

Social Movements and Social Networks

This course provides an introduction to the analysis of the social networks that may be involved in social movements. Social networks have become an increasingly prominent focus of interest in the social and natural sciences. The literature on social movements emphasizes the importance of social networks. The assertion “a network exists” or “is formed” in many social movements is only a start point for various important questions about its structural features and implications. Students will come away from this course with a substantially more refined perspective and “way of thinking” about social networks and social movements.

Politicians and other social activists have a strong interest in generating social movements. Other concerned individuals may have a strong interest in impeding the growth of particular movements and in maintaining particular policies and practices. However, social movements also arise naturally from the social processes that unfold in networks. Here, a social movement is defined growth or decline over time of the number of individuals in a population that have a particular attitude or behavior toward some object. The “object” may be an issue involving a particular individual, event, practice, policy, institution, or group. The attitude toward the object might be strongly negative, strongly positive, or somewhere between these extremes. The behavior toward the object may take a variety of forms. The growth or decline over time of a particular attitude or behavior may involve a small or large fraction of individuals in a defined population of individuals. By convention only, investigations of social movements have been heavily concentrated on the growth of protest movements, i.e., the growth of social conflicts and collective actions intended to alter particular policies and behavior, or to overturn the leaders or governments that support policies and behaviors perceived to be objectionable. Such protest movements are an important special case of social movements. There are many other important and interesting social movements that have been or might be studied.

A detailed attention to social network structure, and the social processes that unfold in such structures, is necessary to acquire a fundamental, generic, understanding of social movements

Course: Sociology 146, Fall 2011, TR, 1173 HSSB, 11-12:15

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The course syllabus is on my webpage: <http://www.soc.ucsb.edu/faculty/friedkin>

Course materials (readings and notes) may be downloaded from the hyperlinks on the syllabus.

First Class Meeting: Thursday, 22 September, 1173 HSSB, 11-12:15

FOUNDATIONS

Week 1: Foundations

- Read: Watts, D. and Strogatz, S., 1998. "[Collective dynamics of small-world networks.](#)" *Nature* 393, 440-442.
- Tuesday Lecture: [Images of networks](#)
- Thursday Lecture: [Foundational graph-analytic constructs, Part I](#) (complete graphs, connectivity, semipaths, [paths](#), walks, geodesics, reachability, distances, flows)

Week 2: Foundations

- Read: Zachary W. (1977). "[An information flow model for conflict and fission in small groups.](#)" *Journal of Anthropological Research*, 33, 452-473
- Tuesday Lecture: [Foundational graph-analytic constructs, Part II](#) (graph connectivity categories, diagraph connectivity categories, cuts, disjoint paths, point bases, flows)
- Thursday Lecture: [Foundational graph-analytic constructs, Part III](#) (strong components, subgraphs, partitions, interfaces and intersections, flows)

[Assignment 1](#) (Due Next Tuesday, Oct 11)

ZACHARY KARATE CLUB

DATASET ZACHARY
DESCRIPTION Two 34×34 matrices:

ZACHE symmetric, binary.
ZACHC symmetric, valued.

BACKGROUND These are data collected from the members of a university karate club by Wayne Zachary. The ZACHE matrix represents the presence or absence of ties among the members of the club; the ZACHC matrix indicates the relative strength of the associations (number of situations in and outside the club in which interactions occurred). Zachary (1977) used these data and an information flow model of network conflict resolution to explain the split-up of this group following disputes among the members.

REFERENCE Zachary W. (1977). An information flow model for conflict and fission in small groups. *Journal of Anthropological Research*, 33, 452-473.

KEY STRUCTURAL CONSTRUCTS OF SOCIAL NETWORK ANALYSIS

Week 3: Node Centrality

Read: Freeman, L. 1978. "[Centrality in social networks: conceptual clarification](#)" *Social Networks* 1 215-239

Tuesday Lecture: [Freeman's degree, closeness, and betweenness measures](#)

Thursday Lecture: [Illustrations](#)

Week 4: Cohesive Subgroups and Communities

Read: Granovetter, M. 1973. "[The strength of weak ties.](#)" *American Journal of Sociology* 78: 1360-1380.

Tuesday Lecture: [Cliques, 2-cliques, 2-clans, & 2-plexes](#)

Thursday Lecture: [Zachary karate club cliques](#)

[Paper 1](#) (Due Next Tuesday, Oct 25)

KEY STRUCTURAL CONSTRUCTS OF SOCIAL NETWORK ANALYSIS

Week 5: Affiliation Networks

Read: Breiger, R. 1974. "[The duality of persons and groups.](#)" *Social Forces* 53: 181-190

Tuesday Lecture: [Affiliation Matrices](#)

Thursday Lecture: [Illustrations](#)

Week 6: Aligned Relational Positions

Read: White H., S. Boorman and R. Breiger. 1976. "[Social structure from multiple networks. I. Blockmodels of Roles and Positions.](#)" *American Journal of Sociology* 81: 730-780.

Tuesday Lecture: [Blockmodels of Aligned Relational Positions](#)

Thursday Lecture: Network Structure and Social Movements

[Assignment 2](#) (Due Next Tuesday, Nov 8)

SAMPSON MONASTERY, DATASET SAMPSON

DESCRIPTION Ten 18×18 matrices: SAMPLK1 non-symmetric, valued (rankings) SAMPLK2 non-symmetric, valued (rankings) SAMPLK3 non-symmetric, valued (rankings) SAMPDLK non-symmetric, valued (rankings) SAMPES non-symmetric, valued (rankings) SAMPDES non-symmetric, valued (rankings) SAMPIN non-symmetric, valued (rankings) SAMPNIN non-symmetric, valued (rankings) SAMPPR non-symmetric, valued (rankings) SAMPNPR non-symmetric, valued (rankings)

BACKGROUND Sampson recorded the social interactions among a group of monks while resident at the cloister. During his stay, a political conflict resulted in the expulsion of four monks (Nos. 2, 3, 17, and 18) and the voluntary departure of numerous others. Most of the present data are retrospective, collected after the breakup occurred. They concern a period during which a new cohort entered the monastery near the end of the study but before the major conflict began. The exceptions are "liking" data gathered at three times: SAMPLK1 to SAMPLK3 - that reflect changes in group sentiment over time (SAMPLK3 was collected in the same wave as the data described below). Information about the senior monks was not included. Four relations are coded, with separate matrices for positive and negative ties on the relation. Each member ranked only his top three choices on that tie. The relations are esteem (SAMPES) and disesteem (SAMPDES), liking (SAMPLK) and disliking (SAMPDLK), positive influence (SAMPIN) and negative influence (SAMPNIN), praise (SAMPPR) and blame (SAMPNPR). In all rankings 3 indicates the highest or first choice and 1 the last choice. (Some subjects offered tied ranks for their top four choices).

REFERENCE Sampson, S. 1969. *Crisis in a cloister*. Unpublished doctoral dissertation, Cornell University.

PROCESSES UNFOLDING IN SOCIAL NETWORKS

Week 7 Introduction to Network Social Processes

Read: Jackson, M. and L. Yariv. 2006. "[Social networks and the diffusion of economic behavior.](#)" *Yale Economic Review* 3: 42-47.

Tuesday Lecture: [Social Cascades, Contagion, & Diffusion](#)

Thursday Lecture: [Illustrations](#)

Week 8 Threshold Triggering Mechanisms

Read: Granovetter, M. 1978. "[Threshold models of collective behavior.](#)" *American Journal of Sociology* 83: 1420-1443

Tuesday Lecture: [Behavioral Cascades, Contagion, & Diffusion](#)

Thursday Lecture: [Illustrations](#)

[Paper 2](#) (Due Next Tuesday, Nov 22)

PROCESSES UNFOLDING IN SOCIAL NETWORKS

Week 9 Introduction to Network Social Processes

Read: Bargh, J. and M. Ferguson. 2000. "[Beyond behaviorism: On the automaticity of higher mental processes.](#)" *Psychological Bulletin* 126: 925-945

Tuesday Lecture: [Attitude-Behavior Linkage & Social Influence Systems](#)

Thursday Lecture: Holiday

Week 10 Weighted Averaging Mechanisms

Read: Friedkin, N. 2010. "[The attitude-behavior linkage in behavioral cascades.](#)" *Social Psychology Quarterly* 73: 196-213.

Tuesday Lecture: Attitude-Behavior Cascades, Contagions, & Diffusions

Thursday Lecture: Illustrations & Conclusion

[Paper 3](#) (Due Next Thursday, Dec 8)