

Lecture 6: Foci

Matthew Salganik

Sociology 204: Social Networks
Princeton University

Wednesday, February 12, 2025



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- ▶ You can post questions on Ed:
<https://edstem.org/us/courses/75219/discussion>

1. Gladwell, M. (1999). Six degrees of Lois Weisberg. *The New Yorker*.
2. Watts, Chapter 4, 114-129.
3. Feld, S.L. (1981) The focused organization of social ties. *American Journal of Sociology*.

Review

- ▶ growth + preferential attachment \rightarrow power law degree distribution

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- ▶ some (but not all) real networks have a power law degree distribution

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- ▶ diseases spread more easily on networks with power law degree distribution than on other types of networks
- ▶ networks with power law degree distribution are robust to random failure but fragile to targeted attack
- ▶ “hubs” seem important



Her story connects 2 ideas: power law degree distributions and foci

Source: www.wbez.org

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A key point is that these people don't know each other. That enables Lois to be a “broker.”


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The No. 1 Predictor Of Career Success According To Network Science

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It has been over three years since [Steve Jobs](#) died.

Since then, books have been written and movies have been made.


Each has celebrated his legacy and aimed to share the secrets he used to build the largest company in the world; things like attention to detail, attracting world-class talent and holding them to high standards.


We think we understand what caused his success.

We don't.

We dismiss usable principles of success by labeling them as personality quirks.

CONFERENCES AND MORE 7


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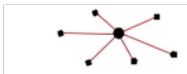
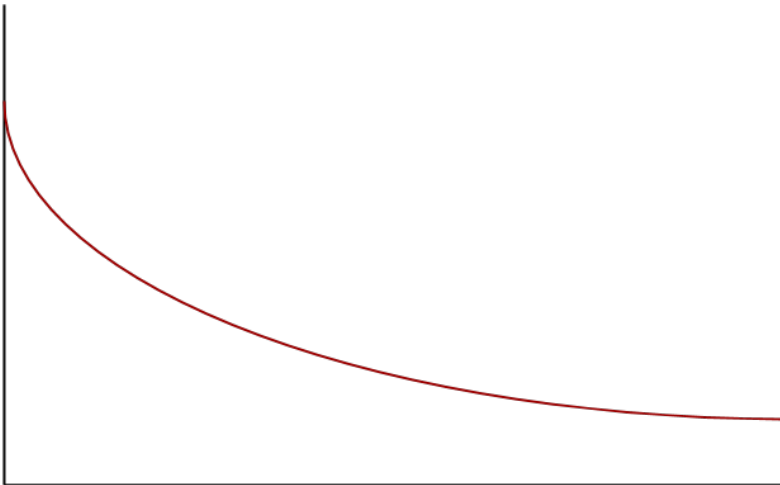

Next Post

Source: [http:](http://www.forbes.com/sites/michaelsimmons/2015/01/15/this-is-the-1-predictor-of-career-success-according-to-network-science/)

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Relative Performance

(compensations, evaluation, promotion)



Network Constraint



large, open network where you are the link between people from different clusters.

small, closed network where you are connected to people who already know each other.



Comics

Blog

Shop



Reblog

+ Follow

Dashboard

Do Open Networks Boost Your Odds of Success?

Posted January 23rd, 2015 @ 8:46am in [#success](#)

Every time I hear of a study suggesting that doing (whatever) is important for success, I ask myself if the authors interpreted the correlations correctly.

And I rarely think they did.

Take for example this [recent article](#) describing how people with "open networks" are far more successful than those with "closed networks." In this context, it means that the more new ideas you are exposed to, the more likely you are a success.

That interpretation makes perfect sense to me. Seeing lots of new ideas is probably a good thing in most situations.

But another interpretation is that the folks with the personalities and resources to succeed are more likely to also have open networks. It doesn't necessarily mean one causes the other.

The good people manufacturing mature products, such as concrete,

STRUCTURAL HOLES

The Social Structure of Competition

RONALD S. BURT

How does Lois Weisberg's story—and the readings more generally—change how we should think about networks?

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Combines:

- ▶ network structure
- ▶ social structure

Affiliation network



Bipartite
Graph

Affiliation network



Bipartite
Graph

► actors and movies

Affiliation network



Bipartite
Graph

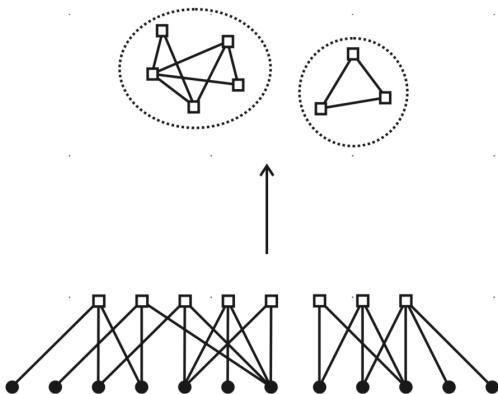
- ▶ actors and movies
- ▶ scientists and papers

Affiliation network



Bipartite
Graph

- ▶ actors and movies
- ▶ scientists and papers
- ▶ board members and boards of directors

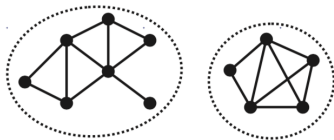


Group Interlock
Network

Bipartite
Graph



Bipartite
Graph



Actor Affiliation
Network

The Focused Organization of Social Ties¹

Scott L. Feld

State University of New York at Stony Brook

The Focused Organization of Social Ties¹

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- ▶ you are stepping in a conversation

The Focused Organization of Social Ties¹

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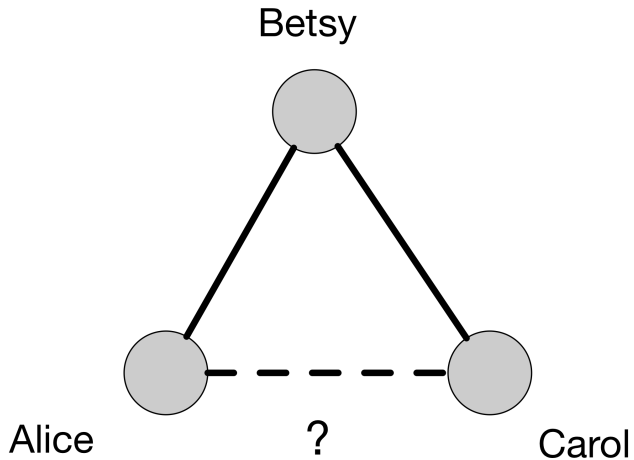
State University of New York at Stony Brook

- ▶ you are stepping in a conversation
- ▶ a very dense—but interesting—conversation

Foci: a social, psychological, or physical entity around which joint activities are organized.

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Think-pair-share: What are some examples of foci at Princeton?



Explaining triadic closure:

- ▶ balance theory vs foci
- ▶ psychology vs sociology
- ▶ agency vs structure

Context about Feld (1981)

- ▶ This style of sociology (definition, assumption, proposition) is rare

Context about Feld (1981)

- ▶ This style of sociology (definition, assumption, proposition) is rare
- ▶ I found it striking that this was so hard to test because we didn't have the right data

Roughly speaking: you don't pick your friends, your environment
picks your friends for you

ALPHABET AND ATTRACTION:
AN UNOBTRUSIVE MEASURE OF THE EFFECT OF
PROPINQUITY IN A FIELD SETTING¹

MADY WECHSLER SEGAL²

Department of Sociology, Eastern Michigan University

<http://dx.doi.org/10.1037/h0037446>

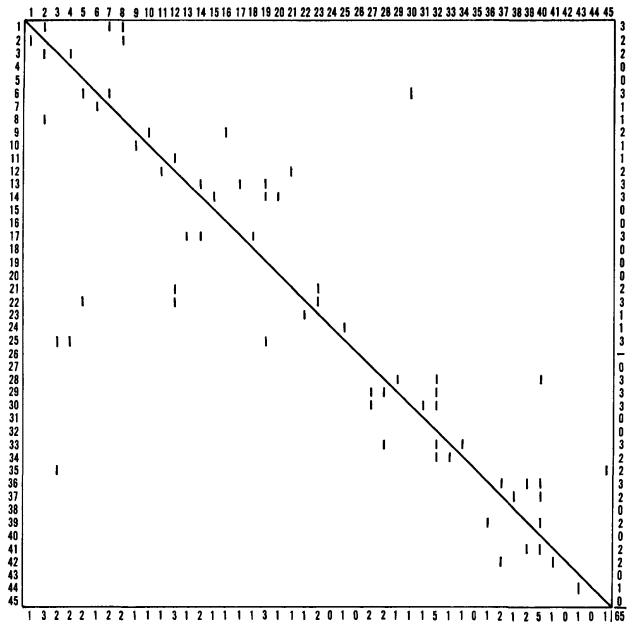


FIGURE 1. Matrix of friendship choices. (Numbers across the top of the matrix indicate place in alphabetical order of *chosen*. Numbers down the left of the matrix indicate place in alphabetical order of *chooser*.)

RESIDENTIAL PROPINQUITY AS A FACTOR IN MARRIAGE SELECTION

JAMES H. S. BOSSARD
University of Pennsylvania

- ▶ study of 5,000 marriage licenses in which one or both applicant lived in Philadelphia (January - May 1931)

<https://www.jstor.org/stable/2766455>

TABLE II
DISTRIBUTION, CUMULATIVELY OF FIVE THOUSAND MARRIAGES
BY RESIDENTIAL PROPINQUITY BEFORE MARRIAGE

Number of Blocks Apart	Number of Cases	Per Cent
Same address	632	12.64
Within one block or less	859	17.18
Within two blocks or less	1163	23.26
Within three blocks or less	1373	27.46
Within four blocks or less	1528	30.56
Within five blocks or less	1679	33.58
Within six blocks or less	1798	35.96
Within seven blocks or less	1889	37.78
Within eight blocks or less	1968	39.38
Within nine blocks or less	2037	40.74
Within ten blocks or less	2116	42.32
Within fifteen blocks or less	2400	48.00
Within twenty blocks or less	2597	51.94

- More than one in three couples involved a person lived within 5 blocks or less.

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- ▶ More than one in three couples involved a person lived within 5 blocks or less.
- ▶ Bossard (1932): "Cupid may have wings, but apparently they are not adapted for long flights."

- ▶ The theory of foci calls attention to the fact that many network ties are formed because of social structure.

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- ▶ What do foci have to do with Facebook and Google+?

STEVEN LEVY

BUSINESS 06.28.2011 01:18 PM

Inside Google+ — How the Search Giant Plans to Go Social

<https://www.wired.com/2011/06/inside-google-plus-social/>



Hi everyone, thanks for coming.

[https://www.businessinsider.com/
heres-the-presentation-that-inspired-google-2011-7](https://www.businessinsider.com/heres-the-presentation-that-inspired-google-2011-7)

More about Google Plus:

- ▶ Paul Adams *Grouped: How Small Groups of Friends are the Key to Influence on the Social Web*
- ▶ “Google Plus: a \$585 million dollar mistake”:
<https://slidebean.com/blog/startups-google-plus>
- ▶ “Looking back at Google+”:
<https://techcrunch.com/2018/10/08/looking-back-at-google/>
- ▶ <https://en.wikipedia.org/wiki/Google%2B>

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- ▶ compare and contrast psychological vs sociological explanations for network structure
- ▶ sociological principles can shape the design of technical systems

Reflection and feedback:

<http://rb.gy/sgib8o>

- ▶ Watts, Chapter 5. (Not available from Canvas)
- ▶ Lee, N.H. (1969). *The Search for an Abortionist*: Preface, Chapter 1, and Chapter 5. (Available from Canvas).