

SOCIAL NETWORKS READING LIST

The citations for all readings (except those from the three books listed below) are available through [RefWorks](#) (username = socnet, password = links). PDFs of required readings are available through RefWorks as attachments.

Book Abbreviations:

- W&F: Wasserman, Stanley and Katherine Faust. 1997. *Social Network Analysis: Methods and Applications*. Cambridge: Cambridge University Press.
- CSW: Carrington, Peter J., John Scott, and Stanley Wasserman (Eds.) *Models and Methods in Social Network*.
- D&F: Degeenne. Alain and Michel Forse, *Introducing Social Networks*.

1) Overview/Introduction [1/14]

Required

- W&F, Chapters 1 & 2
- Barabasi (Skim)
- Breiger, Ronald L. 2004. "The Analysis of Social Networks," Pp. 505-07 in Melissa Hardy and Alan Bryman (Eds.), *Handbook of Data Analysis* London: Sage.
- Bernard, Russell H. 2005. "Review of: *The Development of Social Network Analysis: A Study in the Sociology of Science* by Linton C. Freeman." *Social Networks* 27: 377-384.
- Wellman, Barry. 1988. "Structural Analysis: From Method and Metaphor To Theory and Substance. Pages 19-61 in Wellman and Berkowitz (Eds.) *Social Structures: A Network Approach*. Cambridge: Cambridge University Press.
- Pool, Ithiel De Sola, Manfred Kochen. 1978. "Contacts and influence." *Social Networks* 1: 5-51

Recommended

- Alba, Richard A. 1982. "Taking Stock of Network Analysis: A Decade's Results." *Research in the Sociology of Organizations* 1:39-74
- Bonacich, Phillip. 2004. "The invasion of the Physicists." *Social Networks* 26: 285-288.

- Freeman, Linton C. 1984. "Turning a profit from mathematics: the case of social networks." *Journal of Mathematical Sociology* 10: 343–360.
- Galaskiewicz, Joseph and Stanley Wasserman. 1993. "Social Network Analysis: Concepts, Methodology, and Directions For The 1990s." *Sociological Methods & Research* 22: 3-22.
- Granovetter, Mark G. 1979. "The Theory-Gap in Social Network Analysis." Pp. 501-18 in *Perspectives on Social Network Research*, edited by P. W. Holland and S. Leinhardt. New York: Academic Press
- Hummon, Norman P., Kathleen Carley. 1993. "Social networks as normal science." *Social Networks* 15: 71-106.
- Mizruchi, Mark. S. 1994. "Social network analysis: Recent achievements and current controversies." *Acta Sociologica* 37: 329-343.
- Mayhew, Bruce H. 1980. "Structuralism versus individualism: Part 1, Shadowboxing in the Dark." *Social Forces* 59: 335-375.
- Marsden, Peter V., and Edward O. Laumann. 1984. "Mathematical Ideas in Social Structural Analysis." *Journal of Mathematical Sociology* 10:271-94.
- Moreno, J. L. 1950. "Sociometry in Relation to Other Social Sciences (1937)." *Sociometry* 13: 63-75.
- Rogers, Everett M. 1987. "Progress, Problems, and Prospects for Network Research." *Social Networks* 9:285-310
- Wellman, Barry, and S. D. Berkowitz. 1988. "Introduction: Studying Social Structures." Pp. 1-18 in *Social Structures a Network Approach*, edited by B. Wellman and S. D Berkowitz. Cambridge: Cambridge University Press.
- Wellman, Barry. 1983. "Network Analysis: Some Basic Principles." *Sociological Theory* 1:155-200.
- D&F, Introduction.

2) Graph Theory (& Network Data) [1/21]

Required

- **W&F**, Chapters 3 & 4
- **CSW**, Chapter 12.
- Freeman, Linton "Visualizing Social Networks" *Journal of Social Structure*.
- Krackhardt, David. 1987. "Cognitive Social Structures." *Social Networks* 9: 109–134.

- Peter V. Marsden, "Recent Developments in Network Measurement," in CSW, pp. 8-30.

Recommended

- D&F, Ch. 3.

3) Ego Networks [1/28]

Required

- Burt. *Structural Holes*, Chapters 1 & 2
- **D&F**, Chapter 2.
- Burt, Ronald S. 1990. "Kinds of Relations in American Discussion Networks." in *Structures of Power and Constraint*, Edited By Craig Calhoun, Marshall W Meyer, and W. Richard Scott. . New York: Cambridge University Press.
- Marsden, Peter. 1987. "Core Discussion Networks of Americans" *American Sociological Review* 52: 122-131.
- Burt, Ronald S. 1983. "Range." Pp. 176-194 in *Applied Network Analysis*, edited by Ronald S Burt and Michael J Minor. Beverly Hills: Sage.
- Granovetter, Mark. 1973. "The Strength of Weak Ties." *American Journal of Sociology* 78: 1360-1380.
- Verbrugge, Lois M. 1977. "The Structure of Adult Friendship Choices." *Social Forces* 56:576-597.
- Wellman, Barry, Peter J Carrington, and Alan Hall. 1988. "Networks as Personal Communities." Pp. 130-184 in *Social Structures: A Network Approach*, Edited By Barry Wellman and S. D Berkowitz. Cambridge: Cambridge University Press.

Recommended

- Bailey, Stefanie, and Peter V. Marsden. 1999. "Interpretation and interview context: examining the General Social Survey name generator using cognitive methods." *Social Networks* 21:287-309.
- Bearman, Peter, and Paolo Parigi. 2004. "Cloning Headless Frogs and Other Important Matters: Conversation Topics and Network Structure." *Social Forces* 83:535-557.
- Brewer, Devon D. 1997. "No associative biases in the first name cued recall procedure for eliciting personal networks." *Social Networks* 19:345-353.

- Brown, D. W., and A. M. Konrad. 2001. "Granovetter Was Right: The Importance of Weak Ties to a Contemporary Job Search." *Group & Organization Management* 26:434.
- Burt, Ronald S. 2005. *Brokerage and Closure*. Oxford: Oxford University Press.
- Burt, Ronald S. 1997. "A note on social capital and network content." *Social Networks* 19:355-373.
- Burt, Ronald S. 1987a. "A note on missing network data in the General Social Survey." *Social Networks* 9:63-73.
- Burt, Ronald S. 1987b. "A Note on the General Social Survey's Ersatz Network Density Item." *Social Networks* 9:75-85.
- Burt, Ronald S. 1986. "A Note on Sociometric Order in the General Social Survey Network Data." *Social Networks* 8:149-74.
- Burt, Ronald S. 1984. "Network Items and the General Social Survey." *Social Networks* 6:293-339.
- Burt, Ronald S. 1982. *Toward A Structural Theory of Action*. New York: Academic Press.
- Burt, Ronald S. and M. Guillarte. 1986. "A note on scaling the General Social Survey network data." *Social Networks* 8:387-396.
- Campbell, Karen E., and Barrett A. Lee. 1990. "Gender Differences in Urban Neighboring." *The Sociological Quarterly* 31:495-512.
- Campbell, Karen E., and Barrett A. Lee. 1992. "Sources of Personal Neighbor Networks: Social Integration, Need, or Time?" *Social Forces* 70:1077-1100.
- Campbell, Karen E., and Barrett A. Lee. 1991. "Name generators in surveys of personal networks." *Social Networks* 13:203-221.
- Carley, Kathleen M., David Krackhardt. 1996. "Cognitive inconsistencies and non-symmetric friendship." *Social Networks* 18: 1-27.
- Carter, W. Craig, and Scott L. Feld. 2004. "Principles relating social regard to size and density of personal networks, with applications to stigma." *Social Networks* 26:323-329.
- Cross, Rob, Stephen P. Borgatti and Andrew Parker. 2001. "Beyond answers: dimensions of the advice network." *Social Networks* 23: 215-235.
- Coser, Ruth Laub. 1975. "The Complexity of Roles as a Seedbed of Individual Autonomy." Pp. 237-263 in *The Idea of Social Structure*, edited by Lewis A Coser. New York: Harcourt.

- DeSoto, C. B. 1960. "Learning a social structure." *Journal of Abnormal and Social Psychology* 60: 417-421.
- Deng, Zhong, and Phillip Bonacich. 1991. "Some effects of urbanism on black social networks." *Social Networks* 13:35-50.
- Goldstein, Joshua R, and John Robert Warren. 2000. "Socioeconomic Reach and Heterogeneity in the Extended Family: Contours and Consequences." *Social Science Research* 29:382-404.
- Fararo, Thomas J. 1983. "Biased networks and the strength of weak ties." *Social Networks* 5: 1-11.
- Fararo, Thomas J. and John Skvoretz. 1987. "Unification research programs: integrating two structural theories." *American Journal of Sociology* 92: 1183-1209.
- Friedkin, Noah. E. 1990. "A Guttman Scale for the Strength of an Interpersonal Tie." *Social Networks* 12:239-52
- Fischer, Claude S. 1982. "What do we mean by 'friend'? An inductive study of social networks." *Social Networks* 3: 287-306.
- Granovetter, Mark. 1983. "The Strength of Weak Ties: A Network Theory Revisited." *Sociological Theory* 1: 201-233.
- Ibarra, Herminia. 1992. "Sex Differences in Network Structure and Access in an Advertising Firm." *Administrative Science Quarterly* 37:422-447.
- Ibarra, Herminia. 1995. "Race, Opportunity, and Diversity of Social Circles in Managerial Networks." *Academy of Management Journal* 38:673-703.
- Louch, Hugh. 2000. "Personal network integration: transitivity and homophily in strong-tie relations." *Social Networks* 22:45-64.
- McCarty, Christopher, Peter D. Killworth, and James Rennell. 2007. "Impact of methods for reducing respondent burden on personal network structural measures." *Social Networks* 29:300-315.
- Marin, Alexandra. 2004. "Are respondents more likely to list alters with certain characteristics?: Implications for name generator data." *Social Networks* 26:289-307.
- Marsden, Peter V. 2003. "Interviewer effects in measuring network size using a single name generator." *Social Networks* 25:1-16.
- Marsden, Peter V. 1988. "Homogeneity in Confiding Relations." *Social Networks* 10: 57-76.

- Mouw, Ted. 2003. "Social Capital and Finding a Job: Do Contacts Matter?" *American Sociological Review* 68:868-898.
- Newman, Mark E. J. 2003. "Ego-centered networks and the ripple effect." *Social Networks* 25: 83-95.
- Petroczi, A., T. Nepusz, and F. Bacsó. 2006. "Measuring tie-strength in virtual social networks." *Connections* 27:39-52.
- Straits, Bruce C. 1996. "Ego-Net Diversity: Same- and Cross-Sex Coworker Ties." *Social Networks* 18:29-45.
- Straits, Bruce C. 2000. "Ego's important discussants or significant people: an experiment in varying the wording of personal network name generators." *Social Networks* 22:123-140.
- Yakubovich, Valery. 2005. "Weak ties, information, and influence: How workers find jobs in a local Russian labor market." *American Sociological Review* 70:408-421.
- Verbrugge, Lois M. 1979. "Multiplexity in Adult Friendships." *Social Forces* 57: 1286-1309.

4) Centrality [2/4]

Required

- **W&F**, Chapter 5.
- **CSW**, Chapter 4.
- Bonacich, Phillip. 1987. Power and Centrality: A Family of Measures." *American Journal of Sociology* 92:1170-1182. (Skim)
- Bonacich, Phillip, Annie Cody Holdren, Michael Johnston. 2004. "Hyper-edges and multidimensional centrality." *Social Networks* 26: 189-203.
- Borgatti, Stephen P. 2005. "Centrality and network flow." *Social Networks* 27: 55-71.
- Bell, D. C., J. S. Atkinson, and J. W. Carlson. 1999. "Centrality Measures for Disease Transmission Networks." *Social Networks* 21:1-21.
- Friedkin, Noah. E. 1991. "Theoretical Foundations for Centrality Measures." *American Journal of Sociology* 96:1478-504.
- Freeman, Linton C. 1979. "Centrality in Social Networks: Conceptual Clarification." *Social Networks* 1: 215-239

Recommended

- Bavelas, Alex. 1950. "Communication Patterns in Task Oriented Groups." *Journal of the Acoustical Society of America* 22:271-82.
- Beauchamp, Murray A. 1965. "An Improved Index of Centrality." *Behavioral Science* 10:161-63
- Bolland, J. M. 1988. "Sorting Out Centrality: An Analysis of the Performance of Four Centrality Models in Real and Simulated Networks." *Social Networks* 10:233-53.
- Bonacich, Phillip. 1972. "Techniques for analyzing overlapping memberships." Pp. 176–185 in Herbert L. Costner (Ed.) *Sociological Methodology*. San Francisco: Jossey-Bass.
- Bonacich, Phillip. 1991. "Simultaneous group and individual centralities." *Social Networks* 13: 155–168.
- Bonacich, Phillip. 2007. "Some unique properties of eigenvector centrality." *Social Networks* 29: 555-564.
- Bonacich, Phillip, Amalya Oliver and Tom A. B. Snijders. 1998. "Controlling for size in centrality scores." *Social Networks* 20: 135-141.
- Bonacich, Phillip and Paulette Lloyd. 2001. "Eigenvector-like measures of centrality for asymmetric relations." *Social Networks* 23: 191-201.
- Borgatti, Stephen P., Kathleen M. Carley and David Krackhardt. 2006. "On the robustness of centrality measures under conditions of imperfect data." *Social Networks* 28: 124-136.
- Borgatti, Stephen P. and Martin G. Everett. 2006. "A Graph-theoretic perspective on centrality." *Social Networks* 28: 466-484.
- Brandes, Ulrik. 2008. "On variants of shortest-path betweenness centrality and their generic computation." *Social Networks* 30: 136-145.
- Costenbader, Elizabeth and Thomas W. Valente. 2003. "The stability of centrality measures when networks are sampled." *Social Networks* 25: 283-307.
- Doreian, Patrick. 1986. "Measuring Relative Standing in Small Groups and Bounded Social Networks." *Social Psychology Quarterly* 49: 247-259.
- Estrada, Ernesto, Desmond J. Higham and Naomichi Hatano. 2009. "Communicability betweenness in complex networks." *Physica A: Statistical Mechanics and its Applications* 388: 764-774.
- Faust, Katherine. 1997. "Centrality in affiliation networks." *Social Networks* 19: 157-191.

- Freeman, Linton C. 1977. "A Set of Measures of Centrality Based on Betweenness." *Sociometry* 40: 35-41.
- Freeman, Linton C. 1980. "The Gatekeeper, Pair-Dependency and Structural Centrality." *Quality and Quantity* 14:585-92.
- Freeman, Linton C., Stephen P. Borgatti and Douglas R. White. 1991. "Centrality in valued graphs: A measure of betweenness based on network flow." *Social Networks* 13: 141-154.
- Freeman, Linton C., Douglas Roeder, and Robert R. Mulholland. 1980. "Centrality in Social Networks: II. Experimental Results." *Social Networks* 2:119-41
- Friedkin, Noah E. 1982. "Information Flow through Strong and Weak Ties in Intraorganizational Social Networks." *Social Networks* 3:273-85
- Gould, Roger V. 1987. "Measures of betweenness in non-symmetric networks." *Social Networks* 9: 277-282.
- Katz, L. 1953. "A new index derived from sociometric data analysis." *Psychometrika* 18: 39-43.
- Leavitt, H. J. 1951. "Some effects of certain communication patterns on group performance." *Journal of Abnormal and Social Psychology* 46: 38-50.
- Marsden, Peter V. 2002. "Egocentric and sociocentric measures of network centrality." *Social Networks* 24: 407-422.
- Marsden, Peter V. 1983. "Restricted Access in Networks and Models of Power." *American Journal of Sociology* 88: 686-717.
- Mizruchi, Mark S., Peter Mariolis, Michael Schwartz and Beth Mintz. 1986. "Techniques for disaggregating centrality scores in social networks." Pp. 26-48 in Nancy B. Tuma, Editor, *Sociological Methodology*. San Francisco, CA: Jossey-Bass.
- Newman, Mark E. J. 2005. "A measure of betweenness centrality based on random walks." *Social Networks* 27: 39-54.
- Ruhnau, B. 2000. "Eigenvector-centrality - a node-centrality?" *Social networks* 22: 357-365.
- Sade, D. S. 1989. "Sociometrics of macaca mulatta III: N-path centrality in grooming networks." *Social Networks* 11 :273-292.
- Stephenson, Karen, and Marvin Zelen. 1989. "Rethinking Centrality: Methods and Examples." *Social Networks* 11:1-37.

- Tutzauer, Frank. 2007. "Entropy as a measure of centrality in networks characterized by path-transfer flow." *Social Networks* 29: 249-265.
- Valente, Thomas W. and Robert K. Foreman. 1998. "Integration and radiality: Measuring the extent of an individual's connectedness and reachability in a network." *Social Networks* 20: 89-105.
- White, Douglas R. and Stephen P. Borgatti. 1994. "Betweenness centrality measures for directed graphs." *Social Networks* 16: 335-346.

5) Cliques/Clustering/Cohesion [2/11]

Required

- **W&F**, Chapter 7.
- Alba, R. D. 1973. "A graph-theoretic definition of a sociometric clique." *Journal of Mathematical Sociology* 3:113-126.
- Borgatti, Stephen P. and Martin G. Everett. 1999. "Models of Core/Periphery Structures." *Social Networks* 21: 375-395.
- Freeman, Linton 1992 "The Sociological Concept of Group: An Empirical Test of Two Models." *American Journal of Sociology* 98(1):152-166.
- Moody, James and Douglas R. White. 2003. "Structural Cohesion and Embeddedness: A Hierarchical Conception of Social Groups." *American Sociological Review* 68:103-127
- Moody, James. 2004. "The Structure of a Social Scientific Collaboration Network." *American Sociological Review* 69:213-238.
- Newman, Mark E. J. 2006. "Modularity and Community Structure in Networks." *Proceedings of the National Academy of Sciences* 103, 8577-8582.
- McPherson, M., L. Smith-Lovin, et al. (2001). "Birds of a feather: Homophily in social networks." *Annual Review of Sociology* 27(1): 415-444.

Recommended

- Alba Richard and Charles Kadushin. 1976. "The intersection of social circles." *Sociological Methods and Research* 5: 77-102.
- Alba Richard and Gwen Moore. 1978. "Elite Social Circles." *Sociological Methods and Research* 7: 167-188.
- Bavelas, Alex. 1948. "A Mathematical Model for Group Structure." *Human Organization* 7:16-30

- Bock, R. D., and S. Z. Husain. 1952. "Factors of the tele: a preliminary report." *Sociometry* 15:1952.
- Bonacich, Phillip. 1972. "Factoring and weighting approaches to status scores and clique identification." *Journal of Mathematical Sociology* 2: 113-120.
- Borgatti, Stephen P., Martin G. Everett and P. R. Shirey. 1990. "Ls Sets, Lambda Sets, and Other Cohesive Subsets." *Social Networks* 12, 337-358.
- Davis, George B., and Kathleen M. Carley. 2008. "Clearing the FOG: Fuzzy, overlapping groups for social networks." *Social Networks* 30:201-212.
- Doreian, Patrick. 1969. "A Note on the Detection of Cliques in Valued Graphs." *Sociometry* 32:237-242.
- Doreian, Patrick. 1980. "On the evolution of group and network structure." *Social Networks* 2: 235-252.
- Everett, Martin G. and Stephen P. Borgatti. 1999. "Peripheries of Cohesive Subgroups." *Social Networks* 21: 397-407.
- Falzon, Lucia. 2000. "Determining groups from the clique structure in large social networks." *Social Networks* 22:159-172.
- Fershtman, Meir. 1997. "Cohesive group detection in a social network by the segregation matrix index." *Social Networks* 19:193-207.
- Foster, B. L. and S. B. Seidman. 1983. "A strategy for the dissection and analysis of social structures." *Journal of Social and Biological Structures* 6:49-64.
- Frank, Kenneth A. 1995. "Identifying cohesive subgroups." *Social Networks* 17: 27-56.
- Frank, Kenneth A. 1996. "Mapping interactions within and between cohesive subgroups." *Social Networks* 18: 93-119.
- Friedkin, Noah E. 1984. "Structural Cohesion and Equivalence Explanations of Social Homogeneity." *Sociological Methods Research* 12:235-261.
- Freeman, L.C., 1996. Cliques, Galois lattices, and the structure of human social groups. *Social Networks* 18: 173-187.
- Freeman, Linton C. 1980. "Q-Analysis and the structure of friendship networks." *International Journal of Man-Machine Studies* 12: 367-378.

- Garcia Muniz, Ana Salome, and Carmen Ramos Carvajal. 2006. "Core/periphery structure models: An alternative methodological proposal." *Social Networks* 28:442-448.
- Harary, F., and I. C. Ross. 1957. "A procedure for clique detection using the group matrix." *Sociometry* 20:205-215.
- Hammer, Muriel. 1980. "Social access and the clustering of personal connections." *Social Networks* 2: 305-325.
- Holme, P. 2005. "Core-periphery organization of complex networks." *Physical Review E* 72:46111.
- Hubbell, Charles H. 1965. "An Input-Output Approach to Clique Identification." *Sociometry* 28: 377-399.
- Lawler, E. L. 1973. "Cutsets and partitions of hypergraphs." *Networks* 3:275-285.
- Luccio, F., and M. Sami. 1969. "On the Decomposition of Networks in Minimally Interconnected Subnetworks." *Circuits and Systems, IEEE Transactions on [legacy, pre-1988]* 16:184-188.
- Luce, D. 1950. "Connectivity and generalized cliques in sociometric group structure." *Psychometrika* 15: 169-190.
- Luce, D. and A. Perry. 1949. "A method of matrix analysis of group structure." *Psychometrika* 14: 95-116.
- MacRae, D. 1960. "Direct factor analysis of sociometric data." *Sociometry* 23:360-71.
- Mokken, R., 1979. "Cliques, clubs and clans." *Quality and Quantity* 13: 161-173.
- Moody, James. 2001. "Peer influence Groups: Identifying Dense Clusters in Large Networks." *Social Networks* 23: 261-283.
- Mizruchi, Mark S. 1993. "Cohesion, equivalence, and similarity of behavior: a theoretical and empirical assessment." *Social Networks* 15:275-307.
- Mullins, Nicholas C., Lowell L. Hargens, Pamela K. Hecht, and Edward L. Kick. 1977. "The Group Structure of Cocitation Clusters: A Comparative Study." *American Sociological Review* 42:552-562.
- Newman, Mark E. J. 2001. "The Structure of Scientific Collaboration Networks." *Proceedings of The National Academy of Sciences* 98: 404-449.
- Peay, E. R. 1974. "Hierarchical clique structures." *Sociometry* 37:54-65.

- Peay, E. R. 1975a. "Grouping by cliques for directed relationships." *Psychometrika* 40:573-574.
- Peay, E. R. 1975b. "Nonmetric grouping: Clusters and cliques." *Psychometrika* 40:297-313.
- Peay, E. R. 1976. "A note concerning the connectivity of social networks." *Journal of Mathematical Sociology* 4:319-321.
- Peay, E. R. 1980. "Connectedness in a general model for valued networks." *Social Networks* 2:385-410.
- Radicchi, Filippo, Claudio Castellano, Federico Cecconi, Vittorio Loreto, Domenico Parisi and Giorgio Parisi. 2004. "Defining and Identifying Communities in Networks." *Proceedings of the National Academy of Sciences* 101: 2658-2663.
- Reitz, K. P. 1988. "Social groups in a monastery." *Social Networks* 10: 343-357.
- Sailer, L. D., and S. J. C. Gaulin. 1984. "Proximity, Sociality, and Observation: The Definition of Social Groups." *American Anthropologist* 86:91-98.
- Seidman, Stephen B. 1981. "Structures induced by collections of subsets: A hypergraph approach." *Mathematical Social Sciences* 1:381-396.
- Seidman, Stephen B. 1983a. "Network structure and minimum degree." *Social Networks* 5:269-287.
- Seidman, Stephen B. 1983b. "LS sets and cohesive subsets of graphs and hypergraphs." *Social Networks* 5:92-96.
- Seidman, Stephen B. 1983c. "Internal cohesion of LS sets in graphs." *Social Networks* 5: 97-107.
- Seidman, Stephen B. and Foster, B., 1978. A graph-theoretic generalization of the clique concept." *Journal of Mathematical Sociology* 6, pp. 139-154.
- Tutzauer, Frank. 1985. "Toward a theory of disintegration in communication networks." *Social Networks* 7: 263-285.
- White, Douglas R., Jason Owen-Smith, James Moody, and Walter W. Powell. 2004. "Networks, Fields and Organizations: Micro-Dynamics, Scale and Cohesive Embeddings." *Computational & Mathematical Organization Theory* 10:95-117.
- White, Douglas R., and Frank Harary. 2001. "The Cohesiveness of Blocks in Social Networks: Node Connectivity and Conditional Density." *Sociological Methodology* 31: 305-359.

- Winship, C. 1977. "A distance model for sociometric structure." *Journal of Mathematical Sociology* 5:21-39.
- Wright, Benjamin, and Mary Sue Evitts. 1961. "Direct Factor Analysis in Sociometry." *Sociometry* 24:82-98.
- Yee, L. 1980. "A fuzzy set analysis of sociometric structure." *Journal of Mathematical Sociology* 7: 159-180.

6) Affiliation (Two-Mode) Networks [2/18]

Required

- **W&F**, Chapter 8
- Bearman, Peter S. and Kevin D. Everett. 1993. "The structure of social protest, 1961-1983." *Social Networks* 15: 171-200.
- Borgatti, Stephen P. and Martin G. Everett. 1997. "Network analysis of 2-mode data." *Social Networks* 19: 243-269.
- Feld, Scott L. 1981. "The Focused Organization of Social Ties." *American Journal of Sociology* 86:1015-1035.
- Breiger, Ronald L. 1974. "The Duality of Persons and Groups." *Social Forces* 53:181-190.
- Faust, Katherine. 1997. "Centrality in affiliation networks." *Social Networks* 19: 157-191.
- Latapy, Matthieu, Clémence Magnien, Nathalie Del Vecchio. 2008. "Basic notions for the analysis of large two-mode networks." *Social Networks* 30: 31-48.

Recommended

- Agneessens, F., H. Roose and H. Waeye. 2002. "Choices of theatre events: p* models for affiliation networks with attributes." *Metodoloski Zvezki* 1: 419-439.
- Doreian, Patrick, Vladimir Batagelj, Anuska Ferligoj. 2004. "Generalized blockmodeling of two-mode network data." *Social Networks* 26: 29-53.
- Fararo, Thomas J. and Patrick Doreian. 1984. "Tripartite structural analysis: Generalizing the Breiger-Wilson formalism." *Social Networks* 6: 141-175.
- Faust, Katherine, Karin E. Willert, David D. Rowlee, John Skvoretz. 2002. "Scaling and statistical models for affiliation networks: patterns of

- participation among Soviet politicians during the Brezhnev era." *Social Networks* 24: 231-259.
- Feld, Scott L. 1982. "Social Structural Determinants of Similarity among Associates." *American Sociological Review* 47:797-801.
 - Field, Sam, Kenneth A. Frank, Kathryn Schiller, Catherine Riegle-Crumb and Chandra Muller. 2006. "Identifying positions from affiliation networks: Preserving the duality of people and events." *Social Networks* 28: 97-123.
 - Roberts Jr., John M.. 2000. "Correspondence analysis of two-mode network data." *Social Networks* 22: 65-72.
 - Wang, Peng, Ken Sharpe, Garry L. Robins and Philippa E. Pattison. 2009. "Exponential random graph (p*) models for affiliation networks." *Social Networks* 31: 12-25.
 - Wilson, Thomas P. 1982. "Relational networks: An extension of sociometric concepts." *Social Networks* 4: 105-116.

7) Structural Equivalence[2/25]

Required

- **W&F**, Chs. 9, 10, 11.
- Doreian, Patrick, Vladimir Batagelj, and Anuska Ferligoj 2005. "Positional Analyses of Sociometric Data." Chapter 5 Pages 77-97 in CSW.
- Borgatti, Steve and Martin Everett 1992. "Notions of Position in Network Analysis." *Sociological Methodology* 22:1-36.
- Burt, Ronald S. 1976. "Positions in Networks." *Social Forces* 55:93-122.
- Faust, Katherine and Stanley Wasserman. 1992. "Blockmodels: Interpretation and Evaluation." *Social Networks* 14: 5-61.
- White, Harrison C., Scott A. Boorman, and Ronald L Breiger. 1976. "Social Structure From Multiple Networks. I. Blockmodels of Roles and Positions." *American Journal of Sociology* 81:730-780.
- Alderson, Arthur S. and Jason Beckfield. 2004. "Power and Position in the World City System." *American Journal of Sociology* 109: 811-851.

Recommended

- Arabie, Phipps, Scott A. Boorman, and Paul R. Levitt. 1978. "Constructing Blockmodels: How and Why." *Journal of Mathematical Psychology* 17:21-63.

- Batagelj, Vladimir, Anuska Ferligoj and Patrick Doreian. 1992. "Direct and indirect Methods For Structural Equivalence." *Social Networks* 14: 63-90.
- Breiger, Ronald L., Scott A. Boorman, and Phipps Arabie. 1975. "An Algorithm For Clustering Relational Data With Applications To Social Network Analysis and Comparison With Multidimensional Scaling." *Journal of Mathematical Psychology* 12:328-383.
- Breiger, Ronald A. and Philippa E. Pattison. 1978. "The joint role structure of two community elites." *Sociological Methods and Research* 7: 1-21.
- Breiger, Ronald L. 1976. "Career attributes and previous network structure: a blockmodel study of a biomedical research specialty." *American Sociological Review* 41: 117-135.
- Boorman, Scott A. and Harrison C. White, 1976. "Social structure and multiple networks: Part II. Role Structures." *American Journal of Sociology* 81: 1384-1446.
- Borgatti, Stephen P. and Martin G. Everett. 1989. "The class of all regular equivalences: Algebraic structure and computation." *Social Networks* 11: 65-88.
- Burt, Ronald S. 1990. "Detecting Role Equivalence." *Social Networks* 12: 83-97.
- Burt, Ronald S. 1977. "Positions in Multiple Network Systems, Part One: A General Conception of Stratification and Prestige in A System of Actors Cast As A Social Topology." *Social Forces* 56:106-131.
- Burt, Ronald S. 1986. "A Cautionary Note." *Social Networks* 8: 205-211.
- Doreian, Patrick. 1988. "Equivalence in a Social Network." *Journal of Mathematical Sociology* 13: 243-282.
- Doreian, Patrick and Thomas J. Fararo. 1985. "Structural Equivalence in A Journal Network." *Journal of the American Society for Information Science* 36: 28-37.
- Lorrain, Francois and Harrison White. 1971. "Structural Equivalence of individuals in Social Networks." *Journal of Mathematical Sociology* 1:49-80.
- Mahutga, Matthew C. 2006 "The Persistence of Structural inequality? A Network Analysis of international Trade, 1965-2000" *Social Forces* 84 (4): 1863-1889.
- Sailer, Lee D. 1978. "Structural Equivalence: Meaning and Definition, Computation and Application." *Social Networks* 1: 73-90.

- White, Harrison C., Scott A. Boorman and Ronald L. Breiger. 1976. *Social Structure From Multiple Networks. Blockmodels of Roles and Positions.* *American Journal of Sociology* 81: 730-779.
- Smith, David A., and Douglas R. White. 1992. "Structure and Dynamics of *The Global Economy: Network Analysis of international Trade 1965-1980.*" *Social Forces* 70:857-893.
- Snyder, David, and Edward L Kick. 1979. "Structural Position in The World System and Economic Growth, 1955-1970: A Multiple-Network Analysis of Transnational interactions." *American Journal of Sociology* 84:1096-1126.
- White, Douglas R. and K. P. Reitz. 1983. "Graph and semigroup homomorphism on networks and relations." *Social Networks* 5: 143-234.
- Winship, Christopher and Michael Mandel. 1984. "Roles and Positions: A Critique and Extension of the Blockmodeling Approach." *Sociological Methodology* 14: 314-344.

8) Local Structure (Dyads, Triads)[3/4]

Required

- **W&F**, Chapters 6, 13 & 14 .
- Burt, Ronald S. 1980. "Models of Network Structure." *Annual Review of Sociology* 6: 79-141.
- Davis, James A. 1963. "Structural Balance, Mechanical Solidarity, and interpersonal Relations." *American Journal of Sociology* 68:444-462 .
- Chase, Ivan D. 1980. "Social Processes and Hierarchy Formation in Small Groups: A Comparative Perspective." *American Sociological Review* 45:905-924.
- Faust, Katherine. 2007. "Very Local Structure in Social Networks." *Sociological Methodology* 37:1: 209-256.
- Bearman, Peter S., James Moody and Katherine Stovel. 2004. "Chains of Affection: The Structure of Adolescent Romantic and Sexual Networks." *American Journal of Sociology* 110: 44-91.
- Gould, R. & Fernandez, R. 1989. Structures of mediation: A formal approach to brokerage in transaction networks. *Sociological Methodology*. 19: 89-126.
- Schelling, Thomas. C. 1978. *Micromotives and macrobehavior*. New York, Norton.

Recommended

- Davis, James A. 1967. "Clustering and Structural Balance in Graphs." *Human Relations* 20:181-187.
- Davis, James A. and Samuel Leinhardt. 1972. "The structure of positive interpersonal relations in small groups." Pp. 218–251 in J. Berger, M. Zeldith Jr. and B. Anderson (Eds.), *Sociological Theories in Progress vol. 2*, Houghton Mifflin, Boston (1972),.
- Doreian, Patrick and Andrej Mrvar. 2009. "Partitioning signed social networks." *Social Networks* 31: 1-11.
- Faust, Katherine. 2008. "Triadic Configurations in Limited Choice Sociometric Networks: Empirical and Theoretical Results." *Social Networks* 30: 273-282.
- Faust, K., and J. Skvoretz. 2002. "Comparing Networks Across Space and Time, Size and Species." *Sociological Methodology* 32:267-299.
- Frank, O., and F. Harary. 1982. "Cluster inference by using transitivity indices in empirical graphs." *Journal of the American Statistical Association* 77: 835-840.
- Hallinan, Maureen T. 1974. "Structural model of sentiment relations." *American Journal of Sociology* 80: 364–378.
- Hallinan, Maureen T., and Edwin E. Hutchins. 1980. "Structural Effects on Dyadic Change." *Social Forces* 59:225-245.
- Hallinan, Maureen T. and W. N. Kubitschek. 1990. "The formation of intransitive triads." *Social Forces* 69: 505-519.
- Heider, Fritz. 1946. "Attitudes and Cognitive Organization," *Psychological Review* 52:358-374
- Cartwright, Dorwin and Frank Harary. 1956. "Structural Balance," *Psychological Review* 63:277-293
- Holland, Paul W. and Samuel Leinhardt . 1970. "A Method for Detecting Structure in Sociometric Data." *American Journal of Sociology* 70: 492–513 (skim).
- Holland, Paul W. and Samuel Leinhardt. 1975. P. W. "Local Structure in Social Networks." *Sociological Methodology* 7: 1–45.
- Holland, Paul W. and Samuel Leinhardt . 1978. "An Omnibus Test for Social Structure Using Triads." *Sociological Methods and Research* 7: 227–256.
- Holland, Paul W. and Samuel Leinhardt . 1981. "An exponential family of probability distributions for directed graphs." *Journal of the American Statistical Association* 76: 33–50.

- Hummon, Norman P. and Patrick Doreian. 2003. "Some Dynamics of Social Balance Processes: Bringing Heider Back into Balance Theory." *Social Networks* 25: 17-49.
- Johnsen, Eugene C. 1985. "Network macrostructure models for the Davis–Leinhardt set of empirical sociomatrices." *Social Networks* 7: 203–224.
- Johnsen, Eugene C. 1986. "Structure and process: Agreement models for friendship formation." *Social Networks* 8: 257-306.
- Johnsen, Eugene C. 1989. "Agreement-friendship processes related to empirical social macrostructures." Pp. 239–279 in M. Kochen (Ed.) , *The Small World*, New Jersey: Ablex, Norwood.
- Karlberg, Martin. 1997. "Testing transitivity in graphs." *Social Networks* 19: 325-344.
- Karlberg, Martin. 1999. "Testing Transitivity in Digraphs." *Sociological Methodology* 29:225-251.
- McDonald, John W., Peter W.F. Smith, and Jonathan J. Forster. 2007. "Markov chain Monte Carlo exact inference for social networks." *Social Networks* 29:127-136.
- Mandel, M. 2000. "Measuring tendency towards mutuality in a social network." *Social Networks* 22:285-298.
- Moody, James. 1998. "Matrix Methods for Calculating the Triad Census." *Social Networks* 20: 291-299.
- Roberts, John M. 2000. "Simple methods for simulating sociomatrices with given marginal totals." *Social Networks* 22:273-283.
- Snijders, Tom A. B. 1991. "Enumeration and simulation methods for 0-1 matrices with given marginals." *Psychometrika* 56: 397–417.
- Wasserman, Stanley S. 1977. "Random Directed Graph Distributions and The Triad Census in Social Networks." *Journal of Mathematical Sociology* 5: 61–86.

9) Longitudinal Analyses of Personal Networks and Dyadic Connections [3/18]

Required

- Burt, Ronald S. 2000. "Decay Functions." *Social Networks* 22:1-28.
- Bidart, Claire, and Daniel Lavenu. 2005. "Evolutions of Personal Networks and Life Events." *Social Networks* 27:359-376.

- Hallinan, Maureen T. 1978. "The process of friendship formation." *Social Networks* 1: 193-210.
- Kossinets, Gueorgi, and Duncan J. Watts. 2006. "Empirical Analysis of an Evolving Social Network." *Science* 311:88-90.
- Martin, John Levi and King-To Yeung. 2006. "Persistence of Close Personal Ties Over A 12-Year Period." *Social Networks* 28: 331-362.
- Morgan, David L, Margaret B Neal, and Paula Carde. 1997. "The stability of core and peripheral networks over time." *Social Networks* 19:9-25.
- Wellman, Barry, Renita Yuk-Lin Wong, David Tindall, and Nancy Nazer. 1997. "A Decade of Network Change: Turnover, Persistence and Stability in Personal Communities." *Social Networks* 19:27-50.
- Morgan, David L, Margaret B Neal, and Paula Carde. 1997. "The stability of core and peripheral networks over time." *Social Networks* 19:9-25.

Recommended

- Aartsen, Marja J., Theo van Tilburg, Carolien H. M. Smits, and Kees C. P. M. Knipscheer. 2004. "A Longitudinal Study of the Impact of Physical and Cognitive Decline on the Personal Network in Old Age." *Journal of Social and Personal Relationships* 21:249-266.
- Ahuja, G. 2000. "Collaboration Networks, Structural Holes, and Innovation: A Longitudinal Study." *Administrative Science Quarterly* 45:425-455.
- Antal, T., P. L. Krapivsky, and S. Redner. 2006. "Social balance on networks: The dynamics of friendship and enmity." *Physica D: Nonlinear Phenomena* 224:130-136.
- Antal, T., P. L. Krapivsky, and S. Redner. 2005. "Dynamics of social balance on networks." *Physical Review E* 72:36121.
- Bunt, Van De, Gerhard G Marijtje, A. J. Van Duijn, and Tom A. B Snijders. 1999. "Friendship Networks Through Time: An Actor-Oriented Dynamic Statistical Network Model." *Computational & Mathematical Organization Theory* 5:167-192. Leik, R. K., and M. A. Chalkley. 1997. "On the stability of network relations under stress." *Social Networks* 19:63-74.
- Burt, Ronald S. 2002. "Bridge Decay." *Social Networks* 24: 333-363.
- Burt, R. S. 2001. "Attachment, decay, and social network." *Journal of Organizational Behavior* 22:619-643.
- Bignami-Van Assche, Simona. 2005. "Network stability in longitudinal data: A case study from rural Malawi." *Social Networks* 27: 231-247.

- Degenne, Alain, and Marie-Odile Lebeaux. 2005. "The dynamics of personal networks at the time of entry into adult life." *Social Networks* 27:337-358.
- Feld, Scott L., J. Jill Sutor, and Jordana Gartner Hoegh. 2007. "Describing Changes in Personal Networks over Time." *Field Methods* 19:218-236.
- Freeman, Linton C. 1992. "Filling in the blanks: A theory of cognitive categories and the structure of social affiliation." *Social Psychology Quarterly* 55: 118-127.
- Galaskiewicz, Joseph and Stanley Wasserman. 1981. "A Dynamic Study of Change in a Regional Corporate Network." *American Sociological Review* 46:475-84.
- Hallinan, Maureen T. and W.N. Kubitschek. 1988. "The effects of individual and structural characteristics on transitivity in social networks." *Social Psychology Quarterly* 51: 81-92.
- Hallinan, Maureen T. and Richard A. Williams. 1987. "The stability of students' interracial friendships." *American Sociological Review* 52: 653-664.
- Hammer, Muriel. 1979. "Predictability of social connections over time." *Social Networks* 2:165-180.
- Hammer, Muriel. 1985. "Implications of behavioral and cognitive reciprocity in social network data." *Social Networks* 7: 189-201\
- Hays, R. B. 1984. "The development and maintenance of friendship." *Journal of Social and Personal Relationships* 1: 75-98.
- Katz, L. and C. Proctor. 1959. "The concept of configuration of interpersonal relations in a group as a time-dependent stochastic process." *Psychometrika* 24: 317-327.
- Klein Ikkink, Karen, and Theo van Tilburg. 1999. "Broken ties: reciprocity and other factors affecting the termination of older adults' relationships." *Social Networks* 21:131-146.
- Lazarsfeld, Paul F, and Robert K Merton. 1954. "Friendship as a Social Process: A Substantive and Methodological Analysis." Pp. 18-66 in *Freedom and Control in Modern Society*, Edited By M. Berger, T. Abel, and C. Page. New York: Van Nostrand.
- Marmaros, David and Bruce Sacerdote. 2006. "How do Friendships Form?" *Quarterly Journal of Economics* 121: 79-119.
- Perry, B. L. 2006. "Understanding Social Network Disruption: The Case of Youth in Foster Care." *Social Problems* 53:371-391.

- Powell, Walter W., Douglas R. White, Kenneth W. Koput, and Jason Owen-Smith. 2005. "Network Dynamics and Field Evolution: The Growth of Interorganizational Collaboration in the Life Sciences." *The American Journal of Sociology* 110:1132-1205
- Runger, G., and S. Wasserman. 1980. "Longitudinal analysis of friendship networks." *Social Networks* 2:143-154.
- Salzinger, S. 1982. "The ties that bind: the effect of clustering on dyadic relationships." *Social Networks* 4: 117-145.
- Sørensen, Aage B. and Maureen T. Hallinan. 1976. "A stochastic model for change in group structure." *Social Science Research* 5: 43-61.
- Sutor, Jill, and Shirley Keeton. 1997. "Once A Friend, Always A Friend? Effects of Homophily On Women's Support Networks Across A Decade." *Social Networks* 19:51-62.
- Sutor, J. Jill, Barry Wellman, and David L Morgan. 1997. "It's About Time: How, Why, and When Networks Change." *Social Networks* 19:1-7.
- van Duijn, Marijtje J. A., Evelien P. H. Zeggelink, Mark Huisman, Frans N. Stokman and Frans W. Wasseur. 2003. "Evolution of Sociology Freshmen into A Friendship Network." *Journal Of Mathematical Sociology* 27: 153-191.
- Weinreb, A. A. 2003. "Change and instability: A multilevel analysis of AIDS-related conversational networks among Malawian women." *Demographic Research* 1:S1-S12.
- Weiss, K., and R. Gaud. 2004. "Formation and Transformation of Relational Networks During an Antarctic Winter-Over." *Journal of Applied Social Psychology* 34:1563-1586.

10) Statistical Models [3/25]

Required

- **W&F**, Chapter 15.
- **CSW**, Chapter 8.
- Koehly and Pattison, Chapter 9 in CSW.
- Robins, G., P. Pattison, Y. Kalish, and D. Lusher. 2007. "An introduction to exponential random graph (p*) models for social networks." *Social Networks* 29:173-191.

- Robins, Gary, Tom A. B. Snijders, P. Wang, Mark Handcock, and Phillipa Pattison. 2007. "Recent developments in exponential random graph (p*) models for social networks." *Social Networks* 29:192-215.
- Krackhardt, D. 1988. "Predicting with networks: Nonparametric multiple regression analysis of dyadic data." *Social Networks* 10:359-381.
- Agneessens, F., H. Roose, and H. Waege. 2004. "Choices of theatre events: p* models for affiliation networks with attributes." *Metodoloski zvezki* 1:419-439. [[available here](#)]
- Hoff, P. D., and M. D. Ward. 2004. "Modeling Dependencies in International Relations Networks." *Political Analysis* 12:160-175.

Recommended

- Anderson, Carolyn J., Stanley Wasserman and Bradley Crouch. 1999. "p* Primer: Logit Models For Social Networks." *Social Networks* 21: 37-66.
- Butts, Carter T. 2007. "Permutation Models for Relational Data." *Sociological Methodology* 37:257-281.
- Duijn, M. A. J., T. A. B. Snijders, and B. J. H. Zijlstra. 2004. "p2: a random effects model with covariates for directed graphs." *Statistica Neerlandica* 58:234-254.
- Frank, O. 1991. "Statistical analysis of change in networks." *Statistica Neerlandica* 45: 283-293.
- Frank, O., and D. Strauss. 1986. "Markov graphs." *Journal of the American Statistical Association* 81: 832-842.
- Koehly, Laura M., Steven M. Goodreau, and Martina Morris. "Exponential Family Models For Sampled and Census Network Data." *Sociological Methodology* 34: 241-271.
- Krackardt, David. 1987. "QAP partialling as a test of spuriousness." *Social Networks* 9:171-186.
- Goodreau, S. M. 2007. "Advances in exponential random graph (p*) models applied to a large social network." *Social Networks* 29:231-248.
- Hoff, P. D. 2007. "Multiplicative latent factor models for description and prediction of social networks." *Computational and Mathematical Organization Theory*.
- Hunter, D. R. 2007. "Curved exponential family models for social networks." *Social Networks* 29:216-230.

- Huisman, M., and M. A. J. van Duijn. 2004. "Software for statistical analysis of social networks." Pp. 17-20 in *Proceedings of the Sixth International Conference on Logic and Methodology* [[available here](#)]
- Huisman, M., and M. A. J. Van Duijn. 2003. "StOCNET: Software for the statistical analysis of social networks." *Connections* 25:7-26 [[available here](#)]
- Park, Juyong and Mark E. J. Newman. 2004. "Statistical mechanics of networks." *Physical Review E* 70:66117 (1-17).
- Park, Juyong and Mark E. J. Newman. 2004. "Solution of the 2-star model of a network." Arxiv preprint cond-mat/0405457.
- Robins, G., P. Pattison, and S. Wasserman. 1999. "Logit models and logistic regressions for social networks: III. Valued relations." *Psychometrika* 64:371-394.
- Robins, G., P. Pattison, and J. Woolcock. 2004. "Missing data in networks: exponential random graph (p*) models for networks with non-respondents." *Social Networks* 26:257-283.
- Snijders, Tom A. B. 1996. "Stochastic actor-oriented models for network change." *Journal of Mathematical Sociology* 21: 149-172.
- Snijders, Tom A. B., Phillipa E. Pattison, Gary L. Robins, and Mark S. Handcock. 2006. "New specifications for exponential random graph models." *Sociological Methodology* 36:99-153.
- Snijders, Tom A. B. 2001. "The Statistical Evaluation of Social Network Dynamics." *Sociological Methodology* 31:361-395.
- Strauss, D. and Ikeda, M. 1990. "Pseudolikelihood estimation for social networks." *Journal of the American Statistical Association* 85, 204-212.
- Wasserman, S., and P. Pattison. 1996. "Logit models and logistic regressions for social networks: I. An introduction to Markov graphs and p*." *Psychometrika* 61:401-425.

11) Small World Networks [4/1]

Required

- Watts, Duncan J. and Steven H. Strogatz, "Collective Dynamics of 'Small-World' Networks." 1998. *Nature* 393: 440-42.
- Newman, Mark E. J. 2000. "Models of the small world: a review." *Journal of Statistical Physics* 101: 819-841.

- Travers, Jeffrey and Stanley Milgram. 1969. "An Experimental Study of the Small World Problem An Experimental Study of the Small World Problem." *Sociometry* 32: 425-443.
- Davis, Gerald F., Mina Yoo and Wayne E. Baker. 2003. "The Small World of the American Corporate Elite, 1982-2001." *Strategic Organization* 1: 301-326.
- Uzzi, Brian and Jarrett Spiro. 2005. "Collaboration and Creativity: The Small World Problem." *American Journal of Sociology* 111: 447-504.
- Watts, Duncan J., Peter Sheridan Dodds, and Mark E. J. Newman. 2002. "Identity and Search in Social Networks." *Science* 296: 1302-1305.
- Newman, Mark E.J., Steven H. Strogatz, and Duncan J. Watts, "Random graphs with arbitrary degree distributions and their applications." 2001. *Physical Review E* 64 1-17, esp. pp. 1-2, 4-5, 11-16.

Recommended

- **D&F**, Ch. 1
- Baum, Joel A. C., Andrew V. Shipilov and Tim J. Rowley. 2003. "Where do small worlds come from?" *Industrial and Corporate Change* 12: 697-725.
- Milgram, Stanley. 1970. "The Small World Problem." *Psychology Today* 22: 61-67.
- Adamic, Lada and Eytan Adar. 2005. "How to search a social network." *Social Networks* 27: 187-203.
- Watts, Duncan J. "Networks, Dynamics, and the Small-World Phenomenon" *American Journal of Sociology* 1999: 493-527.
- White, Douglas R. and Michael Houseman. 2002. "The navigability of strong ties: Small worlds, tie strength, and network topology." *Complexity* 8: 72-81.

12) Diffusion [4/8]

Required

- Burt, Ronald S. 1987. "Social contagion and innovation: cohesion versus structural equivalence." *American Journal of Sociology* 92: 1287-1335.
- Davis, Gerald F. 1991. "Agents without Principles? The Spread of The Poison Pill Through the Intercorporate Network." *Administrative Science Quarterly* 36: 583 - 613.
- Coleman, James, Elihu Katz and Herbert Menzel. 1957. "The Diffusion of an Innovation Among Physicians." *Sociometry* 20: 253-270.

- Hedström, Peter, Rickard Sandell and Charlotta Stern. 2000. "Mesolevel Networks and the Diffusion of Social Movements: The Case of the Swedish Social Democratic Party." *American Journal of Sociology* 106: 145-172.
- Katz, Elihu. 1957. "The Two-Step Flow of Communication: An Up-To-Date Report on A Hypothesis." *Public Opinion Quarterly* 21: 61-78.
- Valente, Thomas W. 2005. "Network Models and Methods for Studying the Diffusion of Innovations." In *Models and Methods in Social Network Analysis* Cambridge University Press.
- Moody, James. 2002. "The Importance of Relationship Timing for Diffusion." *Social Forces* 81: 25-56.
- Wejnert, Barbara. 2002. "Integrating Models of Diffusion of Innovations: A Conceptual Framework." *Annual Review of Sociology* 28: 297-326.

Recommended

- Burt, Ronald S. 1980. "innovation as a structural interest: rethinking the impact of network position on innovation adoption." *Social Networks* 2: 327-355.
- Davis, Gerald F. and Henrich R. Greve "Corporate Elite Networks and Governance Changes in the 1980s." *American Journal of Sociology*, 103:1-37.
- Dodds, P.S. and D.J. Watts, "A generalized model of social and biological contagion," *Journal of Theoretical Biology* 232 (2005) 587-604.
- Duncan J. Watts, "A simple model of global cascades on random networks." *Proceedings of the National Academy of Sciences* 99: 5766-5771.
- Granovetter, Mark and Roland Soong. 1983. "Threshold models of diffusion and collective behavior." *Journal of Mathematical Sociology* 9: 165-179.
- Rogers, Everett M. 1983. *Diffusion of innovations*. New York: Free Press.
- Katz, Elihu and Paul F. Lazarsfeld. 1955. *Personal influence: The Part Played By People in The Flow of Mass Communications*. New York: Free Press.
- Friedkin, Noah E. and Karen S. Cook. 1990. "Peer Group influence." *Sociological Methods and Research* 19: 122-143.
- Fisher, Claude S. 1978. "Urban-To-Rural Previous Diffusion of Opinions in Contemporary America." *American Journal of Sociology* 84: 151-159.
- Friedkin, Noah E. 1982. "information Flow Through Strong and Weak Ties in intraorganizational Social Networks." *Social Networks* 3: 273-285.

- Baerveldt, Chris and Tom A. B. Snijders. 1994. "Influences on and from the segmentation of networks: hypotheses and tests." *Social Networks* 16: 213-232.
- Galaskiewicz, Joseph and Ronald S. Burt. 1991. "Interorganization Contagion in Corporate Philanthropy." *Administrative Science Quarterly* 36: 88-105.
- Michaelson, Alaina G. 1993. "The development of a scientific specialty as diffusion through social relations: the case of role analysis." *Social Networks* 15: 217-236.
- Morris, Martina. 1993. "Epidemiology and Social Networks: Modeling Structured Diffusion." *Sociological Methods and Research* 22: 99-126.
- Nyblom, Jukka, Steve Borgatti, Juha Roslakka and Mikko A. Salo. 2003. "Statistical analysis of network data—an application to diffusion of innovation." *Social Networks* 25: 175-195.
- Rothenberg, Richard B., John J. Potterat, Donald E. Woodhouse and others. 1998. "Social Network Dynamics and HIV Transmission." *AIDS* 12: 1529-1536.
- Ryan, Bryce and Neal C. Gross. 1943. "Diffusion of Hybrid Seed Corn in Two Iowa Communities." *Rural Sociology* 8: 15-24.
- Strang, David. 1991. "Adding Social Structure to Diffusion Models: An Event History Framework." *Sociological Methods & Research* 19: 324-353.
- Strang, David and Sarah A. Soule. 1998. "Diffusion in Organizations and Social Movements: From Hybrid Corn to Poison Pills." *Annual Review of Sociology* 24: 265-290.
- Valente, Thomas W. 1996. "Social network thresholds in the diffusion of innovations." *Social Networks* 18: 69-89.

13) Network Science [4/15]

Required

- Barabasi, A. L. and R. Albert. 1999. "Emergence of Scaling in Random Networks." *Science* 286: 509-512.
- Barabasi, A. L., R. Albert, Et Al. 2000. "Scale-Free Characteristics of Random Networks: The Topology of The World-Wide Web." *Physica A* 281: 69-77.
- Newman, Mark E. J., Steven Strogatz and Duncan J. Watts. 2001. "Random Graphs with Arbitrary Degree Distributions and Their Applications." *Phys. Rev E*: 64.

- Newman, Mark E. J. 2005. "The Structure and Function of Complex Networks." *Siam Review* 45:167-256.**
- Goh, Kwang-Il, Eulsik Oh, Hawoong Jeong, Byungnam Kahng and Doochul Kim. "Classification of Scale-Free Networks." *Proceedings of the National Academy of Sciences* 99: 12583-12588.
- Onnela, J.-P., J. Saramäki, et al. 2007. "Structure and tie strengths in mobile communication networks." *Proceedings of the National Academy of Sciences* 104: 7332-7336.
- Palla, G., A. L. Barabasi, et al. 2007. "Quantifying social group evolution." *Nature* 446: 664-667.
- Sheridan, Peter Dodds, Roby Muhamad and Duncan J. Watts. 2003. "An Experimental Study of Search in Global Social Networks." *Science* 301: 827-829.

Recommended

- Barabasi, A. L. and E. Bonabeau 2003. "Scale-Free Networks." *Scientific American* 288: 50-59.
- Boccaletti, S., V. Latora, Y. Moreno, M. Chavez and D.-U. Hwang. 2006. "Complex networks: Structure and dynamics." *Physics Reports* 424: 175-308.
- Girvan, M. and M. E. J. Newman. 2002. "Community Structure in Social and Biological Networks." *Proceedings of the National Academy of Sciences* 99: 7821-7826.
- Guimerà, R., S. Mossa, A. Turtshi, L. A. N. Amaral and Kenneth W. Wachter. "The Worldwide Air Transportation Network: Anomalous Centrality, Community Structure, and Cities' Global Roles." 2005. *Proceedings of the National Academy of Sciences* 102: 7794-7799.
- Newman, Mark E. J. and Juyong Park. 2003. "Why social networks are different from other types of networks." *Phys. Rev. E* 68.

14) Concluding Issues (Network Effects) [4/22]

- Bearman, Peter S. 1991. "Desertion as Localism: Army Unit Solidarity and Group Norms in the U.S. Civil War." *Social Forces* 70: 321-342.
- Cohen, Jere M. 1977. "Sources of Peer Group Homogeneity." *Sociology of Education* 50: 227-241.

- Christakis, Nicholas A. and Fowler, James H. 2007. "The spread of obesity in a large social network over 32 years." *New England Journal of Medicine* 4: 370-379.
- Fernandez, Roberto M. and Doug McAdam. 1988. "Social Networks and Social Movements: Multiorganizational Fields and Recruitment to Mississippi Freedom Summer." *Sociological Forum* 357-382
- McFarland, Daniel, and Heili Pals. 2005. "Motives and Contexts of Identity Change: A Case for Network Effects." *Social Psychology Quarterly* 68:289-315.
- Smilde, David. 2005. "A Qualitative Comparative Analysis of Conversion to Venezuelan Evangelicalism: How Networks Matter." *American Journal of Sociology* 111: 757-796.
- Wejnert, Barbara. 2005. "Diffusion, Development, and Democracy, 1800–1999." *American Sociological Review* 70: 53-81.

15) Appendix: Methodological Issues about Network Data

Required

- Wasserman & Faust (Chapter 2),
- Marsden, Peter V. 1990. "Network Data and Measurement." *Annual Review of Sociology* 16: 435-463.
- Peter V. Marsden, "Recent Developments in Network Measurement," in CSW, 8-30.
- Marsden, P. V. and K. E. Campbell (1984). "Measuring Tie Strength." *Social Forces* 63: 482-501.
- Marsden, P. V. and J. S. Hurlbert (1987). "Small Networks and Selectivity Bias in The Analysis of Survey Network Data." *Social Networks* 9: 333-349.
- Mcpherson, J. Miller. 1982. "Hypernetwork Sampling: Duality and Differentiation Among Voluntary Organizations." *Social Networks* 3: 225-249..

Recommended

- Burt, Ronald S. and Don Ronchi. 1994. "Measuring a large network quickly." *Social Networks* 16: 91-135.
- Galaskiewicz, Joseph. 1991. " Estimating point centrality using different network sampling techniques." *Social Networks* 13: 347-386.

- Killworth, Bernard H.P. and L. Sailer. 1982. "Informant accuracy in social previous network data." *Social Science Research* 11: 30–66.
- adams, jimi and James Moody. 2007. "To Tell The Truth: Measuring Concordance in Multiply Reported Network Data." *Social Networks* 29: 44-58.
- Bernard, H. Russell, Peter D. Killworth and Lee Sailer. 1980. "informant Accuracy in Social Network Data IV: A Comparison of Clique-Level Structure in Behavioral and Cognitive Network Data." *Social Networks* 2: 191–218.