

Networks and Culture  
John Levi Martin  
Spring 2000

This course attempts to synthesize recent efforts in sociology to link processes and states normally understood as cultural to those formal patterns of interaction between individuals or institutions known as social networks. We begin with the idea of social networks and go over the bases of terminology and analysis used by social network researchers. We then examine a number of key (and relatively recent) studies that somehow link culture to social networks. We then abstract to the situation in which the entities connected by networks are transpersonal, and examine the concepts of institution and field. We close by critically studying some recent theoretical statements about the relation between networks (in general) and culture.

**Requirements:** Regular and cheerful attendance is, as always, expected, as well as keeping up with the readings. One paper is expected at the end, I suppose. You have options, though severely limited, as to the form it takes. (1) [most favored status] An actual research paper; (2) partaking of a collective exposition of White's Identity and Control; (3) an analytic paper [least favored, but tolerated]. If you do an actual research paper, this may either be a "formal" network analysis, which may be an analysis of original or secondary,\* or a different type of analysis (e.g. ethnographic).

**Warning warning beep beep:** I think that there is a growing interest in networks (loosely, all too loosely, defined) and culture (not that there is such a thing). But it certainly isn't systematized, has unclear boundaries, and therefore cannot really be "surveyed." Hence I take the somewhat unusual approach in this course of presenting a set of readings interwoven via declamatory statements that many, if not all, of the writers used would consider confusing, unproven, uninteresting, or outrageously false. That's the bad news; here's the good news: for reading, I'll generally assign one complete or near-complete work, or several complete works if they're short, and then indicate other works I build upon during the talky talk part in this syllabus (as opposed to trying to give billions of one page excerpts of everything I think is interesting). We will have a good time.

### REQUIRED READINGS

There are six books that we'll read so much of that purchase is pretty much required—they're in the cute floating text box on the next page. All other readings (including all articles) will be placed in reserve in the Sergeant Joyce Kilmer memorial sociology graduate library.

---

\* Coincidentally, I am currently working on a project to make public a large set of network data collected by Benjamin Zablocki and colleagues, which will be made available to any interested persons.

Required Books, Available at the Livingston Bookstore:

Wasserman and Faust, Social Network Analysis

White, Identity and Control

Bearman, Relations into Rhetorics

Gould, Insurgent Identities

Hutchins, Cognition in the Wild

Bourdieu, Homo Academicus; or The Field of Cultural Production

## I. INDIVIDUALS, ACTS, NETWORKS

**Required Reading:** None

It's the first day, how much can one expect? We begin with a set of formal definitions that provide the substratum for the declamatory woof of the class (woof woof!)...in addition to getting to know each other and all that.

*Readings drawn upon:*

I take the formal definitions from the beginning of Talcott Parsons, Toward a Structural Theory of Action; the definition of social action is from Max Weber's introductory definitions in Economy and Society; discussion of the notion of status and social structure relies upon Ralph Linton's The Study of Man; the discussion of culture and social structure in American functionalism refers to Robert Merton, Social Theory and Social Structure; Talcott Parsons and Edward Shils, Towards A General Theory of Action. The discussion of the triad refers to Georg Simmel, Sociology: Investigations into the Form of Sociation, translated in Kurt Wolff's From Georg Simmel.

## II. NETWORKS AND NETWORK ANALYSIS

**Required Reading:** Wasserman and Faust: Ch.1-4, as much as you can do. Feel free to skip Ch 1, but it's the easiest. Skip all the parts with the circles by 'em in the table of contents.

Having defined the theoretical building blocks in the last class, we begin with the idea of social networks and go over the bases of terminology and analysis used by social network researchers. We focus on matrix representations of networks and graph representations of networks, and make sure that we can go back and forth between them. NOTE: If this goes quickly, I may move into next week, which is pretty heavy.

*Readings Drawn Upon*

Most of this is really basic notation, and its been forgotten who said what, but the theoretical part of the discussion about affiliation networks comes from Ronald Breiger, "The Duality of Persons and Groups," Social Forces 53(1974):181-90 (he gets it from Simmel's Web of Affiliation stuff).

## III. PROPERTIES OF NETWORKS

**Required Reading:** Wasserman and Faust: er...how about the rest of the book? OK, maybe that's a bit much, but it's a lot easier than reading all the original stuff, isn't it? You're getting off lucky.

We discuss properties of networks as a whole; this is perhaps the most technically daunting portion of the entire semester. We emphasize: connectedness; centrality, brokerage and power; and structural equivalence.

*Readings drawn upon*

Some of the original work textbookified by Wasserman and Faust:

- A. For structural equivalence: White, Boorman, and Breiger, "Social Structure from Multiple Networks I: Blockmodels of Roles and Positions." American Journal of Sociology 81 (1976):730-779; Breiger, Boorman, and Arabie, "An algorithm for clustering relational data...", Journal of Mathematical Psychology 12(1975):328-383; White and Boorman pieces, Burt, "Positions in Networks," Social Forces 55(1976):93-122.
- B. For centrality and power: Bonacich, "Power and Centrality: A Family of Measures," AJS 92(1987):1170-1182, Cook, Emerson, and Yamagishi, "The Distribution of Power in Exchange Networks: Theory and Experimental Results." AJS 89(1983):275-305.
- C. For balance: Heider, "Attitudes and Cognitive Organization," Psychological Review 52(1946):358-374; Cartwright and Harary, "Structural Balance," Psychological Review 63(1956):277-293; Harary, "On Local and N-balance of Signed Graphs," Michigan Mathematical Journal 5(1955):37-41.
- D. For transitivity: Davis and Leinhardt, "The Structure of Positive Interpersonal Relations in Small Groups." In Joseph Berger, Morris Zelditch, Jr., and Bo Anderson (eds.), Sociological Theories In Progress Volume 2, Boston: Houghton Mifflin(1972), pp. 218-251, Holland and Leinhardt, "A Method for Detecting Structure in Sociometric Data" American Journal of Sociology 70(1970): 492-513, "Transitivity in Structural Models of Small Groups." Comparative Group Studies 2 (1971): 107-124, "Local Structure in Social Networks," Sociological Methodology 1976: 1-45; Johnsen, "Network Macrostructure Models for the Davis-Leinhardt Set of Empirical Sociomatrices." Social Networks 7(1985): 203-224.
- E. Properties of Nodes. I am not discussing stochastic models for networks on the basis of imputed properties of nodes. Here see Holland and Leinhardt, "An Exponential Family of Probability Distributions for Directed Graphs." Journal of the American Statistical Association 76(1981):33-50; Wasserman, Stanley and Dawn Iacobucci. "Statistical Analyses of Discrete Relational Data." British Journal of Mathematical and Statistical Psychology 39 (1986):41-64, and other Wasserman, Fienberg, Faust, and Pattison pieces too numerous to include here.

#### IV. THE ANTHROPOLOGICAL APPROACH

**Required Reading:**

Claude Levi-Strauss, The Elementary Structures of Kinship, Chs. 2-6, 9, 11-13, 15-1.

From any person, an "ego-centered" network is one in which we trace out the possible ties to others; often we have many different types of ties. We can deal with this complexity by grouping the **alters** into structurally equivalent blocks, and considering all ties the same. Hence You are tied to your aunt through a "sister" tie appended to a "mother" or "father" tie. From this simple vision comes all wisdom, so let's spend some time getting it down.

*Readings Drawn Upon:* Andre Weil made a first formalization as a chapter in Levi-Strauss's book, but this was extremely ungainly. Harrison White, An Anatomy of Kinship replaced Weil's ugly permutations with elegant matrices compatible with the network representation we have learned—it is White's version that I employ. This understanding of kinship algebras lay at the basis of the second part of White's breakthrough in network methodology, namely Boorman and White, "Social Structure from Multiple Networks II: Role Structures." American Journal of Sociology 81 (1976):1384-1446. Further formulations have been done by Boyd and Pattison. My discussion of the development of generalized exchange probably draws upon Peter Bearman's article AJS 1997 or so; the discussion of reciprocity relies almost totally on Marcel Mauss, The Gift, but uses nice phrases from Alvin Gouldner's "The Norm of Reciprocity."

## V. NETWORKS AND POLITICAL INFLUENCE

**Required Reading:** Paul McLean, "Agency and Political Culture in the Renaissance"; Padgett and Ansel, "Robust Action," Carl Lande, "Networks and Groups in Southeast Asia," James Scott, "Patron-Client Politics and Political Change in Southeast Asia," Andrew J. Nathan, "A Factionalism Model for CCP Politics," Ronald Burt, Structural Holes, Intro, Chapter 1.

We examine networks of political power and brokerage, and see how a political culture grows up around structural properties of networks. Is there a structural difference between brokerage, patronage, and factionalism? If so, what are the social differences this makes? Are there structural properties of influence structures that shape the legitimacy of power?

*Readings Drawn Upon:* For methodological issues on top-down networks, a classic piece is Friedell, "Organizations as Semilattices" ASR 32 (1967):46-54; also White, "Management Conflict and Sociometric Structure." AJS 67 (1961): 185-187. There are some citations to interesting work on patronage in Podolny and Baron's 1997 ASR piece 62/5 p. 679. I use large parts of Burt's terminology from Towards a Structural Theory of Action, though we're going to read something different.

## VI. NETWORKS AND SOCIAL MOVEMENTS

**Required Reading:** Gould, "Whiskey Rebellion," Mische and Pattison, "Composing a Civic Arena", Gould, Insurgent Identities, Chs 1,2,6,7; Jeff Goodwin, "Libidinal Ties and Solidarity: The Huk Rebellion, 1946 to 1954," and Flache and Macy, "The Weakness of strong ties".

**NOTE** this last piece has a lot of math in it, which you can skip since the real point is the assumptions and the consequences, which are largely independent of the formalization.

Gould takes us from patronage structures to social movements, which aren't exogenous to the existing political field. But to truly understand social movements, we need not only a conception of the political field, but a conception of the future—projects in Mische's terminology. This seems to imply a culturally determined stew of values and visions. Yet "framing" often turns out not to be as important as "ties."

## VII. NETWORKS AND CULTURAL INFLUENCE

**Required Reading:** Erickson, “The Relational Basis of Attitudes;” Festinger et al., Social Pressures in Informal Groups, chapter on influence, Noah Friedkin, A Structural Theory of Influence, selections, Diana Crane, Invisible Colleges, selections; Henry Collins, “Tacit Knowledge in the TEA Set.”

We’ve gotten as far as we can go by replacing culture with networks. Now we look at how information itself can diffuse through networks. We note that now cultural products are not necessarily uniformly distributed; but (this week) the lack of uniformity isn’t **culturally** meaningful, it’s only **structurally** meaningful.

*Readings Drawn Upon:* Friedkin’s many articles with others such as Karen Cook and Eugene Johnsen; these can be found in the bibliography of the book: one classic collaboration is Marsden and Friedkin, “Network Studies of Social Influence,” Sociological Methods and Research, 22(1993):127-151.

## VIII. NETWORKS AND COGNITION

**Required Reading:** Hutchins, Cognition in the Wild.

Finally, we need to stop the simplification of culture as being uniform by definition. We see distributed cognition as involving a **culturally meaningful** division of subjectivity.

*Readings Drawn Upon:*

Some of the inspirations for this approach will come up in week 11. More particularly, the distributed cognition approach which Hutchins here exemplified has won almost religious adherence among many educational psychologists. A classic collection is Resnick, Levine, and Behrend’s Socially Shared Cognitions, which has a great piece by Hutchins. For a correction to some of the wilder versions of SSC, see Salmon, “No Distribution without Individuals’ Cognition,” which appears in his edited volume, Distributed Cognitions: Psychological And Educational Considerations. I also use James Kitts’s work modeling influence as neural networks which allow for higher order problem solving (“Structural Learning: Attraction and Conformity in Task-Oriented Groups,” by Kitts, Macy, and Flache, *Computational and Mathematical Organization Theory*, 5:129-145, 1999).

## IX. NETWORKS AND CULTURAL PATTERN I

**Required Reading:** Peter Bearman, Relations into Rhetorics; Leifer, “Interaction Preludes to Role Settings” *ASR*53(95):865-78

Given the possibility of culturally meaningful distributions of subjectivity, can they be tied to networks? Now let us look at the logic of mapping cultural oppositions onto social networks. This is central, we spend two weeks.

## X. NETWORKS AND CULTURAL PATTERN II

**Required Reading:** Carley, “Knowledge Acquisition as a Social Phenomenon;” G.H. Mead, Mind, Self, and Society, selections, probably other readings to be announced; H.C. Harton and B. Latane, “The Social Self-Organization of Culture.”

We continue with the theme of the former week, but begin a transition to next week: what about mind as the internalization of social pattern?

### *Readings Drawn Upon:*

I also use other parts of Carley’s opus, to wit “On the Evolution of Social and Organizational Networks,” forthcoming in David Knocke and Steve Andrew, eds., special issue of Research on the Sociology of Organizations, JAI Press. I use other Latane pieces but haven’t found them yet. I refer to triadic analyses by Holland and Leinhardt cited in week 3 section D. Finally, I use the interpretation of  $p^*$  models given by Phillipa Pattison in recent talks; I do not know whether any published papers have yet appeared that lay out this approach.

## XI. THE NEW SOCIAL PSYCHOLOGY

**Required Reading:** Vygotsky, piece in Wertsch anthology, 1929 article in Journal of Genetic Psychology; J. J. Gibson, The Ecological Approach to Visual Perception, selections; Lewin, Field Theory in the Social Sciences, selections.

Mind as importation of social action may be a definitional statement, or it can be the basis for falsifiable claims. This week, we just get the vocabulary down. We extend from Mead towards a new social psychology, one variously grounded in pragmatism and Marxist-Leninism, that takes **activity** as a crucial component of thought.

### *Readings Referred to:*

I rely heavily on some thoughts of Bergson’s Creative Evolution, which is also a “practical-activity” approach to knowledge a little zestier than that of the pragmatists or Leninists. Vygotsky is a difficult catch, not the least because in addition to Vygotsky’s main (and wretchedly written) Thinking and Speech, there is also Vygotski’s Thought and Language. Two translators, two books, one ugly mess. No one really reads Gibson himself; they look to an interpreter, whom I’ve forgotten but will find out about.

## XII. NETWORKS AND LANGUAGE

**Required Reading:** White, “Switching Talk.”; Begin White, Identity and Control; Mische and White, “Between Conversation and Situations.”

This approach turns the conventional sociological understanding of the relation between culture and social structure on its side. Rather than making a static mapping of structural pattern in social life to structural pattern in culture (let alone the mapping of content from the social to the cultural, as in “interest” based explanations), we examine a perspective that sees linguistic elaboration as the result of dominance encounters and network-domain shifts. This implies that social life leaves its traces not in the nouns we use to cut up reality, but in our grammar.

*Readings drawn upon:*

The “conventional sociological understanding of the relation between culture and social structure” comes from Durkheim and Mauss, Primitive Classification and Durkheim, Elementary Forms of Religious Life. The old “interest based” explanations stem from the long forgotten bad old days, in which sociologists thought that some groups had “ideologies” which were thin veneers of fancy gibberish covering their direct material “interests.” I am forced to briefly discuss linguistic theories which I do not like or understand all that much, expounding upon the difference between “old” structuralism based in the lectures of De Saussure (Course in General Linguistics), which emphasizes the abstract meaning system of language, and the pragmatist approach to the empirical utterances of everyday speech (especially Austin, How to Do Things With Words). I supplement Austin with Habermas’s schemas from Vol I of The Theory of Communicative Action, and use Gilles Fauconnier’s Mental Spaces at times. To explain the importance of shifting, I refer to Michael Silverstein, “Shifters, Linguistic Categories, and Cultural Description: (in Basso and Selby, Meaning in Anthropology) and Susan Gal, Language Shift.

## XIII. FROM NETWORKS TO INSTITUTIONS AND INSTITUTIONAL FIELDS

**Required Reading:** Dimaggio and Powell, “Institutional Isomorphism,” Bourdieu, Homo Academicus, selections

We begin to generalize from interpersonal networks to networks of institutions; finally, to the institution field and to social power. It may help to see networks as a distinct meso-level between the individual and the institutional field, and not to re-use network concepts to analyze the logic of inter-institutional connections in the field.

*Readings Drawn Upon:*

Bourdieu’s work on fields in general is best laid out in his wonderful Distinction, which should be read. His theoretical approach is best unified in The Logic of Practice, which replaces the earlier Outline of a Theory of Practice. The final critical section refers to Randall Collins’s Conflict Sociology as an alternative to Bourdieu’s approach which has many similarities, and a few advantages, but seemed to succumb to ideological inflations of the importance of conversation; Dorothy Smith’s The Everyday World as Problematic is used as the best argument that relational analysis is prior to categorical class analysis; she makes clear use of Marx and Engels, The German Ideology, section on Feuerbach.

## XIV. NETWORKS AND IDENTITY

**Required Reading:** Finish White, Identity and Control [!]; Also see the article “Social Networks Can Help Resolve Actor Problems.”

We close with White because it is the toughest stuff; it also dovetails with Bourdieu in some senses, and is consciously opposed in others.