

**Sociology 380/Political Science 310: Networks and Social Structure**  
**Fall 2017**  
**Thursday 1:40-4:30pm**  
**ETC 205**

**LIVE SYLLABUS (DRAFT 2017-08-31)**

**Contact Information:**

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**Course Description:**

Social network dynamics influence phenomena from communities, neighborhoods, families, work life, scientific and technical innovation, terrorism, trade, alliances, and wars. Network theories of social structure view actors as inherently interdependent, and examine how social structure emerges from regularities in this interdependence. This course focuses on the theoretical foundations of structural network dynamics and identifies key analytical questions and research strategies for studying network formation, organization, and development. Attention is paid to both interactionist and structuralist traditions in network analysis, and includes a focus on the core principles of balance and centrality; connectivity and clustering; power and hierarchy; and social structure writ large. Substantive topics include social mobility and stratification, group organization and mobilization, patterns of creativity and innovation, resource distributions, decision-making, the organization of movement and belief systems, conflict and cooperation, and strategic interaction. This course couples theoretical and substantive themes with methodological applications. Approximately one-third of course time is spent on the methodology of collecting, analyzing, and interpreting social network data.

**Course Materials:**

The following books can be purchased from the Reed College Bookstore:

*Required*

- Christakis, Nicholas A., and James H. Fowler. 2009. *Connected: The Surprising Power of Our Social Networks and How They Shape Our Lives*. 1st ed. New York: Little, Brown and Co.

*Optional*

- De Nooy, Wouter. 2011. *Exploratory Social Network Analysis with Pajek*. 2nd ed. Structural Analysis in the Social Sciences, 34. Cambridge: Cambridge University Press. (Free online) <https://doi.org/10.1017/CBO9780511996368>.
- Kolaczyk, Eric D., and Gábor Csárdi. *Statistical Analysis of Network Data with R*. Vol. 65. Use R! New York, NY: Springer New York, 2014. (Free online) <http://link.springer.com/10.1007/978-1-4939-0983-4>
- Stack, Carol B. 2008. *All Our Kin: Strategies For Survival In A Black Community*. Basic Books.

*Good books to keep in mind for further information (on reserve):*

- Degenne, Alain, and Michel Forse. *Introducing Social Networks*. London: SAGE Publications, Ltd, 1999. doi:[10.4135/9781849209373](https://doi.org/10.4135/9781849209373) or <http://ebookcentral.proquest.com/lib/reed/detail.action?docID=343950>.

- Scott, John. *Social Network Analysis: A Handbook*. 2nd ed. London ; Thousands Oaks, Calif.: SAGE Publications, 2000. *We will use a newer version of one chapter in this course.*
- Wasserman, Stanley, and Katherine Faust. 1994. *Social Network Analysis: Methods and Applications*. Cambridge, UK: Cambridge University Press.

These readings have been placed on reserve at the library (books) or e-reserve (chapters and articles) on the course moodle. In addition, the articles are available through journal databases available online from the library, hyperlinked when possible on the moodle. Students should bring a copy of the readings to class each day.

### **Software (SOC 380):**

In this class you will learn how to use network software to utilize empirical network data. We will use two software packages to visualize our networks and calculate basic statistics on them. One is free for download and the other is available for personal use for a nominal fee (\$40). Both run only in a Windows environment, or through a windows emulator program on a Mac. I have found the following to be useful regarding installing UCInet on Mac machines through the Wine application: <https://sites.google.com/site/ucinetsoftware/downloads>

You should try to have the software on your own machine if it can be configured to do so. In addition, the software will be available at the PPW research facility on Reed campus, which you may apply to gain access. More information about the PPW can be found here: <http://academic.reed.edu/ppw/>. Lastly, Pajek and UCInet can be accessed from ETC 205, IRC 3, and the library machines.

#### *UCInet*

Individual students pay \$40 for a permanent copy of this program. This can be done at the following link: <https://sites.google.com/site/ucinetsoftware/home>. Choose the download option to avoid paying an extremely hefty shipping fee. The download page is at: <https://sites.google.com/site/ucinetsoftware/downloads>.

That said, the full program can be downloaded and used **free** for 90 days, which is a good chunk of the semester. If you wait to download it closer to the time we start using it, you will draw out this timeline for which you could use the software for free for course purposes. [Whether you buy or just try it, you'll download the same program. Buying it just gets you the registration code that you'll need at the end of the 90 days.]

#### *Pajek*

This program is free, and can be downloaded at the following URL: <http://mrvar.fdv.uni-lj.si/pajek/>.

### **Software (POL 310):**

We will use R through RStudio, drawing from multiple software libraries to visualize our networks and calculate basic statistics on them. They can run on Windows, Mac, or Linux environments if you wish to use your own machine; for this class, we will be using Reed's RStudio server, <http://rstudio.reed.edu> — you may wish to log in prior to the class to get comfortable with the environment. You should run through [R, RStudio, RMarkdown, and SNA packages in R](#) before the second class.

### **Assignments:**

#### *Class participation and Memos*

Class participation matters in this course a great deal. We expect that everyone will arrive to class with questions, topics, and issues to discuss. If you do not participate, it will be impossible for you to receive an A in this class, and very difficult to receive a B. If you are having trouble with this, come see me and we will brainstorm about ways to make it work. *You cannot miss more than two classes and pass the course without documentation and approval from us.*

[Students who use laptops and tablets for notetaking learn less and do less well on assessments](#), and [the mere presence of your smartphone reduces your available cognitive capacity](#); consequently, conventional laptops and cell phones are not permitted in class, although tablet devices and convertible laptops may be used without a keyboard for the sole purpose of bringing the readings during the lecture and discussion part of the course. Laptops are, of course, permitted during the lab portion, but are not required, since the classroom is fully equipped with desktops.

In addition to your class participation, starting the second week, you will submit a one page memo each week in reaction to the assigned readings. The memo is to be EMAILED to Alex and Kjersten with the subject "NSS Memo" by 10p the day before conference (MS Word format). The memos are not meant to be summaries of the articles. Instead they are intended to help you organize your ideas and to help situate the readings as a collective and in terms of the course thus far. Your memo should respond to the readings thoughtfully, and should include the following elements: a) a "wow" statement about an idea or ideas that you appreciated; b) some puzzles regarding ideas that you did not fully understand and/or a thoughtful critique of one or two particular arguments that you did not find persuasive and c) some unanswered questions or thoughts for discussion that arose while you were doing the reading. Please remember to address the collective assignment of readings by not focusing solely on just one reading or a subset throughout the entire memo. Also, we do not want a summary of each article - this is a synthesis memo. We will read them and return them to you at the start of class on Wednesday - no need to bring a hard copy to class. They will not be given extensive comments and we will use an internal check, check plus/check minus grading scheme. Late memos will not be accepted.

#### *Leading Discussion*

Along with a classmate or two, you will be responsible for leading discussion on two class occasions during the semester. Leaders help shape the discussion by formulating 2-3 questions to forward to the class in advance of our discussion, and by taking an active role in facilitating the discussion during conference. In your preparations for leading class, meet before class with your partner(s), discuss the readings, and formulate questions to share with the class. Post these questions to the class moodle by 10pm then night before class. We will join you in leading the class that day.

### *Class Lab Assignments*

Every week we will use 1 of our roughly 3 hours to work with empirical network data. You will complete a series of lab assignments during lab and after class. Many, if not all, of these lab assignments will be handed in to be graded and for comments and feedback from us.

### *Term Paper*

Lastly, during the course of the class you will write a final research paper of approximately 13-15 pages, double spaced, 12 point font ( about 3250–3750 words). This paper should explore some aspect of an empirical social network. This term paper is open-ended and may incorporate network data that you collect, or you may choose to use already existing network data (such as our own, or that of others available for download).

You are free to choose and analyze any network data set that is of interest to you. In the past, students have analyzed such topics as music collaborations, relationships among bloggers, Reed networks (student study, committee membership relations, etc.), organization interlocks, citation analysis, and a host of other interesting topics. Regardless of the topic you choose, your project should be motivated by a substantive or theoretical research question, and based on a general sociological understanding of network theory and analysis as presented in the class readings and laboratory sessions.

This paper will count for a significant part of your final grade, so it should be given a great deal of thought and effort. Since there is no final exam in the course, it is primarily through the term paper that you must provide evidence that you have learned and can apply critical concepts from the required course readings and labs to a new research question and dataset. The writing process will go in stages. You will submit a brief proposal summarizing your intended topic around the middle of the term, and we will have an opportunity to discuss our topics in class. We will devote some of our lab time to work on your individual projects near the end of the semester. Everyone will give an oral presentation of their paper and findings in the last week of class, and the paper will be due at the conclusion of the semester. You *must* complete the term paper assignment to pass this course.

### **Some Final Notes:**

You will be expected to strike a healthy balance in conference between arguing your own position on these issues, listening to others, and helping the class to collectively explore how the sociologists you read defend their approaches. Each member of the class is expected to abide by the Reed Honor principle, according to which you must both take responsibility on yourself to think about how your actions and words affect others, and share responsibility with your peers for enabling the class as a whole to achieve its highest intellectual aims without alienating or marginalizing anyone. Your regular attendance and active participation in conference are necessary for the class to work. Themes and approaches will shift considerably from one week to the next, and in-class discussions will be necessary for you and your colleagues to demonstrate to each other how they fit together.

## Reading List

### **Week 1 – Introduction to the Course**

August 31

- Christakis, Nicholas A., and James H. Fowler. 2009. *Connected: The Surprising Power of Our Social Networks and How They Shape Our Lives*. 1st ed. New York: Little, Brown and Co. *Chapters 3-4, 6, and 8-9. (Purchased Book)*
- Marin, Alexandra, and Barry Wellman. "[Social Network Analysis: An Introduction](#)." In *The SAGE Handbook of Social Network Analysis*, edited by John Scott and Peter J. Carrington, 11–25. SAGE, 2011.

*Optional good introductions*

- Barry Wellman, "Structural analysis: from method and metaphor to theory and substance," pp. 19-61 in Wellman, Barry and S. D. Berkowitz, eds. 1988. *Social Structures: A Network Approach*. Cambridge, UK: Cambridge University Press. (e-reserves linked on moodle)
- Pool, Ithiel De Sola, Manfred Kochen. 1978. "Contacts and influence." *Social Networks 1*: 5-51 (through page 25) - *early writing about social networks*
- Scott, John. 2000. *Social Network Analysis: A Handbook*. London: Sage. *Chapters 2-4 for history of social networks (On reserve)*
- Emirbayer, M. 1997. "Manifesto for Relational Sociology." *American Journal of Sociology*103:281-317. (JSTOR) - *another classic*
- Wasserman and Faust. *Social Network Analysis. Pages 3-22 and 55-59 in Chapter 1. (On reserve)*
- Barabasi, Albert Laszlo. 2003. *Linked: How Everything Is Connected to Everything Else and What It Means*. New York: Plume.
- Blau, Melinda. "The Ascendance of Consequential Strangers." In *Consequential Strangers: The Power of People Who Don't Seem to Matter-- but Really Do*, 1st ed., xv–xxi, 1-27. New York: WWNorton & Co, 2009.

### **Week 2 - Origins of Network Theory**

September 7

- Simmel, Georg. 1908. "The Problem of Sociology." In *On Individuality and Social Forms: Selected Writings*, 23–35. University of Chicago Press.
- ———. 1950. "The Triad." In *The Sociology of Georg Simmel*, 145–69. Simon and Schuster.
- ———. 1955. "The Web of Group-Affiliations." In *Conflict and the Web of Group-Affiliations*, 138–67. Free Press.
- Lynn, Freda, and Joel Podolny. 2011. "Homophily and the Focused Organization of Ties." *The Oxford Handbook of Analytical Sociology*, January. doi:[10.1093/oxfordhb/9780199215362.013.22](https://doi.org/10.1093/oxfordhb/9780199215362.013.22).
- Victor, Jennifer Nicoll, Alexander H. Montgomery, and Mark Lubell. 2017. "Introduction." *The Oxford Handbook of Political Networks*, August. doi:[10.1093/oxfordhb/9780190228217.013.1](https://doi.org/10.1093/oxfordhb/9780190228217.013.1). *Pages 3-12, 22-29.*

Lab

- De Nooy et al. *Exploratory Social Network Analysis with Pajek*. Chapter 1. (Purchased Book).

*Optional and/or for term paper purposes*

- Bott, Elizabeth. 1955. "Urban Families: Conjugal Roles and Social Networks", *Human Relations* 8: 345-384. (e-reserves linked on moodle).
- Nadel, Siegfried. F. 1957. *The Theory of Social Structure*. London: Cohen and West. Chapters 1 and 6, or pages 1-19, 125-152.
- Wellman, Barry. 1979. "The Community Question: The Intimate Networks of East Yorkers." *American Journal of Sociology* Vol. 84, No. 5 (Mar., 1979), pp. 1201-1231 <http://www.jstor.org/stable/2778222>
- Feld, Scott. 1981. "The Focused Organization of Social Ties." *American Journal of Sociology* , Vol. 86, No. 5 (Mar., 1981), pp. 1015-1035 <http://www.jstor.org/stable/2778746>

**Week 3: Local Networks**

*September 14*

- Marsden, Peter V. "Core Discussion Networks of Americans." *American Sociological Review* 52, no. 1 (February 1987): 122. [doi:10.2307/2095397](https://doi.org/10.2307/2095397).
- Brashears, Matthew E. "Small Networks and High Isolation? A Reexamination of American Discussion Networks." *Social Networks* 33, no. 4 (October 1, 2011): 331–41. [doi:10.1016/j.socnet.2011.10.003](https://doi.org/10.1016/j.socnet.2011.10.003). *Follow-up to Marsden*.
- Bearman, P., and P. Parigi. "Cloning Headless Frogs and Other Important Matters: Conversation Topics and Network Structure." *Social Forces* 83, no. 2 (December 1, 2004): 535–57. [doi:10.1353/sof.2005.0001](https://doi.org/10.1353/sof.2005.0001).
- DiPrete, Thomas A., Andrew Gelman, Tyler McCormick, Julien Teitler, and Tian Zheng. "Segregation in Social Networks Based on Acquaintanceship and Trust." *American Journal of Sociology* 116, no. 4 (January 2011): 1234–83. doi:[10.1086/659100](https://doi.org/10.1086/659100). *Long appendix, skip formulas*.

*Lab*

- De Nooy et al. *Exploratory Social Network Analysis with Pajek*. Chapter 2

*Optional/Background Reading on Topic*

- Wellman and Wortley. 1990. "Different Strokes from Different Folks." *American Journal of Sociology* , Vol. 96, No. 3 (Nov., 1990), pp. 558-588 <http://www.jstor.org/stable/2781064>
- Theodore Caplow, "Christmas Gifts and Kin Networks," *American Sociological Review* 47:383-92
- Moore, G. 1990. "Structural Determinants of Men's and Women's Personal Networks." *American Sociological Review* 55:726-35. (JSTOR)
- Claude Fischer. *To Dwell Among Friends*. Chapters 1-3, 7-10, 12-16.

*Further reading on the isolation-discussion networks debate*

- McPherson, Miller, Lynn Smith-Lovin, and Matthew Brashears. 2006. "Social Isolation in America: Changes in Core Discussion Networks over Two Decades". *American Sociological Review* 71: 353-375. <http://www.jstor.org/stable/30038995>
- Fischer, CS (2009) "Comment: The 2004 GSS Finding of Shrunken Social Networks: An Artifact?" Claude S. Fischer *American Sociological Review*
- McPherson, Smith-Lovin, Brashears (2009) "Reply: Models and Marginals: Using Survey Evidence to Study Social Networks" (*American Sociological Review*)
- Paik, Anthony, and Kenneth Sanchagrin. 2013. "Social Isolation in America: An Artifact." *American Sociological Review* 78 (3): 339–60. doi:10.1177/0003122413482919.

## **Week 4. Centrality**

September 21

- Short discussion of different measures here: <http://www.analytictech.com/networks/centrali.htm>
- Scott, John. "Popularity, Mediation and Exclusion." In *Social Network Analysis*, 4th edition., 96–111. Thousand Oaks, CA: SAGE Publications Ltd, 2017.
- Baker, Wayne E., and Robert R. Faulkner. "The Social Organization of Conspiracy: Illegal Networks in the Heavy Electrical Equipment Industry." *American Sociological Review* 58, no. 6 (December 1993): 837. doi:10.2307/2095954.
- Ehrenberg, Rachel. "Information Flow Can Reveal Dirty Deeds." *Science News*, September 23, 2013. <https://www.sciencenews.org/article/information-flow-can-reveal-dirty-deeds>.
- Krebs, Valdis E. "Mapping Networks of Terrorist Cells." *Connections* 24, no. 3 (2002): 43–52.
- Rossman, Gabriel, Nicole Esparza, and Phillip Bonacich. "I'd Like to Thank the Academy, Team Spillovers, and Network Centrality." *American Sociological Review* 75, no. 1 (February 2010): 31–51. doi:10.1177/0003122409359164. *For this article, try not to worry too much about understanding the full empirical models.*

Lab

- De Nooy et al. *Exploratory Social Network Analysis with Pajek*, Chap. 6. (Purchased Book)

*Additional Readings that Deal with Centrality and its Mechanisms (Optional Background)*

- Wasserman and Faust, Chapter 5.
- Bonacich, Phillip. 1987. "Power and centrality, a family of measures" *The American Journal of Sociology*. 5: 1170-1182. (JSTOR)
- Friedkin, N. E. 1993. "Structural Basis of Interpersonal Influence in Groups: A Longitudinal Case Study." *American Sociological Review* 58:861-72. (JSTOR)
- Friedkin, N. E. 1991. "Theoretical Foundations for Centrality Measures." *American Journal of Sociology* 96:1478-504. (JSTOR)
- Cook, Karen, Richard Emerson, Mary Gillmore, and Toshio Yamagishi. 1983. "The Distribution of Power in Exchange Networks: Theory and Experimental Results" *The American Journal of Sociology*. 89(2): 275-305. (JSTOR)
- Feld, Scott. 1991. "Why your friends have more friends than you do?" *American Journal of Sociology* 96: 1464-1477. (JSTOR)
- Aldersen and Beckfield 2004. "Power and Position in the World City System" *American Journal of Sociology* 109:811-851 (JSTOR)

## **Week 5 - Brokerage and Structural Holes**

September 28

- Granovetter, Mark S. "The Strength of Weak Ties." *American Journal of Sociology* 78, no. 6 (1973): 1360–80.
- Burt, Ronald S. "Structural Holes and Good Ideas." *American Journal of Sociology* 110, no. 2 (2004): 349–399.
- Fernandez, Roberto M., and Roger V. Gould. "A Dilemma of State Power: Brokerage and Influence in the National Health Policy Domain." *American Journal of Sociology* 99, no. 6 (1994): 1455–91.
- Goddard, Stacie E. "Brokering Peace: Networks, Legitimacy, and the Northern Ireland Peace Process." *International Studies Quarterly* 56, no. 3 (September 1, 2012): 501–15. doi:10.1111/j.1468-2478.2012.00737.x.

Lab

- De Nooy et al. Exploratory Social Network Analysis with Pajek, Chapter 7 (Purchased Book)

*Other Readings that Deal with Brokerage and its Mechanisms (Optional Background)*

- Burt, R. 1998. "[The Gender of Social Capital](#)". *Rationality and Society*.
- Burt, R. *Brokerage and Closure: An Introduction to Social Capital* (Oxford University Press, 2005). Chapter 1 and Chapter 3.
- Padgett, John F., and Christopher K. Ansell. 1993. "[Robust Action and the Rise of the Medici, 1400-1434](#)." *American Journal of Sociology* 98: 1259-1319. (JSTOR).
- Blok, Anton. 1974. *The Mafia of a Sicilian village, 1860-1960. A study of violent peasant entrepreneurs*. New York: Harper & Row.
- Gould, Roger. 1989. "Power and Social Structure in Community Elites." *Social Forces* 68: 531-552. (JSTOR)
- Gould, Roger V., and Roberto M. Fernandez. 1989. "Structures of Mediation: A Formal Approach to Brokerage in Transaction Networks." *Sociological Methodology* 19: 89-126. (JSTOR)
- Lee, Nancy Howell (1969) *The search for an abortionist*. University of Chicago Press.
- Granovetter, Mark. (1974) *Getting a job; a study of contacts and careers*. Harvard University Press.
- Brian Uzzi, "The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect," *American Sociological Review* 61:674-9

## **Week 6 – Relations through Associations**

October 5

- Burris, Val. "Interlocking Directorates and Political Cohesion among Corporate Elites." *American Journal of Sociology* 111, no. 1 (2005): 249–283.
- Fernandez, Roberto M., and Doug McAdam. "Social Networks and Social Movements: Multiorganizational Fields and Recruitment to Mississippi Freedom Summer." In *Sociological Forum*, 3:357–382. Springer, 1988.
- Montgomery, Alexander H. "Centrality in Transnational Governance: How Networks of International Institutions Shape Power Processes." In *The New Power Politics: Networks and Transnational Security Governance*, edited by Deborah D Avant and Oliver Westerwinter. Oxford University Press, 2016.



- Wasserman, Stanley, and Katherine Faust. "Social Network Analysis: Methods and Applications." In *Social Network Analysis: Methods and Applications*, 291–307. Cambridge, UK: Cambridge University Press, 1994.

#### Lab

- De Nooy et al. *Exploratory Social Network Analysis with Pajek*, Chapter 5 (Purchased Book).

#### Background Reading on Duality (Optional)

- This is the article that Burris is riffing off of: Mark S. Mizruchi, "[What Do Interlocks Do? An Analysis, Critique, and Assessment of Research on Interlocking Directorates](#)", *Annual Review of Sociology*, Vol. 22, (1996), pp. 271-298.
- Cornwell and Harrison, 2004. "[Union Members and Voluntary Associations](#)" 69: 862.
- Ronald Breiger, "The Duality of Persons and Groups," *Social Forces* 53:181-90. (JSTOR)
- Moody, James. 2004. "The Structure of a Social Science Collaboration Network" *American Sociological Review* 69:213-264. (JSTOR)
- Bearman, Peter S. 1991. "The Social Structure of Suicide." *Sociological Forum* 6: 501-524. (JSTOR)
- Stephen P. Borgatti and Martin Everett, "Network Analysis of 2-Mode Data," *Social Networks* 19:243-69
- Katherine Faust, "Centrality in Affiliation Networks," *Social Networks* 19:157-91
- Georg Simmel, "The Web of Group Affiliations," in his *Conflict and the Web of Group Affiliations* (Free Press, 1955)
- Lots of great work on director interlocks, such as that by Mizruchi: Mizruchi, M.S. & L.B. Stearns. 1988. A Longitudinal Study of the Formation of Interlocking Directorates. *Administrative Science Quarterly* 33: 194-210. (JSTOR).
- McPherson, Miller. 1982. "Hypernetwork Sampling." *Social Networks*. 3(4):225-249.

### **Week 7 – Social Capital**

October 12

Part 1: Social capital as it relates to civil society

- Berman, Sheri. "Civil Society and the Collapse of the Weimar Republic." *World Politics* 49, no. 3 (1997): 401–29.
- Putnam, Robert D. "Bowling Alone: America's Declining Social Capital." *Journal of Democracy* 6, no. 1 (January 1, 1995): 65–78. doi:10.1353/jod.1995.0002.

Part 2: Social capital as it relates to individuals and communities

- Stack, Carol B. *All Our Kin: Strategies For Survival In A Black Community*. Basic Books, 2008. *Chapter 2-4, 6 and 8 (Don't worry, this is a quick read, and for all who have taken Intro Soc, a review). (Purchased Book)*
- Sandra Susan Smith. "[Don't put my name on it': \(Dis\)Trust and Job-Finding Assistance among the Black Urban Poor.](#)" *American Journal of Sociology* 111(1):1-57, 2005. Volume 5, No. 2, 2005.

#### Lab

- In-class discussion of paper project ideas

## Optional

- Small, Mario. *Unanticipated Gains. Chapter 1, pages 51-63 and 76-78 in Chapter 3, Chapter 4-6, 8.*
- Cranford, Cynthia. "Networks of Exploitation: Immigrant Labor and the Restructuring of the Los Angeles Janitorial Industry ." *Social Problems* Vol. 52, No. 3 (August 2005) (pp. 379-397) (JSTOR)
- James S. Coleman, "Social Capital in the Creation of Human Capital," *American Journal of Sociology Supplement* 94 (1988): S95-S120.
- Roberto M. Fernandez, Emilio J. Castilla, and Shyon Baumann, "Social Capital at Work: Networks and Employment at a Phone Center," *American Journal of Sociology* 105:1288-1356
- Wejnert, Barbara. 2005. "Diffusion, Development, and Democracy, 1800–1999." *American Sociological Review* 70: 53-81.
- Smilde, David. 2005. "A Qualitative Comparative Analysis of Conversion to Venezuelan Evangelicalism: How Networks Matter." *American Journal of Sociology* 111: 757-796.

## **Week 8 – Fall break, no class**

## **Week 9 - Connectivity: Small Worlds**

*Note: Don't forget to upload your Paper Proposal and Progress Report by noon on Monday, October 23rd.*

October 26

- Travers, Jeffrey, and Stanley Milgram. "An Experimental Study of the Small World Problem." *Sociometry* 32, no. 4 (December 1969): 425. doi:10.2307/2786545.
- Barabasi, Albert-Laszlo. 2003. *Linked: How Everything is Connected to Everything Else and What it Means for Business, Science, and Everyday Life.* Chapter 3 (pages 25-54).
- Watts, Duncan. "[Network Dynamics and the Small World Problem](#)" *AJS*. (Try to stick with it throughout the mathematics).
- Uzzi, Brian, and Jarrett Spiro. "Collaboration and Creativity: The Small World Problem." *American Journal of Sociology* 111, no. 2 (2005): 447–504. doi:10.1086/432782. (Application of small world dynamics).

Lab

- De Nooy et al. *Exploratory Social Network Analysis with Pajek*, Chapter 13 (Purchased Book).

## *Additional Background Reading (Optional)*

- Fleming, Lee, Charles King, and Adam Juda. "[Small Worlds and Regional Innovation](#)" *Organization Science*. Vol 18. No. 6, pp 938-954.
- Killworth, Peter and HR Bernard. 1978. "The reverse small world problem". *Social Networks* 1:159-92.
- Newmann, M. E. J. 1999. Models of the Small World: A Review. Online: [http://nicomedia.math.upatras.gr/courses/mnets/mat/Newman\\_Models\\_of\\_the\\_SW.pdf](http://nicomedia.math.upatras.gr/courses/mnets/mat/Newman_Models_of_the_SW.pdf)(online access via link).
- Rapoport, A. and W. J. Horvath. 1961. "A Study of a Large Sociogram." *Behavioral Science* 6:279-91.
- Amaral, L.A.N., Scala, A. Berthelemy M, and Stanley H, E. 2000. Classes of small world networks. *Proceedings of the National Academy of Sciences USA*. 97(2): 11149-11152.

- Lee, Nancy Howell. 1969. *The search for an abortionist*. Chicago: University of Chicago Press. Esp. chapters 1, 5, and 8.
- Brudner, Lilyan A., and Douglas R. White. 1997. "Class, Property, and Structural Endogamy: Visualizing Networked Histories." *Theory and Society* 26: 161-208. (JSTOR).
- M. E. J. Newman (2000) Who is the best connected scientist? A study of scientific coauthorship networks. Santa Fe Institute working paper 00-12-064.
- Watts, Duncan J. 1999. *Small Worlds: The Dynamics of Networks between Order and Randomness*. Princeton University Press.
- Pool, I. d. S. and M. Kochen. 1978. "Contacts and Influence." *Social Networks* 1:5-51.

## **Week 10 - Connectivity and Cohesion**

### *November 2*

- Bearman, Peter S., James Moody, and Katherine Stovel. "Chains of Affection: The Structure of Adolescent Romantic and Sexual Networks." *American Journal of Sociology* 110, no. 1 (July 1, 2004): 44–91. doi:10.1086/386272.
- Moody, James. "The Structure of a Social Science Collaboration Network: Disciplinary Cohesion from 1963 to 1999." *American Sociological Review* 69, no. 2 (April 1, 2004): 213–38. doi:10.1177/000312240406900204.
- Morris, Martina, and Mirjam Kretzschmar. "Concurrent Partnerships and the Spread of HIV." *AIDS* 11, no. 5 (1997): 641–48.
- Moody, James, and Douglas R. White. "Structural Cohesion and Embeddedness: A Hierarchical Concept of Social Groups." *American Sociological Review* 68, no. 1 (2003): pages 103–27, although the following are *optional*: 103-109 (*end at Cohesive Blocking*).

### *Lab*

- De Nooy et al. *Exploratory Social Network Analysis with Pajek*, Chapter 3 (Purchased Book).

### *Background Reading (Optional)*

- Erickson, Emily, and Peter Bearman. 2006. "[Malfeasance and the Foundations for Global Trade: The Structure of English Trade in the East Indies, 1601–1833](#)." *American Journal of Sociology* 112: 195-230. (JSTOR).
- John Scott, *Social Network Analysis*, Chapter 6 (Purchased Book).
- Wasserman and Faust, Chapter 7 through to page 267 (book on reserve)
- Bearman, Peter, Robert Faris, & James Moody, "[Blocking the Future](#)" *Social Science History* 23:501-533.
- Frank, Ken and Jeffrey Yasumoto. 1998. "Linking Action to Social Structure within a System: Social Capital within and Between Groups", *American Journal of Sociology*. 104(3): 642-686. (JSTOR).
- Baker, Wayne. 1984. "The social structure of a national securities market", *American Journal of Sociology*. 89(4): 775-811. (JSTOR).
- Klovdahl, A. S. 1985. "Social Networks and the Spread of Infectious Diseases: The AIDS Example." *Social Science Medicine* 21:1203-16.
- Moody, James. 2001. "Peer influence groups: Identifying Dense Clusters in Large Networks". *Social Networks*. 23: 261-283.
- James R. Lincoln and Jon Miller, "Work and Friendship Ties in Organizations," *Administrative Science Quarterly* 24:181-99
- Moody, James. 2001. "Race, School Integration, and Friendship Segregation in America" *American Journal of Sociology*.

## **Week 11 - Roles and Structural Equivalence**

November 9

- Alderson, Arthur S., and Jason Beckfield. "Power and Position in the World City System." *American Journal of Sociology* 109, no. 4 (2004): 811–851.
- Herman, Nancy J. "Conflict in the Church: A Social Network Analysis of an Anglican Congregation." *Journal for the Scientific Study of Religion* 23, no. 1 (March 1984): 60.
- Please consider the case you are doing for your term paper project. Spend a moment or two jotting down some ideas about how principles of blockmodeling and structural equivalence could inform your project. Do you have data (or will you have data) that would lend itself to blockmodeling techniques? Describe in what way.

Lab

- De Nooy et al. *Exploratory Social Network Analysis with Pajek*. Read sections 12.3 on the concept of structural equivalence [pp.306-309 only – skip the clustering application] , then continue with sections 12.4-12.5 on blockmodels [pp.315-328].

Additional Background Reading (Optional)

- Padgett, John F., and Christopher K. Ansell. 1993. "[Robust Action and the Rise of the Medici, 1400-1434.](#)" *American Journal of Sociology* 98: 1259-1319. (JSTOR).
- Friedkin, N. E. 1984. "Structural Cohesion and Equivalence Explanations of Social Homogeneity." *Sociological Methods and Research* 12:235-61.
- Brieger, Ronald L. 1976. Career Attributes and Network Structure: A Blockmodel Study of a Biomedical Research Specialty *American Sociological Review*, Vol. 41: 117-135. (JSTOR).
- Burt, Ronald S. 1976. "Positions in Networks." *Social Forces* 55: 93-122. (JSTOR).
- Bearman, Peter and Kevin Everett, "[The structure of social protest, 1961-1983](#)" *Social Networks*, 15(2): 171-200. (linked here)
- John Scott, *Social Network Analysis*, Chapter 7 (Purchased Book).

## **Week 12. Dynamic Networks, Diffusion, and Peer Influence**

November 16

- Moody, James, Daniel McFarland, and Skye Bender- deMoll. "Dynamic Network Visualization." *American Journal of Sociology* 110, no. 4 (January 1, 2005): 1206–41. *Read pages 1206-1222.*
- Christakis, Nicholas A., and James H. Fowler. "The Spread of Obesity in a Large Social Network over 32 Years." *N Engl J Med* 2007, no. 357 (2007): 370–379.
- Aven, Brandy L. "The Paradox of Corrupt Networks: An Analysis of Organizational Crime at Enron." *Organization Science* 26, no. 4 (August 2015): 980–96. doi:10.1287/orsc.2015.0983.
- Moody, James. "The Importance of Relationship Timing for Diffusion." *Social Forces* 81, no. 1 (September 1, 2002): 25–56. doi:10.1353/sof.2002.0056.

Optional or further reading

- Powell, Walter.W., D.R. White, K.W. Koput, and Jason Owen- Smith 2005. —[Network Dynamics and Field Evolution: The Growth of Interorganizational Collaboration in the Life Sciences.](#) *American Journal of Sociology* 100:1132-1205 (this paper has a really long appendix and is really about 60 pages).
- Craig M. Rawlings Daniel A. McFarland Linus Dahlander Dan Wang. "Streams of Thought: Knowledge Flows and Intellectual Cohesion in a Multidisciplinary Era". *Social Forces*, Volume 93, Issue 4, 1 June 2015, Pages 1687–1722, <https://doi.org/10.1093/sf/sov004>

- Schaefer, David R., John Light, Laura D. Hanish, Carol L. Martin and Richard A. Fabes. 2010. "Fundamental Principles of Network Formation among Preschool Children." *Social Networks* 32:61-71.
- Powell, Walter Kenneth Koput, and Laurel Smith-Doerr. 1996. "Interorganizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology." *Administrative Science Quarterly* 41: 116-45. (JSTOR).
- Stark, David, and Balazs Vedres. 2006. "Social Times of Network Spaces: Network Sequences and Foreign Investment in Hungary". *American Journal of Sociology*. 111:1367-1411. (JSTOR).
- DiMaggio & Garip. "How Network Externalities can Exacerbate Intergroup Inequality" *American Journal of Sociology* 116:1887-1933.
- Centola, Damon. 2010. "The Spread of Behavior in an Online Social Network Experiment" *Science* 2010: 1194-1197.
- Abbott, Andrew, and Alexandra Hrycak. 1990. "Measuring Resemblance in Sequence Data: An Optimal Matching Analysis of Musicians' Careers." *American Journal of Sociology* 96: 144-185. (JSTOR).
- Stovel, Katherine. 2001. "Local Sequential Patterns: The Structure of Lynching in the Deep South, 1882-1930." *Social Forces* 79: 843-880. (JSTOR).
- Akbar Zaheer, Giuseppe Soda. (2009) Network Evolution: The Origins of Structural Holes. *Administrative Science Quarterly* 54:1, 1-31
- Hughes et al (2009) "Power and Relation in the World Polity: The INGO Network Country Score, 1978-1998" *Social Forces*
- Christakis, Nicholas A. and Fowler, James H. 2008. "[The Collective Dynamics of Smoking in a Large Social Network](#)" *N Engl J Med* 2008; 358:2249-2258.
- Klodahl, A. S. 1985. "Social Networks and the Spread of Infectious Diseases: The AIDS Example." *Social Science Medicine* 21:1203-16.
- Stovel, Katherine, Michael Savage, and Peter Bearman. 1996. "Ascription into Achievement: Models of Career Systems at Lloyds Bank, 1890-1970." *American Journal of Sociology* 102: 358-399. (JSTOR).
- Mayhew, Bruce H., and Roger L. Levinger. 1976. "On the Emergence of Oligarchy in Human Interaction." *American Journal of Sociology* 81: 1017-1049. (JSTOR).
- Schelling, Thomas. C. 1978. *Micromotives and macrobehavior*. New York, Norton.

**Week 13 - Our regular night is Thanksgiving. We will not have class this week.**

### **Week 14: Critiques of Network Theories of Social Structure**

November 30

- Emirbayer, Mustafa, and Jeff Goodwin. 1994. "[Network Analysis, Culture, and the Problem of Agency](#)." *American Journal of Sociology* 99: 1411-54. (JSTOR).
- Ann Mische. 2011. "[Relational Sociology, Culture, and Agency](#)" in *The Sage Handbook of Social Network Analysis*.
- Pachucki and Breiger, 2010. "[Cultural Holes: Beyond Relationality in Social Networks and Culture](#)". *Annual Review of Sociology*. 36:205-24.
- McFarland, Daniel, Kevin Lewis, and Amir Goldberg. "Sociology in the Era of Big Data: The Ascent of Forensic Social Science". *The American Sociologist*. March 2016, Volume 47, [Issue 1](#), pp 12–35. <https://link.springer.com/article/10.1007/s12108-015-9291-8>.
- Scott, John. 2011. "Social Physics and Social Networks." In *The SAGE Handbook of Social Network Analysis*, edited by John Scott and Peter J. Carrington, 55–66. SAGE.

- **NOTE: Respond to the articles and also feel free to bring in new critiques of your own, besides those of the authors.**

*Lab*

- Devoted to working on projects

*Additional Background Reading (Optional)*

- Steven Brint, "Hidden Meanings: Cultural Content and Context in Harrison White's Structural Sociology" *Sociological Theory*, 1992, 10:194-208; (JSTOR).
- Read also White's reply: Harrison C. White, "Reply to Steven Brint," *Sociological Theory*, 1992, 10:209-213 (JSTOR)
- Ann Swidler. 1986. "Culture in Action: Symbols and Strategies," *American Sociological Review*, 51:273-286. (JSTOR).
- Peter Hedstrom. 1998. "Rational Choice and Social Structure: On Rational Choice Theorizing in Sociology" in *Social Theory and Human Agency*, edited by Bjorn Wittrock.
- Big Data and Society: <http://journals.sagepub.com/doi/abs/10.1177/2053951715602495>

**Week 15 - Presentations of Final Projects**

*Note: TUESDAY CLASS! December 5th*

- Paper Presentations, No Reading Assigned

FINAL PAPER DUE: December 11th, by noon. Please upload a copy of your paper to the course moodle AND put a hard copy in Kjersten's Vollum mailbox (Vollum 133) by noon. If you wish to receive written feedback from us on your paper please also include your mailbox number.