CS 6474/CS 4803
Social Computing:
Social Computing Theories: Social Capital and Social Influence
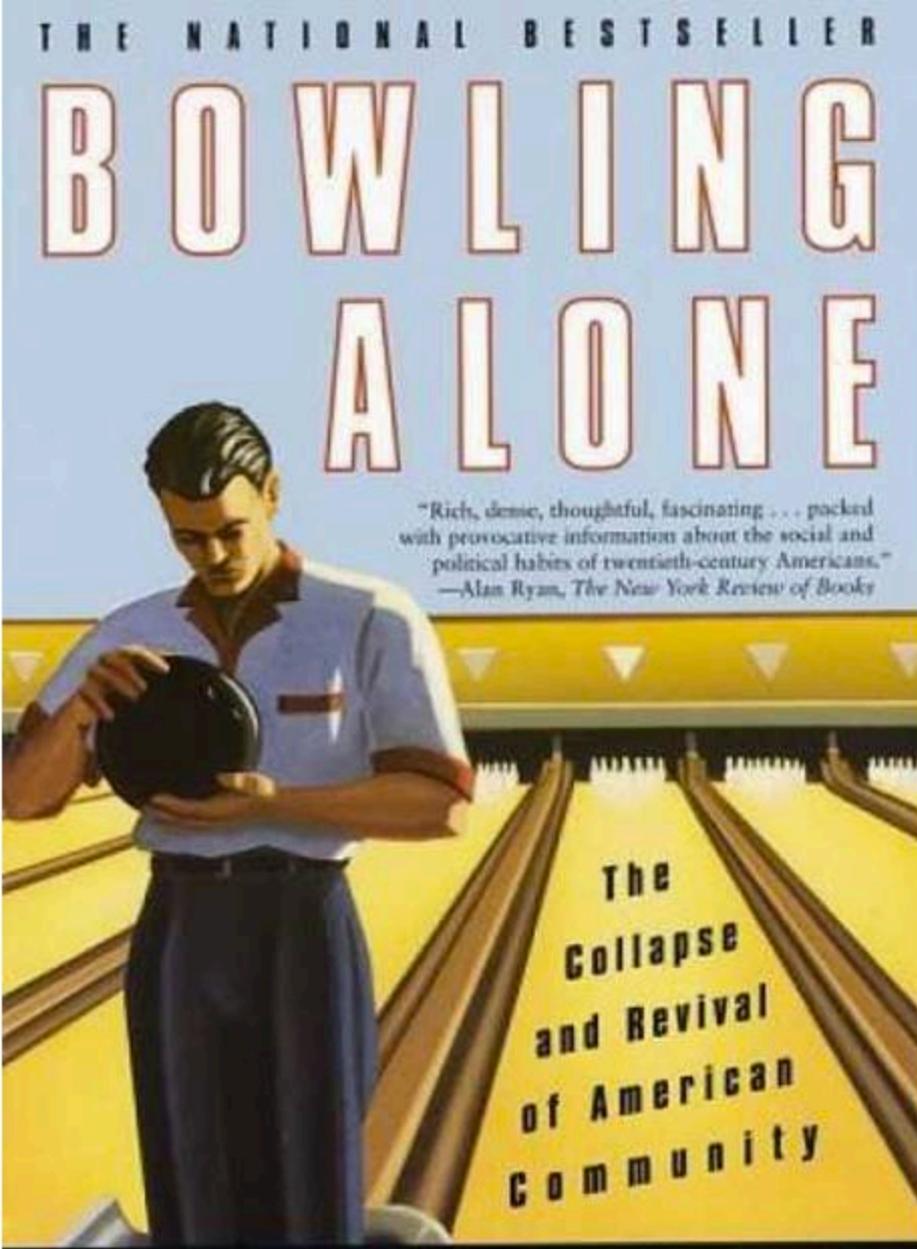
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Social Capital Focuses on:

- *Who knows Whom*
- *The Character of these Networks*
- *The Strength of our Ties*
- *Levels of Trust*
- *Levels of Reciprocity*
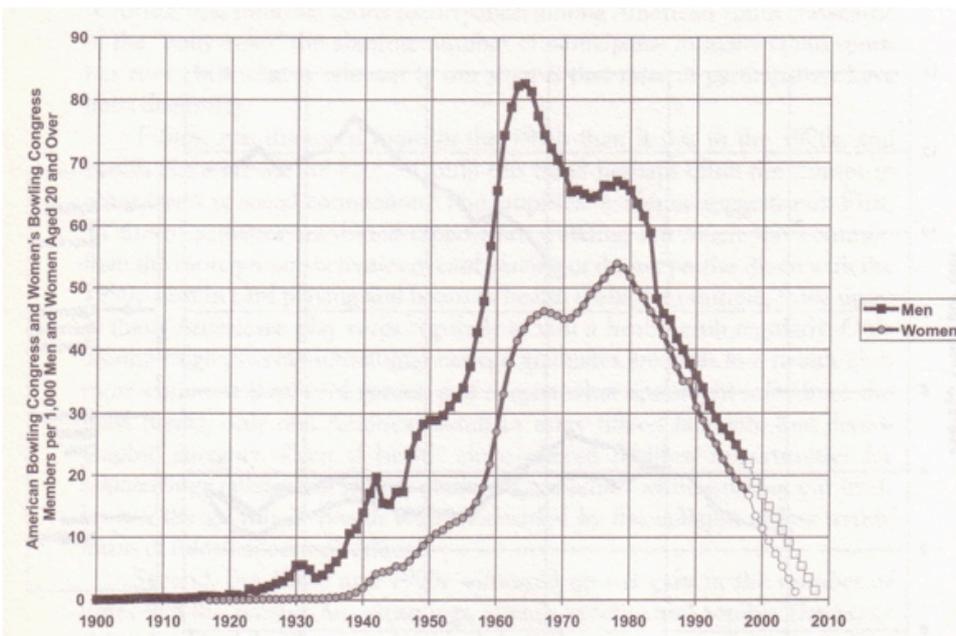
Rise and Decline of League Bowling

Figure 26: The Rise and Decline of League Bowling

Bonding and bridging social capital (Putnam)

1. **Bonding** (Putnam)

- Generated by strong ties. Considered essential in every society. Concerns over loss of bonding social capital prevalent in related scholarship (see also our earlier notes on communities)
- Bonging social capital is the *effect* of maintaining strong ties

2. **Bridging** (Putnam)

- Weak ties at play; 'bridges' more essential than other weak ties. Complementing or making up for loss of strong ties and increasing in importance in modern urban societies and CMC
- Bridging social capital is the *effect* of maintaining bridges

Putnam's book was controversial – he disregarded newer organizations and forms of social capital

Critics like sociologist Claude Fischer said that "Putnam neglects the emergence of new forms of supportive organizations on and off the Internet"

Social capital broadly refers to the resources accumulated through the relationships among people (Coleman, 1988).

Bourdieu and Wacquant (1992) define social capital as "the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (p. 14).

Social capital is defined as "social networks and the associated norms of reciprocity and trust that arise from those networks" (Putnam, 2000)

Dimensions of social capital

1. Bonding (Putnam)

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2. Bridging (Putnam)

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Maintained (Ellison et al.)

- Social capital salvaged by CMC after physical disconnection from offline social network (implies some social capital lost by physical disconnection, e.g., move to another place for work or study)

Why is it important or relevant to study social capital in this class?

The Benefits of Facebook "Friends:" Social Capital and College Students' Use of Online SNS

Summary

- One of the earliest studies examining the relationship between the usage of Facebook and the formation and maintenance of social capital

- Survey study based on N=286 undergraduate students

- Findings:
  - Intensity of Facebook use was correlated with bridging and bonding social capital, however more for bridging than bonding
  - For users with low self-esteem and low life-satisfaction, Facebook use can promote psychological well-being
  - Facebook helps convert latent ties into weak ties
  - Facebook use supports the "poor gets richer" hypothesis

H1: Intensity of Facebook use will be positively associated with individuals' perceived bridging social capital.

H2: Intensity of Facebook use will be positively associated with individuals' perceived bonding social capital.

H3a: The relationship between intensity of Facebook use and bridging social capital will vary depending on the degree of a person's self esteem.
H3b: The relationship between intensity of Facebook use and bridging social capital will vary depending on the degree of a person's satisfaction with life.

H4a: The relationship between intensity of Facebook use and bonding social capital will vary depending on the degree of a person's self esteem.
H4b: The relationship between intensity of Facebook use and bonding social capital will vary depending on the degree of a person's satisfaction with life.

Thoughts and additional findings

▸ Main target audience for Facebook profile seem to be old friends and then current friends and acquaintances from immediate environment; but strongest results of study are with respect to the effects of weak ties (bridging social capital)

▸ FB more valuable in bridging for users with low self-esteem and/or dissatisfaction with professional and/or social environment

Thoughts and additional findings

▸ Main target audience for Facebook profile seem to be old friends and then current friends and acquaintances from immediate environment; but strongest results of study are with respect to the effects of weak ties (bridging social capital)

  ▸ Possible interpretation: users maintain FB pages for their friends and closer circle of acquaintances but FB is actually most helpful in the management of weak ties

▸ FB more valuable in bridging for users with low self-esteem and/or dissatisfaction with professional and/or social environment

  ▸ Possible interpretation: CMC helps users overcome social or psychological barriers to communication

Ellison et al. use college students as participants. How could this attribute have affected the findings? E.g., there's a strong case of college students wanting to maintain social capital with friends from high school. But how does this generalize to other settings?

Ellison et al. find that college students' intensity of Facebook use was more predictive of bridging social capital versus bonding (46% vs. 22% explanation of variance in the data).

How would it generalize to the FB of today?

Class Activity 1

What can Facebook do, in terms of design changes, to promote better bonding of social capital i.e., enable people access their strong ties and their resources better?

Class Activity 2

Ellison et al. focus on the role of Facebook in social capital. Do the findings extend to other platforms as well? Give examples of bonding/bridging social capital on a social media, an online forum, and an anonymous / ephemeral site. (Examples in the handout)

ELEMENTS

HOW FACEBOOK MAKES US UNHAPPY

By Maria Konnikova   September 10, 2013

Ellison et al. also found that Facebook usage was found to interact with measures of psychological well-being. How does it contrast with the perception of today that Facebook makes people depressed?

No one joins Facebook to be sad and lonely. But a new study from the University of Michigan psychologist Ethan Kross argues that that's exactly how it makes us feel. Over two weeks, Kross and his colleagues sent text messages to eighty-two Ann Arbor residents five times per day. The researchers wanted to know a few things: how their subjects felt overall, how worried and lonely they were, how much they had used Facebook, and how often they had had direct interaction with others since the previous text message. Kross found that the more people used Facebook in the time between the two texts, the less happy they felt—and the more their overall satisfaction declined from the beginning of the study until its end. The data, he argues, shows that Facebook was making them unhappy.

Research into the alienating nature of the Internet—and Facebook in particular—supports Kross's conclusion. In 1998, Robert Kraut, a researcher at Carnegie Mellon University, found that the more people used the Web, the lonelier and more depressed they felt. After people went online for the first time, their sense of happiness and social connectedness dropped, over one to two years, as a function of how often they used the Internet.

Does algorithmic design impact how people derive benefits from social capital? E.g., curation of items on the News Feed

Social influence – a critical construct of social networks

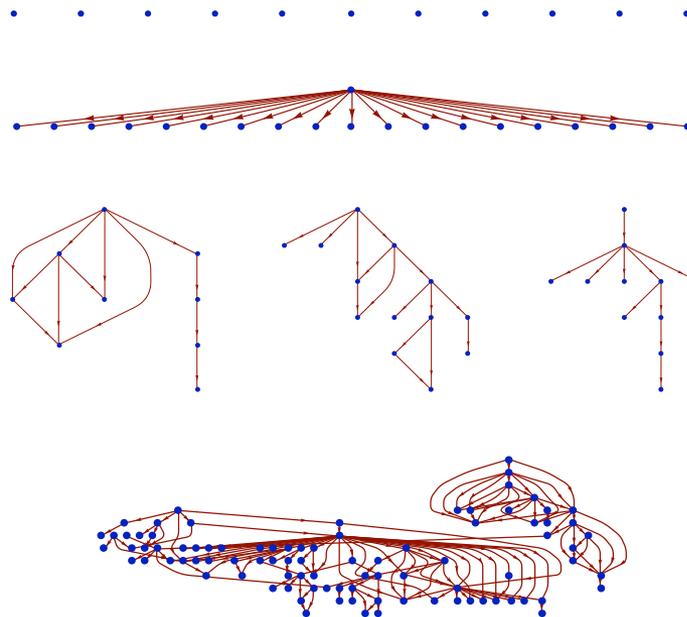Why are certain things more contagious than others?
Why are certain things more popular or catchy?
How does the social network facilitate such contagion?

Everyone's an Influencer: Quantifying Influence on Twitter

Summary

- Diffusion of URLs on Twitter
  - Easy to be traced back to the originating user through the follower graph
- "Influencers are identified only in retrospect, usually in the aftermath of some outcome of interest, such as the unexpected success of a previously unknown author or the sudden revival of a languishing brand"

The Tipping Point

HOW LITTLE THINGS CAN MAKE
A BIG DIFFERENCE

MALCOLM GLADWELL

What is the Tipping Point?

The International No.1 Bestseller

The

TIPPING POINT

HOW LITTLE THINGS CAN MAKE
A BIG DIFFERENCE

MALCOLM
GLADWELL

That magic moment when an idea, trend or social behavior crosses, tips and spreads like wildfire.

Is she worth $10,000 per tweet? Kim Kardashian earns big money using her Twitter account to advertise to her 2million fans

By DAILY MAIL REPORTER
UPDATED: 11:16 EDT, 24 December 2009

f **Share**   🐦   📌   g+   🔗

💬**17**
View comments

Some might question her apparent celebrity status, however Kim Kardashian certainly seems to have acquired some pulling power.

According to a report out this week, the U.S. socialite allegedly commands up to $10,000 (£6,300) for every tweet she posts on her Twitter account as part of her contract with in-stream advertising company Ad.ly.

Kim, 29, is the highest earner on the company's books and the most popular on their roster of celebrity tweeters.

Your Facebook Posts Will Probably Go Viral if You Follow These 5 Steps

FACEBOOK

Share 115   Tweet 32   Share 93

ABOUT THE AUTHOR
Aaron Lee

Aaron Lee is the Founder of AskAaronLee.com & ShortofHeight.com, a fashion blog that shares style for short men. Follow him on Twitter at @askaaronlee

Do you want your Facebook posts to go viral?

Of course you do.

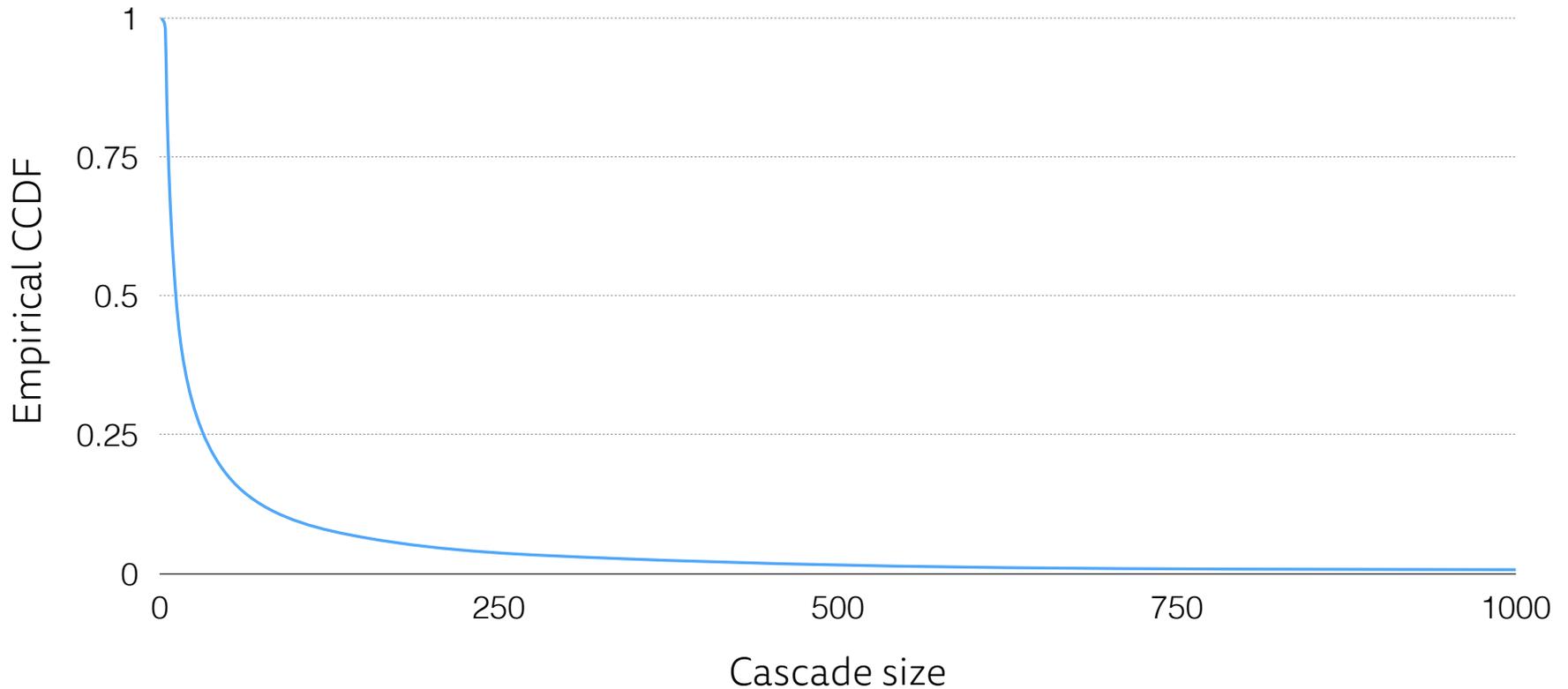Who wouldn't want to dramatically increase the reach of their posts?!

What intuition may explain why large number of followers does not necessarily imply greater influence?

QUIZ: Which of these Facebook photos went viral?

Difficulty #1 Large cascades are rare

Difficulty #2 Same content, different popularity