

SOCIAL NETWORK ANALYSIS
Sociology 920:573:01/02
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Location and time: Tuesdays, 4:10-6:50pm, Davison 128 and/or online

Zoom address:

<https://rutgers.zoom.us/j/91910612309?pwd=UTR2K0xmeERJU1doUStieHM5Nmd0Zz09>

Online drop-in hours: M4:00-5:00pm, W7:00-8:00pm, F11:00am-noon, and by appointment

Online office hours: M5:00-6:00pm, F12:00-1:00pm

Zoom addresses:

M: <https://rutgers.zoom.us/j/92539621961?pwd=UTVDeHpLeERQakZpSXRoeTl5ajVsZz09>

F: <https://rutgers.zoom.us/j/92687303157?pwd=ZzloSmV0ZytRMm5zdYt4UWoyQm10QT09>

Over the last few decades, and over the last twenty years especially, there has been an enormous increase in the attention paid to social networks as key determinants of many elements of social life, including motivations, identities, tastes, social mobility, group organization and mobilization, resource distributions and power relations, decision-making, patterns of innovation, diffusion of disease and attitudes, and the organization of belief systems. Conversely, sociologists have also been increasingly interested in the factors—structural, cultural, motivational, emotional—that drive the formation and evolution of networks.

While social networks was once a highly specialized area of inquiry, nowadays networks are frequently invoked in mainstream sociological research—even though the specific tools of network analysis remain distinctly different from those most commonly used in ‘mainstream’ research, whether it be quantitatively or qualitatively oriented. Certainly there are ways to incorporate network elements (as variables, as metaphor, as narrative design) into many research projects. But in its more radical formulations, the study of networks vies to become a kind of fundamental theory of social organization, not just an add-on. In this respect it dovetails with the development over the last decade of a theory of networks as the constitutive material of the physical, biological, technological, and economic worlds.

The fundamental idea of *social* network analysis specifically is that we must study the social order *relationally*: entities (people, organizations, actions, events, texts) are interdependent and mutually constitutive, and structure emerges as patterns in these interdependencies. Social network analysis (SNA) is not the only approach available for studying the social relationally (think of Bourdieu, or Latour, or symbolic interaction), but it is among the most important and versatile, and it offers a rich assortment of tools for exploring the relational quality of social life systematically. Some of you may dabble in networks; I hope all of you will become educated

consumers. Hopefully, some of you will become producers of exciting new networks research, and become committed to networks as an orienting sociological (social scientific) perspective.

We will have **three main goals** pertaining to social network analysis in this course:

- We will consider theoretical justifications for the study of networks and key concepts used in the field, using classical sociological formulations of these concepts and more recent statements.
- We will begin to learn certain methods and computer applications, including working a bit with two programs in particular:
 1. PAJEK, for the graphic visualization and quantitative analysis of social networks. Pajek is available for free download (see <http://mrvar.fdv.uni-lj.si/pajek/>). There is also a book—*Exploratory Social Network Analysis with Pajek*, 3rd edition (Cambridge, 2018), by Wouter de Nooy, Andrej Mrvar, and Vladimir Batagelj—that helps you to become acquainted with the program: <http://mrvar.fdv.uni-lj.si/pajek/be3.htm>. I own the first and second editions of that book, and will make certain parts of it available on Canvas. You can decide yourselves whether or not to buy the latest edition.
 2. UCINET, for the representation, manipulation, and analysis of network data in matrix format. UCINET is freely available for a trial period, or for \$40 for a student license: <https://sites.google.com/site/ucinetsoftware/home>. There is a book that goes with that program, too: *Analyzing Social Networks*, 2nd edition, by Stephen P. Borgatti, Martin G. Everett, and Jeffrey C. Johnson (Sage, 2018). I own a copy of the first edition and will make parts available on Canvas. You can decide whether to purchase the newer edition.

I will assign a few exercises to get you working with data in these two programs. I can provide access to some data, but if you have data of your own, you can try to use that. Some data is embedded in the software above. It's also becoming easier to find network datasets online (though that is not my strength). Hana Shepherd has collected a lot of network data from her schools project (and other projects) and has told me she would welcome your use of it, with her permission. One more thing: Increasingly researchers are using R to do network analysis, but I don't know R and there is no way I am going to learn it this semester! The number of tools for conducting network analysis continues to grow swiftly, unfortunately far faster than I can keep up with. So we will use the software above to get you started, but if you stick with this stuff, you will probably need to become acquainted with other (perhaps more powerful and more flexible) tools. This is especially so if you get to the point of using Exponential Random Graph Models and their requisite software.

- We will sample from the large (and growing) volume of empirical work that adopts a networks perspective in one form or another, including work on small groups, friendship networks, political elites, social movements, disease diffusion, immigration, formal organizations, markets, industries, cultural repertoires, and large-scale historical transformation. As we do this, we will recursively consider the merits and demerits (or caveats) regarding the adoption of networks methodologies.

Concerning class format: I will spend part of several class sessions lecturing on some of the key ideas and arguments and methods. Nevertheless, I want there to be ample opportunity for questions and discussion, including for each of you to lead class discussion at some point, especially as we get into the empirical readings. We'll decide those assignments soon.

Requirements

Your grade will be based on the following factors:

- participation, engagement, and discussion leadership in class (approximately 30%)
- short network-analytic assignments (approximately 20% in total, graded on a check-minus/check/check-plus scale)
- term paper (approximately 50%)

The term paper is obviously the main requirement for this seminar, and it should take the form of an empirical research paper, about 13-15 pages in length. It may be based on a brand new idea you develop in this class, or something you are looking to expand upon from a previous class, conceivably for thesis or dissertation purposes. By empirical, I mean you need to use and analyze network data. These need not be data you collect yourself (although that would be great); some network datasets and/or implicitly network data are available online for free with a little digging around (e.g. practice datasets, voting records, trade networks, academic citations, and boards of directors). I could supply datasets from my own research, except that it can be a little off-putting to learn Polish surnames and/or Renaissance Italian nomenclature! As noted above, you might ask Hana if she has data you could use. If you are intent on collecting your own data, you should secure any required IRB approval first. Alternatively, you could collect data from publicly available sources. **Please discuss your goals and options with me early in the semester.**

Required Readings

The **required** readings for each class session are printed in **bold** below, under each weekly heading. I have endeavored to put all of these materials on Canvas. Above, I mentioned the two how-to books that you might want to purchase, even though I am trying to supply you with the minimally necessary pages. In the past, I assigned many chapters of *Social Network Analysis: Methods and Applications* (Cambridge, 1994), by Stanley Wasserman and Katherine Faust. That book covers all the basic terminology and many of the core concepts, and it has served generations of networks scholars as a kind of Bible/gazetteer. But currently I think it better to use shorter introductions to the core concepts and bring in a little more on research design questions than describing measures per se.

Two books worth buying for this course are John Levi Martin's *Social Structures* (ISBN-13: 978-0691150123), and Garry Robins' *Doing Social Network Research: Network-Based Research Design for Social Scientists* (ISBN-13: 978-1446276136). But like all books, these are

expensive, and if you want to make do with what I copy from them or locate them without paying for them, that's okay with me.

I list in the syllabus many readings which are **not** required. Their arrangement by topic is decent but not perfect. The volume of work on networks is overwhelming. It includes myriad articles and books on methods, measures, techniques, etc., and a huge and growing corpus of empirical applications. I find it intimidating to ponder the volume and diversity of this research. Don't make the mistake of assuming I have read all this stuff! I simply list some subset of materials that may provide you with leads into a broader literature concerned with particular topics.

Diversity Statement

The Rutgers Sociology Department strives to create an environment that supports and affirms diversity in all manifestations, including race, ethnicity, gender, sexual orientation, religion, age, social class, disability status, region/country of origin, and political orientation. We also celebrate diversity of theoretical and methodological perspectives among our faculty and students and seek to create an atmosphere of respect and mutual dialogue. We have zero tolerance for violations of these principles and have instituted clear and respectful procedures for responding to such grievances.

Schedule of Classes

Week 1 (1/19) Introduction: Networks as 'Relational' and 'Structural' Paradigm

Read: 1) Georg Simmel, "The Problem of Sociology," in Don Levine (ed.), *Georg Simmel on Individuality and Social Forms*, pp. 23-35

2) Mustafa Emirbayer, "Manifesto for a Relational Sociology," *American Journal of Sociology* 103: 281-317

3) Stephen P. Borgatti, Ajay Mehra, Daniel J. Brass, and Giuseppe Labianca, "Network Analysis in the Social Sciences," *Science* (13 February 2009): 892-5

4) John Levi Martin, *Social Structures* (Princeton, 2009), preface and ch. 1

Some other theoretical literature and manifesto-like overviews, NOT to be read for class:

Pierpaolo Donati, *Relational Sociology: A New Paradigm for the Social Sciences* (Routledge, 2010)

Nick Crossley, *Towards Relational Sociology* (Routledge, 2010)

Harrison C. White, *Identity and Control* (Princeton, 1992; 2nd [much improved] edition, 2008)

John F. Padgett and Walter W. Powell, *The Emergence of Organizations and Markets* (Princeton, 2012)

Ronald S. Burt, *Toward a Structural Theory of Action* (Academic Press, 1982), especially chs. 1 and 9

Peter Blau, *Exchange and Power in Social Life* (Transaction, 1983 [1964])

Bonnie Erickson, "The Relational Basis of Attitudes," in Barry Wellman and S. D. Berkowitz (eds.), *Social Structures: A Network Approach* pp. 99-121 (Cambridge, 1988)

- A.R. Radcliffe-Brown, "On Social Structure," *Journal of the Royal Anthropological Institute of Great Britain and Ireland* 70:188-204
- Georg Simmel, "The Triad," in Kurt Wolff, *The Sociology of Georg Simmel* (Free Press, 1950), pp. 145-69
- Ronald L. Breiger, "The Analysis of Social Networks," in Melissa Hardy and Alan Bryman (eds.), *Handbook of Data Analysis* (Sage, 2003), pp. 505-26
- Barry Wellman, "Structural Analysis: From Method and Metaphor to Theory and Substance," in Barry Wellman and S. D. Berkowitz (eds.), *Social Structures: A Network Approach* (Cambridge, 1988), pp. 19-61
- Marin, Alexandra and Barry Wellman. 2011. "Social Network Analysis: An Introduction." In *The Sage Handbook of Social Network Analysis* edited by John Scott and Peter J. Carrington pp. 11-25
- Albert-Laszlo Barabasi, *Linked: How Everything Is Connected to Everything Else and What It Means for Business, Science, and Everyday Life* (Plume, Penguin Books, 2002)
- Carter T. Butts, "Revisiting the Foundations of Network Analysis," *Science* (24 July 2009): 414-16
- Mark Newman, *Networks: An Introduction* (Oxford University Press, 2010)
- Duncan J. Watts, *Six Degrees: The Science of a Connected Age* (Norton, 2003)

Week 2 (1/26) Basic Network Concepts, Research Design, and Ways of Representing Networks

Read: 1) Christina Prell, *Social Network Analysis: History, Theory and Method* (Sage, 2012), chapter 1

2) Garry Robins, *Doing Social Network Research: Network-based Research Design for Social Scientists* (Sage, 2015), chapters 1-4 [currently NOT on Canvas]

3) McLean, *Culture in Networks*, chapter 2

4) I will endeavor to do a little presentation on software, too. In support of that, you might look at some of the stuff in the "software materials" folder under the "Files" heading on Canvas

A brief assortment of other useful texts covering basic (and some not so basic) network analytic concepts:

- Stanley Wasserman and Katherine Faust, *Social Network Analysis: Methods and Applications* (Cambridge, 1994), chapters 1-4 to start with
- Charles Kadushin, *Understanding Social Networks: Theories, Concepts, and Findings* (Oxford, 2012)
- Nicholas A. Christakis and James H. Fowler, *Connected: How Your Friends' Friends' Friends Affect Everything you Feel, Think, and Do* (Little, Brown and Company, 2009)
- John Scott, *Social Network Analysis: A Handbook* (Sage, 3rd edition, 2013)
- Peter Monge and Noshir Contractor, *Theories of Communication in Networks* (Oxford, 2003)
- David Knoke and Song Yang, *Social Network Analysis* (Sage, 2007)
- Matthew O. Jackson, *Social and Economic Networks* (Princeton, 2008)

Some classic one-mode network studies, describing single and/or multiple types of ties:

- David Krackhardt, "Informal Networks: The Company Behind the Chart," *Harvard Business Review* (July 1993): 105-11
- S.F. Sampson, *A Novitiate in a Period of Change. An Experimental and Case Study of Social Relationships* (PhD thesis Cornell University, 1968) (data used all over the place)
- F. J. Roethlisberger and William J. Dickson, "The Internal Organization of the Group in the Bank Wiring Observation Room," in their *Management and the Worker* (Harvard, 1939), pp. 493-510

- Elizabeth Bott, "Urban Families: Conjugal Roles and Social Networks," *Human Relations* 8:345-84
- Elizabeth Bott, *Family and Social Network* (Tavistock, 1957)
- J. A. Barnes, "Classes and Committees in a Norwegian Island Parish," in Samuel Leinhardt (ed.), *Social Networks: A Developing Paradigm*, pp. 233-52 (Academic, 1977)
- James R. Lincoln and Jon Miller, "Work and Friendship Ties in Organizations," *ASQ* 24:181-99
- Christina Prell, *Social Network Analysis: History, Theory, and Method* (Sage, 2012), chapter 2

Some concerns about network data collection and measurement:

- Peter V. Marsden, "Network Data and Measurement," *Annual Review of Sociology* 16:435-63
- P. Killworth and H. R. Bernard, "Informant Accuracy in Social Network Data," *Human Organization* 35: 269-86
- W. H. Bernard, P. Killworth, and L. Sailer, "Informant Accuracy in Social Networks, Part IV: Comparison of Clique-level Structure in Behavioral and Cognitive Network Data," *Social Networks* 2: 191-218
- Jeff Smith and James Moody, "Structural Effects of Network Sampling Coverage I: Nodes Missing at Random," *Social Networks* 35: 652-68
- J. A. Smith, James Moody, and J. Morgan, "Network sampling coverage II: The effect of non-random missing data on network measurement," *Social Networks* 48: 78-99
- Linton C. Freeman, A. K. Romney, and S. C. Freeman, "Cognitive Structure and Informant Accuracy," *American Anthropologist* 89:310-25
- Ove Frank, "Network Sampling and Model Fitting," in Peter Carrington et al. (eds.), *Models and Methods in Social Network Analysis* (Cambridge, 2005), chapter 3
- Ronald L. Breiger, "Introduction to Special issue: Ethical Dilemmas in Social Network Research," *Social Networks* 27, 2: 89-93
- Matthew J. Salganik and Douglas D. Heckathorn, "Sampling and Estimation in Hidden Populations Using Respondent-Driven Sampling," *Sociological Methodology* 34 (2004): 193-239.
- Charles Kadushin, "Who Benefits from Network Analysis: Ethics of Social Network Research," *Social Networks* 27, 2: 139-53
- Matthew E. Brashears and Eric Gladstone, "Error Correction Mechanisms in Social Networks Can Reduce Accuracy and Encourage Innovation," *Social Networks* 44: 22-35

Week 3 (2/2) Local Mechanisms of Network Formation

Read: 1) Charles Kadushin, *Understanding Social Networks*, chapters 2 and 5

2) Mark T. Rivera, Sara B. Soderstrom, and Brian Uzzi, "Dynamics of Dyads in Social Networks: Assortative, Relational, and Proximity Mechanisms," *Annual Review of Sociology* 36 (2010): 91–115

3) J. Miller McPherson, Lynn Smith-Lovin, and James Cook, "Birds of a Feather: Homophily in Social Networks," *Annual Review of Sociology* 27: 415-44

4) Kevin Lewis, "Preferences in the Early Stages of Mate Choice," *Social Forces* 95 (2016): 283-320

5) Harrigan, Nicholas M., Giuseppe (Joe) Labianca, and Filip Agneessens. 2020. "Negative Ties and Signed Graphs Research: Stimulating Research on Dissociative Forces in Social Networks." *Social Networks* 60: 1-10.

6) Mario Luis Small, *Someone to Talk To* (Oxford, 2017), Introduction, and chapters 1, 7, and 8

Some other materials on fundamental aspects of tie formation and/or sites of tie-formation:

- Wasserman and Faust, *Social Network Analysis: Methods and Applications*, chapters 13 and 14
- Gueorgi Kossinets and Duncan J. Watts, "Origins of Homophily in an Evolving Social Network," *AJS* 115, 2 (September 2009): 405-450
- James Coleman, *The Adolescent Society* (Free Press, 1961[71]), especially chapter 7
- John W. Kidd, "An Analysis of Social Rejection in a College Men's Residence Hall," in J. L. Moreno (ed.), *The Sociometry Reader* (Free Press, 1960), pp. 428-36.
- Paul Holland and Samuel Leinhardt, "An Exponential Family of Probability Distributions for Directed Graphs," *Journal of the American Statistical Association* 76:33-50
- Jere Cohen, "Sources of Peer Group Homogeneity," *Sociology of Education* 50:227-41
- Denise Kandel, "Homophily, Selection, and Socialization in Adolescent Friendships," *AJS* 84:427-36
- Leon Festinger, Stanley Schachter and Kurt Back, *Social Pressures in Informal Groups: A Study of Human Factors in Housing* (Stanford, 1950)
- Theodore M. Newcomb, *The Acquaintance Process* (Holt Rinehart Winston, 1961)
- Randall Collins, *Interaction Ritual Chains* (Princeton, 2004)
- Eric Leifer, "Interaction Preludes to Role Setting: Exploratory Local Action," *ASR* 53: 865-78
- Howard Becker and R. Useem, "Sociological Analysis of the Dyad," *ASR* 7 (1942): 13-26
- Kara Joyner and Grace Kao, "Interracial Relationships and the Transition to Adulthood," *ASR* 70: 563-81
- Paul D. McLean, *The Art of the Network: Strategic Interaction and Patronage in Renaissance Florence* (Duke '07)
- Andreas Wimmer and Kevin Lewis, "Beyond and Below Racial Homophily: ERG Models of a Friendship Network Documented on Facebook," *AJS* 116, 2: 583-642
- McFarland, Daniel A., Dan Jurafsky, and Craig Rawlings, "Making the Connection: Social Bonding in Courtship Situations," *AJS* 118: 1596-1649
- McFarland, Daniel A., James Moody, David Diehl, Jeffrey A. Smith, and Reuben J. Thomas, "Network Ecology and Adolescent Social Structure," *ASR* 79: 1088-1121

Some materials on the idea of negative ties and balance:

- Howard Taylor, *Balance in Small Groups* (Von Nostrand Reinhold, 1970), chapter 2
- Fritz Heider, "Attitudes and Cognitive Orientation," *Psychological Review* 52:358-74
- Dorwin Cartwright and Frank Harary, "Structural Balance," *Psychological Review* 63: 277-93
- James A. Davis, "Clustering and Structural Balance in Groups," in Samuel Leinhardt (ed.), *Social Networks: A Developing Paradigm* (Academic Press, 1977), pp. 27-34
- Wouter de Nooy, "A Literary Playground: Literary Criticism and Balance Theory," *Poetics* 26: 385-404.

Week 4 (2/9) Personal Networks (Ego-Networks) and Social Support

Read: 1) Christina Prell, *Social Network Analysis*, chapter 5

2) J. Miller McPherson, Lynn Smith-Lovin, and Matthew Brashears, "Social Isolation in America: Changes in Core Discussion Networks over Two Decades," *American Sociological Review* 71: 353-75

3) Peter S. Bearman and Paolo Parigi, "Cloning Headless Frogs and Other Important Matters: Conversation Topics and Network Structure," *Social Forces* 83: 535-57

4) Barry Wellman and S. Wortley, "Different Strokes from Different Folks: Community Ties and Social Support," *American Journal of Sociology* 96: 558-88

Some other materials related to ego-networks, core discussion groups, and/or social support:

- Anthony Paik and Kenneth Sanchagrin, "Social Isolation in America: An Artifact," *ASR* 78: 339-60
- Peter Marsden, "Core Discussion Networks for Americans," *ASR* 52: 122-131
- Claude S. Fischer, *Still Connected: Family and Friends in America Since 1970* (Russell Sage, 2011)
- Claude S. Fischer, *To Dwell Among Friends* (Chicago, 1982)
- Barry Wellman, "The Community Question: The Intimate Networks of East Yorkers," *AJS* 84: 1201-31
- Scott Feld, "Why Your Friends Have More Friends Than You Do," *AJS* 96:1464-77
- Neha Gondal, "Who 'Fills In' for Siblings and How? A Multi-Level Analysis of Personal Network Composition and its Relationship to Sibling Size," *Sociological Forum* 27: 732-55
- Claire Bidart and Daniel Lavenu, "Evolutions of Personal Networks and Life Events," *Social Networks* 27: 359-76
- Filip Agneessens, Hans Waeghe, and John Lievens, "Diversity in Social Support by Role Relations: A Typology," *Social Networks* 28: 427-41
- S. M. Kana'iaupuni, K. M. Donato, T. Thompson-Colon and M. Stainback, "Counting on Kin: Social Networks, Social Support, and Child Health Status," *Social Forces* 83: 1137-64
- Danching Ruan, "The Content of the General Social Survey Discussion Networks: An Exploration of General Social Survey Discussion Name Generator in a Chinese Context," *Social Networks*, 20: 247-64
- Benjamin Cornwell, Edward O. Laumann, and L. Philip Schumm, "The Social Connectedness of Older Adults: A National Profile," *ASR* 73: 185-203
- B. Wellman, R. Wong, D. Tindall, and N. Nazer, "A Decade of Network Change: Turn-over, Mobility and Stability," *Social Networks* 19: 27-51
- C. Wetherell, A. Plakans, and B. Wellman, "Social Networks, Kinship, and Community in Eastern Europe," *Journal of Interdisciplinary History* 24(4): 639-663
- S. Roberts, G. Dunbar, T. V. Pollet, and T. Kuppens, "Exploring Variation in Active Network Size: Constraints and Ego Characteristics," *Social Networks* 31: 138-146
- G. Plickert, R. R. Côté, and B. Wellman, "It's Not Who You Know, It's How You Know Them: Who Exchanges What with Whom?" *Social Networks* 29: 405-429
- Joel Podolny and James Baron, "Resources and Relationships: Social Networks and Mobility in the Workplace," *ASR* 62(5): 673-693
- G. Lai, "Social Support Networks in Urban Shanghai," *Social Networks* 23(1): 73-85
- R. P. L. Lee, D. Ruan, and G. Lai. "Social Structure and Support Networks in Beijing and Hong Kong," *Social Networks* 27: 249-274
- E. Litwak and I. Szelenyi, "Primary Group Structures and Their Functions: Kin, Neighbors, and Friends," *ASR* 34: 465-81
- M. Grossetti, "Are French Networks Different?" *Social Networks* 29: 391-404
- Susan Bastani, "Family Comes First: Men's and Women's Personal Networks in Tehran," *Social Networks* 29: 357-74
- Candice Feiring, "Other-Sex Friendship Networks and the Development of Romantic Relationships in Adolescence," *Journal of Youth and Adolescence* 28:495-512
- J.L. Martin and King-To Yeung, "Persistence of Close Personal Ties Over a 12-year Period," *Social Networks* 28: 331-62
- Jill Sutor and Shirley Keeton, "Once a Friend, Always a Friend? Effects of Homophily on Women's Support Networks across a Decade," *Social Networks* 19:51-62
- Thomas A. DiPrete, Andrew Gelman, Tyler McCormick, Julien Teitler, and Tian Zheng, "Segregation in Social Networks Based on Acquaintanceship and Trust," *AJS* 116: 1234-83

Week 5 (2/16)

Subgroups and Cohesion (and its Limits)

Read: 1) Christina Prell, *Social Network Analysis*, chapter 7

2) James Moody and Douglas R. White, "Structural Cohesion and Embeddedness: A Hierarchical Conception of Social Groups," *American Sociological Review* 68:103-127

3) James Moody, “The Structure of a Social Science Collaboration Network: Disciplinary Cohesion from 1963 to 1999,” *American Sociological Review* 69: 213–238

4) John Levi Martin, *Social Structures*, chapters 2 and 3

5) optional: de Nooy, Mrvar, and Batagelj, *Exploratory Social Network Analysis with Pajek*, chapter 3

On the notion of cliques, near-cliques, and isolates, a good deal of it empirical:

Kenneth Frank and Jeff Yasumoto, “Social Capital Within and Between Groups,” *AJS* 104:642-86

Noah Friedkin, “The Structure of Social Space,” pp. 125-62 in his *A Structural Theory of Social Influence*

John Cottrell, *Social Networks and Social Influences in Adolescence* (Routledge, 1996)

Karl P. Reitz, “Social Groups in a Monastery,” *Social Networks* 10: 343-57

Wayne Baker, “The Social Structure of a National Securities Market,” *AJS* 89:775-811

James Lincoln, Michael Gerlach, and Christiana Ahmadjian, “Keiretsu Networks and Corporate Performance in Japan,” *ASR* 61:67-88

Derek Kreager, “Strangers in the Halls: Isolation and Delinquency in School Networks,” *Social Forces* 83: 351-90

Kenneth A. Frank et al., “The Social Dynamics of Mathematics Coursetaking in High School,” *AJS* 113, 6: 1645-96

Douglas R. White and Frank Harary, “The Cohesiveness of Blocks in Social Networks: Node Connectivity and Conditional Density,” *Sociological Methodology* 31:305-59

Kenneth A. Frank, “Identifying Cohesive Subgroups,” *Social Networks* 17:27-56

James Moody, “Peer Influence Groups: Identifying Dense Clusters in Large Networks,” *Social Networks* 23: 261-83

Srivastava, Sameer B., and Mahzarin R. Banaji. 2011. “Culture, Cognition, and Collaborative Networks in Organizations,” *ASR* 76: 207-33

Week 6 (2/23) Power in Networks: Centrality and Hierarchy

Read: 1) Christina Prell, *Social Network Analysis*, chapter 4

2) Gabriel Rossman, Nicole Esparza and Phillip Bonacich, “I’d Like to Thank the Academy, Team Spillovers, and Network Centrality,” *American Sociological Review* 75(1): 31–51

3) Ying Shi and James Moody, “Most Likely to Succeed: Long-Run Returns to Adolescent Popularity,” *Social Currents* 4: 13-33

4) Val Burris, “The Academic Caste System: Prestige Hierarchies in PhD Exchange Networks,” *American Sociological Review* 69: 239–264

5) John Levi Martin, *Social Structures*, chapter 4

6) optional: de Nooy, Mrvar, and Batagelj, *Exploratory Social Network Analysis with Pajek*, chapters 6 and 9

Some other empirical examples of how centrality matters, and articles on the various measures:

- Wayne Baker and Robert Faulkner, "The Social Organization of Conspiracy: Illegal Networks in the Heavy Electrical Equipment Industry," *ASR* 58: 837-60
- Roger Gould, "Power and Social Structure in Community Elites," *Social Forces* 68:531-52
- Robert Faris and Diane Felmlee, "Status Struggles: Network Centrality and Gender Segregation in Same- and Cross-Gender Aggression," *ASR* 76, 1 (Feb 2011): 48-73
- Steve Borgatti and Martin Everett, "Models of Core-Periphery Structure," *Social Networks* 21:375-395
- D. C. Bell, J. S. Atkinson, and J. W. Carlson, "Centrality Measures for Disease Transmission Networks," *Social Networks* 21:1-21
- J. M. Bolland, "Sorting Out Centrality: An Analysis of the Performance of Four Centrality Models in Real and Simulated Networks," *Social Networks* 10:233-53
- Linton Freeman, "A Set of Measures of Centrality Based on Betweenness," *Sociometry* 40:35-41
- Steven P. Borgatti, "Centrality and Network Flow," *Social Networks* 27: 55-71
- Benjamin Cornwell, Edward O. Laumann, "Network Position and Sexual Dysfunction: Implications of Partner Betweenness for Men," *AJS* 117, 1: 172-208
- John H. Evans, "Stratification in Knowledge Production: Author Prestige and the Influence of an American Academic Debate," *Poetics* 33 (2): 111-133

Network Position as 'Social Capital':

- James Coleman, "Social Capital in the Creation of Human Capital," *AJS* 94: S95-120.
- James Coleman, *Foundations of Social Theory* (Harvard, 1990), pp. 300-21
- Mark Granovetter, "Economic Action and Social Structure: The Problem of Embeddedness," *AJS* 91:481-510.
- James Moody and Pamela Paxton, "Building Bridges: Linking Social Capital and Social Networks to Improve Theory and Research," *American Behavioral Scientist* 52: 1491-1506
- Paul DiMaggio and Filiz Garip, "How Network Externalities Can Exacerbate Intergroup Inequality," *AJS* 116, 6 (May 2011): 1887-1933
- Ronald S. Burt, *Brokerage and Closure: An Introduction to Social Capital* (Oxford, 2005)

Classic (and recent) sociological work on exchange, power and Resource Dependency theory:

- Richard Emerson, "Power-Dependence Relations," *ASR* 27:31-41.
- Karen S. Cook and Richard M. Emerson, "Power, Equity and Commitment in Exchange Networks," *ASR* 43:721-39
- Karen S. Cook, Richard Emerson, M. R. Gillmore, and T. Yamagishi, "The Distribution of Power in Exchange Networks: Theory and Experimental Results," *AJS* 89:275-305
- K. Cook and J. Whitmeyer, "Two Approaches to Social Structure," *Annual Review of Sociology* 18:109-27
- T. Yamagishi, M. R. Gillmore, and Karen Cook, "Network Connections and the Distribution of Power in Exchange Networks," *AJS* 93:833-51
- Jeffrey Pfeffer and Gerald Salancik, *The External Control of Organizations* (Harper & Row, 1978)
- Linda Molm, "The Dynamics of Power in Social Exchange," *ASR* 55:427-47
- Barry Markovsky, David Willer and T. Patton, "Power Relations in Exchange Networks," *ASR* 53:220-36
- Robb Willer, "Groups Reward Individual Sacrifice: The Status Solution to the Collective Action Problem," *ASR* 74: 23-43
- Marcel Van Assen and Arnout van de Rijt, "Dynamic Exchange Networks," *Social Networks* 29, 2: 266-78
- Arnout Van de Rijt and Marcel van Assen, "Theories of Network Exchange: Anomalies, Desirable Properties, and Critical Networks," *Social Networks* 30, 3: 259-271

Other work on hierarchies and hierarchy formation:

- Ivan Chase, "Social Process and Hierarchy Formation in Small Groups: A Comparative Perspective," *ASR* 45:905-24
- Ivan Chase, "Models of Hierarchy Formation in Animal Societies," *Behavioral Sciences* 19:374-82
- Frans de Waal, *Chimpanzee Politics: Power and Sex Among Apes* (Harper & Row, 1982)
- Andrew V. Papachristos, "Murder by Structure: Dominance Relations and the Social Structure of Gang Homicide," *AJS* 115: 74-128

- Cecilia Ridgeway and David Diekema, "Dominance and Collective Hierarchy Formation in Male and Female Task Groups," *ASR* 54:79-93
- Eugene Rosa and Allan Mazur, "Incipient Status in Groups," *Social Forces* 58:18-37
- Allan Mazur et al, "Physiological Aspects of Communication Via Mutual Gaze," *AJS* 86:50-74
- Steve Ellyson and John Dovidio (eds.), *Power, Dominance, and Nonverbal Behavior* (Springer, 1985)
- Donald Omark, F. F. Strayer, and Daniel Freedman, *Dominance Relations: An Ethological View of Human Conflict in Social Interaction*, esp. chapters 7-12, 21-3, 26 (Garland, 1980)
- Roger Gould, "The Origins of Status Hierarchies: A Formal Theory and Empirical Test," *AJS* 107:1143-78

Classic material specifically on the idea of transitivity:

- Maureen T. Hallinan and W. N. Kubitschek, "The Effects of Individual and Structural Characteristics on Intransitivity in Social Networks," *Social Psychology Quarterly* 51:81-92
- Paul Holland and Samuel Leinhardt, "A Method for Detecting Structure in Sociometric Data," *AJS* 76:492-513
- Paul Holland and Samuel Leinhardt, "Transitivity in Structural Models of Small Groups," *Comparative Group Studies* 2:107-24
- Eugene Johnsen, "Network Macrostructure Models for the Davis-Leinhardt Set of Empirical Sociomatrices," *Social Networks* 7:203-24
- Shin-Kap Han, "Tribal Regimes in Academia: A Comparative Analysis of Market Structure Across Disciplines," *Social Networks* 25: 251-280
- Harrison C. White, "Management Conflict and Sociometric Structure," *AJS* 67:185-7.
- Steffen W. Schmidt, James C. Scott, Carl Landé, and Laura Guasti (eds.), *Friends, Followers, and Factions: A Reader in Political Clientelism* (California, 1977)

Week 7 (3/2) Large-Scale Network Topologies: Small-Worlds, Reachability, Brokerage

Read: 1) Mark S. Granovetter, "The Strength of Weak Ties," *American Journal of Sociology* 78: 1360–1380

2) Duncan Watts, "Networks, Dynamics, and the Small-World Phenomenon," *American Journal of Sociology* 105: 493-527

3) Peter S. Bearman, James Moody, and Katherine Stovel, "Chains of Affection: The Structure of Adolescent Romantic and Sexual Networks," *American Journal of Sociology* 110: 44–91

4) Ronald S. Burt, "Structural Holes and Good Ideas," *American Journal of Sociology* 110: 349-99

5) John Levi Martin, *Social Structures*, chapter 5

Other materials on reachability, the strength of weak ties, and understanding macrostructure:

- Mark Granovetter, *Getting a Job: A Study of Contacts and Careers* (Chicago, 1974; 2nd edition 1995)
- L. C. Freeman, "'The Sociological Concept of 'Group': An Empirical Test of Two Models," *AJS* 98: 152-66
- Walter W. Powell, Douglas R. White, Kenneth W. Koput, and Jason Owen-Smith, "Network Dynamics and Field Evolution: The Growth of Inter-organizational Collaboration in the Life Sciences," *AJS* 110: 1132–1205
- Brian Uzzi and Jarrett Spiro, "Collaboration and Creativity: The Small World Problem," *AJS* 111:2, 447-504
- M. T. Hansen, "The Search-Transfer Problem: The Role of Weak Ties in Sharing Knowledge Across Organization Subunits," *Administrative Science Quarterly* 44:82-111
- A. Hargadon and R. Sutton, "Technology Brokering and Innovation in a Product Development Firm," *Administrative Science Quarterly* 42:716-49.

Gabriel Weimann, "On the Importance of Marginality," *ASR* 47:764-73
 Peter Marsden and K. E. Campbell, "Measuring Tie Strength," *Social Forces* 63:482-501
 Peggy Giordano, "Wider Circle of Friends in Adolescence," *AJS* 101:661-97
 Rick Grannis, "Six Degrees of 'Who Cares?'" *AJS* 115: 991-1017
 Paul McLean, *The Art of the Network: Strategic Interaction and Patronage in Renaissance Florence*, ch. 6

Week 8 (3/9) Duality: Varieties of Two-Mode (and N-Mode) Networks

Read: 1) Ronald L. Breiger, "The Duality of Persons and Groups," *Social Forces* 53: 181–190

2) John W. Mohr, "Soldiers, Mothers, Tramps, and Others: Discourse Roles in the 1907 New York City Charity Directory," *Poetics* 22: 327-57

3) McLean, *Culture in Networks*, chapter 7

4) Val Burris, "Interlocking Directorates and Political Cohesion Among Corporate Elites," *American Journal of Sociology* 111: 249-83

5) John W. Mohr and Petko Bogdanov, "Introduction—Topic models: What They Are and Why They Matter, *Poetics* 4 (2013): 545–69

Some other technical work on affiliation networks:

Wasserman and Faust, chapter 8
 J. Miller McPherson, "Hypernetwork Sampling: Duality and Differentiation Among Voluntary Organizations," *Social Networks* 3: 225-49
 Stephen P. Borgatti and Martin Everett, "Network Analysis of 2-Mode Data," *Social Networks* 19:243-69
 Steve Borgatti and Daniel Halgin, "Analyzing Affiliation Networks," Pp. 417-33 in *The Sage Handbook of Social Network Analysis*, edited by John Scott and Peter J. Carrington (Sage, 2011)
 Bernice Pescosolido and Beth Rubin, "The Web of Group Affiliations Revisited: Social Life, Postmodernism, and Sociology," *ASR* 65:52-76
 James G. Ennis, "The Social Organization of Sociological Knowledge: Modeling the Intersection of Specialties," *ASR* 57:259-65
 Katherine Faust, "Centrality in Affiliation Networks," *Social Networks* 19:157-91
 George Barnett, "Correspondence Analysis: A Method for the Description of Communication Networks," in W. D. Richards and G. Barnett (eds.), *Progress in Communication Science* (Ablex, 1993), pp. 136-63.
 John M. Roberts, "Correspondence Analysis of Two-Mode Network Data," *Social Networks* 22:65-72
 Georg Simmel, "The Web of Group Affiliations" (in his *Conflict and the WoGA*, Free Press, 1955)
 Peter Blau and Joseph Schwartz, *Crosscutting Social Circles* (Transaction, 1997)
 Thomas J. Fararo and Patrick Doreian, "Tripartite Structural Analysis: Generalizing the Breiger-Wilson Formalism," *Social Networks* 6, 2 (June 1984): 141-75
 P. Wang, K. Sharpe, G. Robins, and P. Pattison, "Exponential Random Graph Models for Affiliation Networks," *Social Networks* 31: 12–25

A few empirical applications of affiliation network ideas:

Ann Mische and P. Pattison, "Composing a Civic Arena: Publics, Projects, and Social Settings," *Poetics* 27: 163-94
 E. Lazega, M. Jourda, L Mounier, and R. Stofer, "Catching Up with Big Fish in the Big Pond? Multi-level Network Analysis Through Linked Design," *Social Networks* 30: 159-76

- F. Agneessens, H. Roose, H. Waage, "Choices of Theatre Events: p^* Models for Affiliation Networks with Attributes," *Metodoloski Zvezki* 1: 419–39
- M. Latapy, C. Magnien, and N. Vecchio, "Basic Notions for the Analysis of Large Two-mode Networks," *Social Networks* 30: 31–48
- Neha Gondal, "The Local and Global Structure of Knowledge Production in an Emergent Research Field: An Exponential Random Graph Analysis," *Social Networks* 33: 20-30
- King-to Yeung, "What Does Love Mean? Exploring Network Culture in Two Network Settings," *Social Forces* 84: 391-420

SPRING BREAK—ENJOY!

Week 9 (3/23) Exponential Random Graph Models

Read: 1) J. L. Moreno and H. H. Jennings. 1938. "Statistics of Social Configurations," *Sociometry* 1 (3/4): 342-374

2) Gary Robins, Pip Pattison, Yuval Kalish, and Dean Lusher, "An Introduction to Exponential Random Graph (p^*) Models for Social Networks," *Social Networks* 29:173-191

3) Neha Gondal and Paul D. McLean, "What Makes a Network Go Round: Exploring the Structure of a Strong Component using Exponential Random Graph Models," *Social Networks* 35: 499-513

4) Steven M. Goodreau, James A. Kitts, and Martina Morris, "Birds of a Feather, Or Friend of a Friend? Using Exponential Random Graph Models to Investigate Adolescent Social Networks," *Demography* 46: 103-125

5) N. Harrigan, "PNet for Dummies,"
<http://www.mysmu.edu/faculty/nharrigan/PNetForDummies.pdf>

Some technical aspects of ERGMs:

- G. Robins, G., P. Pattison, and P. Wang. 2009. "Closure, Connectivity and Degrees: New Specifications for Exponential Random Graph (p^*) Models for Directed Social Networks," *Social Networks* 31, 2: 105-17
- Garry Robins, J. Woolcock, and Philippa Pattison, "Small and Other Worlds: Global Network Structures from Local Processes," *AJS* 110: 894-936
- Peng Wang, Sharpe, K., Robins, G., Pattison, P., 2009. "Exponential random graph models for affiliation networks." *Social Networks* 31: 12–25.
- Garry Robins, Tom Snijders, Peng Wang, Mark Handcock, and Philippa Pattison, "Recent Developments in Exponential Random Graph (p^*) Models for Social Networks," *Social Networks* 29, 2: 192-215
- S. Wasserman and G. Robins, "An Introduction to Random Graphs, Dependence Graphs, and p^* ," in Peter Carrington et al. (eds.), *Models and Methods in Social Network Analysis* (Cambridge, 2005), pp. 148-61
- Tom A. B. Snijders, "Models for Longitudinal Network Data," in Peter Carrington et al. (eds.), *Models and Methods in Social Network Analysis* (Cambridge, 2005), pp. 215-47
- Tom A. B. Snijders, "The Statistical Evaluation of Social Network Dynamics," *Sociological Methodology* 31:361-95
- D. Lusher, J. Koskinen, and G. Robins, *Exponential Random Graph Models for Social Networks: Theory, Methods, and Applications* (Cambridge, 2013)
- J. Besag, "Spatial Interaction and the Statistical Analysis of Lattice Systems." *Journal of the Royal Statistical Society, Series B (Methodological)* 36 (2): 192-236

- P. Erdős and A. Rényi, "On Random Graphs," *Publicationes Mathematicae* 6: 290-297
- O. Frank & D. Strauss, "Markov Graphs," *Journal of the American Statistical Association* 81(395): 832-42
- S. M. Goodreau, "Advances in Exponential Random Graph (p^*) Models Applied to a Large Social Network," *Social Networks* 29: 231-48
- M. S. Handcock, "Assessing Degeneracy in Statistical Models of Social Networks," Center for Statistics and the Social Sciences, University of Washington, Seattle, WA, Working Paper 39
- P. W. Holland and S. Leinhardt, "An Exponential Family of Probability Distributions for Directed Graphs," *Journal of the American Statistical Association* 76 (373): 33-50
- D. R. Hunter, "Curved Exponential Family Models for Social Networks," *Social Networks* 29: 216-230
- D. R. Hunter and M. S. Handcock, "Inference in Curved Exponential Family Models for Networks," *Journal of Computational and Graphical Statistics* 15: 565-583
- P. Pattison & G. Robins, "Neighborhood-Based Models for Social Networks," *Sociological Methodology* 32: 301-37
- G. Robins, P. Elliott, and P. Pattison, "Network Models for Social Selection Processes," *Social Networks* 23: 1-30
- G. Robins and P. Pattison, "Interdependencies and Social Processes: Dependence Graphs and Generalized Dependence Structures," In *Models and Methods in Social Network Analysis*, edited by P. Carrington, J. Scott, and S. Wasserman (Cambridge, 2013)
- G. Robins, P. Pattison, and P. Elliott, "Network Models for Social Influence Processes," *Psychometrika* 66: 161-89
- T. A. B. Snijders, "Markov Chain Monte Carlo Estimation of Exponential Random Graph Models," *Journal of Social Structure* 3: 1-40
- T. A. B. Snijders, P. Pattison, G. Robins, and M. Handcock, "New Specifications for Exponential Random Graph Models," *Sociological Methodology* 36: 99-153

A few noteworthy ERGM applications:

- E. Lazega and M. van Duijn, "Position in Formal Structure, Personal Characteristics and Choices of Advisors in a Law Firm: A Logistic Regression Model for Dyadic Network Data," *Social Networks* 19: 375-97
- Anna-Marie Niekamp, Liesbeth A.G. Mercken, Christian J.P.A. Hoebe, Nicole H.T.M. Dukers-Muijters, "A Sexual Affiliation Network of Swingers, Heterosexuals Practicing Risk Behaviours that Potentiate the Spread of Sexually Transmitted Infections: A Two-mode Approach," *Social Networks*, 35:223-36
- Andreas Wimmer and Kevin Lewis, "Beyond and Below Racial Homophily: ERG Models of a Friendship Network Documented on Facebook," *AJS* 116: 583-642
- Andrew V. Papachristos, David Hureau, and Anthony Braga, "The Corner and the Crew: The Influence of Geography and Social Networks on Gang Violence," *ASR* 78: 417-47

Week 10 (3/23)

Classic Structuralist Approaches: Positions, Blocks, Roles

Read: 1) Wasserman and Faust, chapters 9, 10, 12 (skip 11)

2) S. F. Nadel, *The Theory of Social Structure*, selections

3) John F. Padgett and Christopher K. Ansell, "Robust Action and the Rise of the Medici, 1400-1434," *American Journal of Sociology* 98: 1259-1319

4) Peter Bearman, "Generalized Exchange," *American Journal of Sociology* 102: 1383-1415

Some other material on structural equivalence and blockmodels:

- Stephen Borgatti and Martin Everett, "Notions of Position in Social Network Analysis," *Sociological Methodology* 22:1-35
- Harrison C. White, Scott Boorman, and Ronald Breiger, "Social Structure from Multiple Networks. I: Blockmodels of Roles and Positions," *AJS* 81:730-80

- Scott Boorman and Harrison C. White, "Social Structure from Multiple Networks. II: Role Structures," *AJS* 81:1384-1446
- Ronald L. Breiger, "Career Attributes and Network Structure: A Blockmodel Study of Biomedical Research Specialty," *ASR* 41:117-135
- Philippa Pattison, *Algebraic Models for Social Networks* (Cambridge, 1994)
- François Lorrain and Harrison C. White, "Structural Equivalence of Individuals in Social Networks," *Journal of Mathematical Sociology* 1:49-80
- Katherine Faust, "Comparison of Methods for Positional Analysis: Structural and General Equivalences," *Social Networks* 10:313-41
- Ronald S. Burt, "Social Contagion and Innovation: Cohesion versus Structural Equivalence," *AJS* 92:1287-335

Vacancy Chains as a dynamic conception of interdependence:

- John F. Padgett, "Mobility as Control: Congressmen through Committees," in Ronald L. Breiger (ed.), *Social Mobility and Social Structure* (Cambridge, 1990), pp. 27-58
- Harrison C. White, *Chains of Opportunity* (Harvard, 1970), especially chapter 1
- Ivan D. Chase, "Vacancy Chains," *Annual Review of Sociology* 17:133-54
- Andrew Abbott, "Vacancy Models for Historical Data," in Ronald L. Breiger (ed.), *Social Mobility and Social Structure*, pp. 80-102 (Cambridge, 1990)
- Andrew Abbott and Alexandra Hrycak, "Measuring Resemblance in Sequence Data: An Optimal Matching Analysis of Musicians' Careers," *AJS* 96:144-85
- D. Randall Smith and Andrew Abbott, "A Labor Market Perspective on the Mobility of College Football Coaches," *Social Forces* 61:1147-67
- Katherine Stovel, Michael Savage, and Peter Bearman, "Ascription into Achievement: Models of Career Systems at Lloyds Bank, 1890-1970," *AJS* 102:358-99
- Katherine Stovel and Mike Savage, "Mergers and Mobility: Organizational Growth and the Origins of Career Migration at Lloyds Bank," *AJS* 111:1080-1121
- King-to Yeung, "Repressing Rebels, Managing Bureaucrats: State Organizational Adaptation During the Taiping Rebellion, 1851-64," unpublished ms., Rutgers University

Anthropological and historical materials on kinship:

- Claude Lévi-Strauss, *The Elementary Structures of Kinship*
- Harrison C. White, *An Anatomy of Kinship* (Prentice-Hall, 1963)
- Robin Fox, *Kinship and Marriage*, chapters 1, 3, 4, 6-8
- Paula Rubel and A. Rosman, *Your Own Pigs You May Not Eat* (Chicago, 1978)
- Andrew Strathern, *The Rope of Moka: Big Men and Ceremonial Exchange in New Guinea*
- Douglas R. White and Paul Jorion, "Representing and Computing Kinship: A New Approach," *Current Anthropology* 33:454-63
- David Herlihy, "Family Solidarity in Medieval Italian History," in David Herlihy et al. (eds.), *Economy, Society and Government in Medieval Italy* (Kent State, 1969)
- John F. Padgett, "Open Elite? Social Mobility, Marriage and Family in Renaissance Florence, 1282-1494," *Renaissance Quarterly* 63, 2: 357-411

Week 11 (4/6) Networks and Culture

Read: 1) McLean, *Culture in Networks*, chs. 3, 6

2) Neha Gondal and Paul D. McLean, "Linking Tie-meaning with Network Structure: Variable Connotations of Personal Lending in a Multiple-network Ecology," *Poetics* 41: 122-150

3) Ann Mische, “Cross-Talk in Movements: Reconceiving the Culture-Network Link,” in Mario Diani and Doug McAdam (eds.), *Social Movement Analysis: The Network Perspective* (Oxford, 2003), pp. 258-80

Some networks literature incorporating discourse, interaction, meaning, and/or tastes:

- Omar Lizardo, “How Cultural Tastes Shape Personal Networks,” *ASR* 71: 778-807
- Stephen Vaisey and Omar Lizardo, “Can Cultural Worldviews Influence Network Composition?” *Social Forces* 88: 1595-1618
- Mark Pachucki and Ronald L. Breiger, “Cultural Holes: Beyond Relationality in Social Networks and Culture,” *Annual Review of Sociology* 36 (2010): 205-24
- Jennifer Schultz and Ronald L. Breiger, “The Strength of Weak Culture,” *Poetics* 38: 610-24
- Ann Mische, *Partisan Publics: Communication and Contention Across Brazilian Youth Activist Networks* (Princeton, 2008)
- Ann Mische, “Relational Sociology, Culture, and Agency,” In *The Sage Handbook of Social Network Analysis*, ed. John Scott and Peter Carrington (Cambridge, 2011)
- David Gibson, “Taking Turns and Talking Ties: Networks and Conversational Interaction,” *AJS* 110:1561-97
- Jan A. Fuhse, “The Meaning Structure of Social Networks,” *Sociological Theory* 27: 51-73
- Jan A. Fuhse, “Networks from Communication,” *European Journal of Social Theory* 18: 39-59
- Mustafa Emirbayer and Jeff Goodwin, “Network Analysis, Culture, and the Problem of Agency,” *AJS* 99:1411-54
- Ann Mische and Harrison C. White, “Between Conversation and Situation: Public Switching Dynamics Across Network Domains,” *Social Research* 65:695-724
- Robert Faulkner, *Music on Demand: Composers and Careers in the Hollywood Film Industry* (especially the Foreword, Preface, and chs. 3, 5, 8, and 9)
- Eric Leifer, “Interaction Preludes to Role-Setting: Exploratory Local Action,” *ASR* 53:865-78
- Gary Alan Fine and Sherryl Kleinman, “Network and Meaning: An Interactionist Approach to Structure,” *Symbolic Interaction* 6: 97-110
- David Smilde, “A Qualitative Comparative Analysis of Conversion to Venezuelan Evangelicalism: How Networks Matter,” *AJS* 111: 757-96
- Ronald S. Burt, “Bandwidth and Echo: Trust, Information, and Gossip in Social Networks,” in James Rauch and Alessandra Casella (eds.), *Networks and Markets* (Russell Sage, 2001), pp. 30-74
- Vanina Leschziner, *At the Chef's Table: Culinary Creativity in Elite Restaurants* (Stanford, 2014)
- Barbalet, Jack. 2014. “The Structure of Guanxi: Resolving Problems of Network Assurance,” *Theory and Society* 43: 51-69
- Nick Crossley, “Pretty Connected: The Social Network of the Early UK Punk Movement.” *Theory, Culture and Society* 25: 89–116
- Nick Crossley, “Networks and Complexity: Directions for Interactionist Research?” *Symbolic Interaction* 33:341-63
- Charles Kirschbaum, “Categories and Networks in Jazz Evolution: The Overlap Between Bandleaders’ Jazz Sidemen from 1930 to 1969,” *Poetics* 52: 154-78

Cognition, meaning, and text mapping:

- Peter S. Bearman and Katherine Stovel, “Becoming a Nazi: A Model for Narrative Networks,” *Poetics* 27:69-90
- Kathleen Carley, “Extracting Culture Through Textual Analysis,” *Poetics* 22:291-312
- Katherine Giuffre, “Sandpiles of Opportunity: Success in the Art World,” *Social Forces* 77:815-32
- Kathleen M. Carley, “Coding Choices for Textual Analysis: A Comparison of Content Analysis and Map Analysis,” *Sociological Methodology* 23: 75-126
- Ann Mische and Philippa Pattison, “Composing a Civic Arena: Publics, Projects, and Social Settings,” *Poetics* 27:163-94
- J C. Lena and R. A. Peterson, “Classification as Culture: Types and Trajectories of Music Genres,” *ASR* 73: 697-718
- L. C. Freeman, “Cliques, Galois Lattices, and the Structure of Human Social Groups,” *Social Networks* 18:173-87
- William Bechtel and Adele Abrahamsen, *Connectionism and the Mind: An Introduction to Parallel Processing in Networks* (Blackwell, 1991)
- Edwin Hutchins, *Cognition in the Wild* (MIT, 1995)
- Karin Knorr-Cetina, *Epistemic Cultures: How the Sciences Make Knowledge* (Harvard, 1999)

Barbara Entwisle, Katherine Faust, Ronald Rindfuss, and Toshika Kaneda, "Networks and Contexts: Variation in the Structure of Social Ties," *AJS* 112, 5: 1495-1533

Alix Rule, Jean-Phillipe Cointet, and Peter Bearman, "Lexical Shifts, Substantive Changes, and Continuity in State of the Union Discourse, 1790–2014," *Proceedings of the National Academy of Science*, Aug 2015

Rajesh Ranganath, Dan Jurafsky, and Daniel A. McFarland, "Detecting Friendly, Flirtatious, Awkward, and Assertive Speech in Speed-Dates." *Computer Speech and Language* 27: 89-115

Rawlings, Craig M., Daniel A. McFarland, Linus P. Dahlander, and Daniel J. Wang, "Streams of Thought: How Ties Form and Influence Flows among New Faculty," *Social Forces* 93: 1687-1722

P. DiMaggio, M. Nag, and D. Blei, "Exploiting Affinities Between Topic Modeling and the Sociological Perspective on Culture: Application to Newspaper Coverage of U.S. Government Arts Funding," *Poetics* 41: 570-606

Daniel A. McFarland, Daniel Ramage, Jason Chuang, Jeffrey Heer, Christopher D. Manning, and Daniel Jurafsky, "Differentiating Language Usage Through Topic Models," *Poetics* 41: 607-25

Daniel A. McFarland, Dan Jurafsky, and Craig Rawlings, "Making the Connection: Social Bonding in Courtship Situations," *AJS* 118: 1596-1649

Week 12 (4/13) Diffusion Processes

Read: 1) Damon Centola and Michael Macy, "Complex Contagions and the Weakness of Long Ties," *American Journal of Sociology* 113: 702-34

2) N. A. Christakis and J. H. Fowler, "The Spread of Obesity in a Large Network," *New England Journal of Medicine* 357: 370-79

3) Matthew J. Salganik, Peter Sheridan Dodds, and Duncan J. Watts, "Experimental Study of Inequality and Unpredictability in an Artificial Cultural Market," *Science* 311 (2006): 854-856

Lots of work on diffusion:

James Coleman, Elihu Katz, and Herbert Menzel, *Medical Innovation: A Diffusion Study* James Coleman, Elihu Katz and H. Menzel, "The Diffusion of an Innovation Among Physicians," *Sociometry* 20:253-70

Ronald S. Burt, "Cohesion Versus Structural Equivalence as a Basis for Network Subgroups," in Ronald Burt and M. Minor (eds.), *Applied Network Analysis: A Methodological Introduction*, pp. 262-82

Noah Friedkin, "Structural Bases of Interpersonal Influence in Groups," *ASR* 58:862-72

C. Clayton Childress and Noah E. Friedkin, "Cultural Reception and Production: The Social Construction of Meaning in Book Clubs," *ASR* 77: 45-68

Noah E. Friedkin, *A Structural Theory of Social Influence* (Cambridge, 1998)

Everett M. Rogers, *Diffusion of Innovations*, 5th edition

David Strang and John W. Meyer, "Institutional Conditions for Diffusion," *Theory and Society* 22:487-511

D. Strang and M. Macy, "In Search of Excellence: Fads, Success Stories, and Adaptive Emulation," *AJS* 107:147-82

Peter V. Marsden and Noah Friedkin, "Network Studies of Social Influence," *Sociological Methods and Research* 22:127-51

Gary Alan Fine, "Folklore Diffusion through Interactive Social Networks: Conduits in a Preadolescent Community," in his *Manufacturing Tales: Sex and Money in Contemporary Legends* (Tennessee, 1992)

J. M. Cohen, "Peer Influence on College Aspirations," *ASR* 48: 728-34

Thomas W. Valente, *Network Models of the Diffusion of Innovations* (Hampton, 1995)

Thomas W. Valente and Rebecca L. Davis, "Accelerating the Diffusion of Innovations Using Opinion Leaders," *Annals of the American Academy of the Political and Social Sciences* 566:55-67

Myong-Hun Chang and Joseph E. Harrington, Jr., "Discovery and Diffusion of Knowledge in an Endogenous Social Network," *AJS* 110: 937-76

Craig Rawlings and Daniel A. McFarland, "The Ties that Influence: How Social Networks Channel Faculty Grant Productivity." *Social Science Research* xx: xx-xx

Gerald F. Davis and H. R. Greve, "Corporate Elite Networks and Governance Changes in the 1980s," *AJS* 103: 1-37
 Ka-Yuet Liu, Marissa King, and Peter S. Bearman, "Social Influence and the Autism Epidemic," *AJS* 115: 1387-434
 [lots of other articles by Bearman and collaborators on autism]
 M. J. Salganik and D. J. Watts, "Leading the Herd Astray: An Experimental Study of Self-fulfilling Prophecies in an Artificial Cultural Market," *Social Psychology Quarterly* 71: 338-55
 Dan J. Wang and Sarah A. Soule, "Social Movement Organizational Collaboration: Networks of Learning and the Diffusion of Protest Tactics, 1960-1995," *AJS* 117: 1674-1722
 Derek A. Kreager and Dana L. Haynie, "Dangerous Liaisons? Dating and Drinking Diffusion in Adolescent Peer Networks," *ASR* 76:737-63
 Damon Centola, "The Spread of Behavior in an Online Social Network Experiment," *Science* (2010): 1194-7
 Centola, Damon, Robb Willer, and Michael Macy, "The Emperor's Dilemma: A Computational Model of Self-Enforcing Norms," *AJS* 110: 1009-40

Epidemiology specifically:

Samuel Friedman et al., "Sociometric Risk Networks and Risk for HIV Infection," *American Journal of Public Health* 87, 8: 1289-96
 Martina Morris, "Epidemiology and Social Networks," *Sociological Methods and Research* 22:99-126 [see other Morris work as well]
 James Moody, "The Importance of Relationship Timing for STD Diffusion: Indirect Connectivity and STD Infection Risk," *Social Forces* 81:25-56
 TJ Yamanis, JC Fisher, JW Moody, and LJ Kajula, "Young Men's Social Network Characteristics and Associations with Sexual Partnership Concurrency in Tanzania," *AIDS and Behavior* 20: 1244-55
 Rothenberg et al., "Choosing a Centrality Measure: Epidemiological Correlates in the Colorado Springs Study of Social Networks," *Social Networks* 17:273-97
 Benjamin Cornwell, Edward O. Laumann, "Network Position and Sexual Dysfunction: Implications of Partner Betweenness for Men," *AJS* 117: 172-208
 M. J. Salganik, D. Fazito, N. Bertoni, A. H. Abdo, M. B. Mello, and F. I. Bastos, "Assessing Network Scale-up Estimates for Groups Most at Risk for HIV/AIDS: Evidence from a Multiple Method Study of Heavy Drug Users in Curitiba, Brazil," *American Journal of Epidemiology* xx: xx-xx

Week 13 (4/20) Networks in Economic and Political Life

Read: 1) John F. Padgett and Paul D. McLean, "Economic Credit in Renaissance Florence," *Journal of Modern History* 83, 1 (March 2011): 1-47

2) Christopher A. Bail, "The Fringe Effect: Civil Society Organizations and the Evolution of Media Discourse about Islam since the September 11th Attacks," *American Sociological Review* 77: 855-79 [or something else TBD]

3) John Levi Martin, *Social Structures*, chapters 6, 7, and 8

Various network approaches to transactions and markets:

John F. Padgett and Paul D. McLean, "Organizational Invention and Elite Transformation: The Birth of Partnership Systems in Renaissance Florence," *AJS* 111:1463-1568
 Paul D. McLean and John F. Padgett, "Was Florence a Perfectly Competitive Market? Transactional Evidence from the Renaissance," *Theory and Society* 26:209-44
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Week 14 (4/27) Concluding Thoughts, Misgivings, New Directions

Read: 1) Gary Robins, *Doing Social Network Research*, chapters 8-10

2) John Levi Martin, *Social Structures*, chapter 9

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