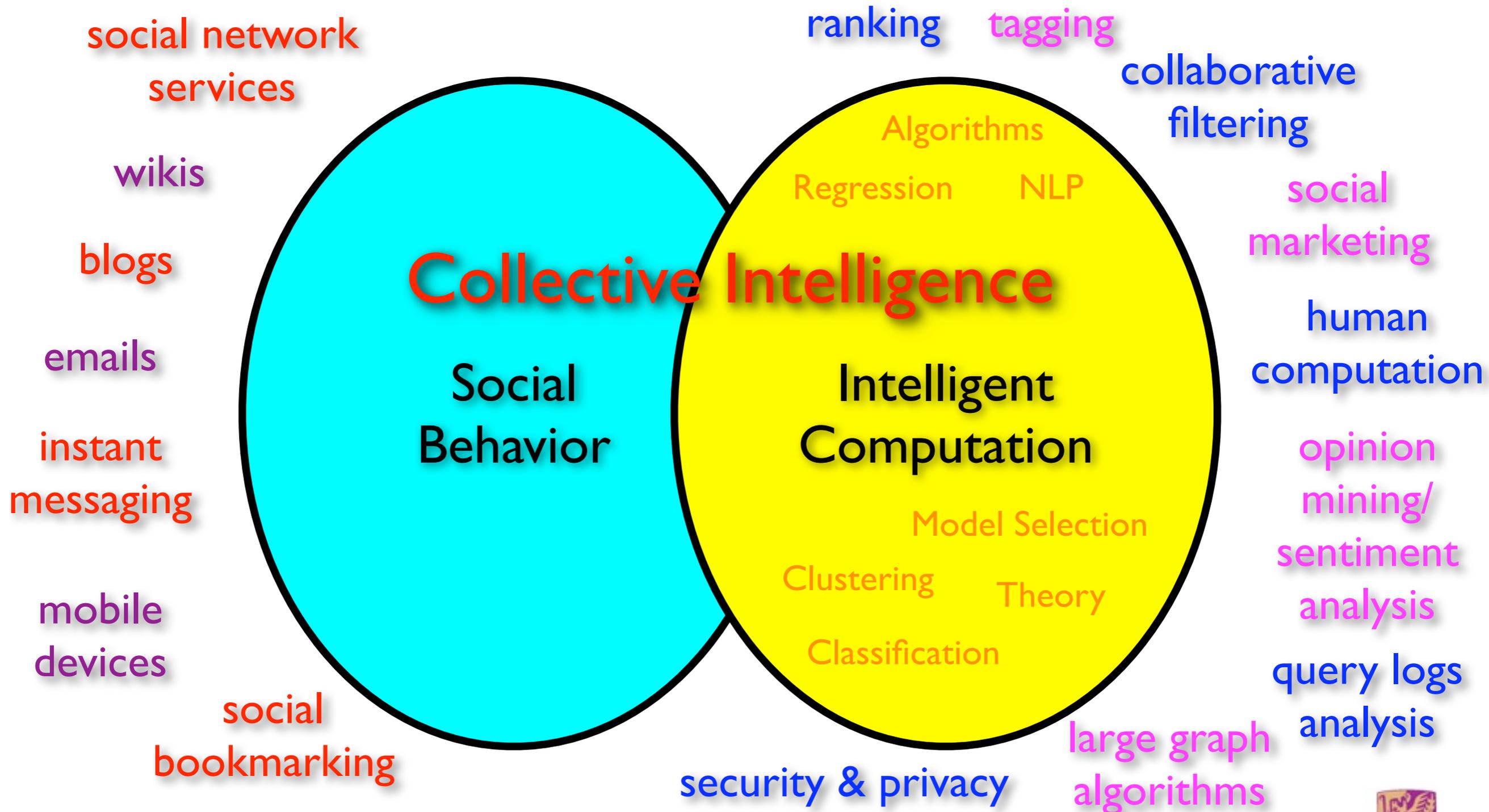


Web 2.0 Revolution

- **Glocalization**-think globally and act locally!
- **Weblication**-Web is the application!
- Three C's
 - **Connectivity**
 - **Collaboration**
 - **Communities**



Social Computing



Definition of Social Computing



- Any Computer-mediated communication and interaction
- In the weaker sense: **supporting any sort of social behavior**
 - blogs, email, instant messaging, wiki, social network services, social bookmarking
- In the stronger sense: **supporting “computations” that are carried out by a group of people**
 - recommender systems, online auctions, prediction markets, reputation systems, tagging, verification games



Social Networking in Greece



Social Networking Sites

- Example of Social Networking Sites: FaceBook, MySpace, Blogger, QQ, etc.



Social Search

- Social Search Engine
- Leveraging your social networks for searching

eurekasterswicki login | sign up

build new swicki | swicki directory | about swicki | about eurekaster

Search and vote for your faves

swicki search

a custom search portal around the topic of your choice powered by your community

Build a swicki!

A swicki is a custom social search portal on the topic of your choice. With every search, vote and click, your swicki generates more relevant results and turns into a valuable asset for you and your community. Take a tour to find out more about how swickis work.

- Choose from text, multimedia or video content
- Customize the swicki widget look and feel
- Share your swicki widget with your community

[Build a swicki](#)

New! Even fresher swickis with RSS and Autodetect. [Learn More.](#)

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- Swicki Users Go Green
- CEO Speaking at SES New York

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- Make Yourself a Man Pad
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- pittsburgh news
- pittsburgh wedding ...
- ski tahoe

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My Profile | My Network

Your friends are the best source of information!
Look for information, media and people within your network

(Go)

Noa Rabiner
Noa Rabiner is connected to you directly

- This is me!
- I know this person
- Add as Connection
- Send Message



Social Media

The screenshot shows the YouTube homepage with the following elements:

- Header:** YouTube logo with the tagline "Broadcast Yourself™". Navigation tabs for Home, Videos, Channels, and Community. A search bar and an "Upload" button.
- Videos being watched right now...:** A row of five video thumbnails with their durations (02:13, 03:29, 01:58, 07:01, 03:53).
- Promoted Videos:** Four video thumbnails with titles like "Think Again Awards" and "第14屆十大電視廣告頒獎典禮 - 飛出...".
- Featured Videos:** A list of featured videos with titles and view counts:
 - David Sedaris delivers a pizza:** From [weaknights](#), Views: 11,313, 5 stars, 01:01. More in [Comedy](#).
 - Erbert and Gerbert's Candle Cannon:** From [candlecannon](#), Views: 109,029, 5 stars, 02:34. More in [Entertainment](#).
 - Girl's Night Out:** From [danidovine](#), Views: 169,435, 5 stars, 03:49. More in [Comedy](#).
 - Lionel Neykov - Freeze My Senses:** From [LionelNeykov](#), Views: 150,758, 5 stars, 03:35. More in [Music](#).
- What's New:** A yellow box containing:
 - YouTube Mobile:** "New! Watch ALL YouTube videos on your mobile device".
 - Warp!** "Visually fly through YouTube videos in the Fullscreen player".
 - RSS Feeds:** "Click on the 'RSS this page' link to get fresh videos delivered".
 - SXSW on YouTube:** "For the next week and a half, the SXSW festival is taking over Austin, Texas, to celebrate music, film and all things interactive. [Read more in our Blog](#)".
- Login:** A form with fields for Username and Password, a "Login" button, and links for "Sign Up | Help", "Forgot Username | Forgot Password", and "Login with your Google account".

The screenshot shows the Flickr homepage with the following elements:

- Header:** Flickr logo and a "Sign In" link.
- Main Content:** A large photo of a small plant growing in a crack in a sidewalk. Text reads: "Share your photos. Watch the world." Below this is a search bar and a "SEARCH" button.
- Statistics:** "3,802 photos uploaded in the last minute · 558,832 photos tagged with urban · 2.2 million photos uploaded this month · [Take the tour](#)".
- Navigation:** Four icons with labels: "Share & stay in touch", "Upload & organize", "Make stuff!", and "Explore...".
- Footer:** A "Take the Tour" button and a link to "Explore Flickr Blog, the World Map, Camera Finder or interesting photos from the last 7 days".

The screenshot shows the Second Life website with the following elements:

- Header:** "SECOND LIFE" logo with the tagline "Your World. Your Imagination." and a "Resident Login | Join" link.
- Navigation:** Links for "What is Second Life?", "SHOWCASE", "COMMUNITY", "BLOG", and "SUPPORT". A search bar labeled "Search Second Life".
- Main Content:** A large image of a man and a woman flying in a virtual world. Text reads: "Get Started! Membership is FREE! Second Life is an online, 3D virtual world imagined and created entirely by its Residents." Below this is a button: "Discover a whole new world of friends, fashion, music, videos and fun! Explore the best of Second Life >>".
- Footer:** A section titled "Your Organization in Second Life!" with text: "Find out why your business, school or nonprofit organization should get its own virtual world presence." and a "Visit Second Life Now!" button.

Social News/Mash Up

The screenshot shows the Digg website interface. At the top, there's a navigation bar with 'Join Digg', 'About', and 'Login'. Below that, a search bar and category tabs like 'All', 'News', 'Videos', 'Images', 'Podcasts', and 'Customize'. The main content area is titled 'News, Videos, Images' and features a list of articles. The first article is 'Microsoft Demos "ADD TO DIGG" Feature in IE8' with a thumbnail and a brief description. Other articles include 'It was only a matter of time, The SIMS 3 Official' and 'Universe submerged in a sea of chilled neutrinos'. On the right side, there's a 'Visual Studio' advertisement and a 'Top in All Topics' section with various trending items like 'The ravages of aging: Sean Connery, 20 years ago vs Today'.

The screenshot shows the Twitter website homepage. At the top, there's the Twitter logo and a 'Select Language' dropdown. Below that, a navigation bar with 'What is Twitter?', 'What?', 'Why?', and 'How?'. The main content area features a large illustration of a yellow bird on a branch. To the right, there's a sign-in section with fields for 'user name or email address' and 'password', and a 'Remember me' checkbox. Below the sign-in section, there's a green button that says 'Already using Twitter from your phone? Click here.' The bottom part of the page shows a map of the United States with a pink bird icon and a tweet bubble that says 'Killane I feel odd 17 minutes ago in North of Seattle'.

The screenshot shows the FoxyTunes website for the artist Björk. At the top, there's the FoxyTunes logo and a search bar. Below that, there's a navigation bar with 'Albums' and 'Tracks' tabs. The main content area features a large image of Björk and a list of her albums and tracks. The first track is 'All is full of love' with a duration of 4:09. Other tracks include 'bjork-hunter' and 'Bjork - Human Behaviour'. On the right side, there's a 'Lyrics from Yahoo! Music' section with a list of songs and a 'Flickr Photos' section with a grid of images. At the bottom, there's an 'Artist on Last.fm' section with a list of similar artists like 'The Sugarcubes' and 'Goldfrapp'.



Social/Human Computation

Security Check: Enter both words below, separated by a space. What's This?
Can't read this? Try another.
[Try an audio captcha](#)



Text in the box:

I have read and agree to the [Terms of Use and Privacy Policy](#)

[Sign Up](#)

[Problems signing up? Check out our help pages](#)

Security Check: Enter both words below, separated by a space. What's This?
Can't read this? Try another.
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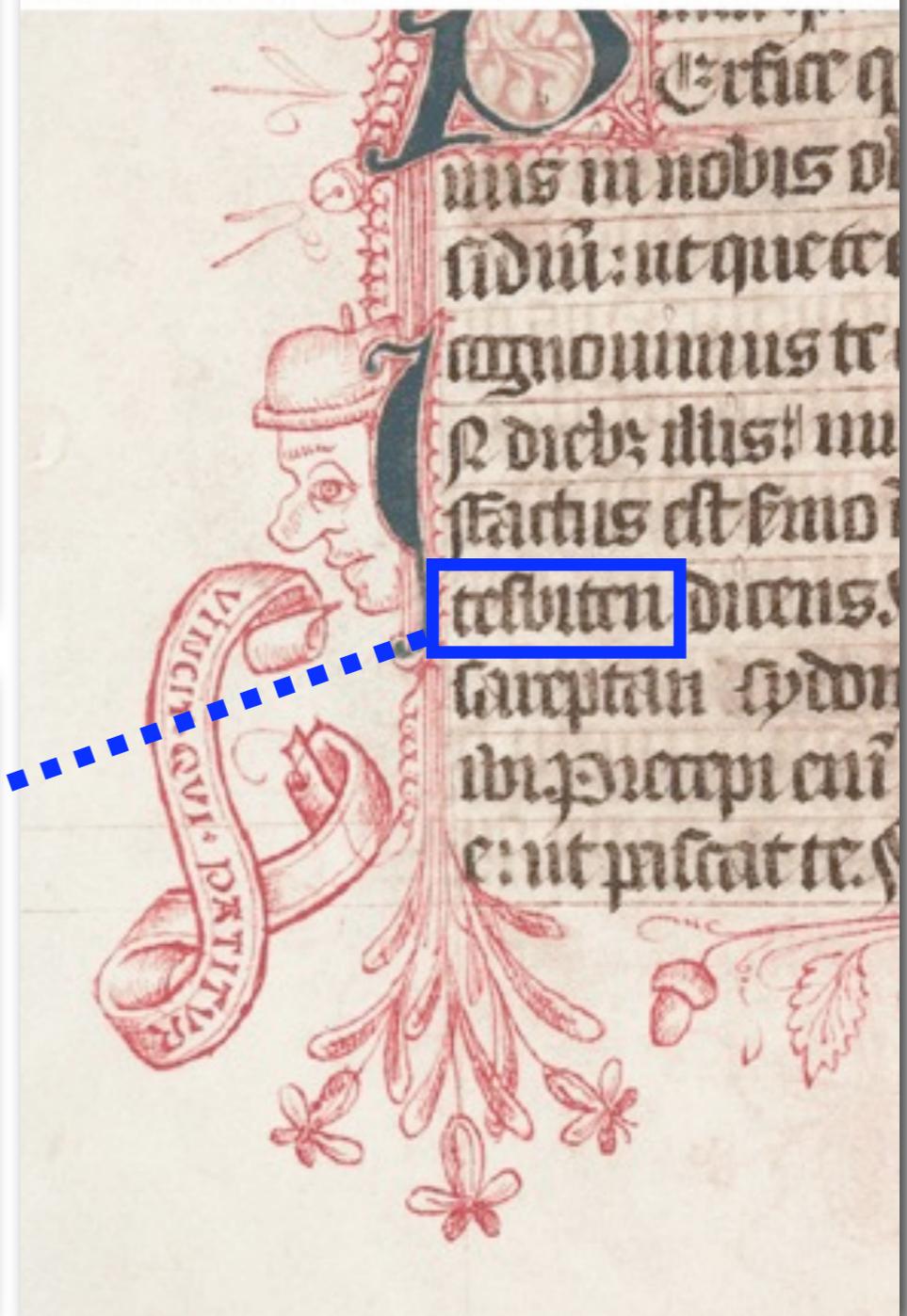
Text in the box:

I have read and agree to the [Terms of Use and Privacy Policy](#)

[Sign Up](#)

[Problems signing up? Check out our help pages](#)

MS. Don. b. 6, fol. 48v (detail) © Bodleian Library, University of Oxford



Human Computation

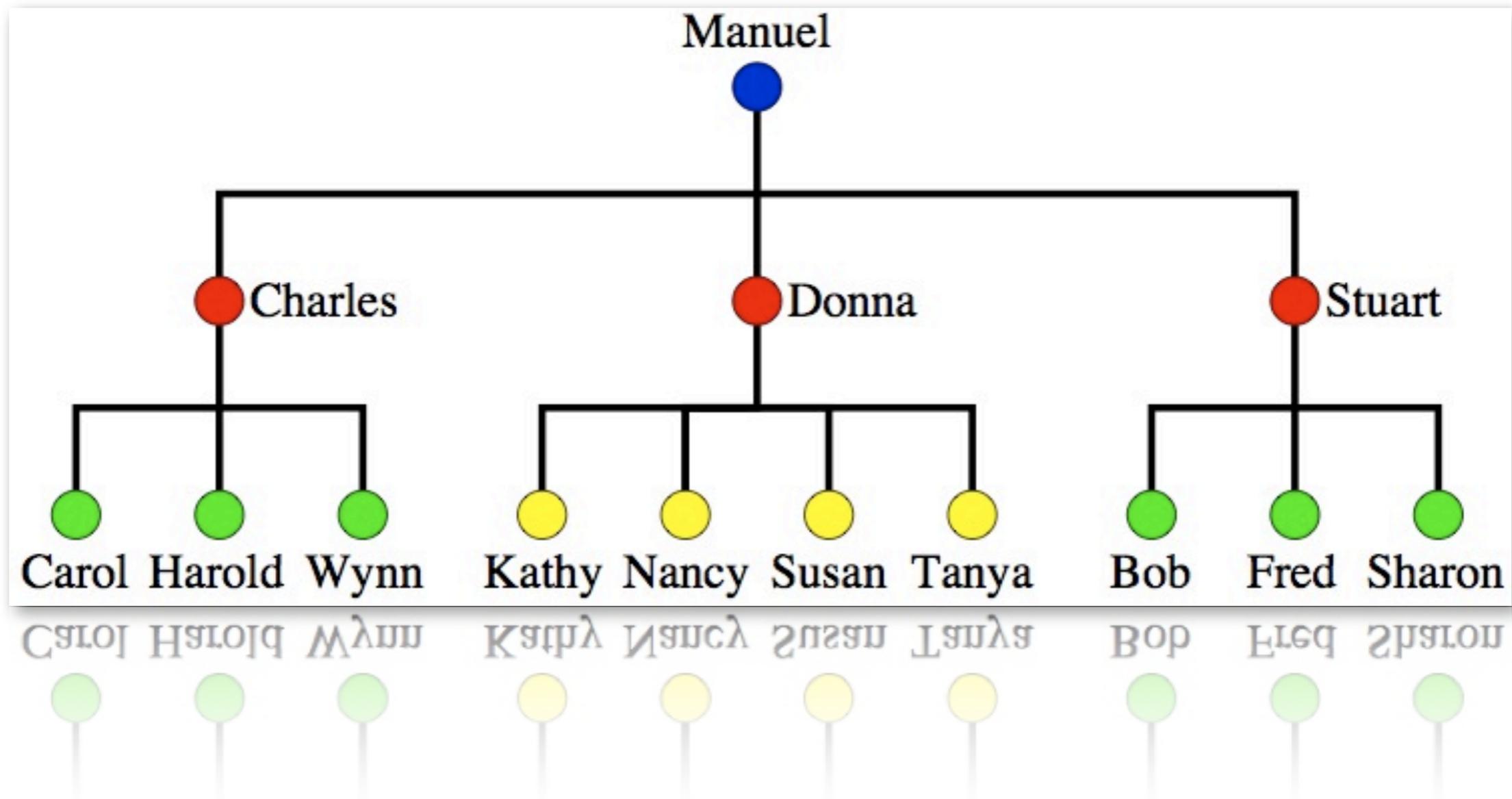
The screenshot shows the Google Image Labeler interface. At the top left is the Google logo with 'Image Labeler BETA' and 'Google Image Labeler' text. On the top right are links for 'Help' and 'Sign In'. On the left side, there is a scorecard with 'time left' at 01:17, 'score' at 0, and 'passes' at 0. In the center, there is a text box containing 'Your partner has suggested 10 labels.' Below this is a photograph of a lake and mountains. To the right of the photo are buttons for 'label' and 'pass'. Below the photo is a 'zoom out' button. At the bottom, there are links for 'Privacy Policy', 'Terms of Use', and 'Return to Google Image Search', along with '© 2007 Google'. Two red starburst shapes are overlaid on the image: one on the left side and one on the right side. The right starburst contains the text 'off-limits' and 'my labels' with horizontal lines below them, and a list of labels: 'sky', 'water', 'blue', 'lake', and 'mountain'.



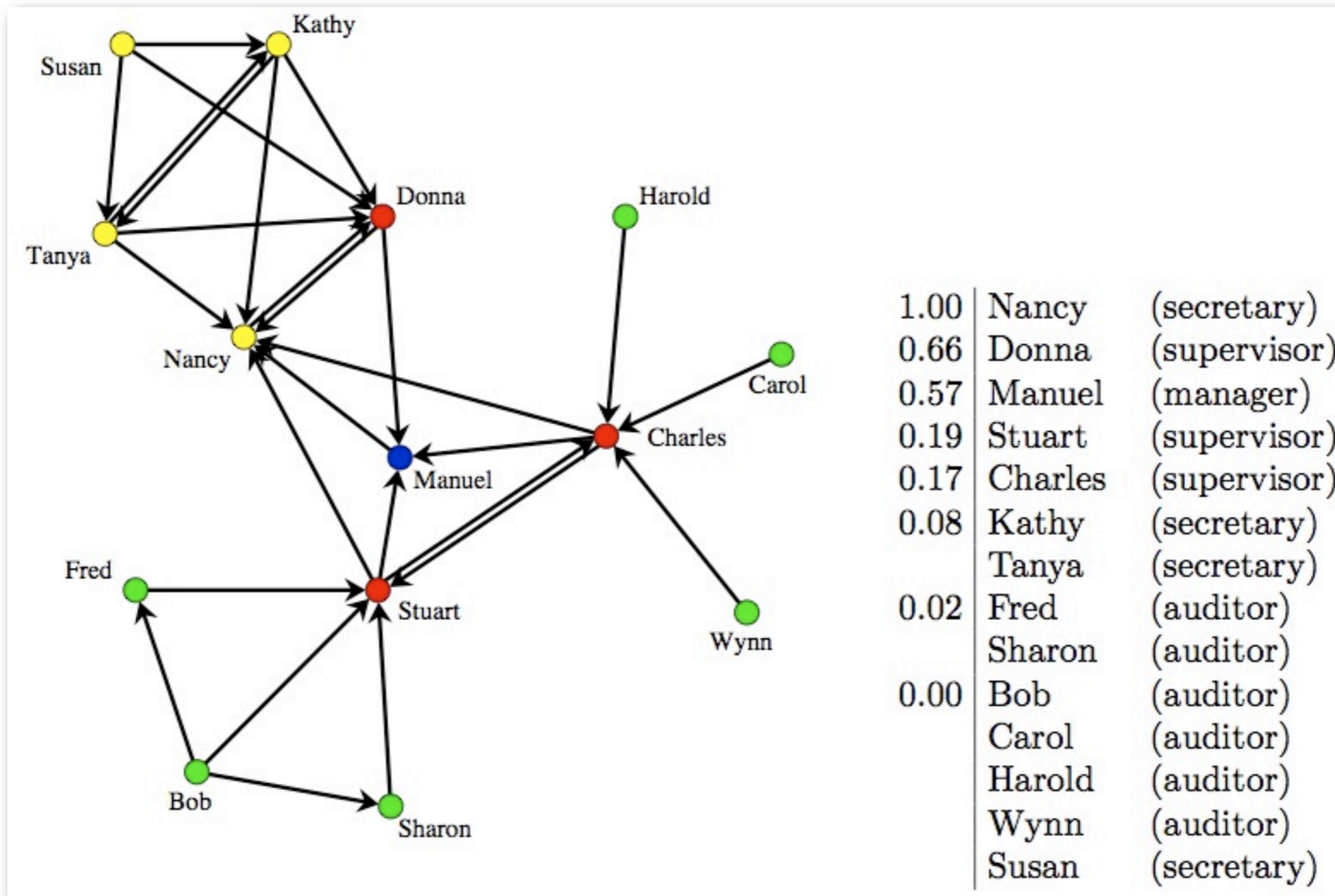
The Social Web



Organizational Chart



Social Network Chart



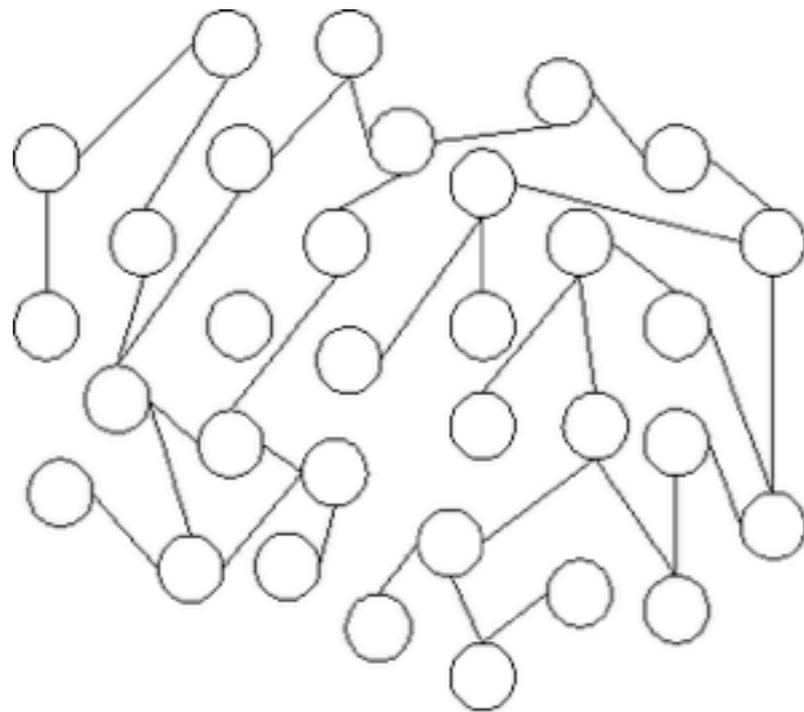
Characteristics of Social Networks

- **Power-law distribution** and **small world network** characteristics of
 - Co-authorship network
 - Email network
 - World Wide Web
 - Blog network
 - Instant-messaging network
 - Mobile network

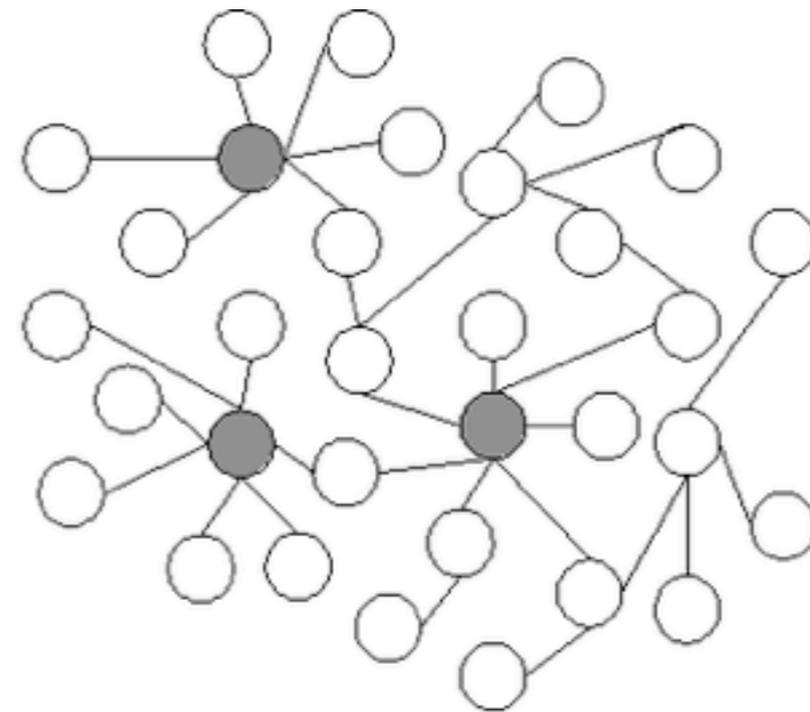


Scale-free Networks

- A **scale-free networks** is a network whose degree distribution follows the **Power Law**
- With a few highly connected nodes that serve as **hubs** and many nodes with only a few connections



(a) Random network

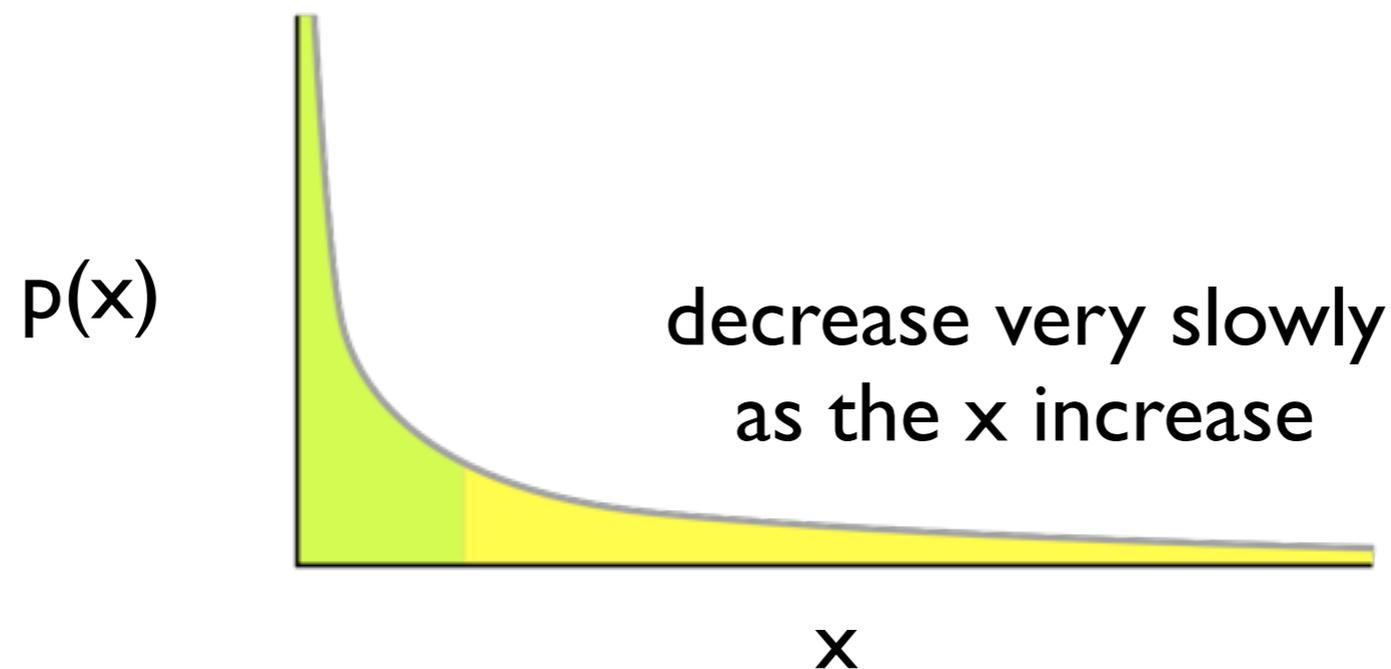


(b) Scale-free network



Power-law distribution

- The **Power Law**: mathematical relationship between two quantities: $p(x) \propto x^{-\lambda}$
- $p(x)$ is the probability to encounter value x
- λ is the exponent of the power law

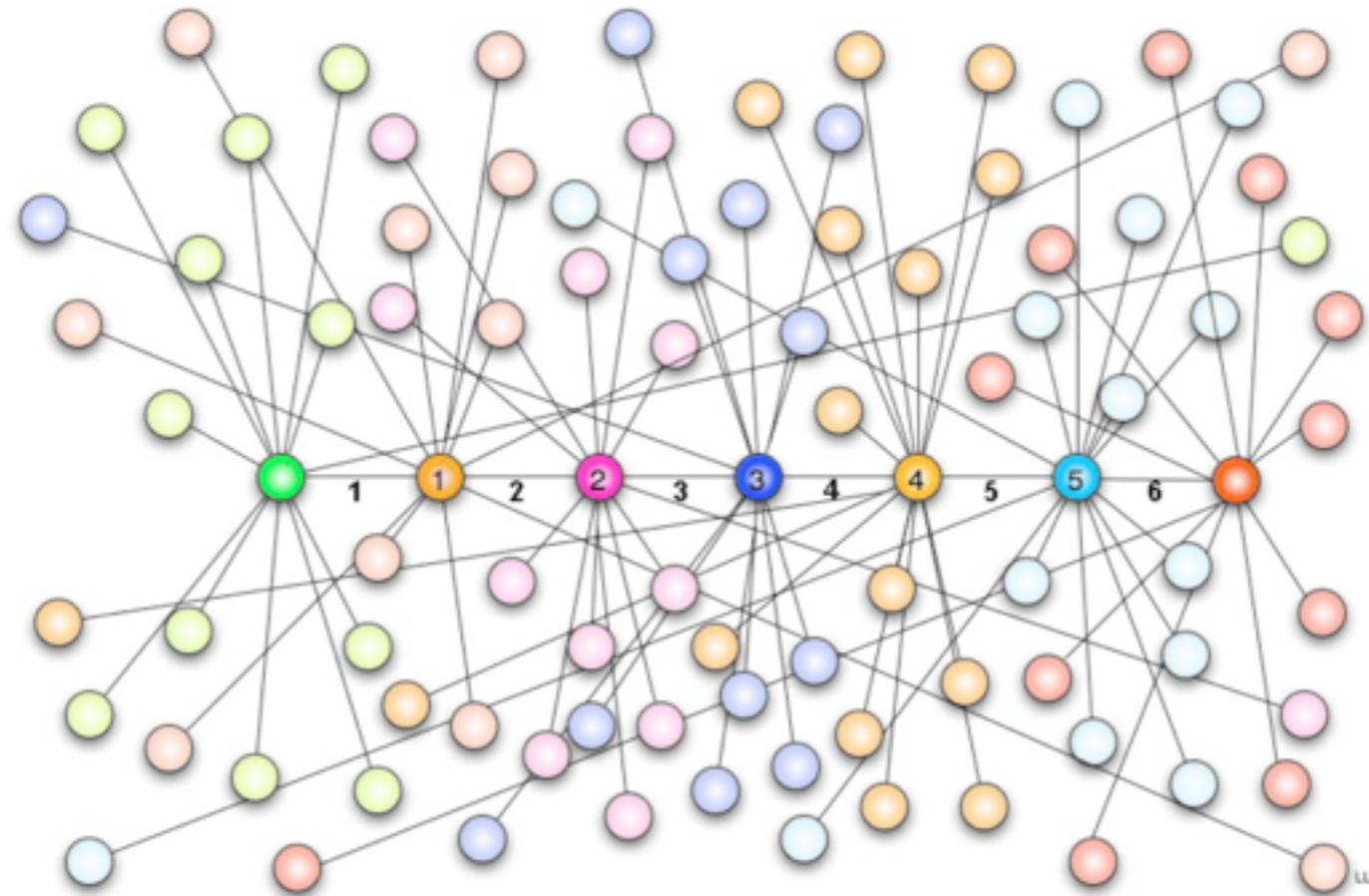


An example power law graph with a long tail, to the left are the few that dominate (also known as the 80-20 rule)



Small World Network

- A small world network is one in which **most nodes are not connected** to each other and yet the **average path between most nodes is relatively short**



Six degree of separation



Experiments on Co-authorship Networks

[Chunguang Li]

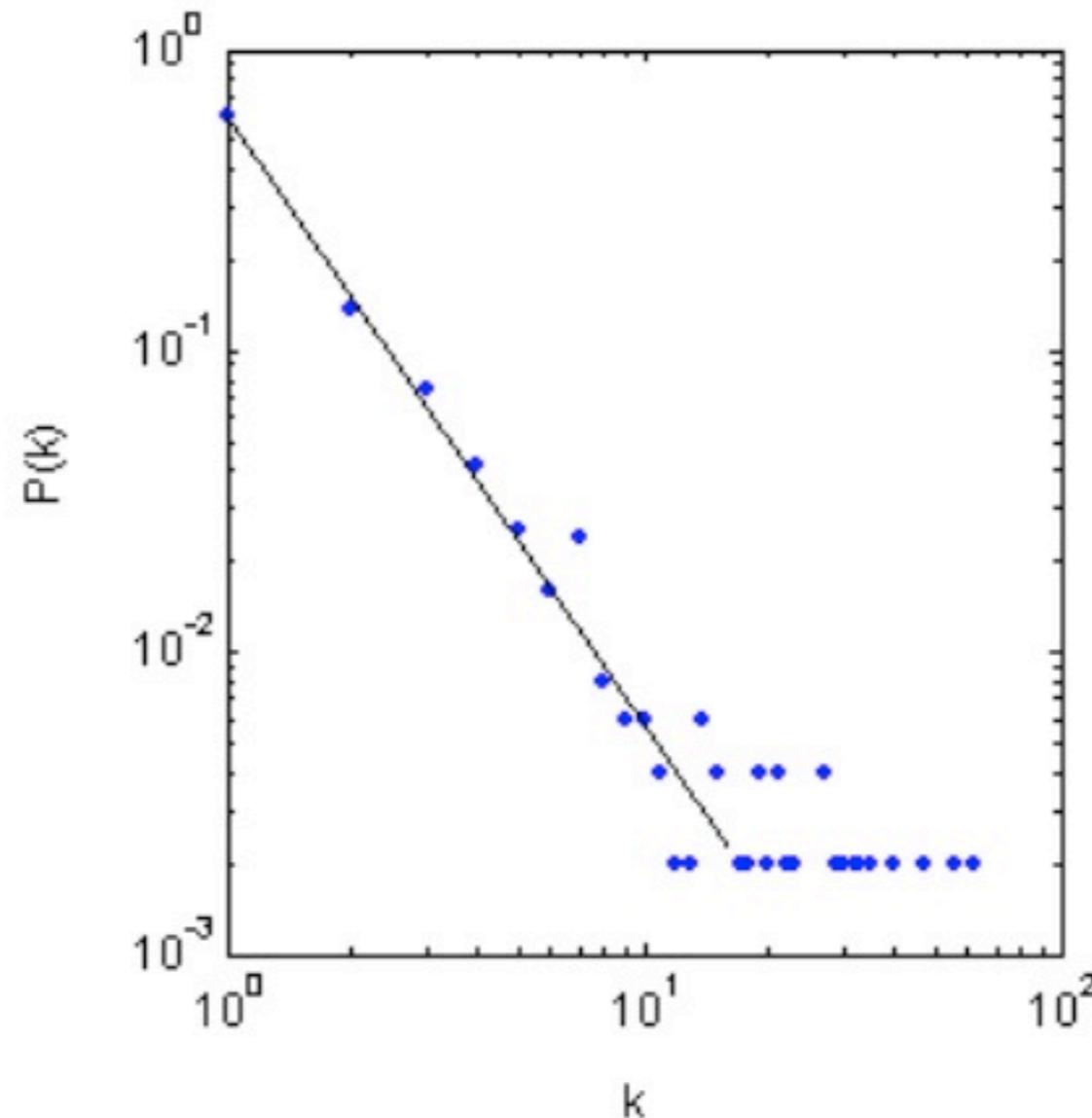
- Erdős's collaboration network, which is a star-shaped network with Erdős at the centre.
- Paul Erdős, a great mathematician who passed on September 20, 1997, at the age of 83
- He published more than **1,600** mathematical research papers in his lifetime.
- He had **507** coauthors, in which there were **306** coauthors who published **1** paper with him, and in which the coauthor having the largest number of joint publications with him was Sarkozy, **62** papers



Experiments on Co-authorship Networks

[Chunguang Li]

$$P(k) = k^{-\lambda}, \lambda = 2.0 \pm 0.2$$



The distribution of connection strengths between Erdős and his coauthors



Experiments on Co-authorship Networks

[A.L. Barabasi, 2002]

- The databases contain article titles and authors of all relevant journals in the field of Mathematics (M) and Neuro-Science (NS), published in the period 1991–98
- In mathematics our database contains **70,975** different authors and **70,901** papers
- In NS the number of different authors is **209,293** and the number of published papers is **210,750**

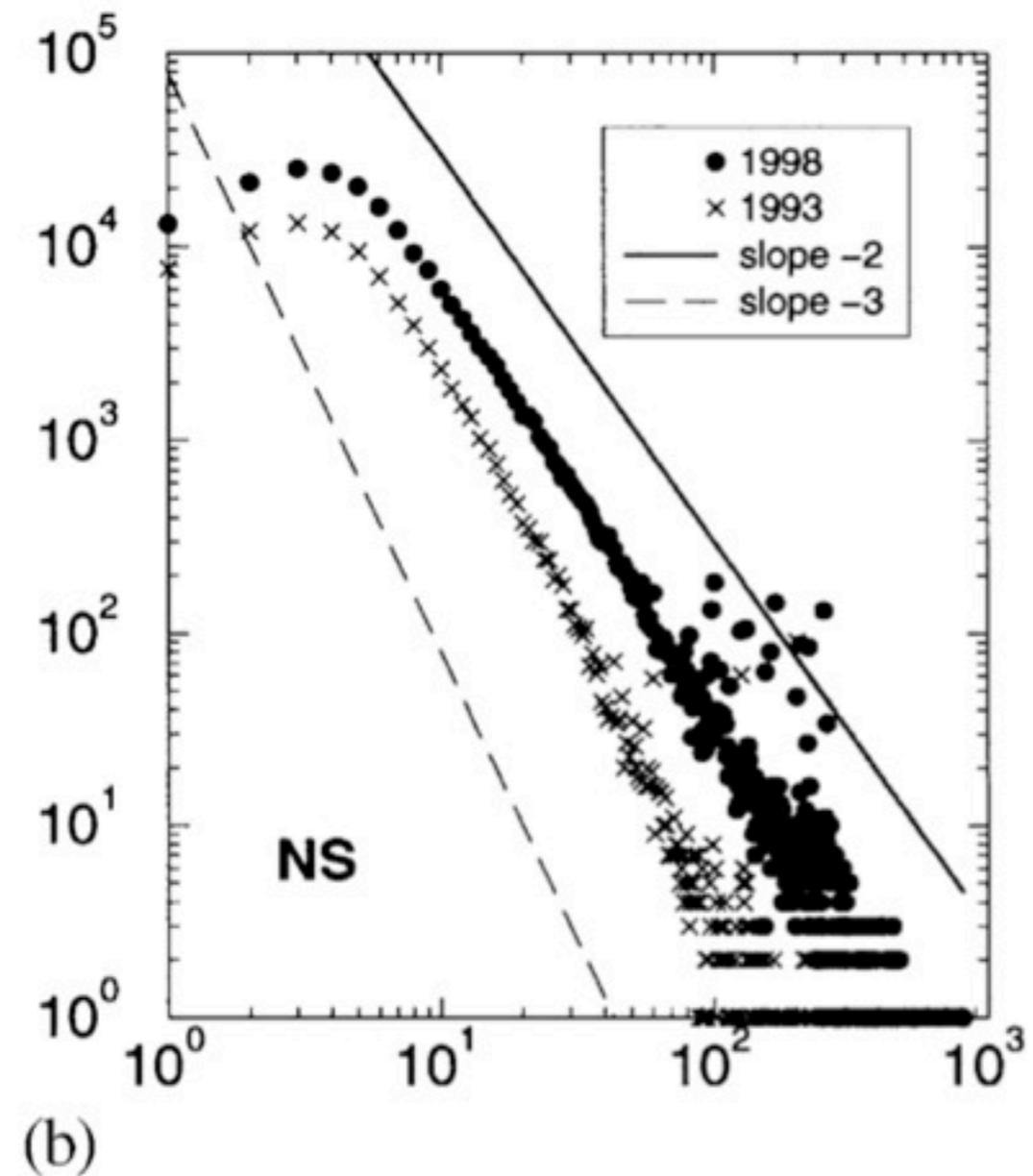
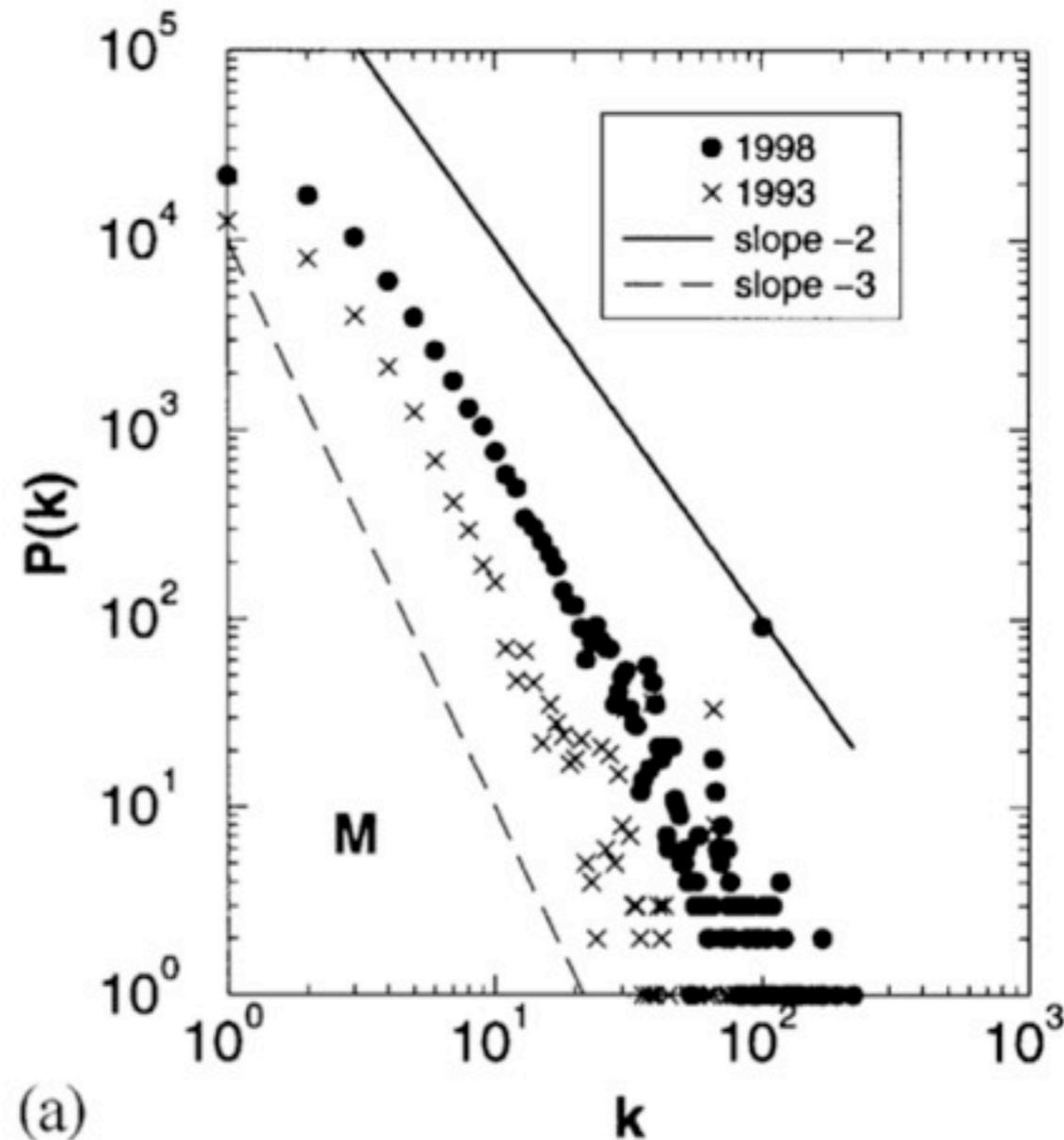


Experiments on Co-authorship Networks

[A.L. Barabasi, 2002]

$$\lambda_M = 2.4$$

$$\lambda_{NS} = 2.1$$

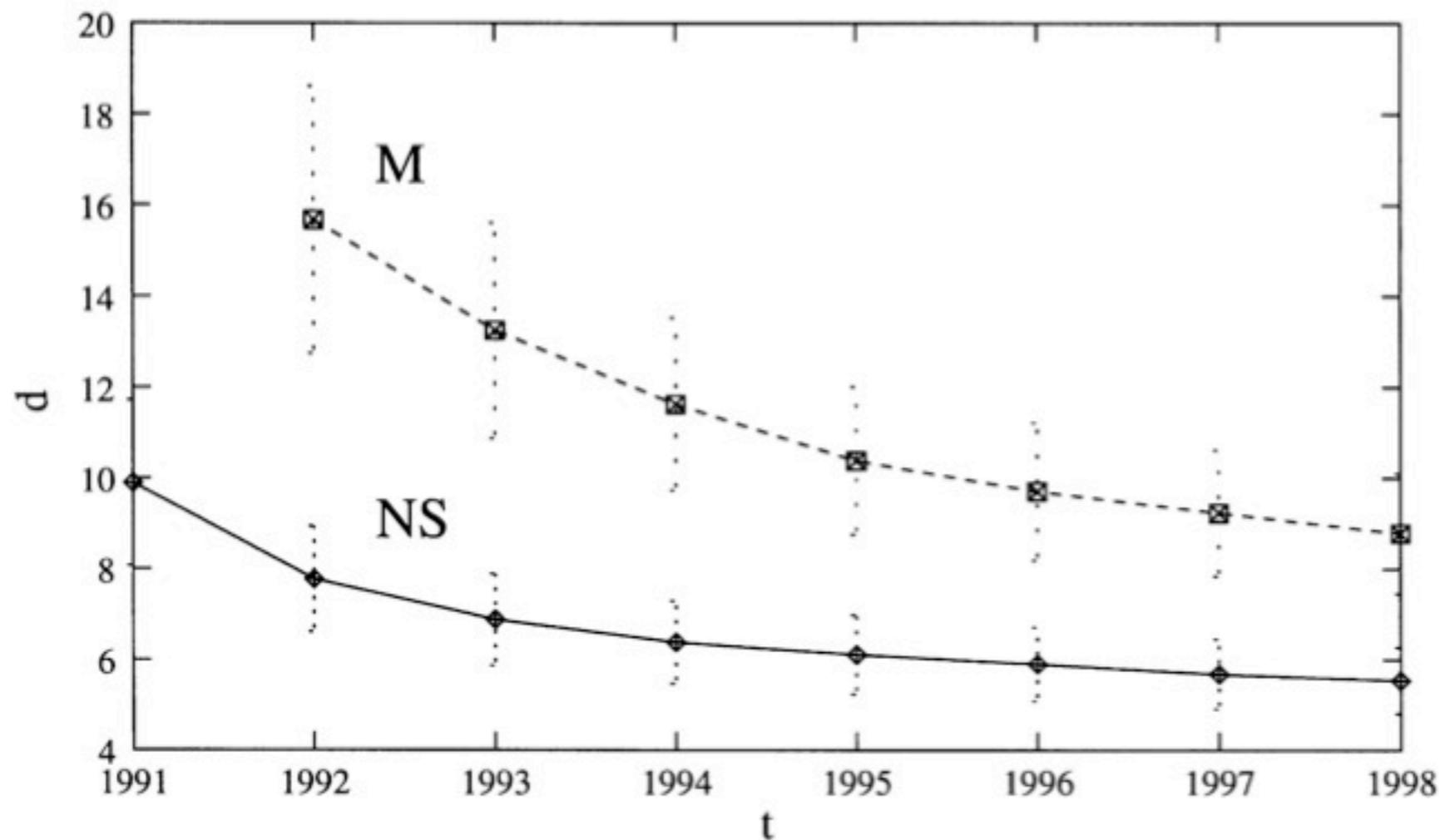


Degree distribution for both M and NS databases



Experiments on Co-authorship Networks

[A.L. Barabasi, 2002]



Average separation in the M and NS databases



Experiments on Email Network

[Duncan Watts, 2001]

- Recreate Milgram's experiment on the internet
- An e-mail message as the "package" that needed to be delivered
- **48,000** senders and **19** targets (in **157** countries)
- Watts found that the average (though not maximum) number of intermediaries was around **6**



Experiments on Email Network

[Diane Lambert, 2004]

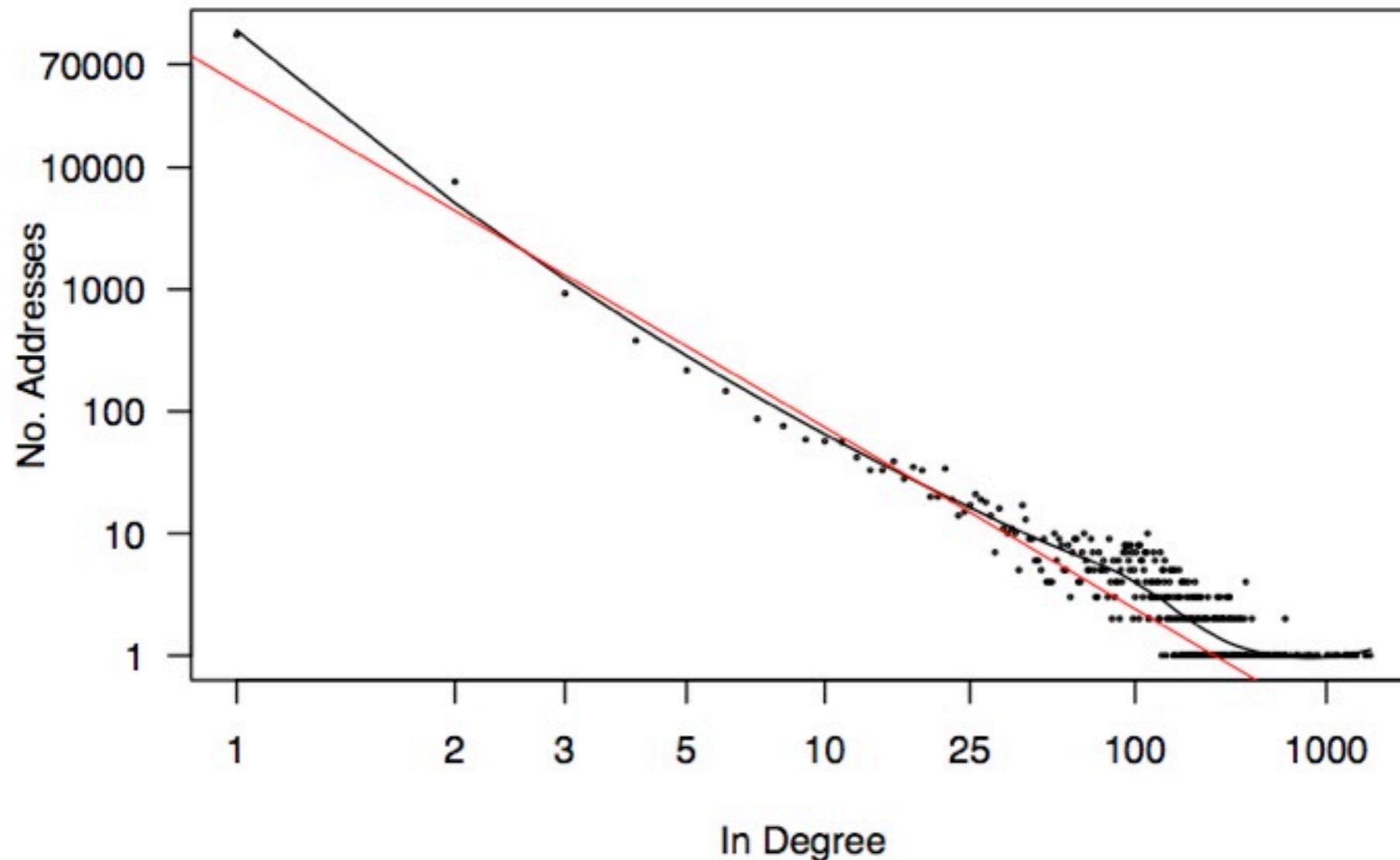
- A complete set of email records obtained from several servers over a 75 day period with delivery dates on or after September 29, 2004
 - 805,100 messages correspond to 176,761 addresses
 - A total of 303,499 unique directed links and 296,742 undirected links
 - A directed link is created between addresses A and B if A sends one or more messages to B during the study and an undirected link if A sends B email or vice versa.



Experiments on Email Network

[Diane Lambert, 2004]

$$p(k) \propto (\log(k + 1))^{-5.9}$$



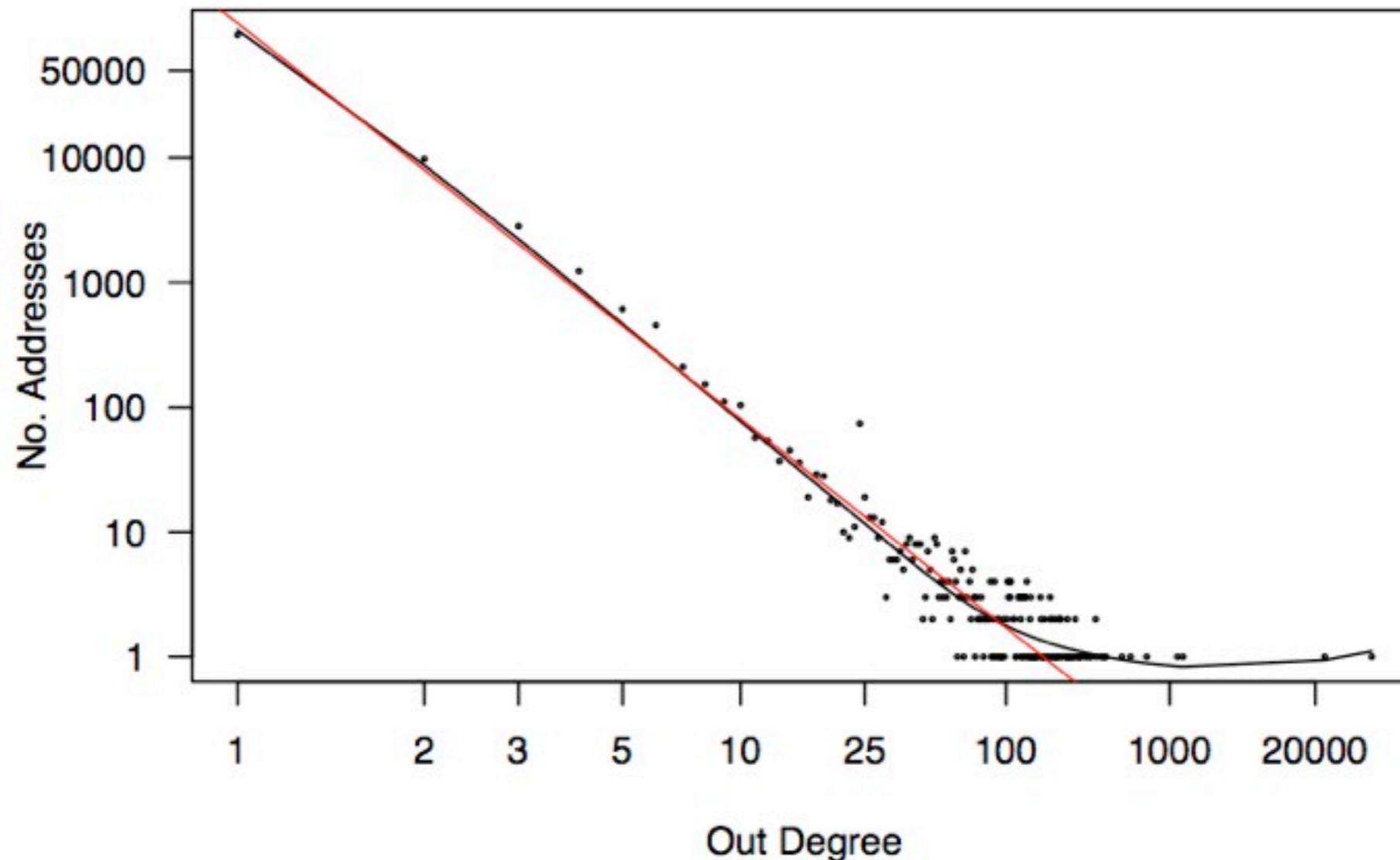
The in-degree distribution



Experiments on Email Network

[Diane Lambert, 2004]

$$p(k) \propto (\log(k + 1))^{-5.2}$$



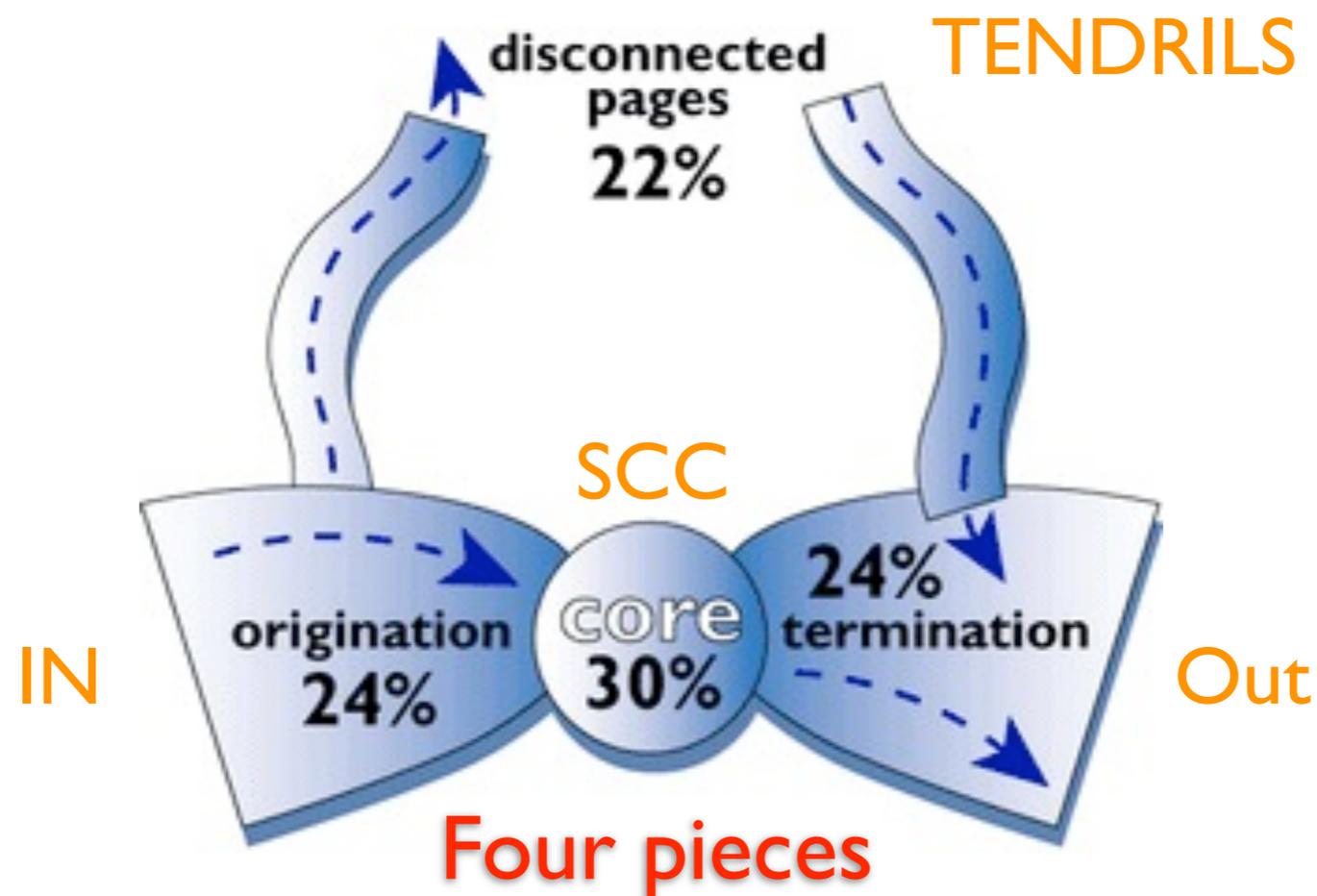
The out-degree distribution



Experiments on Web Crawls

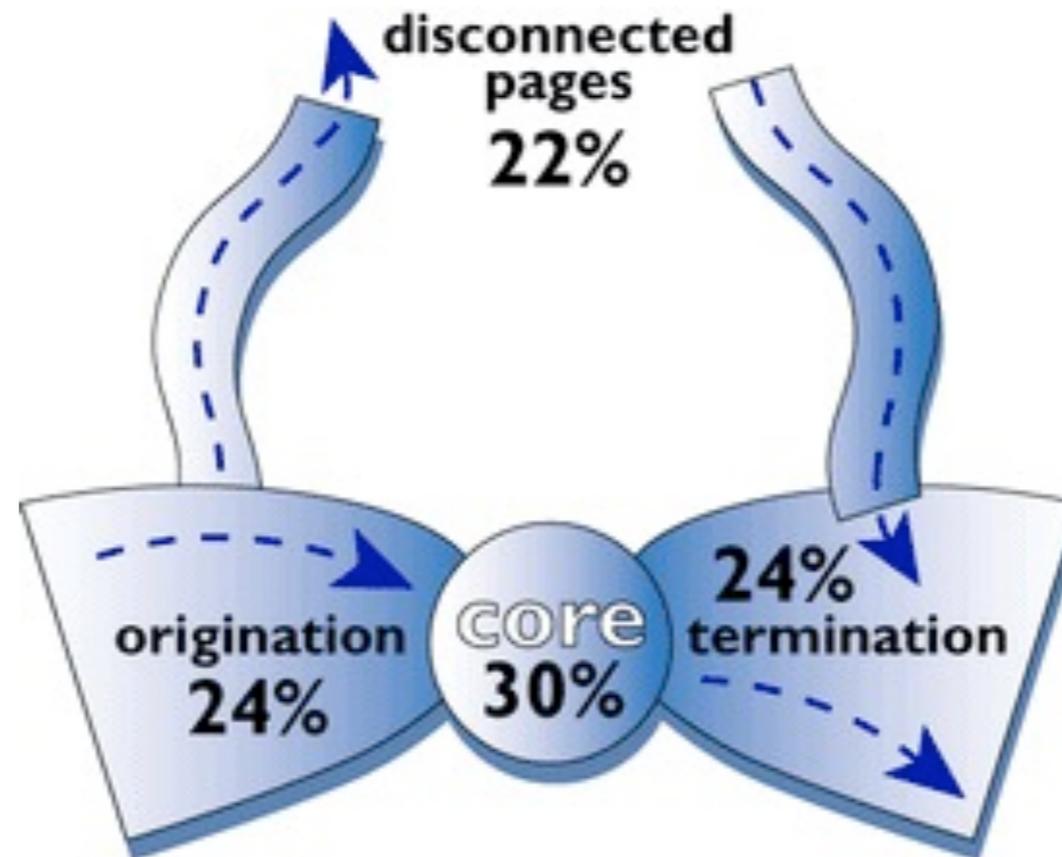
[Andrei Broder, 2000]

- A web crawl (breadth-first search) of approximately **200 million** pages and **1.5 billion** links (2000)
- If links are treated as undirected edges, over **90%** nodes form a single connected component



Experiments on Web Crawls

[Andrei Broder, 2000]



- Results

- Path exists from random source to destination is **24%**
- If a directed path exists, its average will be about **16**
- If an undirected path exists, its average will be about **6**

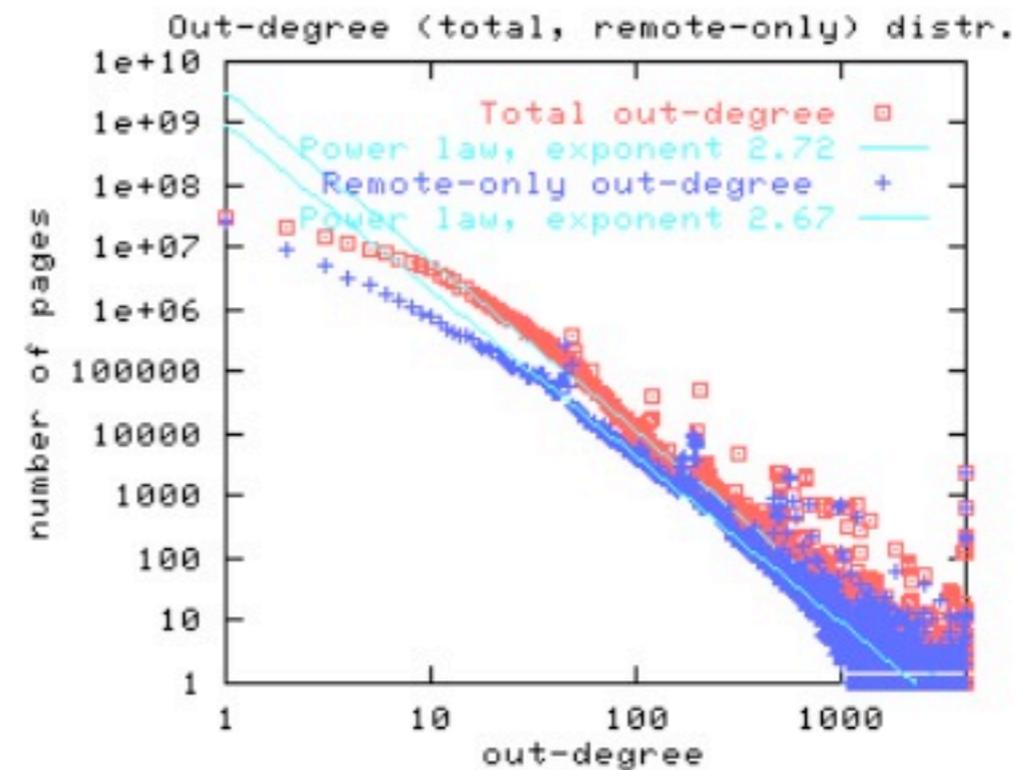
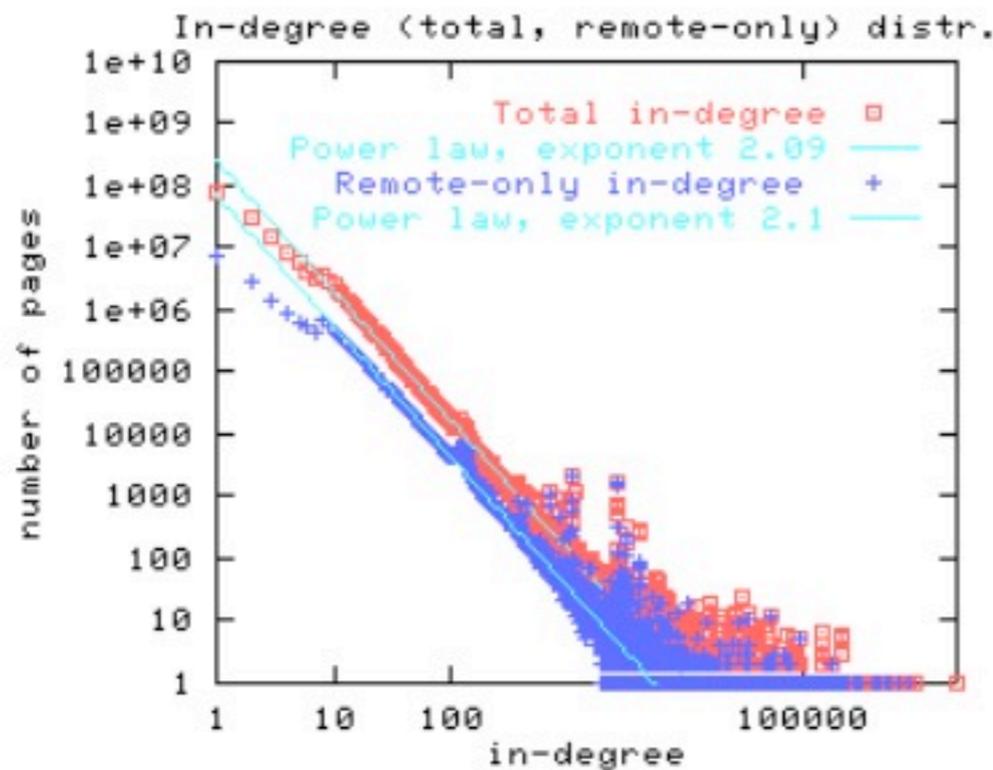


Experiments on Web Crawls

[Andrei Broder, 2000]

$$N(i) \propto i^{-2.1}$$

$$p(o) \propto o^{-2.7}$$

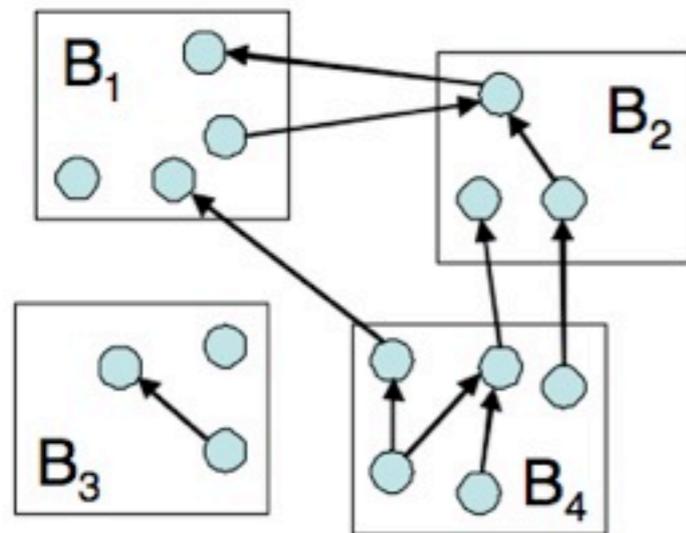


In-degree and out-degree distributions subscribe to power law.
The Law also holds if remote-only edges are considered

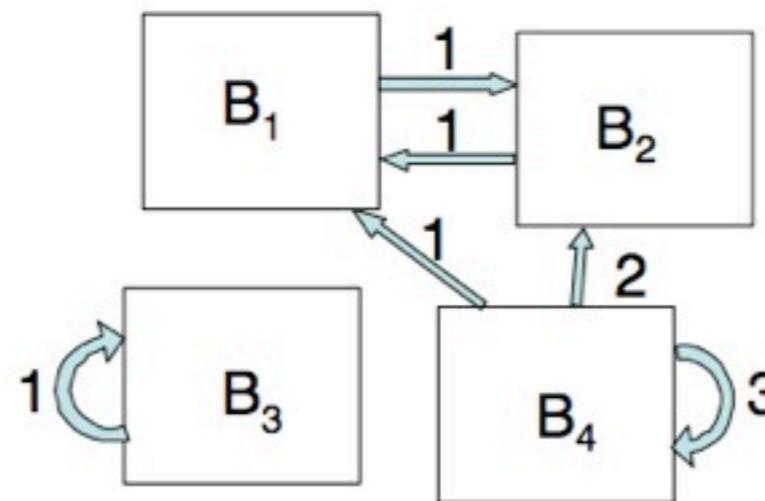


Experiments on Blog Graph

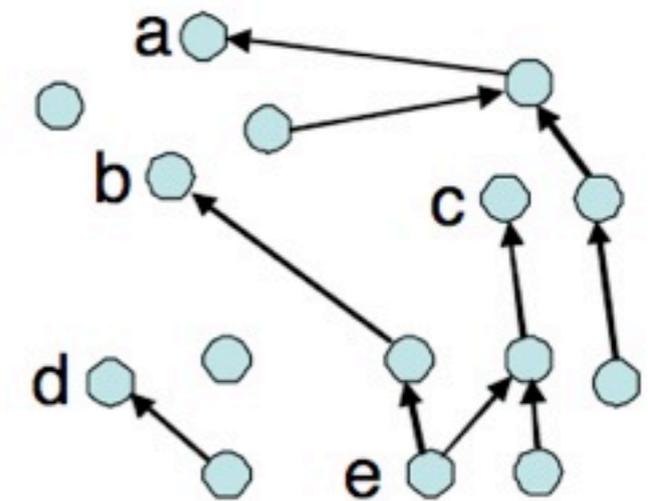
[Jury Leskovec, 2007]



(a) Blogosphere



(b) Blog network



(c) Post network

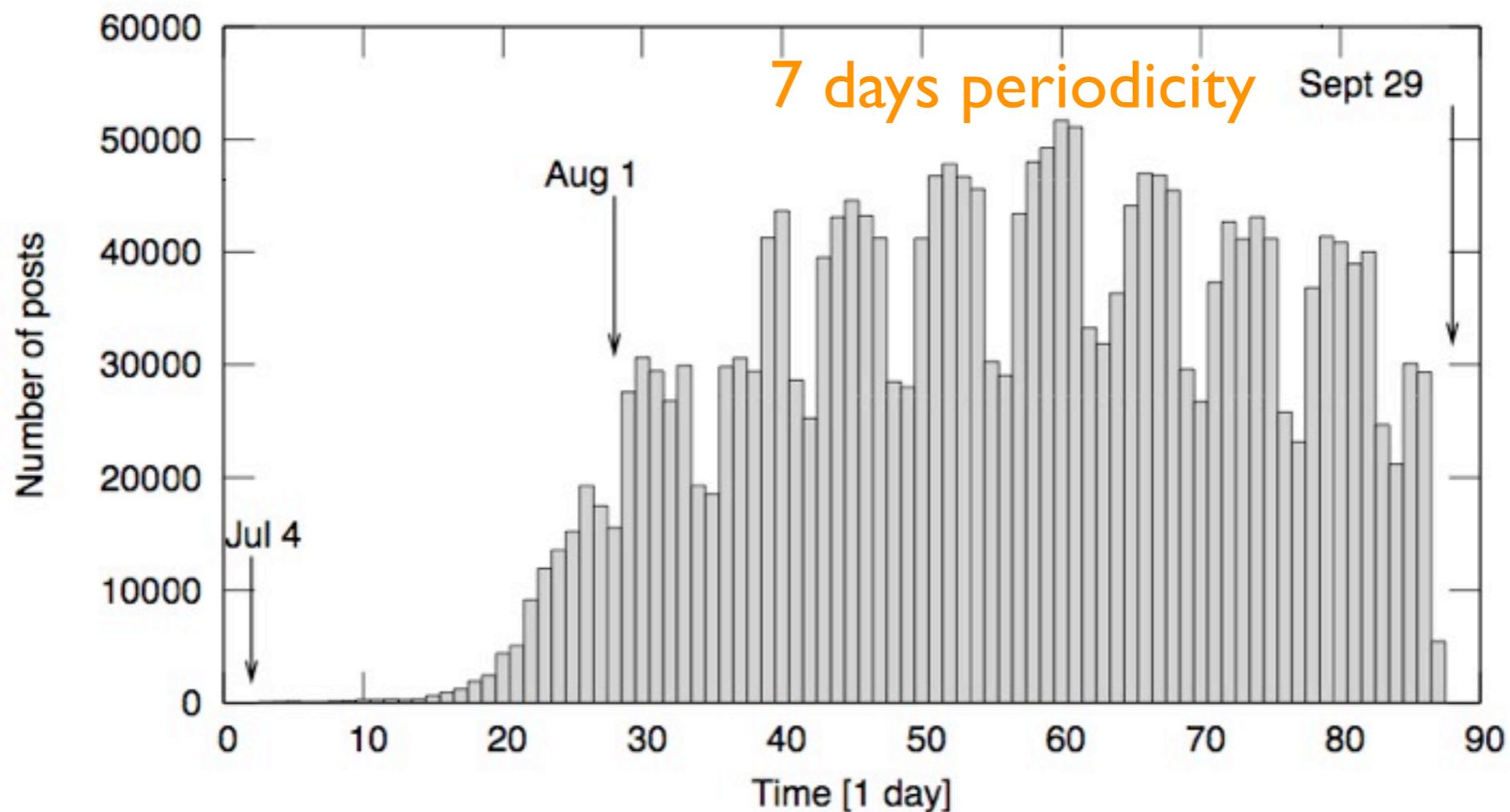
The model of the blogosphere. Squares represent blogs and circles blog-posts



Experiments on Blog Graph

[Jury Leskovec, 2007]

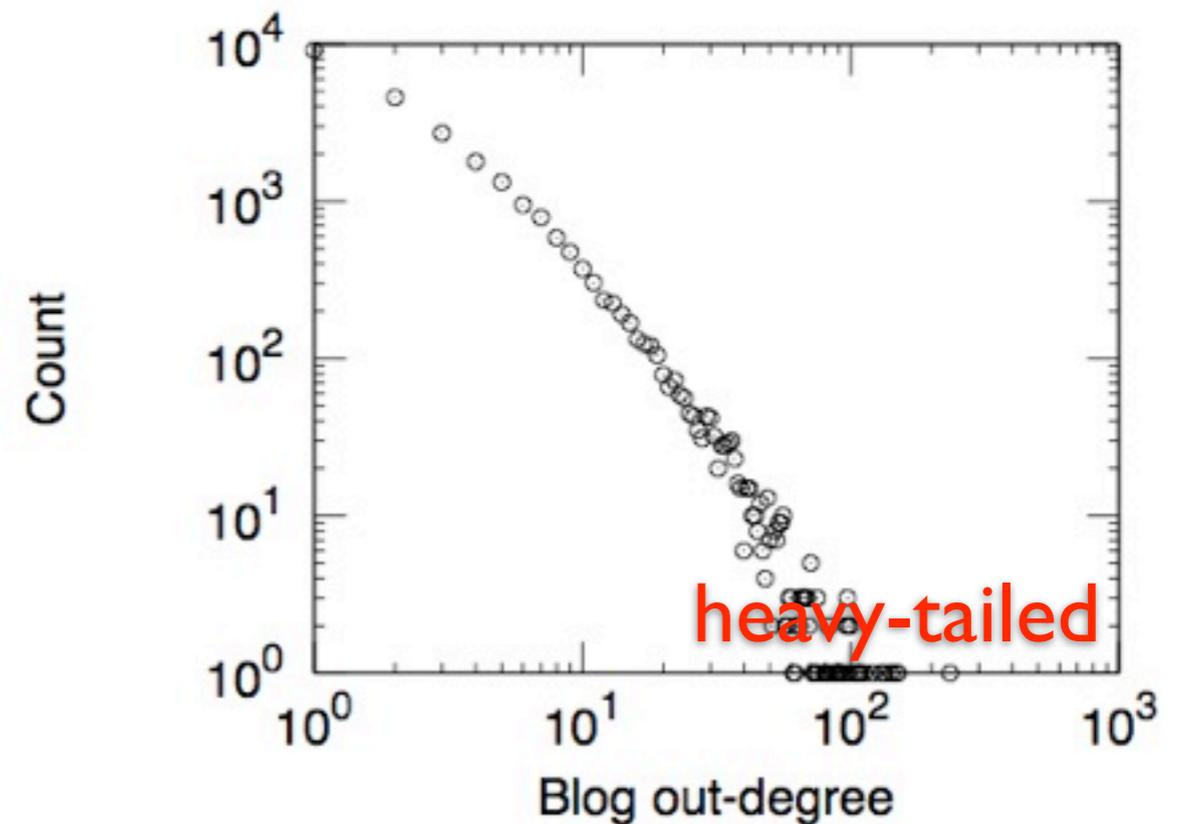
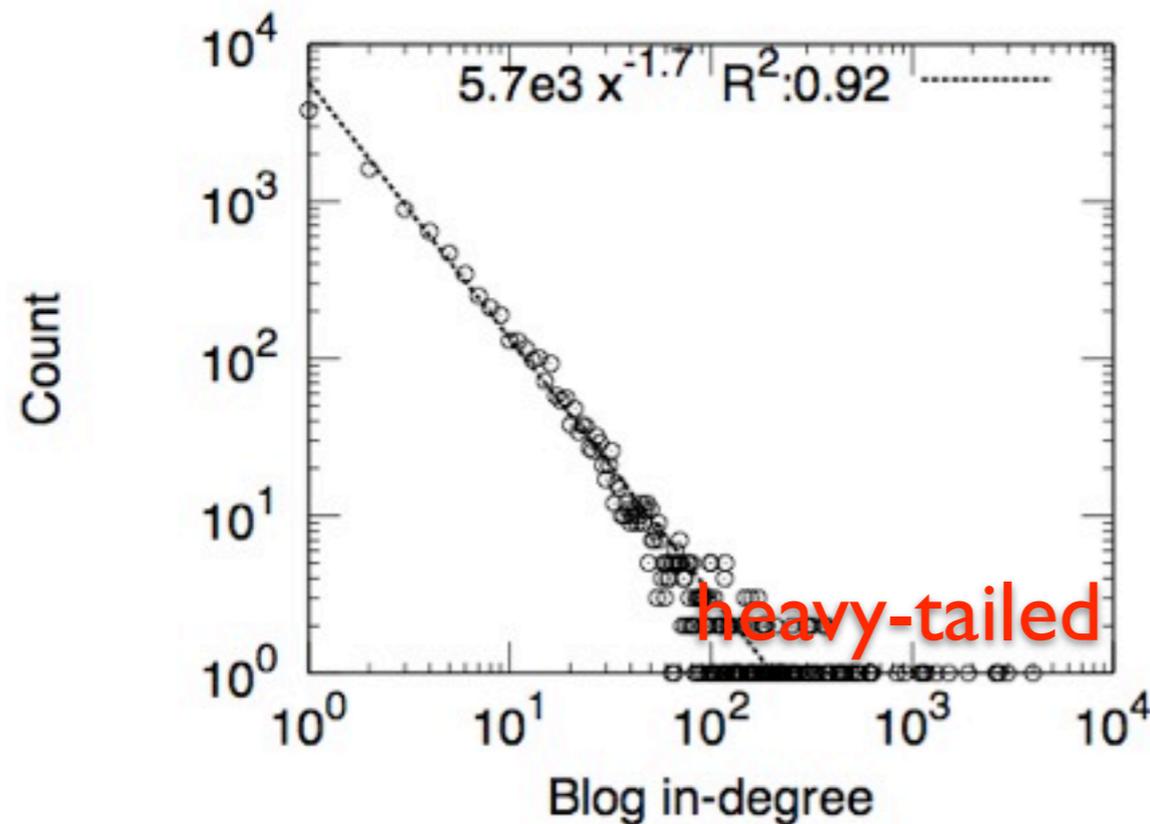
- A larger set of **21.3** million posts from **2.5** million blogs
- Extract **2.4** million posts in **44** thousand blogs from Aug. and Sept. 2005 (90 days)



Experiments on Blog Graph

[Jury Leskovec, 2007]

In-degree distribution has a very shallow power-law (-1.7), which suggests strongly rich-get-richer phenomena

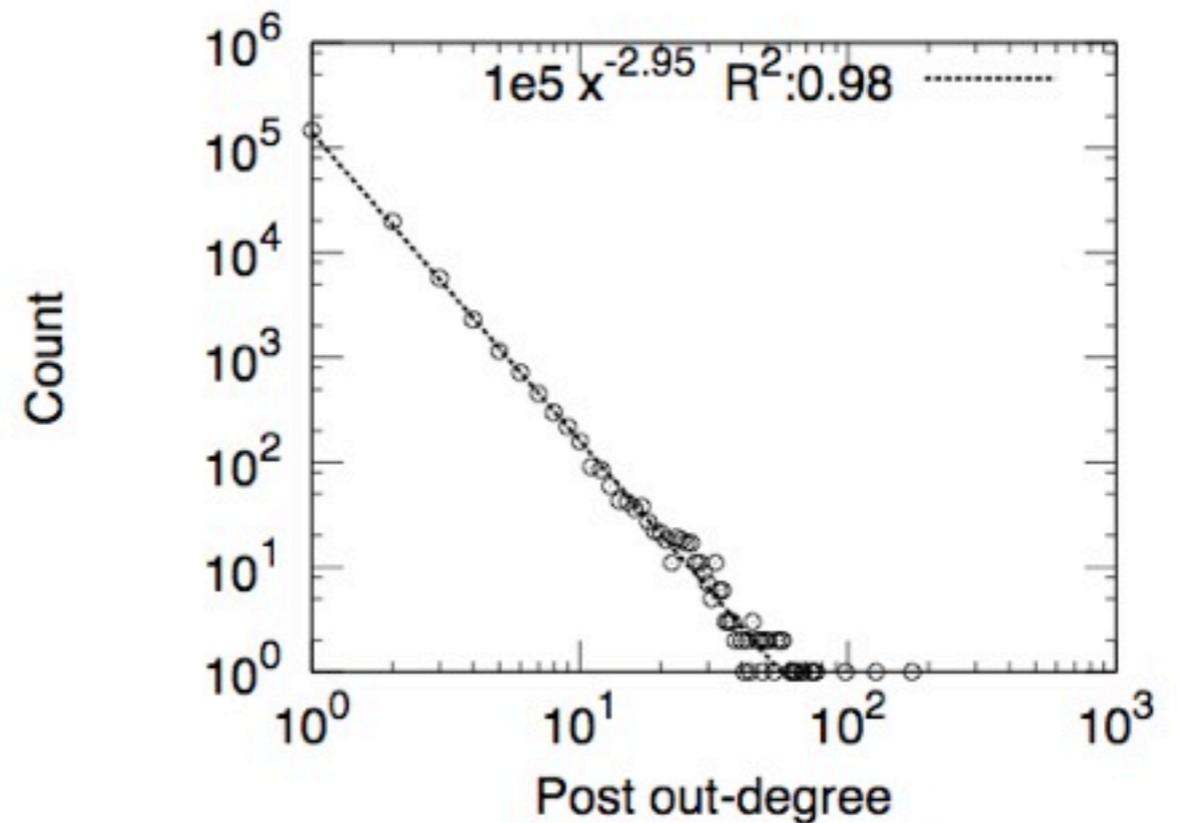
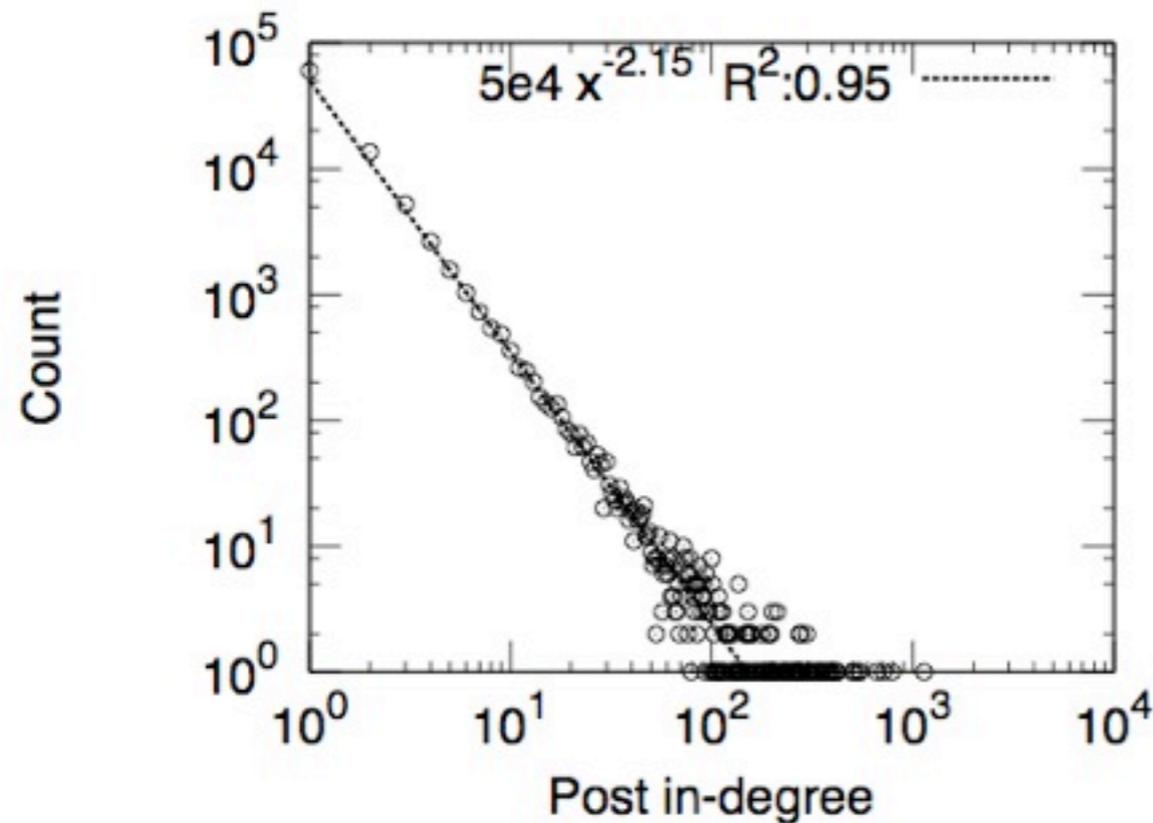


In- and out-degree distribution of the Blog network



Experiments on Blog Graph

[Jury Leskovec, 2007]



Post network in- and out-degree distribution



Experiments on MSN

[Jury Leskovec, 2008]

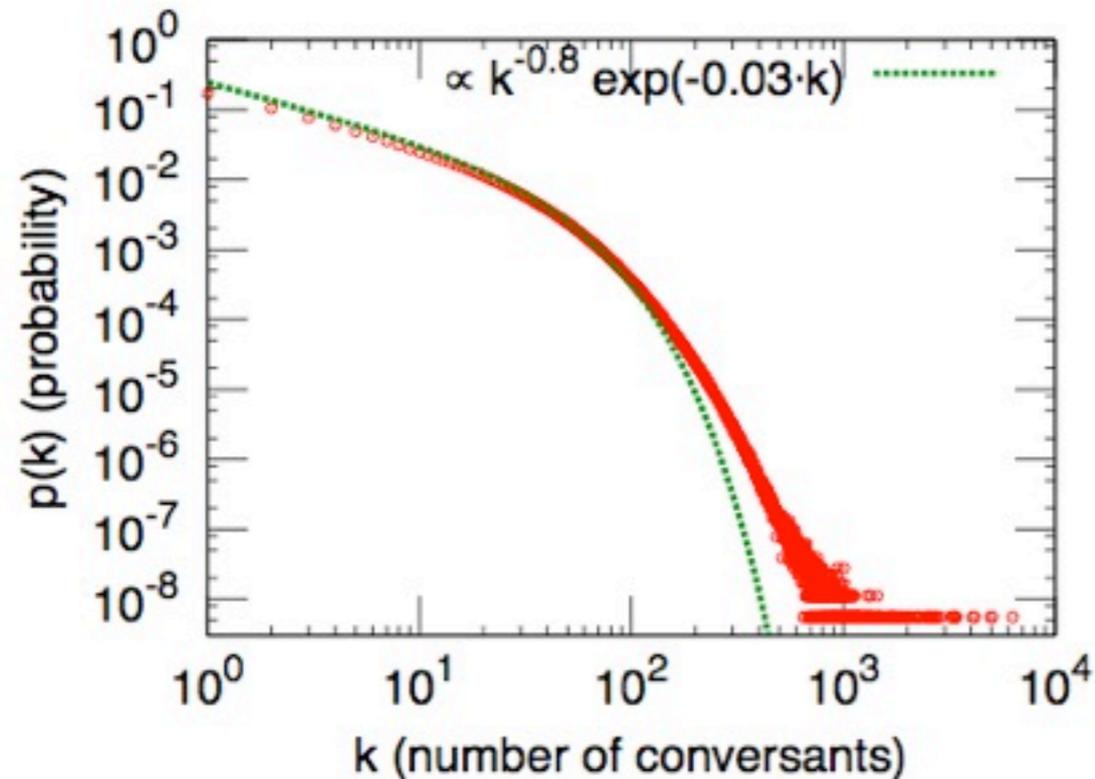
- A study of anonymized data capturing a month of communication activities within the whole of the Microsoft Messenger instant-messaging system
 - Dataset: 240 million people with 30 billion conversation
 - Graph: 180 million nodes and 1.3 billion undirected edges (only connected people who are buddies and have communicated during the observation period)
 - Period: 30 days of June 2006



Experiments on MSN

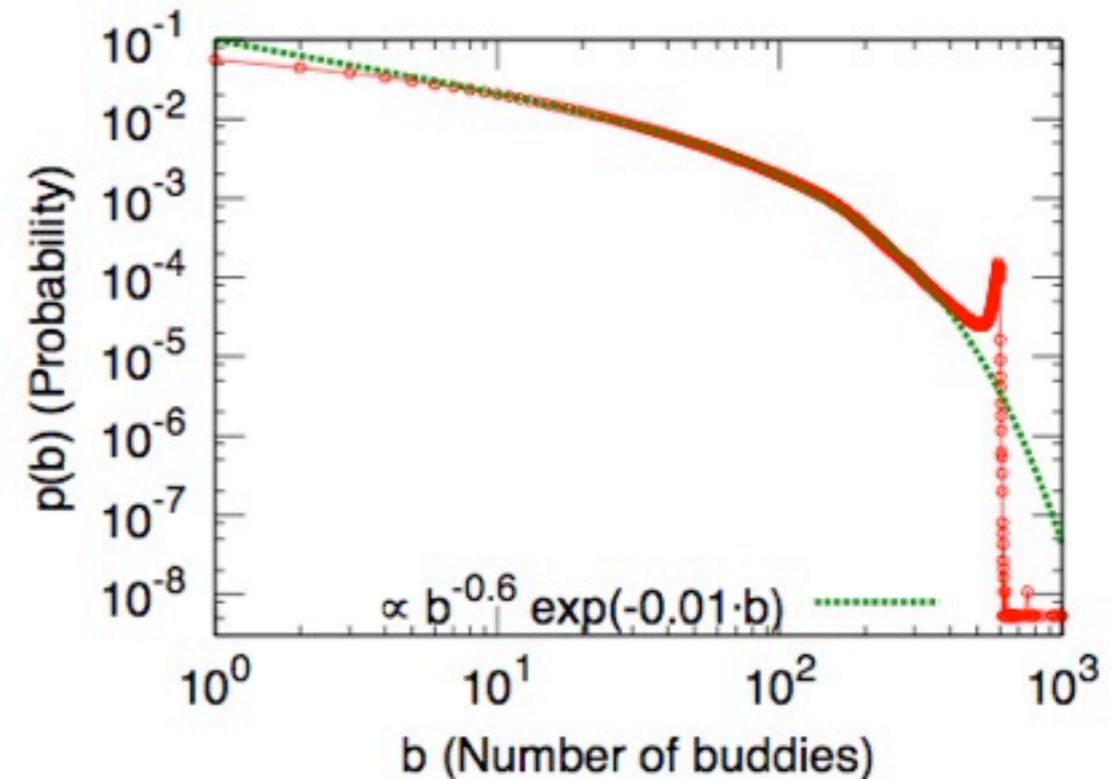
[Jury Leskovec, 2008]

Heavy tailed but not power-law distribution



(a) Communication

Degree distribution of communication network (num. of people with whom a person communicates)



(b) Buddies

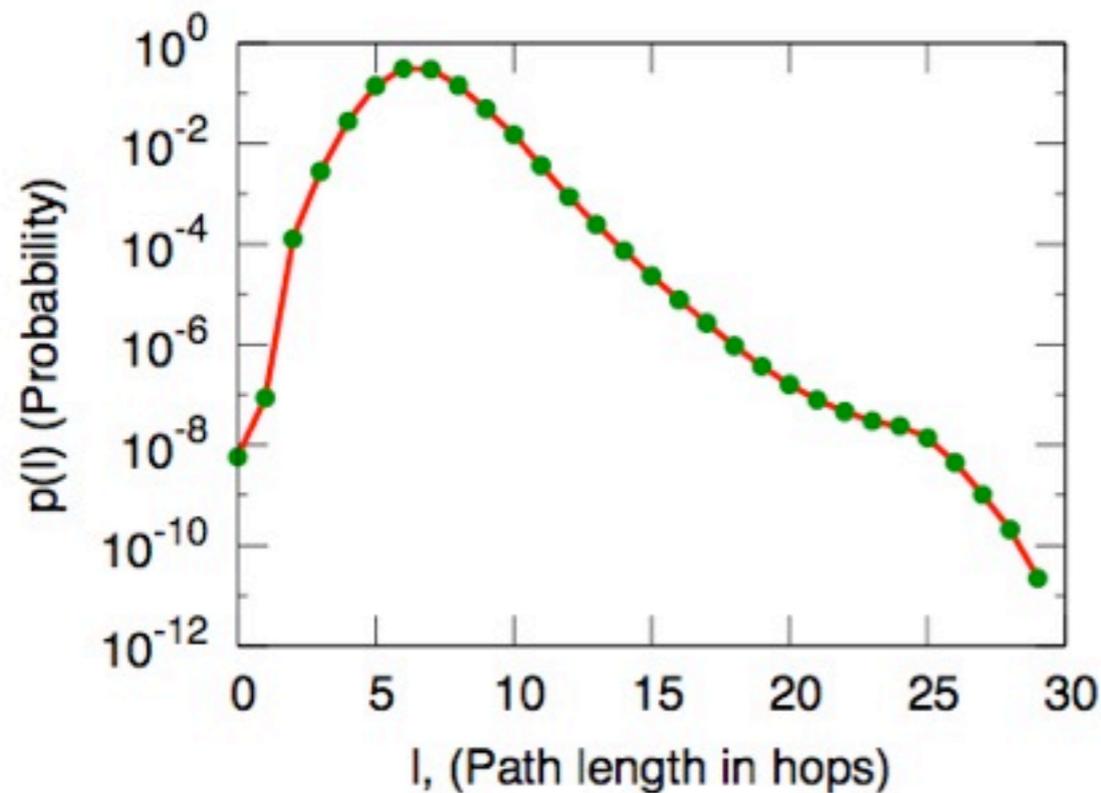
Degree distribution of the buddy network (length of the contact list)



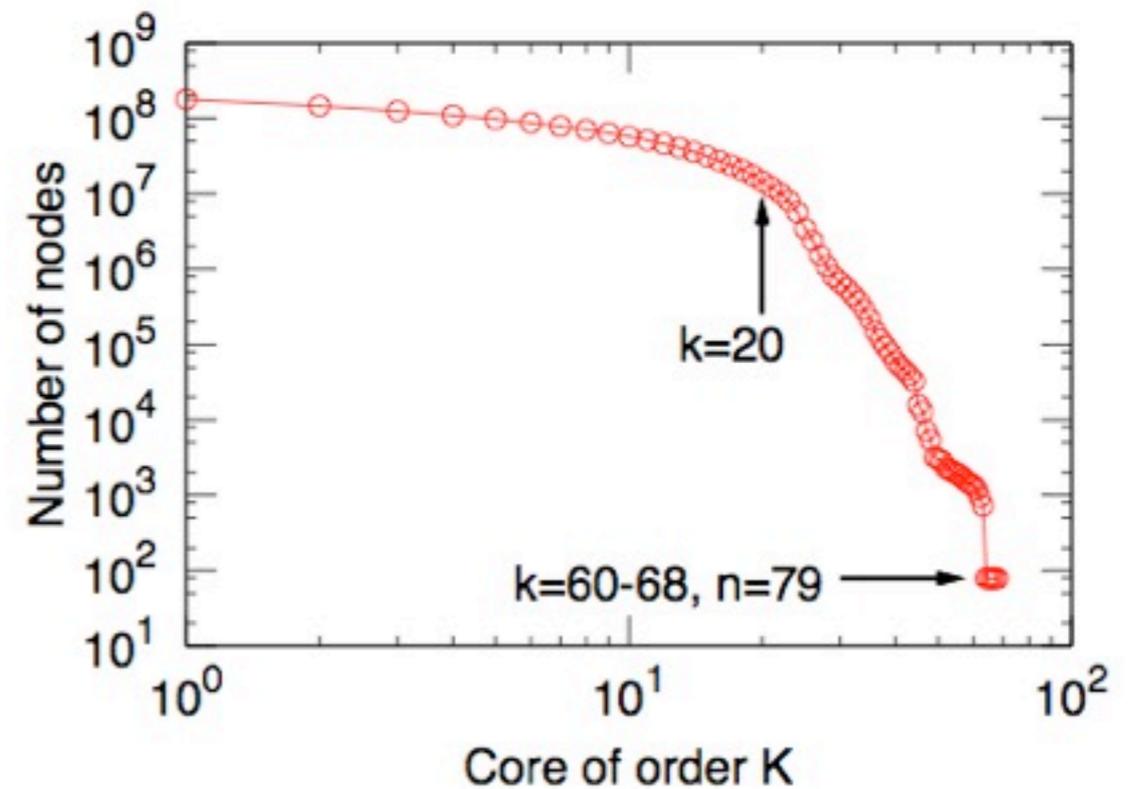
Experiments on MSN

[Jury Leskovec, 2008]

Average shortest path has length 6.6



Distribution over the shortest path lengths



Distribution of sizes of cores of order k



Experiments on Mobile Network

[Zheng-Bin Dong, 2009]

- 2,590,361 phone users were extracted from one month call logs of a city in China
- The mobile social network with 2,590,361 nodes is not a connected graph, which has 56,601 connected subgraphs
- The largest connected subgraph has 2,532,298 nodes – the percentage is 97.76%
- The analysis is focus on the largest connected subgraph



Six Degree Facebook

[Wiki]



6 Degrees of Separation

This application follows the ideas of [6 degrees of separation](#). You can search for any Facebook user by name and try to connect to them through the friend network.

Six Degrees allows you to search for connections to other Facebook users.

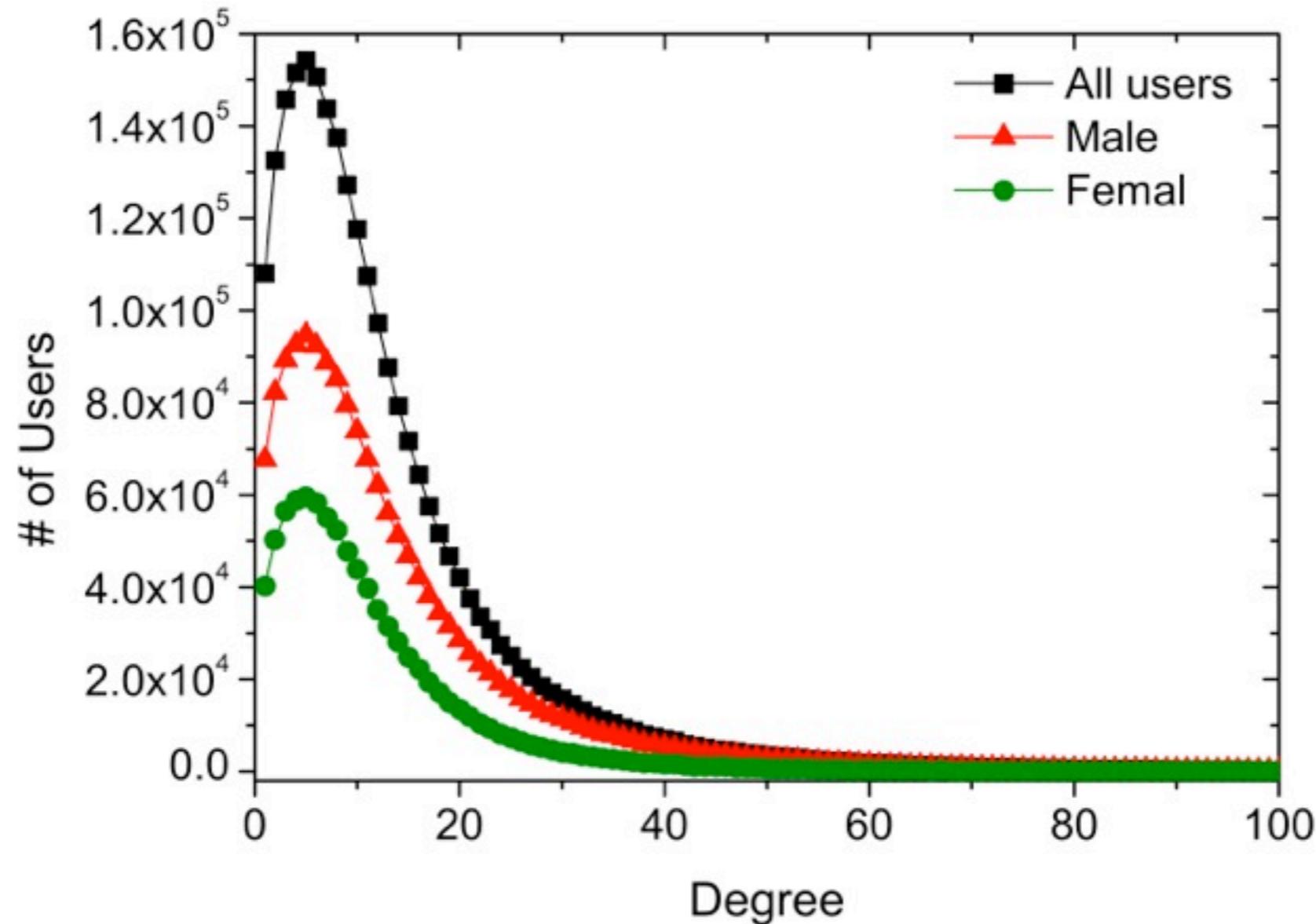
[Log in to Six Degrees](#)

- It calculates the degrees of separation between different people
- It has **4.5 million** users as of April 7, 2008
- The average separation for all users of the application is **5.73** degrees, whereas the maximum degree of separation is **12**



Experiments on Mobile Network

[Zheng-Bin Dong, 2009]



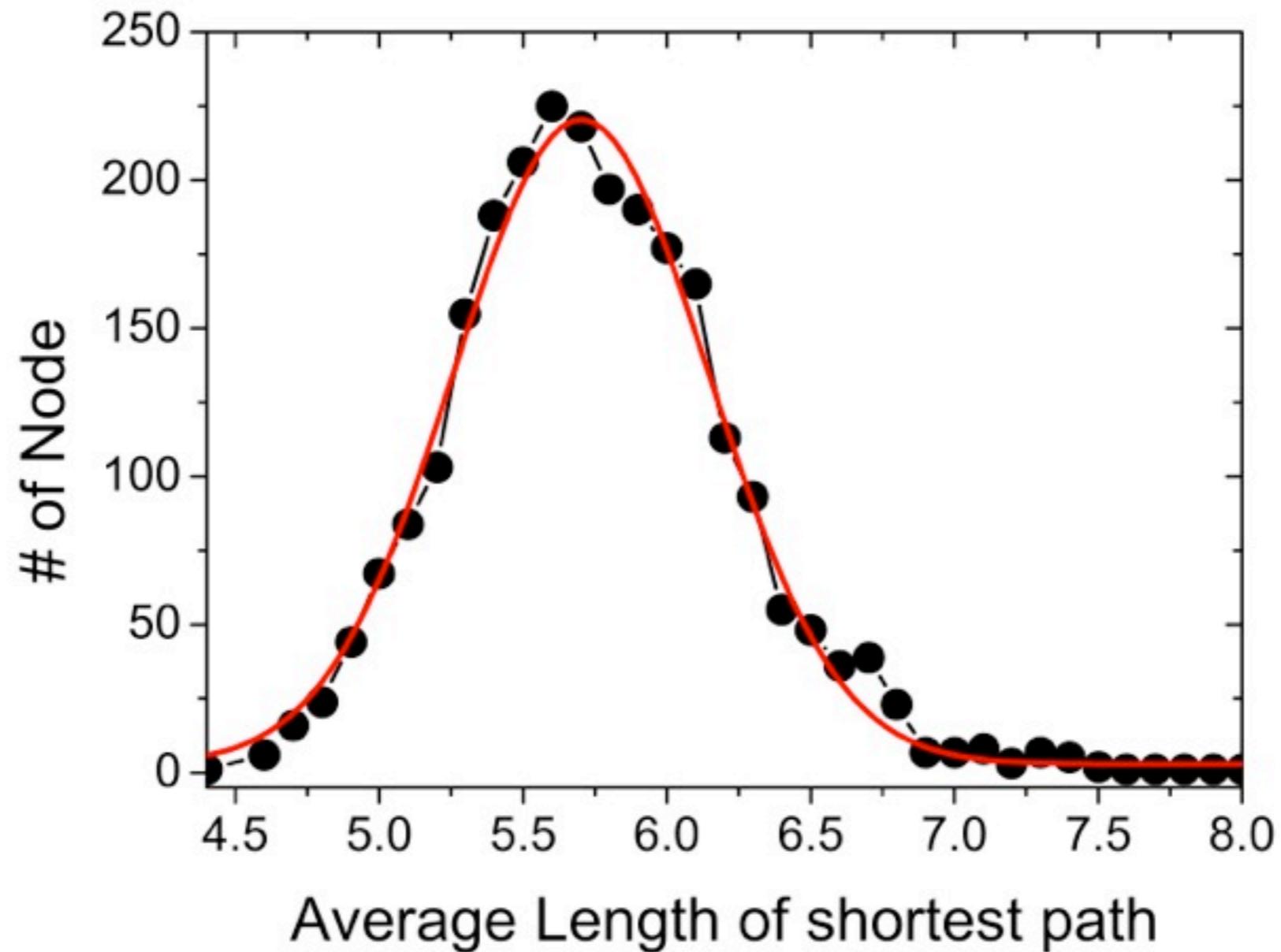
Degree distribution



Experiments on Mobile Network

[Zheng-Bin Dong, 2009]

Overall average shortest path is 5.75

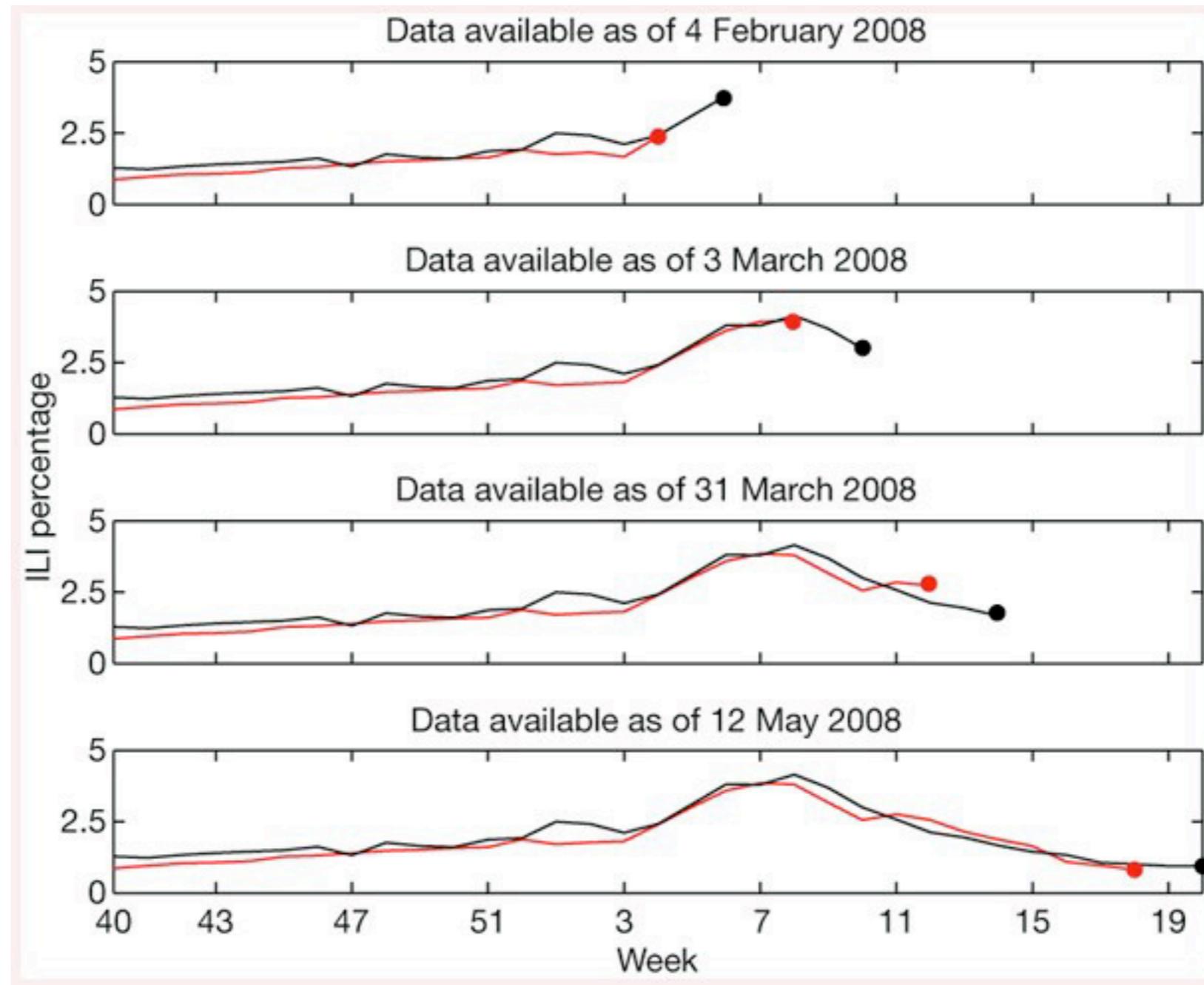


Characteristics of Social Networks

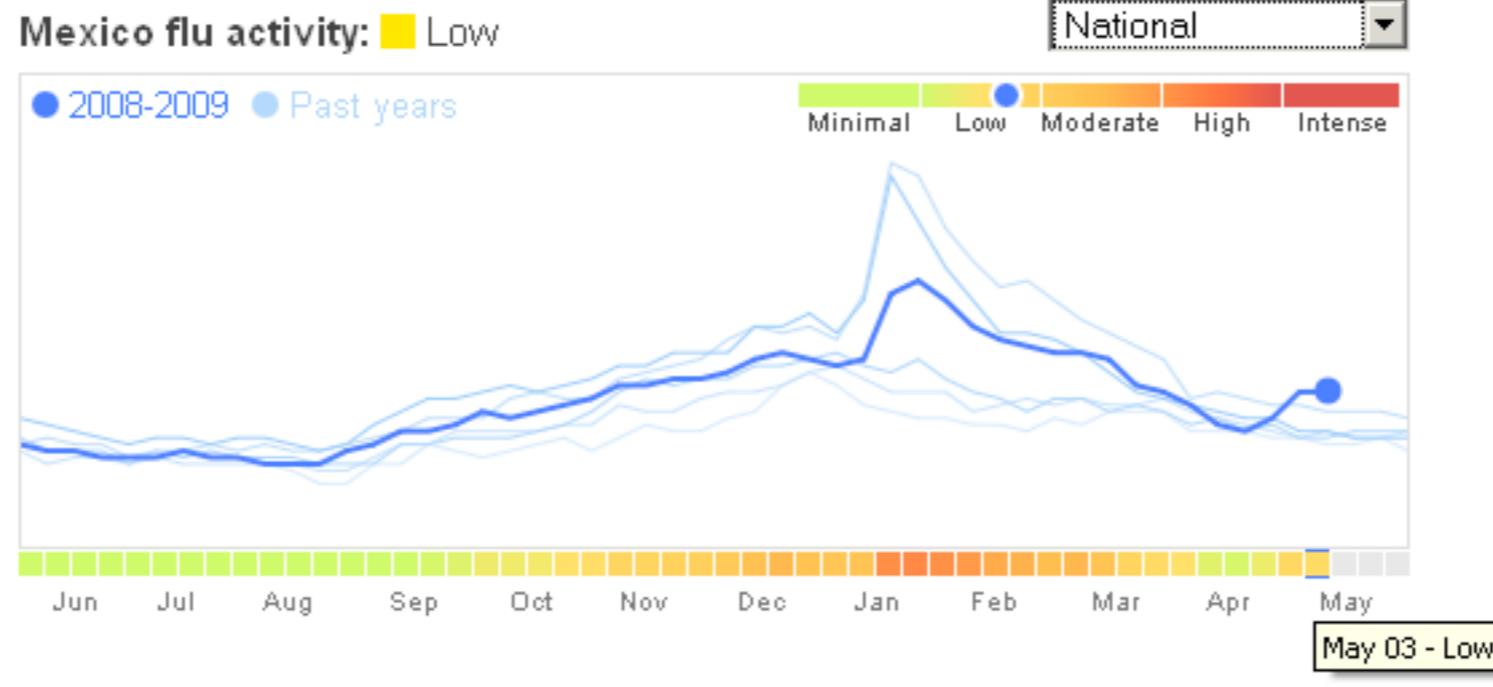
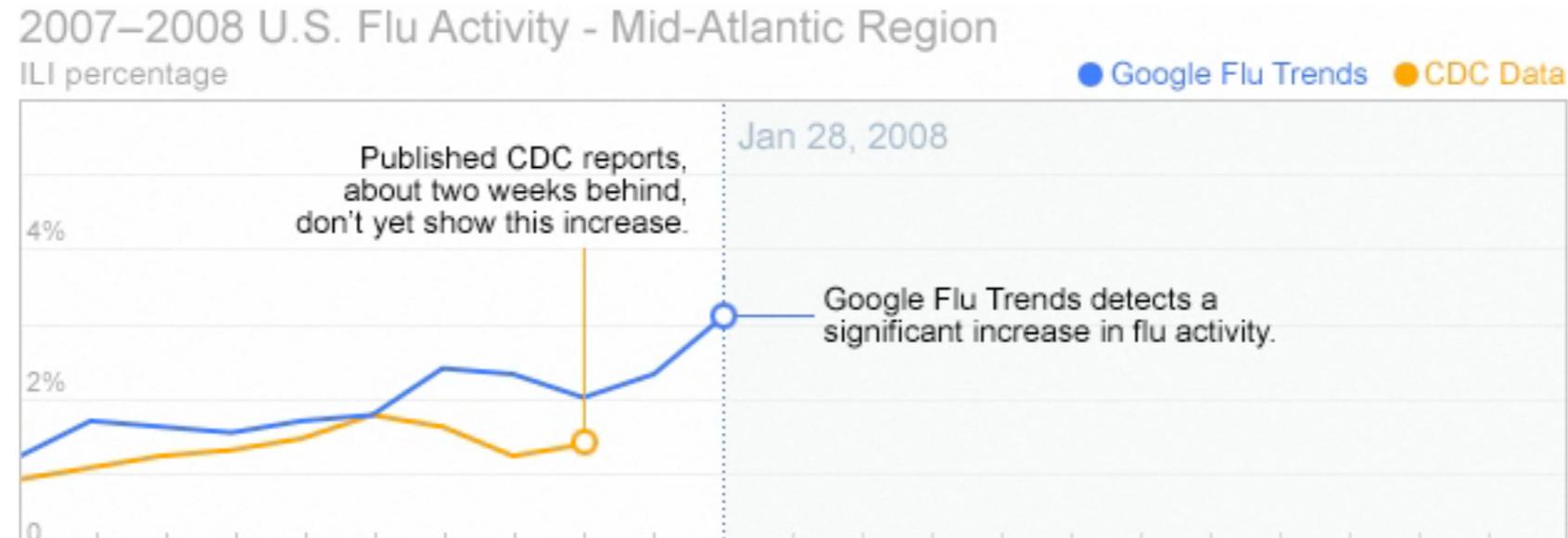
		Power law distribution		Average shortest path	
		In-degree	Out-degree	Directed	Undirected
Co-authorship network		2~3		6~16	
Email network		5.9	5.2	6	
World Wide Web		2.1	2.7	16	6
Blog	Blog network	1.7	N/A	N/A	
	Post network	2.15	2.95		
Instant-messaging network		Heavy tailed but not power law		6.6	
Facebook		N/A		5.73	
Mobile network		N/A		5.75	



Google' Plague Prediction System



Google's Plague Prediction System



Google's search trends can predict flu epidemic decline



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 100% positive

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 100% positive

[Battery Life](#) (6 comments)
 33% positive

[Appearance](#) (5 comments)
 100% positive

[Sound Quality](#) (5 comments)
 80% positive

All user reviews
View by: [All](#) | [Highest rating](#) | [Lowest rating](#)

[ipod new in box](#)
ipod was new in box, exactly as seller described. shipping was so fast made it before long plane ride! lasted through spring break in fl. jogged with it. dropped it. filled it to...
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[Amazing Ebayer!!!](#)
I'll be honest, I don't write too many reviews on orders. This case however I felt like I needed to. This buy was one in a million. The person was very honest when they posted...
★★★★★ ih8whatuchoose2b [www.ebay.com](#) 28/3/2009

[Ipod Review](#)
Never had one now i do it's awesome as music supply in my car for my new stereo system. Otherwise don't need it
★★★★☆ jg11301985 [www.ebay.com](#) 25/3/2009

Application of
opinion mining



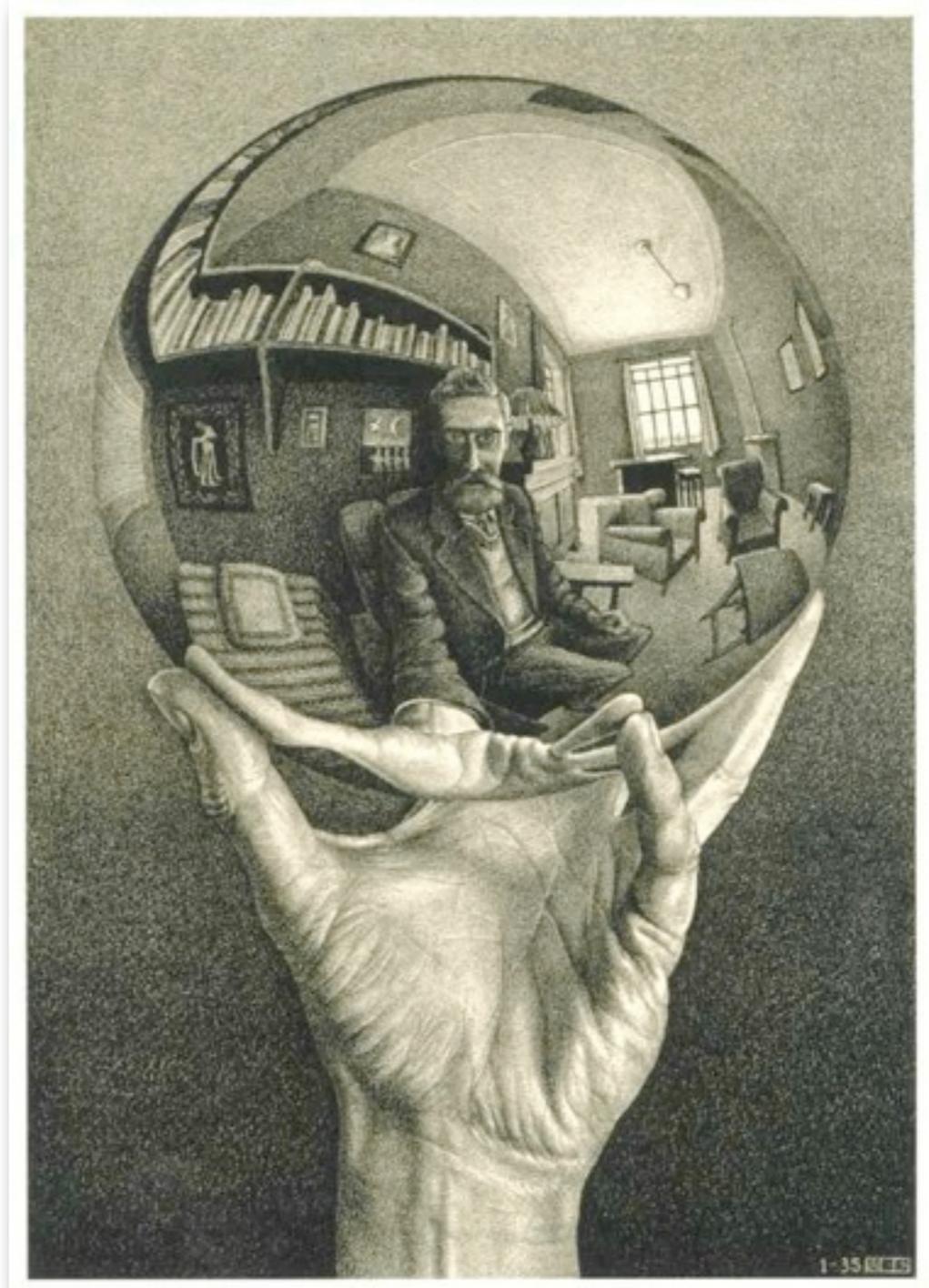
Summary

- The new **Social Computing** paradigm
- Dealing with social behavior
 - **Partial** and **incomplete** information
 - **Spatial** and **temporal** data
 - **Collective** wisdom



What's on the Horizon

- **Theory** and models
- **Scalability** and algorithmic issues
- **Security** and **privacy** issues
- **CLOUD** (broadband + wireless)
- **Web Services**
- **Monetization** of Social Interactions



On-Going Research

Machine Learning

- Direct Zero-norm Optimization for Feature Selection (ICDM'08)
- Semi-supervised Learning from General Unlabeled Data (ICDM'08)
- Learning with Consistency between Inductive Functions and Kernels (NIPS'08)
- An Extended Level Method for Efficient Multiple Kernel Learning (NIPS'08)
- Semi-supervised Text Categorization by Active Search (CIKM'08)
- Transductive Support Vector Machine (NIPS'07)
- Global and local learning (ICML'04, JMLR'04)

Web Intelligence

- Effective Latent Space Graph-based Re-ranking Model with Global Consistency (WSDM'09)
- Formal Models for Expert Finding on DBLP Bibliography Data (ICDM'08)

- Learning Latent Semantic Relations from Query Logs for Query Suggestion (CIKM'08)
- RATE: a Review of Reviewers in a Manuscript Review Process (WI'08)
- MatchSim: link-based web page similarity measurements (WI'07)
- Diffusion rank: Ranking web pages based on heat diffusion equations (SIGIR'07)
- Web text classification (WWW'07)

Collaborative Filtering

- Recommender system: accurate recommendation based on sparse matrix (SIGIR'07)
- SoRec: Social Recommendation Using Probabilistic Matrix Factorization (CIKM'08)

Human Computation

- An Analytical Study of Puzzle Selection Strategies for the ESP Game (WI'08)
- An Analytical Approach to Optimizing The Utility of ESP Games (WI'08)



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- Haiqin Yang (Ph.D.)
- Xin Xin (Ph.D.)
- Chao Zhou (Ph.D.)



<http://groups.google.com/group/WSCE2009>

Call for Papers



Workshop on Social Computing in Education (WSCE2009)
in conjunction with SocialComp-09, August 29-31, 2009, Vancouver, Canada

Welcome to the workshop on Social Computing in Education (SCE2009). The workshop is held in conjunction with the [SocialComp-09](#), Vancouver, Canada from August 29-31, 2009.

With the advent of Web 2.0 and related technologies, Social Computing has become a new paradigm in ways we communicate, learn, and educate. Social platforms such as wikis, blogs, twitters, forums, groups, podcasts, mashups, virtual worlds, and sites for social networking, recommender systems, social bookmarking, social news, knowledge sharing, etc. are generating novel ways we acquire, access, manipulate, process, retrieve, present, and visualize information in the teaching and learning space. The social media for education has become dynamic, ubiquitous, distributed, real-time, collaborative, bottom-up, many-to-many, value-based, and personalized. This workshop solicits contributions on using Social Computing and related technologies for education, the emerging applications of Web 2.0 as an educational platform, as well as privacy, risk, security, and policy issues associated in Social Computing for Education 2.0.



Irwin King
Ricardo Baeza-Yates (Eds.)

King · Baeza-Yates (Eds.)



Weaving Services and People
on the World Wide Web

Weaving Services and People on the World Wide Web

King · Baeza-Yates (Eds.)

Weaving Services and People on the World Wide Web

Ever since its inception, the Web has changed the landscape of human experiences on how we interact with one another and data through service infrastructures via various computing devices. This interweaving environment is now becoming ever more embedded into devices and systems that integrate seamlessly on how we live, both in our working or leisure time.

For this volume, King and Baeza-Yates selected some pioneering and cutting-edge research work that is pointing to the future of the Web. Based on the Workshop Track of the 17th International World Wide Web Conference (WWW2008) in Beijing, they selected the top contributions and asked the authors to resubmit their work with a minimum of one third of additional material from their original workshop manuscripts to be considered for this volume. After a second-round of reviews and selection, 16 contributions were finally accepted.

The work within this volume represents the tip of an iceberg of the many exciting advancements on the WWW. It covers topics like semantic web services, location-based and mobile applications, personalized and context-dependent user interfaces, social networks, and folksonomies.

The presentations aim at researchers in academia and industry by showcasing latest research findings. Overall they deliver an excellent picture of the current state-of-the-art, and will also serve as the basis for ongoing research discussions and point to new directions.

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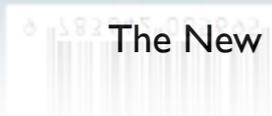


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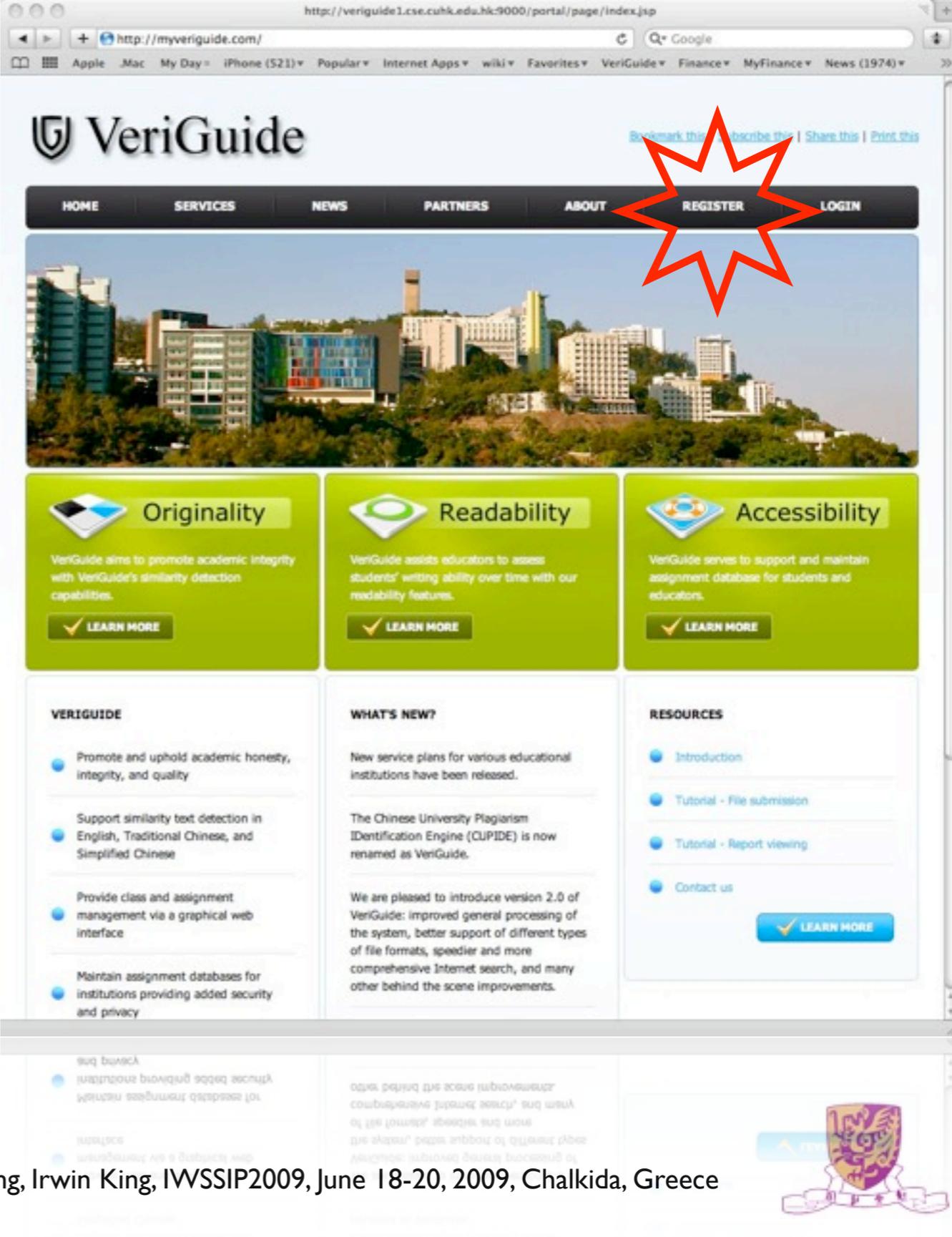
The New Paradigm Shift: The Emergence of Social Computing, Irwin King, IWSSIP2009, June 18-20, 2009, Chalkida, Greece

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- General Co-Chair, Workshop on Social Web Search and Mining, in conjunction with CIKM2009
- Program Co-Chair, The first SIGMM Workshop on Social Media (WSM2009) in conjunction with ACM Multimedia 2009 (ACM MM'09), October 19-24, 2009, Beijing China

Research interests: Machine learning, social computing, web intelligence, information retrieval, multimedia information processing

Caltech's motto, "...the truth shall set you free."

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The New Paradigm Shift: The Emergence of Social Computing, Irwin King, IWSSIP2009, June 18-20, 2009, Chalkida, Greece



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