

SPECIAL TOPICS: NETWORKS AND INFORMATION TRANSMISSION (SOC 289)

CARTER T. BUTTS

WINTER QUARTER, 2007

CLASS SCHEDULE

Meeting time: Monday, 10:30–1:30

Classroom: SSPB 4206

INSTRUCTOR

Name: Carter T. Butts

Office: SSPA 2145

Office hours: Monday, 3:30-5:30

Email: buttsc@uci.edu

Telephone: (949)824-8591

COURSE WEBSITE

<http://eee.uci.edu/07w/69795/>

COURSE OBJECTIVES

From its earliest beginnings, communication – and, in particular, the flow of information – has been one of the core themes of the social network field. This course will provide an introduction to current and past research on communication and information transmission within interpersonal networks. Coverage will vary from the micro-processes involved in information acquisition and recall to the macro-level phenomena of diffusion at the population level, with the meso-level process of local communication also being considered. Specific topics which will be covered include cognitive and affective effects on communication, information corruption due to serial transmission, rumors and disasters, memetics, and information seeking behavior. Organizational and policy implications will also be discussed. In addition to reviewing relevant literature, students in this class will develop their own research projects relating to the course topic, and opportunities will be provided to present this work to the class as a whole.

PREREQUISITES

None per se, but some initiative is expected for those with less quantitative backgrounds. Prior knowledge of network analysis is not assumed, but will be helpful.

COURSE REQUIREMENTS

Readings:

Assigned readings for each class session are listed in the course outline (see below). Students should complete any assigned readings for a given session *before* class begins, so as to allow for informed discussion of the material.

Introduction/Summary: Each reading will be introduced by a selected student, who will be expected to give a brief (e.g., 5 minute) presentation to the class. This presentation should include a short (i.e., 1 page) handout highlighting key points and/or critiques of the reading in question.

Comment/Response: In addition to the introductory presentation, one student will be chosen at random (for each reading) to initiate discussion by commenting on/responding to the material. These remarks are expected to be very brief (e.g., approximately 2 minutes) and should ideally tie the material in the reading being discussed to larger issues in the field; alternately, the student may use the comment period to highlight central issues or critiques not raised in the introductory presentation.

Critiques: During the quarter, each student is expected to select four assigned papers on which to write more extended critiques. These short papers are typically 2-3 pages in length, and discuss in detail either a weakness of the paper in question, or a proposed extension to the research; detailed instructions on critiques will be provided separately. Students are required to complete their four critiques by weeks 2, 4, 6, and 8 (respectively), although they may be turned in early. Any paper from the syllabus may be chosen, *provided that the critique is turned in before class on the day that the paper in question is discussed*. Critiques for a given paper will not be accepted once discussion of that paper has begun.

Research Paper:

Over the course of the quarter, each student is expected to work on a research project of his or her choosing related to the general topic of networks and information transmission. This project may be a component of a larger, group project, but the project proposal/presentation/paper must center on the student's individual contribution. The research project is evaluated via three milestones:

Project Proposal: In the fifth week of class, each student must turn in an approximately three to five page research proposal (in the general style of an NSF project description) outlining his or her chosen project, and indicating the research which is to be performed.

Project Presentation: In the final week of class, each student will be asked to give a brief in-class presentation of his or her research findings. This presentation will be approximately 8-10 minutes in length, and should be in the style of an academic conference presentation.

Project Paper: In addition to the proposal and presentation, each student must submit a paper summarizing his or her research. (Where feasible, this paper should be prepared as a manuscript for eventual publication.) This paper will be due at the end of the exam period (March 23).

GRADING

Assignments will be weighted as indicated below. Note that the proposal, presentation, and paper for the research project are graded separately.

- Class participation (general): 10%
- Introduction/summary presentations: 15%
- Comment/response presentations: 10%
- Critiques: 20%
- Research project (proposal): 10%
- Research project (presentation): 15%
- Research project (paper): 20%

SUGGESTED TEXTS

No books are required for this class. However, the following texts are suggested for students without a background in social networks:

- Scott, J. (1991). *Social Network Analysis: a Handbook*. London: Sage.
- Wasserman, S. and Faust, K. (1994). *Social Networks: Methods and Applications*. Cambridge: Cambridge University Press.

COURSE OUTLINE

Week 1 (1/8): Introduction: Networks, Information, and Social Dynamics

(Note: No presentations are expected for Week 1; however, students should come prepared to discuss the articles below.)

- *Suggested reading for those new to social networks:* Wasserman and Faust: Sections 1.0–1.4, 2.0–2.3, 3 and/or Scott
- McPherson, J. Miller; Smith-Lovin, Lynn; and Brashears, Matthew. 2006. “Social Isolation in America: Changes in Core Discussion Networks over Two Decades.” *American Sociological Review*.
- Pool, Ithiel de Sola and Kochen, Manfred. 1979. “Contacts and Influence.” *Social Networks*, 1:5–51.
- Shiller, Robert J. 1995. “Conversation, Information, and Herd Behavior.” *American Economic Review*, 85(2): 181–185.
- Victor, Jeffrey. 1993. *Satanic Panic*. Chapters 3–4, pp27–78.

Week 2 (1/15): (*MLK Holiday – Class Rescheduled*) Cognitive Foundations

- *Critique 1 Due*
- Esposito, James L. and Rosnow, Ralph L. 1984. “Cognitive Set and Message Processing: Implications of Prose Memory Research for Rumor Theory.” *Language and Communication*, 4(4): 301–315.
- Freeman, Linton C.; Romney, A. Kimball; and Freeman, Sue C. 1987. “Cognitive Structure and Informant Accuracy.” *American Anthropologist*, 89(2): 310–325.
- Haber, Ralph N. and Haber, Lyn. 2000. “Experiencing, Remembering, and Reporting Events.” *Psychology, Public Policy, and the Law*, 6(4): 1057–1097.
- Mandler, Jean M.; Scribner, Sylvia; Cole, Michael; and DeForest, Marsha. 1980. “Cross-cultural Invariance in Story Recall.” *Child Development*, 51(1): 19–26.

Week 3 (1/22): Affect and Rumor Transmission

- Anthony, Susan. 1973. "Anxiety and Rumor." *Journal of Social Psychology*, 89: 91–98.
- Jeager, Marianne E.; Anthony, Susan; and Rosnow, Ralph L. 1980. "Who Hears What from Whom and with What Effect: A Study of Rumor." *Personality and Social Psychology Bulletin*, 6(3): 473–478.
- Walker, Charles J. and Beckerle, Carole A. 1987. "The Effect of Anxiety on Rumor Transmission." *Journal of Social Behavior and Personality*, 2(3): 353–360.
- Walker, Charles J. and Blaine, Bruce. 1991. "The Virulence of Dread Rumors: a Field Experiment." *Language and Communication*, 11(4): 291–297.
- Weenig, Mienieke W. H.; Groenenboom, Arieneke C.W.J; and Wilke, Henk A. M. 2001. "Bad News Transmission as a Function of the Definiteness of Consequences and the Relationship Between Communicator and Recipient." *Journal of Personality and Social Psychology*, 80(3): 449–461.

Week 4 (1/29): Information Distortion via Serial Transmission

- *Critique 2 Due*
- Allport, George W. and Postman, Leo. 1947. *The Psychology of Rumor*. New York: Holt, Reinhart, and Winston. Chapters 4–6, pp61–115.
- Bordia, Prashant and DiFonzo, Nicholas. 2004. "Problem Solving in Social Interactions on the Internet: Rumor as Social Cognition." *Social Psychology Quarterly*, 67(1): 33–49.
- Buckner, H. Taylor. 1965. "A Theory of Rumor Transmission." *The Public Opinion Quarterly*, 29(1): 54–70.
- Gilovich, Thomas. 1987. "Secondhand Information and Social Judgment." *Journal of Experimental Social Psychology*, 23: 59–74.
- Schachter, Stanley and Burdick, Harvey. 1955. "Field Experiment on Rumor Transmission and Distortion." *Journal of Abnormal and Social Psychology*, 50: 363–371.
- Treadway, Molly and McCloskey, Michael. 1987. "Cite Unseen: Distortions of the Allport and Postman Rumor Study in the Eyewitness Testimony Literature." *Law and Human Behavior*, 11(1): 129–25.

Week 5 (2/5): Rumors and Disaster

- *Project Proposal Due*
- Danzig, Elliott R.; Thayer, Paul W.; and Galanter, Lila R. 1958. *The Effects of a Threatening Rumor on a Disaster-Stricken Community*. Publication 517, National Academy of Sciences - National Research Council. Washington, D.C: National Academy of Sciences - National Research Council. Chapters 1–2, pp1–21.
- Erickson, Bonnie H.; Mostacci, Liviana; Nosanchuk, T.A.; and Dalrymple, Christina F. 1975. "The Flow of Crisis Information as a Probe of Work Relations." *Canadian Journal of Sociology*, 3(1): 71–87.
- Richardson, R.J.; Erickson, Bonnie H.; and Nosanchuk, T.A. 1979. "Community Size, Network Structure, and the Flow of Information." *Canadian Journal of Sociology*, 4(4): 379–392.
- Scanlon, T. Joseph. 1977. "Post Disaster Rumor Chains: a Case Study." *Mass Emergencies*, 2: 121–126.
- Sinha, D. 1952. "Behavior in a Catastrophic Situation: A Psychological Study of Reports and Rumors." *British Journal of Psychology*, 43: 200–209.

Week 6 (2/12): Memetic Approaches

- *Critique 3 Due*
- Noymer, Andrew. 2001. "The Transmission and Persistence of 'Urban Legends': Sociological Application of Age-structured Epidemic Models." *Journal of Mathematical Sociology*, 25(3): 299–323.
- Fragale, Alison R. and Heath, Chip. 2004. "Evolving Informational Credentials: The (Mis)Attribution of Believable Facts to Credible Sources." *Journal of Personality and Social Psychology*, 30(2): 226–236.
- Kapferer, J. N. 1989. "A Mass Poisoning Rumor in Europe." *Public Opinion Quarterly*, 53: 467–481.
- Heath, Chip; Bell, Chris; and Sternberg, Emily. 2001. "Emotional Selection in Memes: The Case of Urban Legends." *Journal of Personality and Social Psychology*, 81(6): 1028-1041.

Week 7 (2/19): (*President's Holiday – Class Rescheduled*) Organizational Contexts

- Baker, Wayne E. and Faulkner, R.R. 1993. "The Social Organization of Conspiracy: Illegal Networks in the Heavy Electrical Equipment Industry." *American Sociological Review*, 58:837–860.
- Davis, Keith. 1953. "Management Communication and the Grapevine." *Harvard Business Review*, 31: 43–49.
- Krackhardt, David and Hanson, Jeffrey R. 1993. "Informal Networks: The Company Behind the Chart." *Harvard Business Review*, 104-111.
- Lai, Gina and Wong, Odalia. 2002. "The Tie Effect on Information Dissemination: the Spread of a Commercial Rumor in Hong Kong." *Social Networks*, 24: 49–75.

Week 8 (2/26): Information Seeking and Search

- *Critique 4 Due*
- Adamic, Lada and Adar, Eytan. 2005. "How to Search a Social Network." *Social Networks*, 27(3): 187–203.
- Granovetter, Mark S. 1974. *Getting a Job: A Study of Contacts and Careers*. Cambridge, MA: Harvard University Press. Chapters 1–3, pp25–62.
- Lee, Nancy H. 1969. *The Search for an Abortionist*. Chicago: University of Chicago Press. Chapters 5 and 8, pp59–77, 123–146.
- Turner, Ralph H. 1994. "Rumor as Intensified Information Seeking: Earthquake Rumors in China and the United States." In Dynes, Russel R. and Tierney, Kathleen J. (eds.), *Disasters, Collective Behavior, and Social Organization*, pp244–256. Newark: University of Delaware Press.

Week 9 (3/5): Improvised News

- Caplow, Theodore. 1947. "Rumors in War." *Social Forces*, 25(3): 298–302.
- Greenberg, Bradley S. 1964. "Diffusion of News of the Kennedy Assassination." *Public Opinion Quarterly*, 225–232.
- Scanlon, T. Joseph 1971. "News Flow About Release of Captured Diplomat Researched by J-Students." *The Journalism Educator*, 26: 35–38.
- Scanlon, T. Joseph 2006. "Sampling an Unknown Universe: Problems of Researching Mass Casualty Incidents." Unpublished Manuscript.

- Shibutani, Tamotsu. 1966. *Improvised News: A Sociological Study of Rumor*. Chapters 2–3, pp31–94

Week 10 (3/12): Project Presentation Day

- *Presentation Due*