

CONNECTIONS

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CONNECTIONS

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CONTRIBUTIONS are encouraged from members and colleagues: research papers of any length, reviews of applications of networks in different fields, comments and critiques, survey articles, computer programmes, conference information, abstracts, teaching aids, etc.

NETWORK NOTEBOOK

IN THIS ISSUE

After the traumas of getting our giant double issue out last Winter (Vol. 7, #2-3; still plenty of back issues left), we've gotten our act and energy together and hustled this one out, more or less on time. It features two continuations of running CONNECTIONS themes. MANUEL BARRERA adds another voice to the controversy over the accuracy of reported network data, and JOHN SONQUIST contributes another of his guides to computer tools for network analysts. (Judging by reprint requests, Sonquist's papers have been our most popular features.) We have megapages of abstracts from the Sunbelt network conference, and points north. I don't know about you, but I'm going crazy trying to read all the nifty stuff these abstracts keep leading me to. And 6 pages of Research Roundup promises lots more to come.

INSNA BUSINESS

CONNECTIONS seems to be in good shape, and to be running much more smoothly than a few years ago. We already have a lot of material prepared for future issues, including a Research Roundup of who's doing what (get your blurbs in quickly, folks, if you want to be mentioned), Barry Wellman and Susan Gonzalez Baker's guide to using SAS when studying personal networks, and a special feature on Anatol Rapoport, now Prof of Peace Studies at Toronto.

Sharon Bolt has taken charge of subscription problems, and these have shrunk rapidly under her capable administration.

We're also beginning to move into the computerized age in a number of ways:

1) This is probably the last issue to be typed on a Selectric; we should be processing words by next time.

2) The Canadian government has given us a summer grant to hire a student to develop a keyword index for abstracts and books. Alicia VanDerMeer has been busy setting up the index. Our ultimate hope is to have all bibliographic info. on line, so that we will be able to do focused retrievals on, for example, "social support among widows" or "international corporate interlocks". Combining this with having the abstracts themselves on-line would make a very powerful information session. QUERY: Does anyone have a good database system (for IBM PC) capable of handling this?

3) At the Sunbelt, several folks suggested we do on-line searches for abstracts, using Dialog or BRS. We tried this, but were not happy because of time-lags and omissions. The most recent abstracts we found were nine months old, and the searches were leaving out vast chunks of interesting stuff. The latter problem is probably fixable (at great computer expense), but the former is not until Dialog, et al. speed up their act.

We're in good shape budgetarily. This means we won't have to raise dues for a while, and we can get away with slightly longer issues if need be, etc. This issue is a bit fatter than usual, for example.

SUNBELT SOCIAL NETWORKS CONFERENCE

The ever-popular Sunbelt conference moves to a new locale--Santa Barbara, California, 13-16 February 1986. It's at the famous Miramar Hotel, lots of character, beach, pool, four tennis courts, jacaranda flowers, spa and exercise room. All this doesn't come cheap, but less pricey than you might think for Reaganland. \$65/night for a poolside, motel-like room for two to \$105/night for a "magnificent" (Ron Burt) classic ocean-side room. Likely temperatures: 75°F daytime, 55°F nights. 110 folks came to Palm Beach, so make your plans soon.

Conference organizers at Cal-Santa Barbara (zipcode 932106): John Sonquist (Soc), tel: 805-961-3118 (or -3314 for messages); Eugene Johnson (Math), 961-2061 (or -2171).

Partial list of proposed sessions and organizers: Social support, Barry Wellman (Soc, Toronto); Computers and software, John Sonquist; Microevolutionary processes for structural changes, John Boyd (Soc Sci, Cal-Irvine) and G. Pollock; World network systems, Douglas White (Soc Sci, Cal-Irvine), Participants' perceptions of network structures, Susan Freeman (Soc Sci, Cal-Irvine) and David Krackhardt (Mgmt, Cornell); The triangulation of several methods on one data set, David Krackhardt; Primate networks, Alexandra Maryanski (Soc Sci, Cal-Irvine); Networks in history, Andrejs Plakans (Hist, Indiana).

Some suggested sessions: Measurement; Process models and exchange theory; Cumulative advances in knowledge; Kinship; Organizational networks; Tutorials in network analysis.

If you want to organize these--or any other sessions, call Sonquist or Johnson immediately.

Also at the Sunbelt, poster sessions for those who'd rather write than speak; a PC room where we'll all go for a spin and see who has the hottest micros and floppies in town.

OLD NETWORK TIES ANYONE?

P.L. Sells & Co., Ltd., Neckwear manufacturers of London, have designed a "Networks" tie, suitable for wearing at regimental dinners, interviews with key corporate directors (but definitely not poolside at the Sunbelt). This was in conjunction with the promotion for Tim Heald's NETWORKS books--excerpts elsewhere in this issue. They will sell us a batch of these ties--36 is the minimum order. If you want one, send INSNA a cheque for \$15. They're in dark blue polyester, with the word "NETWORKS" woven into a continuous stripe pattern. Very posh. If we get 20 orders soon, we'll order a batch--otherwise, we'll send you your cheque back. (Note: please say the cheque is for ties, otherwise we'll mistakenly make you a two-time subscriber.)

ASSISTANT EDITORS WANTED

David Bunting has volunteered to be our Assistant Editor for Economics. Hurrah. His job is to send us lots of abstracts, meeting news, etc. We'd like more! This is a great way for a junior faculty member (or a public spirited senior) or a graduate student to build a vitae and learn network analysis. The duties are simple--keep your eyes out for abstracts and books--in publications and conferences--photocopy them and send them to us. Write soon!

VACANCY CHAINS

INSNA FOLKS: It's a source of much satisfaction to the Big Node at Toronto that all present and past INSNA editors seem to be pleasantly fixed with jobs. The current batch - Current Assoc Ed. R.J. (Jack) RICHARDSON has been appointed (tenure-stream) Asst Prof of Soc at McMaster, Canada with a specialization in organizational analysis...former Assoc Ed. BARRY LEIGHTON has joined the Cdn. Solicitor-General's Dept. in Ottawa as a researcher...former Asst Ed. ROBERT HISCOTT appointed Asst Prof of Soc, Queens, Canada with a specialization in methods...former Assoc Ed. KAREN ANDERSON appointed a (tenure-stream) Asst Prof of Soc, Kings, U of Western Ontario.

INSNA is also a de facto patron of the arts. Our typist (for this issue and the last), MARISTELLA ROCA recently put on a workshop production of her play "Clutching the Heat" and is currently rehearsing her adaptation of Dostoyevsky's "White Nights" by day while typing CONNECTIONS by night.

MOVEMENT AROUND THE NETWORK: J.A. BARNES now at School of Social Sciences, Deakin U, Victoria 3217, Australia...J. CLYDE MITCHELL retiring from Nuffield, Oxford 6/85--his home address continues as 25 Staunton Road, Headington, Oxford OX3 7TJ (tel: 0865-62539)... ROSS BAKER is founding Prof of Dept of Health Admin, Dalhousie, Halifax...COLIN BELL has left Aston U to be a private researcher...BRUCE CURTIS appointed Asst Prof at Soc, Wilfrid Laurier, Canada...ELLAN DEROW now attending Oxford Law School...STEVE DUCK appointed Prof of Communications, U of Iowa...DAVID KNOKE appointed Prof of Soc, Minnesota...EUGENE LITWAK now Head, Division of Sociomedical Sciences (& Prof of Soc & Public Health), Columbia U Schl of Public Health...DOREEN MASSEY now Prof of Geography, Open U...JEANNE KERL MOUNT now at Pharmacy, U Wisconsin...MELVIN OLIVER (Soc, UCLA) promoted to tenured Assoc Prof...EVERETT ROGERS now endowed Prof (& Assoc Dean) at Annenberg Schl of Communic, U of Southern Cal...PETER WILLIAMS now at Inst of Housing, London.

SOCIAL NETWORKS--NOTICE TO WRITERS & EDITORS

The Elsevier North-Holland editorial office for SOCIAL NETWORKS has moved to 19 Albermarle St, London W1 (tel: 01-499-6214).

Effective immediately, this is the address to which all correspondence with North-Holland concerning editorial and production matters should be sent, including manuscripts accepted for publication, corrected proofs, reprint requests.

Don't get confused. Lin Freeman continues as SN's Editor, and you should continue sending original manuscripts to him: Tues & Thurs at Soc Sci, Cal-Irvine and MWF at his windsurfer, Newport Beach. Also North-Holland's subscription offices continue to be in the Netherlands.

MITZVAHS: JANET ABU-LUGHOD in Cairo, 11/84 at the Aga Khan conference, addressing officials and scholars on Cairo socioeconomic problems...WILLIAM BIELBY is Visiting Prof, UCLA Schl of Management...DEREK CORNEILL appointed Chair, Computer Sci, Toronto...BARRY EDGINTON awarded tenure at Soc, Winnipeg...BONNIE ERICKSON (Soc, Toronto) received a nice SSHRCC grant for her continuing study of bridge player's networks...CLAUDE FISCHER awarded Fulbright fellowship for Hebrew U...ROBERT BRYM & A.R. (RON) GILLIS promoted to Prof, Soc, Toronto...RON BREIGER appointed to Editorial Board of SOCIOLOGICAL METHODOLOGY...BARRY WELLMAN (Soc, Toronto) got SSHRCC & Welfare Canada grants to study social support.

THEODORE NEWCOMB (Soc Psych, Mich) died 12/84 of a stroke.

ANDERSON GETS WHAT SHE DESERVES

Grace Anderson (Soc, Wilfrid Laurier) was awarded an honorary Doctor of Law degree by McMaster U Divinity College, 5/85. The award cited her research on immigration as well as her long service to Spanish and Portuguesemigrants in Canada, her influence on immigration policy, and her work in the Baptist churches in Latin America. Among her writings are NETWORKS OF CONTACT: THE PORTUGUESE AND TORONTO and a cookbook for lactose-insensitive Latin Americans.

...AND SO DOES BOURNE

Larry Bourne (Geog, Toronto) has scored the first-ever INSNA hat trick. Within the space of a month, Bourne has picked up three top prizes: election as a Fellow of the Royal Society of Canada, and the outstanding achievement awards of both the Assoc of American Geographers, and the Canadian Geographical Society.

GOSPEL STRUCTURALISM

"It's hard to find the blame
It's too smart to have a name
It's not flesh & blood we fight with
It's powers & principalities."

Old gospel song quoted by Marshall Frady in the NEW YORK REVIEW OF BOOKS, 27 Oct 83.

(NETWORK NOTEBOOK continued on page 8)

MEETING CALENDAR

WORLD CONGRESS OF SOCIOLOGY--New Delhi, Aug 18-23, 1986

As of this writing, network folks definitely have one session lined up for this ISA shindig, with two more likely.

The one definite comes under the aegis of ISA's "Community Research Committee". Organized by Joe Galaskiewicz (Soc, Minn) and Barry Wellman (Soc, Toronto), it's titled "Community Networks".

The two probables come from a request by INSNA itself to the ISA. While we haven't heard yet, they've honoured such requests in the past. Current session organizers are John Scott (Soc, Leicester), "Large-Scale Networks" and Barry Wellman (again), "Small-Scale Networks". (Wellman would be delighted if anyone would volunteer to organize this second session). Our general INSNA policy will be (like the Sunbelt) to squeeze all possible papers onto the program in order to help everyone get the \$\$s to go.

Note that the average August high is 34° Celsius and the average low is 26°; there's an average of 8 days of rain in the month. (Bombay and Calcutta average temps. are about the same, but they get 19 days of rain.) *Late news: ISA has just granted INSNA 2 sessions. Get your paper titles into Wellman or Scott by August 31, 1985 to give us time to get them into the World Congress published programme.*

INTERNATIONAL PERSONAL RELATIONSHIPS CONFERENCE

The third conference is planned for 7/86 in Israel, coordinate with the International Congress of Applied Psychology. For info contact Steve Duck (Psych, Lancaster & Communic, Iowa).

ASSOCIATION FOR HUMANISTIC PSYCHOLOGY, 23-27 July 85, Chicago

"Dedicated to all persons who are and want to be intentional agents of change--in themselves, their loved ones and all of society." Info, Univ of Illinois, Conferences & Institutes, 912 S Wood St, Chicago IL 60612 tel: 312-996-8025.

PAST CONFERENCES

SOCIETY FOR PHILOSOPHY & PSYCHOLOGY - Annual Meeting (Toronto, 15-18 May 85)

The session most directly related to network analysis was on CATEGORY FORMATION. It bore directly on the personal attribute-dyadic relationship--network structure problem at the heart of discussions of appropriate units of analysis. Here's a summary (from the conference calendar) of the session:

Categorization is a fundamental cognitive activity. It is involved in everything from operant discrimination to perceptual recognition to naming to describing. Five different approaches to categorization now exist more or less in parallel: (1) the nativist school, which holds that there are few, if any, nontrivial inductive categories, and hence that most categories are performed; (2) the statistical pattern recognition approach, which computer models category formation probabilistically; (3) the artificial intelligence approach, which models categorization with symbol-manipulation rules; (4) the natural-category approach, which investigates categorization through reaction time studies and typicality judgments; (5) the categorical perception approach, which investigates categorization through discrimination and identification studies. Participants: R. Jackendoff, R. Schank, C. Mervis, N. MacMillan, S. Harnad, R. Millikan.

FAMILIES IN THE FACE OF URBANISATION (New Delhi, 2-5 Dec 85)

THEMES: 1. Urbanisation and its impact on family structures--past, present & future. 2. Urban city planning & housing for the family. 3. Transportation in the urban cities & family needs. 4. Child in the urban setting. 5. Impact of urbanisation on women's welfare. 6. Welfare of the aging in urban settings. 7. Policy & law for family well-being in the urban milieu. 8. Alternative strategies & role of non-governmental organisations for urban well-being.

Sponsored by the Indian Ministry of Works & Housing, the International Union of Family Organisations, & UNICEF. Info from IUFO Conference Office, Service Building, Vikas Sadan, I.N.A. Complex, New Delhi 110 023, India. Reg. fee: US \$100. Languages: Eng. & French. Weather: 10^o-27^oC.

SOCIAL SCIENCE HISTORY ASSOCIATION (Toronto, 25-28 Oct 1984)

SSHA members apply social scientific techniques to historical data. I'd estimate that more than half are historians, eagerly using sociological, economic, anthropological, etc. concepts and techniques. The rest consist of sociologists, etc. interested in historical questions. As Charles Tilly kept saying all weekend, the SSHA represents a turning away from "time, place" history to asking comparative, conceptual questions. I estimate 300+ participants showed up, with a dozen sessions running concurrently.

Selected Papers

- Brenda Collins (Inst of Irish Studies, Queens), "Family emigrations & the linen trade in pre-famine Ireland"
- Yda Saueressig (Geog, Delaware), "Emigration from the province of Noord Brabant, the Netherlands, & the decline of rural industries in the mid 19th century"
- Deidre Mageen (Soc Sci, Open U), "Emigration from Ulster & the decline of the linen trade"
- Michael Les Benedict (Hist, Ohio St), "Factionalism & representation: some insights from the 19th century"
- Carole Turbin (Soc, Empire St C), "Daughters, wives & widows: family relations & labour organizing in a mid-19th century community"
- Vicki Ruiz (Hist, Texas-El Paso), "The ties that bind: assembly line segregation & labor activism among Mexican-American women"
- David Levine (Hist, Ont Inst for Studies in Ed.), "The work process before the Industrial Revolution"
- Christopher Johnson (Hist, Wayne St.), "The aristocracy of labor in 19th century France"
- Marjorie Murphy (Hist, Swarthmore), "The aristocracy of women's labor in America"
- Wally Seccombe (Soc, Ont Inst for Studies in Ed.), "The patriarchal construction of the wage form in 19th century Britain"
- Katherine Lynch (Hist, Carnegie-Mellon), "Using computers in history courses"
- Kenneth Janda (Pol Sci, Northwestern), "Using computers in political science courses"
- Thomas Brennan (Hist, US Naval Acad.), "Drinking companions & social networks in 18th century Paris"
- Elaine Kruse (Hist, Maine-Orono), "Men in support of women's rights: witnesses for divorces in revolutionary Paris"
- Scott Haine (Hist, Wisconsin-Milwaukee), "From shopkeeper to social entrepreneur: the Parisian wine merchant, 1870-1890"
- Ronald Aminzade (Soc, Minn.), "Forms of production & patterns of protest in 19th century France-- a comparative urban study"
- James Cronin (Hist, Wisconsin-Milwaukee), "The state & popular protest in Britain since 1800"
- Sidney Tarrow (Govt, Cornell), "Protest against the leviathan: does it work?"
- Donald Schaefer (Econ, Wash. St.), "A structural model of migration in the antebellum South"
- Norman Spear (Ed, Delaware), "Schooling & communication networks"
- Robert Liebman (Soc, Princeton), "Restructuring the fabrique: employer policy after the second Republic"
- John Heyl (Hist, Illinois Wesleyan), "Rethinking revolutionary theory after Iran & Nicaragua"
- Richard Lachman (Soc, Wisconsin), "Elite structure & state formation in 17th century England & France"
- Virginia Anderson (Hist, Harvard), "Moving in the New World: the incidence of mobility among members of New England's first generation"
- Allan Taylor (Hist, Brandeis), "In pursuit of property: patterns of wealth & migration on the northeastern frontier, 1780-1850"

WOMEN AND THE INVISIBLE ECONOMY CONFERENCE, Institut Simone de Beauvoir, Concordia U, Montreal, 21-23 Feb 85

Selected Papers:

Marilyn Porter (Memorial, Nfld.), "Now you see it, now you don't: the quest for marxist-feminist concepts"
 Tanis Day (Econ, Queens, Canada), "Change in Canadian housework"
 Harriet Rosenberg (Soc Sci, York, Canada), "The kitchen & the multinational corp.: an analysis of the links between unwaged housework & global corps."
 Suzanne Klein (Law, Toronto), "Liberal ideology, family law & reproductive labour"
 Jane Lewis (LSE), "A comment on the position of women & the future of work"
 Ann Denis (Soc, Ottawa), "'Helping out' in family enterprises"
 Leslie Brown (Soc, Mt. St. Vincent), "Women's community work: the third part of the puzzle"
 Barry Wellman (Soc, Toronto), "Domestic work, paid work & net work"
 Susanne Mackenzie (Geog, Queens, Canada), "Just a chance to get together: informal childcare networks as a short-term solution & urban future"
 Danièle Blais (Québec à Montréal), "La garde informelle des enfants"

(NETWORK NOTEBOOK continued from page 5)

IMPERFECT COMPETITION = PERFECT NETWORKS (OR, THE INSCRUTIBLE AMERICANS)

"But how much of (US) sales frustration is due to (Japanese) protectionism? The Japanese, who commonly consider themselves the least protectionist major country, often accuse Americans of laziness and failure to study the market. 'They expect to just walk in and talk to a distributor and say, "Here's my product," the way they do in the US,' said Mr. Choy of the Japan Economic Inst. 'It doesn't work that way in Japan.'

"The Japanese distribution system, in particular, is a critical obstacle because the network has several more layers than in the US and because distributors may not jump to buy foreign goods just because they are cheaper. They place a premium on long-term relationships with suppliers, doing business with those who have faithfully performed their obligations in the past. This is what makes it difficult even for new Japanese companies to break into the market." (from Nicholas Kristof's article in the NEW YORK TIMES, 4 April 85).

PUBLISHING OPPORTUNITIES

EVERETT ROGERS & FREDERICK WILLIAMS will edit a new Free Press book series on COMMUNICATION TECHNOLOGY & SOCIETY. 10 volumes are planned. The series will deal with the nature of the technologies and with research methods for studying their impacts in such areas as organizations, urban planning, national development, economics, child development, and leisure.

QUALITATIVE SOCIOLOGY will publish a special issue on artificial intelligence and the study of social life. Manuscripts by 30 Sept 84 to Barry Glassner, Soc, Syracuse U, Syracuse NY 13210.

JOURNAL OF POLITICAL & MILITARY SOCIOLOGY will publish a special issue on ELITES & RULING CLASSES. Especially interested in comparative accounts of how national leaders and the structural constraints within which they operate affect major social and political outcomes. Manuscripts (prefer by 30 July 85) to Michael Burton, Soc, Loyola, U, 4501 N Charles St, Baltimore MD 21210.

SUMMER READING

"The plate-glass, concrete jungle of Euphoria St U (i.e., Berkeley) and the damp red-brick U of Rummidge (i.e., Birmingham, UK) have an annual exchange scheme. When Prof's Swallow (Eng) & Zapp (USA) swap, the Fates play a hand. The two academics find themselves enmeshed in a spiralling involvement on opposite sides of the Atlantic. Nobody is immune: students, colleagues, even wives are swapped as the tensions increase." David Lodge, TRADING PLACES (From publisher's blurb).

Who says structural equivalence is boring and hard to understand?
(NETWORK NOTEBOOK continued on page 20)

INFORMANT CORROBORATION OF SOCIAL SUPPORT NETWORK DATA

Manuel Barrera, Jr., Louise M. Baca, Jon Christiansen, and Melinda Stohl; Department of Psychology; Arizona State University, Tempe, Arizona 85287 USA

In community survey research, social networks are commonly identified through assessment methods that rely on an individual's self-report. Depending on the criteria that are used to define network membership, respondents are asked to name those people who are important, who provide particularly confiding relationships, who engage in frequent social exchanges, or who deliver specific forms of social support. Those researchers who operate from a phenomenological perspective are primarily concerned with an individual's self-perception of linkages to network members. From this perspective it is not critical that external observers (such as network members themselves) share the individual's perception that linkages exist. Accordingly, the interrater reliability of personal networks is of little concern. However, many social network researchers regard the collection of self-report network data as a convenient method of identifying personal networks that could, in fact, be corroborated by external observers. Despite the apparent importance of this assumption, researchers seldom assess how well informants corroborate self-reported network data.

Bernard and Killworth have published a series of articles on informant accuracy of particular types of network data. Specifically, these researchers were concerned with how accurately people could report the extent to which they communicated with each other. Their studies were conducted with samples of deaf adults who communicated with each other on teletypes or oscilloscopes (Killworth & Bernard, 1976, 1979) amateur radio operators, office workers, university personnel in one academic unit, and residents of a college fraternity (Bernard & Killworth, 1977; Bernard, Killworth, & Sailer, 1980; Killworth & Bernard, 1979). In these studies respondents' rankings of how much they communicated with their network members were contrasted with observers' ratings or with unobtrusive measures of communication. The collective results of these studies did not support the accuracy of this type of self-report network data:

In repeated experiments, we have been unable to show (at least for the instrument "Who do/did you talk to?") that cognition is related to behavior in any meaningful way whatever. . . in our data there are many cases of people claiming very strongly (i.e., ranked first of (sic) second, or scaled high) that they talked to someone in a given time period when in fact they didn't. Conversely there are many cases of people who talked to someone else a great deal but who claimed not to have done so at all. (Bernard et al., 1980, p. 209)

These same authors clearly acknowledged, however, that their results should not be interpreted as a blanket condemnation of all self-report network instruments (Bernard et al., 1980). They called on researchers to demonstrate that other self-report network measures accurately measure behavioral transactions.

In a previous issue of *Connections*, Barrera (1980) reported pilot research on a method for assessing social support networks in community survey research. As described in that paper, the Arizona Social Support Interview Schedule (ASSIS) is built on methods that are similar to those used by Jones and Fischer (1978) and Ratcliffe et al. (1978). Essentially, network members are identified through a series of questions that probe for the names of individuals who provide various categories of social support. In the case of the ASSIS, social support categories consist of Intimate Interaction, Material Aid, Guidance, Feedback, Physical Assistance, and Social Participation. While these categories were initially based on a rationally-derived typology, a factor analysis of a measure of supportive behaviors yielded empirical dimensions similar to the ASSIS categories (Barrera & Ainlay, 1983).

Previous studies have already provided some information about certain psychometric properties of network indexes that can be derived from the ASSIS. Over a 3-day interval the test-retest correlation of total network size was .88 (Barrera, 1980). In this same study respondents were able to identify consistently 79.5% of the network members who were reported to be actual providers of support during the preceding month (Barrera, 1980). Over a one-month interval, the test-retest correlation of the network size index was .70 with a sample of female graduate students (Valdenegro & Barrera, 1983).

To this point, the reliability studies conducted with the ASSIS have not assessed how well these self-reports can be corroborated by the network members themselves. Thus, the purpose of the present study was to address this question with a sample of community mental health outpatients and selected members of their networks. As described in the following section, the measurement tasks for both subjects and their informants were quite different from those used in the studies by Bernard and Killworth. In this way the present study responds to the need for testing the informant accuracy of alternative network assessment methods (Bernard et al., 1980; Hammer, 1980).

Method

Subjects

Data for the present study were derived from an investigation of 78 mental health outpatients. Of these subjects, 36 (12 men and 24 women) agreed to supply the name of one network member who could be interviewed by a member of the research project staff. They were a mean of 33.0 years old ($SD = 11.1$).

A number of t-tests and Chi-square analyses were conducted to compare those subjects who agreed to provide the name of an informant to those who did not. Of the 13 comparisons that were made, 2 were significant. Those who agreed to have an informant contacted were significantly more satisfied with the support received from their network members and had significantly larger networks (8.8 vs. 6.8). The two groups did not differ on such variables as age, education, occupational status, self-esteem, severity of psychological symptoms, and frequency of utilizing social support.

Network Member Informants

All network member informants who were asked to participate in this study agreed to do so. These informants consisted of 7 spouses, 8 family members, 20 friends or coworkers, and 1 therapist.

Measures

ASSIS. The Arizona Social Support Interview Schedule (ASSIS) has been more thoroughly described in previous papers (Barrera, 1980, 1981). In the present study subjects were first asked to name those individuals who had provided one or more of six distinct categories of social support during the preceding month. For example, subjects listed providers of Material Aid by responding to the question, "During the past month, if you needed to borrow \$25 or something valuable, who are the people who actually loaned or gave you \$25 or more, or loaned or gave you something (a physical object) that was valuable?" For each successive question, new names could be listed or individuals identified on an earlier probe could be renamed as a provider of additional forms of support. This process yielded a list of individuals who provided at least one form of social support (total network size) and also specified which forms of support each network member provided.

Because the overall research project was partially concerned with reciprocity, subjects were also asked to report which forms of social support they had provided to network members. For each network member, subjects made the dichotomous judgment of whether or not they had provided each form of social support during the past month.

Informant Reports. The questions used to corroborate subjects' reports paralleled those that were used to determine network membership and reciprocity (described in the preceding section). First, informants made dichotomous judgments of whether or not they had provided each of six social support categories to the subject during the preceding month. Second, they were asked whether they had received each form of support from the subject during the preceding month. In most cases informant reports were collected in telephone interviews. For those informants who lacked telephones, face-to-face interviews were conducted.

Procedures

Therapists in three mental health outpatient clinics were asked to inform their new clients of the study and to obtain their written consent to have a research staff member contact them. Therapists exercised the option of screening out those clients who were floridly psychotic or whose participation in the research might constitute an impediment to treatment.

Those clients who agreed to participate were interviewed by one of seven interviewers. Assessments were typically conducted prior to the first or second clinic appointment to minimize any influence that therapy might have on perceptions of social support or psychological symptoms.

At the completion of the ASSIS interview, subjects were asked to grant permission for the researchers to contact one of the network members who had been identified on the ASSIS. A two-tiered contingency plan was adopted in selecting a network member informant. First, a table of random numbers was used to select one of the network members as a possible informant. If the subject did not agree to this selection, this procedure was repeated up to two additional times. If the subject still refused to grant consent, they were provided with the option of selecting a network member of their own choice. Because all subjects were new mental health clients, they often refrained from naming an informant in order to maintain the confidentiality of their mental health treatment.

Informants were mailed a letter that briefly explained the research project and an enclosure that contained the subject's written consent to contact them. Approximately one week after the subject was assessed, the informant was interviewed on items that concerned the provision of support to the subject and the subject's provision of support to the informant over the preceding month.

Results

The mean network size for subjects who identified an informant was 8.8 ($SD = 3.4$). By comparison, the mean network sizes for university undergraduates and pregnant adolescents were 10.4 and 6.2 respectively using comparable interviewing procedures (Barrera, 1980, 1981).

Table 1 shows measures of agreement between subject's and informant's reports of support that was received by subjects. All items showed significant kappa¹ coefficients that ranged from a low of .295 (Intimate Interaction) to a high of .944 (Physical Assistance). Of the 31 total cases of nonagreement, 24 (77.4%) were due to informants' reports that they had provided aid when subjects indicated that it was not. There were only 7 instances when subjects reported that aid was provided, but informants did not. Of the 185 total cases of agreement, 99 (53.2%) were indications that aid was not provided, and 86 (46.8%) were reports of aid provision.

Measures of agreement for support that was provided by subjects are quite comparable. These values are shown in Table 2. All kappa coefficients were statistically significant, but the category Intimate Interaction again showed relatively poor agreement. Of the 30 cases of nonagreement, 19 (63.3%) resulted from informants reports that aid was provided to them when subjects indicated that it was not. In 11 cases, subjects indicated that they had provided aid when informants reported that they had not. Of the 186 cases of agreement, 71 (38.2%) were reports that aid was not provided and 115 (61.8%) were reports of aid provision.

Discussion

With the exception of the category of Intimate Interaction, subjects' reports of the support they had obtained from and provided to informants were largely corroborated by informants' reports. Ten of the 12 categories yielded measures of agreement that were in acceptable ranges; several categories were associated with kappas that were remarkably high (.75 and higher). These results provide good support for the assertion that subjects' self-reported network data can be corroborated by the reports of the network members they identify.

In retrospect, it is understandable that Intimate Interaction was the one category that failed to show strong agreement between subjects and their informants. Unlike the other categories that dealt primarily with material or behavioral exchanges, the Intimate Interaction item required respondents to determine who they talked to about "things that were very personal and private." The unreliability of this item might stem from the subjective judgment of what constitutes "personal and private" information. In addition, this was the most frequently endorsed category for both subjects and informants. For example, 29 (of 36) informants said that they had provided Intimate Interaction to subjects; 27 (of 36) subjects indicated that they had provided it to informants. The combination of frequent endorsement and unreliability suggests that this category also might be susceptible to social desirability response bias.

There are at least two important methodological limitations to this study that should be noted. First, the 36 subjects who allowed us to contact informants represented slightly less than half of the total sample. Although these subjects did not differ from noncompliant subjects on most measures, compliant subjects did have somewhat larger networks and reported greater satisfaction with the support that they received from network members. The two groups did not differ on age, gender, severity of psychological symptoms, frequency of receiving supportive transactions, self-esteem, or personal propensity to utilize network support. Thus, it is not clear to what extent subjects with informants truly differed from the sample at large. The relatively high percentage of subjects who refused to provide an informant was understandable in light of some subjects' concern for maintaining the confidentiality of their mental health outpatient status.

Second, informants cannot be regarded as a random sample of network members. Although random selection was attempted in all cases and successful in some, many subjects only allowed specific network members to serve as their informants. The selection of a particular network member to serve as the informant might reflect a special intimacy or expectation of confidentiality that would not extend to the remainder of the network. If this was the case, the good agreement between subjects and informants might not be generalizable to the entire network, but might represent "an upper limit" on these reliability estimates.

Because of the special issues of confidentiality that were associated with studying mental health outpatients, the large percentage of the sample without informants and the restrictions they placed on our selection of informants might have been fairly unique to this sample. This study should be replicated with subjects who do not perceive the stigma of mental health outpatient treatment and who presumably would not be threatened by having informants participate in a research project of this type.

The unreliability of self-reported network data that was found by Bernard and Killworth does not appear to characterize the kinds of network data that are obtained through the interview procedures adopted in the present study. The data obtained in this study did not require subjects to recall highly specific instances of communication or rank network members on how much communication was exchanged. Instead, the ASSIS is concerned with accurately identifying (a) who provided rather broad categories of support during the preceding month and (b) whether subjects reciprocated this aid to identified network members.

With the exception of the category Intimate Interaction, the self-reports of these subjects were corroborated by informants with a moderate to high degree of accuracy. While it is important to recognize the limitations of the subject and informant samples, the results of the present study suggest that these network data reflect more than just the cognitive activity of subjects. The supportive exchanges assessed by the ASSIS can largely be confirmed by the network members who provide support and who receive it in return.

Notes

¹Kappa is a measure of interrater agreement for categorical scales (Cohen, 1960). Its principle advantage over some other measures of association is that it corrects for chance-expected agreement. Kappa reaches its maximum value of +1 when there is perfect agreement, it has positive values when agreement is greater than chance, and it has values between -1 and 0 when agreement is less than chance. Values greater than .75 have been described as characterizing "excellent" agreement and values less than .40 as indicating "poor" agreement (cf. Fleiss, 1981). Fleiss (1981) provides formulas for estimating the standard error of kappa that can be used in calculating z-scores and determining statistical significance levels.

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Table 1

Agreement on Social Support Provided to Subjects from Informants

Subject Response	No		Yes		% Agree	Kappa
	No	Yes	No	Yes		
Intimate Interaction	<u>5</u>	9	2	<u>20</u>	69.4	.295*
Material Aid	<u>27</u>	2	1	<u>6</u>	91.6	.748***
Guidance	<u>14</u>	5	3	<u>14</u>	77.8	.557**
Positive Feedback	<u>21</u>	4	0	<u>11</u>	88.9	.763***
Physical Assistance	<u>17</u>	1	0	<u>18</u>	97.2	.944***
Social Participation	<u>15</u>	3	1	<u>17</u>	88.9	.753***

Note. N = 36. Agreements between subjects and informants are underlined.

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 2

Agreement on Social Support Provided from Subjects to Informants

Subject Response	No		Yes		% Agree	Kappa
	No	Yes	No	Yes		
Intimate Interaction	<u>3</u>	6	2	<u>25</u>	77.8	.305*
Material Aid	<u>26</u>	3	2	<u>5</u>	86.1	.730***
Guidance	<u>9</u>	5	1	<u>21</u>	83.3	.629***
Positive Feedback	<u>8</u>	2	3	<u>23</u>	86.1	.664***
Physical Assistance	<u>11</u>	2	3	<u>20</u>	86.1	.706***
Social Participation	<u>14</u>	1	0	<u>21</u>	97.2	.941***

Note. N = 36. Agreements between subjects and informants are underlined.

* $p < .05$ ** $p < .01$ *** $p < .001$

RESEARCH REPORTS

ANDERSON, Jeanine (Ford Fdn, Lima, Peru).

Still trying to pull together a Lima working group on network analysis; hope to begin publishing own work on networks in bamadas and tugunos of Lima this year (in Spanish).

BAKER, Wayne (Synectics Group, Wash, DC).

Continuing to apply network approaches to study of markets. Current projects include analysis of information flows on market outcomes and efficiency. Interested in making contact with those with interests in markets, marketing research, and economic exchange systems.

BERNARD, Russell (Anthro, Florida).

Ongoing research, with P.D. Killworth and C. McCarty on measuring patterns of acquaintanceship; seeking the rules governing who people know and why they know each other.

BLOMBERG, Jeanette (Cal-Davis).

I am studying the ways in which social interaction and organizational communication are related to the embedding of new technologies into the workplace. Current research focuses on the use of a computer-based design environment by human factors and industrial designers within a large corporation.

CAMPBELL, Karen (Soc, Vanderbilt).

Working on sex differences in social resources and social constraints (presented at 1985 Sunbelt), and on sex and occupational differences in job search behavior.

CAULKINS, Douglas (Anthro, Grinnell).

Recently served as a faculty intern with the Congressional Office of Technology Assessment, contributing to a report on "Technology, Innovation, and Regional Economic Development" (Washington D.C., U.S. Congress, Office of Technology Assessment, OTA-STI-238, July 1984). My work focused on entrepreneurial networks. Currently planning an ethnographic study of entrepreneurial network in the high technology industries of "Silicon Glen", Scotland.

CHEAL, David (Soc, Winnipeg).

My current research is concerned with various dimensions of the gift economy in Canada. Within that field, my special interest is intergenerational transfers. My most recent publication is: "The system of transfers to and from households in Canada". Submission to the House of Commons' Standing Committee on Health, Welfare and Social Affairs, March 1985. Simultaneously published in the *Western Economic Review*, Volume 4, No. 1.

COCHRAN, Moncrieff (Human Development, Cornell).

Effect of intervention on networks of parents with young children; comparison of mothers' networks across cultures (U.S.A., Sweden, Wales, W. Germany).

DANOWSKI, James (Communic, Illinois-Chicago).

Analyzing electronic mail traffic and content network relationships; using word network analysis to investigate image structures represented across news stories about institutions and organizations; researching personal network radiality and media exposure.

DOW, Malcolm (Anthro, Northwestern).

Still working on statistical aspects of networks - network autocorrelation problems. Applications of network methods in cross-cultural and cross-species research. Mathematical demography.

FARARO, Thomas (Soc, Pitt).

I collaborate with John Skroretz (SC) on two ongoing theoretical research programs, one on the use of biased net models in the formalization of sociological theories and the other on action theory approached through a mode of formal representation (production systems and grammars) drawn from innovations in cognitive science and AI. We are also working on a dynamic model of the emergence of hierarchy in animal groups, blending an expectation-states approach (with its Markov process on a state space of relational expectations) and a structuralist argument about how such hierarchy is constructed over time. I have also collaborated recently with Pat Doreian on various structural-analytic problems, such as our work on tripartite analysis.

FAULKNER, Robert (Soc & Demog Research, Mass).

Short-term contracting and careers; small numbers exchange in professional labor markets; structural position and cumulative advantage in freestanding professions.

FINK, Charles (Falls Church, VA).

Continuing to develop and to put into the field Behavior System Coaching: Self-Reprogramming, a micro processor-based, self-help way of developing out of "mental illness" and beyond. The research program is now international, but more collaborators are needed. Six manuals have been published recently.

FISCHER, Claude (Soc, Cal-Berkeley).

Am currently in the midst of research on the diffusion, use, and personal consequences of communications and transportation technologies -- especially telephone and automobile -- in the first part of the 20th Century.

FISCHER, Judith (Home & Family Life, Texas Tech).

With Donna Sollie, we are completing an NICHD sponsored project studying interactions among life transitions in young adulthood and social networks. We are also piloting a study on friendship network changes among highschool age adolescents, both Anglo and Hispanic.

FRIEDKIN, Noah (Educ, Cal-Santa Barbara).

Collaboration with Charles Bidwell (Chicago) on network studies of educational policy groups; development and test of a formal theory of social power.

GRAHAM, Glenda (Dallas, Texas).

Studying relationships between clinical and basic science departments in a health science center environment - also invisible colleges.

GRANOVETTER, Mark (Soc, SUNY-Stony Brook).

At work on two books. One is on the embeddedness of economic action in social structure. Related article is in 1985 *AJS*: "Economic Action and Social Structure: A Theory of Embeddedness". Second is on threshold models of collective behavior (in collaboration with mathematician Roland Soong). Related publication is "Threshold Models of Diffusion & Collective Behavior", *J. MATH SOC*, 11/1983.

GREENBAUM, Susan (Anthro, S. Fla).

Ethnohistorical and ethnographic research with Afro-Cubans in Tampa, Florida. Network broker for two community organizations in Tampa.

ISRAEL, Barbara (Health Behav & Educ, Mich).

Action research project involving employees in the identification of sources of stress at work, social resources (e.g., social networks and social support), and their effects, and in the development and implementation of programs and changes to address identified needs.

JONES, Brian (Soc, Villanova).

Designing a longitudinal study of adolescent drug abusers in which network measures will be viewed in combination with program treatment variables.

KADUSHIN, Charles & Nava LERER (Soc, CUNY Grad Ctr).

MICRO-COMPUTERS AND SOCIAL NETWORKS. This two-year, NSF-funded project, to be completed in July, 1986, is studying how micro-computer users help one another to operate their computers. The helping process is described by five interrelated concepts: diffusion, exchange, homophily, content, and context. The study involves computer-assisted telephone interviews with 1,200 micro-computer users in New York, including graduate school users, users belonging to computer clubs, and purchasers from specific stores.

KANDEL, Denise (Columbia).

Am engaged in a longitudinal study of the psychosocial transition from adolescence to young adulthood, with a particular emphasis on the role of legal and illegal drugs on the transition. In the last wave, data were collected from spouses and partners and about friendship networks. Publications (recent): 1. Kandel, D & J. A. Logan, "Patterns of Drug Use from Adolescence to Early Adulthood: I. Periods of Risk for Initiation, Stabilization and Decline in Drug Use from Adolescence to Early Adulthood," *AMERICAN JOURNAL OF PUBLIC HEALTH*, 1984, 74:660-666. 2. Yamaguchi, K. & D. Kandel, "On the Resolution of Role Incompatibility: Life Event History Analysis of Family Roles and Marijuana Use," *AMERICAN JOURNAL OF SOCIOLOGY*, 1984 (in press). 3. Kandel, D. & M. Davies, "Adult Sequelae of Adolescent Depressive Mood," *ARCHIVES OF GENERAL PSYCHIATRY*, 1985 (in press).

KAPLAN, Charles (Preventive & Soc Psych, Erasmus U, Rotterdam).

Networks of Drug Worlds; methodological applications of network analysis -- estimation of population parameters from mathematical models of networks, snowball sampling as networking, convergence of blockmodels and numerical taxonomy and classification procedures.

KOENIG, Thomas (Soc, Northeastern).

Work on struggle for control of the legal profession during the 1920's and 1930's. "The Challenge to Hierarchy in Legal Education: Suffolk and the Night Law School Movement," forthcoming in RESEARCH IN LAW, DEVIANCE AND SOCIAL CONTROL, Vol. 7. Work on political action committees, "Corporate Financing of the Christian Right," forthcoming in HUMANITY AND SOCIETY.

KULKA, Richard, William SCHLENGER & Charles KADUSHIN (Soc, CUNY Grad Ctr).

NATIONAL VIETNAM VETERANS READJUSTMENT STUDY. Scheduled for completion in January 1988, the purpose of this 40-month study for the Veterans Administration is threefold: 1) to furnish information to help the VA plan for the provision of health and mental health services to veterans by providing reliable national estimates of the nature and extent of post-war psychological problems among Vietnam Era veterans, with special emphasis on the prevalence of Post-Traumatic Stress Disorder (PTSD); 2) to provide a comprehensive description of the life adjustment of Vietnam Theatre veterans and compare that adjustment to Era veterans and nonveterans; and 3) to provide detailed scientific information about PTSD -- its antecedents, course, sequelae, and relationship to other physical and emotional disorders. Face-to-face interviews will be conducted nationwide with 2,900 Vietnam Theatre veterans, Vietnam Era (non-Theatre) veterans, and civilian counterparts. Special attention will be paid in these three groups to relevant social characteristics: gender, ethnicity (Hispanics and blacks), and social class with reference to their different but specific experiences in Vietnam.

LEWIS, John (Internat'l Security & Arms Control, Stanford).

Completed study of political networks in China, 1979-1983; now working on military networks in PRC.

LIN, Nan (Soc, SUNY-Albany).

Beginning a panel survey of social support among the elderly (co-investigators - Al Dean, Walter Ensel); Planning a survey of social support and mental health in China; Planning a survey of social resources and job mobility in China.

MARSDEN, Peter (Soc, NC-Chapel Hill).

Preparing monograph on exchange, networks, and collective action; research on network measurement; research on networks and job searches, job-matching.

MITNICK, Barry (Bus, Pitt).

With Robert Backoff of Ohio State University, I am completing a book on an incentive systems approach to organizations. My other recent work includes further development and applications of the theory of agency, including applications to boundary-spanning roles in organizations and (with my colleague Donna Wood) use of external agents by boundary spanners (empirical study of fleet management in firms), the behavior of bureaucrats, the legitimacy-providing roles of directorates as organizational agents, and the typical "problems" of agency relationships.

MIZRUCHI, Mark (Sci Computing Ctr, Albert Einstein C of Med, NY).

1. A study of the effects of economic relations among industries on the similarity of their political behavior, using corporate campaign contributions (with Tom Koenig); 2. A longitudinal study of the effects of capital dependence on appointments of representatives of financial institutions to corporate boards (with Linda Stearns); 3. Completing an edited volume, "Structural Analysis of Business" (with Michael Schwartz) - it should be in production by the time this is printed; 4. A study of the effects of social structural variables on the performance of professional basketball teams; 5. Examining methods of measuring centrality, and disaggregating centrality into its component parts.

MOUNT, Jeanine (Pharmacy, Wisconsin).

For the past several years, I have been working with Robert Perrucci on a two-stage study of a community-based human services delivery system serving the aged. From this study, I have written my dissertation (Convergence in Interorganizational Relations - Comparison of Organization-Level and Individual-Level Networks). We will also be presenting a paper at the American Sociology Association meetings ("What is an interorganizational relationship? A Comparison of different units of analysis and content of ties"). I'm also currently beginning work on a study of U.S. pharmacy organizations and their leaders.

MUELLER, Robert.

1. Research on effective use of human networks in business organizations to supplement conventional organizational (hierarchical) communications flow and management processes including relationship to corporate governance. 2. (Latest book): BEHIND THE BOARDROOM DOOR. September 1984. CROWN PUB NY. Concerns Director conduct and networking in Board Room; anecdotal from 30 years experience on Boards; Games Directors Play.

PRICE, Rumi Kato (Survey Research, Cal-Berkeley).

Preparing dissertation: "Kicking the habit: the structure and dynamics of recovery from opiate addiction."

RAU, Marie (Urb St, Portland State).

1. Have co-authored a chapter with Richard Schulz on health and social support over the life course to be published this spring in S. Cohen & L. Syme (Eds.), SOCIAL SUPPORT AND HEALTH (Academic Press).
2. In second year of NIA grant (3 years) examining social network and well-being changes associated with a first, completed stroke, with data collected on caregivers ("primary informant"), and stroke victims for four points in time: (a) pre-stroke (retrospective); (b) 4-6 weeks after stroke event (T_1); 6 months later (T_2); and 6 months after second interview (T_3). Anticipate will have two hundred + dyads in an Oregon and Pittsburgh, PA sample. Outcome measures include self-reported health/well-being (IPWB, CES-D), ADL functioning of stroke victim, optimism scale, caregiver burden (perceived) scale, and other measures of detailed social network and social activity change.

REITZ, Karl (Soc Sci, Cal-Irvine).

I just finished a program called AUTCOR which works on the IBMPC. It does regression analysis on data in which the cases are not independent but connected through a network measured by some square matrix. This program gives a significance test of the degree to which the variables are autocorrelated. It also computes an R^2 as reported by Malcolm Dow at the most recent Social Network Conference.

RICE, Ronald (Annenberg Schl of Communic, So. Cal).

1. Several studies combining network analysis with analysis of uses and impacts of new communications technologies in organizations; 2. Network analysis of emerging electronic publishing industry, identifying which industrial/economic sectors become central; 3. Rice, R.E. & W. Richards Jr., "An Overview of Network Analysis Methods." in Deruin, B & M. Voigt, (eds.) PROGRESS IN COMMUNICATION SCIENCES Vol 6. NJ: Abtex, 1985; 4. Rice, R.E. & G. Barnett, "Group Communication Networking in Electronic Space." in McLaughlin, M. (ed.) COMMUNICATION YEARBOOK 9. Beverly Hills, CA: Sage, 1985; 5. Barnett, G. & R.E. Rice, "Longitudinal Non-Euclidean Networks: Applying Galileo." SOCIAL NETWORKS, 1985; 6. Rice, R.E. & Associates. THE NEW MEDIA: COMMUNICATION, RESEARCH AND TECHNOLOGY. Beverly Hills, CA: Sage, 1984.

RUSSELL, Daniel & Carolyn CUTRONA (Psych, Iowa).

PSYCHOSOCIAL FACTORS, HEALTH, AND WELL-BEING AND AGING. This three-year project, scheduled for completion in March 1987 and funded by the National Institute on Aging, addresses the following theoretical issues: 1) the relative impact of quantitative versus qualitative aspects of a person's social relationships on his or her health and well-being; 2) the causal impact of life stress and social support on changes in physical and mental health over time, including whether these causal factors interact in affecting health and well-being; and 3) causal relationships among physical and psychological indicators of health, particularly over time. The project involves face-to-face interviews and mail questionnaires for 300 healthy adults over 65 living in either rural or urban areas in Linn County, Iowa.

SMITH, Randall (Soc, Rutgers).

Elliot Noma and I have been doing some correspondence analyses of network data. "An analysis of Sampson's Monastery Data" appeared in MULTIVARIATE BEHAVIORAL RESEARCH, April, 1985, 20:179-97. "An Analysis of a Mobility Transition Matrix" appeared in SOCIOLOGICAL PERSPECTIVES, April, 1985, 28:145-73. We've also been doing an exhaustive blockmodeling (all possible 2-blocs, 3-blocs, etc) of the bank wiring room. This will appear in PSYCHOLOGICAL BULLETIN in September.

TARDY, Charles (Speech Communic, S. Mississippi).

I am completing a book on communication research methods. The edited volume will survey and assess options available for operationalizing, measuring, or describing aspects of communication. The AMERICAN JOURNAL OF COMMUNITY PSYCHOLOGY recently published my article on the measurement of social support.

TIMMS, Elizabeth (Community Studies, Moray House College, Edinburgh).

Teaching on the implications of network analysis for the development of community social work; Movement in Scottish Network Development Group - a network of practitioners interested and/or involved in Community Social Work.

TRIMBLE, David (Mass).

Member of Network Consultants, offering consultation and training in social network intervention in mental health. Regular participant in American Orthopsychiatric Association Conference network therapy presentations (1984 Faculty member, "Network Approaches to Therapy," moderated by Jodie Kliman). Co-author with Jodie Kliman of Chapter, "Network Therapy" in Wolman & Stricker's HANDBOOK OF FAMILY AND MARITAL THERAPY (Plenum 1983). Author with Network Consultants colleagues of "Follow-up of a Full-Scale Network Assembly," INTERNATIONAL JOURNAL OF FAMILY THERAPY, 6(2), 1984.

WILLMOTT, Peter (Policy Studies Inst, London).

Currently working on a survey of the influence of social class and gender on social networks in a London suburb. The sample, of husbands and wives with at least one child under 16, is to be split between two residential areas - one middle-class, the other working-class - and will contain fifty men and fifty women in each. The main emphasis is on friends and neighbours, with particular attention to help and support from them (and also from kin).

WILSON, Paul (Soc Work, Illinois).

Research on social network supports of primary caregivers of three types of patients and relationship of informal support and formal service provision.

WINKELSTEIN, Warren Jr. (Pub Health, Cal-Berkeley), & James WILEY (Survey Res Ctr, Cal-Berkeley).

AIDS SURVEY. The second wave of interviewing in this prospective sero-epidemiological study, funded by the National Institute of Allergy and Infectious Diseases, began in January 1985. The study involves a probability sample of over 1,000 unmarried men aged 25-54 who were recruited during Wave 1, which began in mid-1984. Both the baseline and follow-up interviews include questions about respondents' medical history, sexual behavior, drug use, and men's response to the AIDS epidemic (including changes in sexual behavior). In addition, the Wave 1 instrument included a supplementary section on nutritional habits, and the Wave 2 instrument included a special psychosocial component. Respondents not only answer questions but also have physical examinations and provide a variety of specimens, including blood, semen, etc. The interviews are conducted in a clinic setting (at Children's Hospital in San Francisco) using a small staff that includes both men and women, homosexual and heterosexual interviewers. Wave 3 is scheduled to begin in July. The survey is tentatively scheduled to end in 1987 with the sixth and final wave conducted that summer.

(NETWORK NOTEBOOK continued from page 8)

"THE NETWORK IS GROWING"

The "Good Relations Group" has an office on Bloomsbury Way near the University of London.

TRANSITIVITY SNORTS OK!

When the MIAMI HERALD tested \$20 bills, those holding cocaine-contaminated money included the Roman Catholic Archbishop, Edward McCarthy, the chair of the county Republican party, a former Miss America, and the president of a major newspaper chain. (Source: USA TODAY 20 Feb 85).

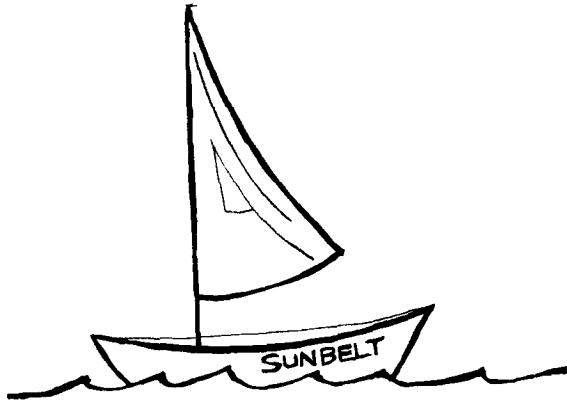
AND I ALWAYS TOOK AN ASPIRIN

"What You Can do About (Stress)...Most important of all: talk to someone. A friend. A neighbor. Someone in the family." (From a Tylenol ad in ESQUIRE, 5/85).

ESTROGEN + NETWORKS = LONGEVITY

"Dr. (Robert) Butler (chair, geriatrics, Mt. Sinai Schl of Med, NYC) said the longevity of women may be attributable to female hormones and the ability of women to develop social networks that enable them to cope with crises. He warned, however, that women will lose this advantage if more of them smoke and thereby run the risk of incurring lung cancer, a growing cause of death among women." (From Sharon Johnson, "Differences in Life Expectancy Widens Between the Sexes," NY TIMES, 22 May 84).

(NETWORK NOTEBOOK continued on page 73)



ABSTRACTS

BAKER, Wayne (Synectics, Wash D.C.). "Spatial Interaction and the Formation and Structure of Social Networks: The case of a Local Hospital Economy."

This paper examines the role of spatial interaction in the formation and structure of micro-level and macro-level networks in the context of a local economy of hospital services. The formation of dyads--community-hospital links--is modeled as a function of the distance between communities and hospitals, the population of communities, and a "hometown advantage" that hospitals experience in their own communities. These three variables explain about 86% of the variation in hospital utilization (i.e., the number of patients a hospital receives from each community in a year period). Macrostructure is analyzed via blockmodeling techniques. The blockmodel derived from the fitted values serves as the theoretical model of the economy--the structure that the economy would have if distance, hometown advantage, and population perfectly explained network patterns. Since the blockmodel of the actual data is very similar to the theoretical blockmodel, it is concluded that this economy is largely determined by spatial interaction variables. The use of network analysis in impact assessment is explored by estimating the redistributive effects of the introduction of a new hospital in this economy. The micro- and macro-level structure of this economy is forecasted 8 years into the future and compared with current structure. Though this economy is expected to expand, its basic structure is not expected to change.

BARNETT, George, Richard BALES & Kenneth DAY (Communic, SUNY--Buffalo). "A General Systems Approach to Organizational Network Analysis."

Network analysis describes relational data such as patterns of communication in social systems. Central to general systems theory is the notion of hierarchization. Sets of mutually interacting systems may form supra-systems. These supra-systems can interact with others at the same level to form still higher level systems. This suggests that network analysis as a systems methodology should be performed consistently with units of analysis at different levels of hierarchization. It should permit the examination of relations among individuals, components, subsystems or entire social organizations.

This paper examines communication patterns of both individuals and components in a formal organization. Two different methods of network analysis were used--NEGOPY and GALILEO. NEGOPY is a graphic theoretical approach which bases its description of the network on whether or not there is a link among nodes. It considers the strength of the relationship after groups have been determined. GALILEO is a form of multidimensional scaling, a spatial model, which considers the strength of the relationship in the description of network structure. Groups can be identified later through cluster analysis.

The results indicate that neither method provides an adequate description of the social network at both the individual and the component levels of analysis. NEGOPY provides a useful description of communication patterns among individuals, but is inadequate for describing communication patterns among components because it is not sensitive to variations in the strength of links. This is problematic for highly interconnected systems, such as components in formal organizations. GALILEO provides a useful description of the communication networks of the components, but not for individuals. It cannot handle all the data for a large number of nodes. In conclusion, it appears that both methodologies are necessary to adequately describe organizational communication networks from a general systems perspective.

BOSTER, James Shilts (Anthro, Pitt). "Exchange of Cultivars and Information between Aguaruna Manioc Cultivators."

In earlier work, I argued that the pattern of agreement between Aguaruna Jivaro on the identity of manioc cultivars reflected the pattern of transmission of cultural knowledge. This paper compares the pattern of sharing of knowledge about manioc with the pattern of exchange of the manioc cultivars themselves. It shows that agreement between Aguaruna on manioc identification depends on a shared experience of the physical plants; in this case, material and intellectual exchange are interdependent. This finding may help explain why some inter-informant variation should be context dependent and some should reflect differences in knowledge of the informants.

CAMPBELL, Karen (Soc, Vanderbilt). "Sex Differences in Social Resources and Social Constraints."

Using primary data on 186 recent job-changers in four white-collar occupations, I devised several measures of network range and composition, based on the number and statuses of occupations known by each respondent. (The instrument on which these measures are based is adapted from Lin and Dumin, 1982.) As measures of social constraints, I used information on whether the respondent had children younger than 6, and on whether the respondent had changed jobs because his or her spouse got a job in the area.

I hypothesized that (1) women's networks would be of more limited range and of lower levels of composition than men's networks; and (2) the relations between social resources and social constraints would be negative among women, but negligible or even positive for men. The results, in part, support my hypotheses. At the zero-order level, men know others in significantly more occupations (one measure of range), and also know persons in lower status occupations (a measure of composition) than women. When respondent's occupation is controlled, men also have access to more diverse occupations, and to higher status occupations.

Having children younger than 6 and changing jobs because of one's spouse's occupational and geographic mobility has the anticipated relations with measures of social resources. Social constraints are negatively correlated with measures of range and composition among women, but only negligibly so for men; differences between the sub-sample correlations are often significant at the .05 level.

Regression results are not as consistent with my hypotheses as the zero-order outcomes. One range measure is positively affected by sex (i.e., men have networks of greater range than women); and both range measures are negatively affected by one of the social constraint measures (moving with one's spouse).

In summary, I have garnered some evidence that women have access to more limited social resources, and that social constraints affect women's networks in ways not salient for men. While limited, the findings here warrant further examination of sex differences in network characteristics, and in the relations between social resources and constraints.

CARLEY, Kathleen (Soc, Carnegie Mellon). "Establishing Social Networks via Computer Mail."

The establishment of computer communication protocols, specifically electronic mail, means that the computer is no longer just a fast calculator or a convenient and dense storage medium, but it is also a technology for communication that can be used to establish, nurture, and control social networks both at the formal and informal level. Relative to communication, computer systems differ in terms of: a) the types of communication technology available, e.g., on some computers only electronic mail is available, whereas on others electronic mail and bulletin boards are available; b) different levels of sophistication in the communication tools, e.g., on some systems you can edit your mail prior to reading it, whereas on others you have to read everything sent to you; and c) different ways for controlling access, e.g., on some systems everyone can read mail sent to any bulletin board, whereas on others you have to be a member of that bulletin board's distribution list to read that mail. How these three parameters (tools, sophistication, and access) are set greatly influences the way in which social network formations at both the formal and informal level are contrasted for three sites - managers and engineers at a large fortune five hundred firm, computer consultants at a small liberal arts college, students and faculty at a small technical school. One finding is that the size of an organization does not completely determine the number of networks that communicate electronically, the average number of individuals in these networks, and the fraction of individuals in the organization that are members of multiple electronically connected networks. Another finding is that establishing a system that facilitates formal social networks does not necessarily facilitate informal social network. To the extent to which one can generalize from these findings, the implication is that policies that establish how the computer mail facility is to be used will have profound impact on not only the flow of information within the organization but social mobility and network stability.

CAULKINS, Douglas (Anthro, Grinnell). "Networking for the Classroom: Taped Communications for Teaching Undergraduate Network Analysis."

This paper describes a means of enriching the teaching of network analysis in undergraduate classes. Network analysts from other campuses are recruited to tape record and mail informal lectures or commentaries on their research specialties. Depending on the course for which the communication is solicited, topics might include substantive applications, theoretical developments, or technical advances in network analysis. The tapes can be assigned for homework or played in class, with the instructor interrupting at appropriate points for application or discussion. Since departmental funds for visiting lecturers are often inadequate, taped commentaries may be more cost-effective means for introducing additional perspectives and expertise, especially since the tapes can be played in subsequent courses. An example of the use of a taped commentary by the author of a text in an Urban Society course is described in detail.

DANOWSKI, James (Commnic, Illinois-Chicago) & John ANDREWS (Comp. Ctr, Illinois-Chicago). "Linking Message Content Structure With 'Who-To-Whom' Network Structure."

This paper focuses on the relationships between the "who-to-whom" communication network structure and the message content exchanged. Much network research examines only the who-to-whom network and relationships among structural variables within this network, or between network variables and non-communication variables. Researchers have directed little attention to message content exchanged in networks, except in a few studies (Kerr and Hiltz, 1983) using broad message categories, such as Bales' coding scheme. Communication researchers, however, generally agree that the content of messages that people exchange is an important component of the communication process. Message content should be studied in relation to other components of the communication process, such as the characteristics of the participants, including their network structures, and the modalities or channels through which they exchange messages. Given these notions, why have communication researchers not done more to empirically investigate message content variables in the context of who-to-whom networks? The main barriers have been methodological, not conceptual.

DOREIAN, Patrick (Soc, Pitt). 1984. "Structural Equivalence in a Psychology Journal Network."

Using procedures founded on the notion of structural equivalence, a journal network, for 21 psychology journals, is partitioned into a set of structurally non-equivalent positions. These positions have a very close correspondence to a categorization of these journals on the basis of their aims and objectives. This provides strong support for Doreian and Fararo's (1984) hypothesis that the journals of a discipline function as a status-role relational system. Their hypothesis concerning the position of interdisciplinary journals also receives support. However, their hypothesis concerning the structure of a disciplinary network is not supported. While this network has a discernable core, the network is not a clear core-periphery structure.

DOW, Malcolm (Anthro, Northwestern). 1985. "Model Selection Procedures for Network Autocorrelated Disturbances Models."

Strategies for model selection within the regression framework typically involve choices among several sometimes competing criteria. In this paper, the interrelated criteria of goodness-of-fit and parameter invariance are explored with respect to a class of maximum likelihood network autocorrelation models. A GLS measure of generalized goodness-of-fit, R_G^2 , is proposed for these models based on the equivalence of ML and GLS in the exponential family. This R_G^2 statistic can be used to test for stability of parameters across various (sub)samples. A second test of parameter invariance across (sub)samples is proposed: Akaike's (1974) Information Criterion. An example illustrates how these identification and testing procedures may be jointly used to help select the most adequate model for a given data set.

FELD, Scott (Soc, SUNY-Stony Brook). "Selective Maintenance in Social Networks."

This paper shows how the process of developing new personal relationships is accompanied by the selective maintenance of existing relationships, and examines implications of these addition/selection processes for the composition of personal networks. The processes of change are illustrated using Sutor's longitudinal data on married mothers who returned to school. New associates were primarily drawn from school, and they were not as close as long term associates. The data indicate that the relative closeness of long term associates can be primarily accounted for by selection on closeness over time. These data show that the long term associates from the first wave interviews who were mentioned again on the second wave were generally closer than the others; at the same time, the closeness of each relationship was relatively stable over the year.

The data also show the instability of social networks and/or unreliability of reporting. The women mentioned many associates at the second wave who they had known for a long time, but who they had not mentioned at the first wave. Nevertheless, there were fewer long term associates who were "rediscovered" than were "lost," and the net effect of selection was an increase in the closeness of the set of "mentioned" long term associates over time.

Implications of the addition/selection processes are discussed. Specifically, the processes imply a negative association between longevity and sharing a current focus of activity. Since longevity is associated with frequency of interaction, these processes lead to two paradoxical findings: 1) a negative associations between longevity and frequency, and 2) a negative association between sharing a current focus and closeness.

FENNEMA, M. (Pol Sci, U. of Amsterdam) & J. NOBEL (Research Methods, Free U. of Amsterdam). 1985. "The Dutch Economy After the Loss of Indonesia - An Analysis of Changes in the Network of Interlocking Directorates, 1985 - 1984."

Before the Second World War the Netherlands had a considerable interest in its largest colony, the former Netherlands Indies. In 1949, Indonesia gained political independence. By 1957 the last economic ties were severed. In our paper we investigate the consequences of this process of decolonization for the Dutch colonial corporate world by means of an analysis of changes in the structure of the network of interlocking directorates. Data have been collected on 141 Dutch-owned corporations, divided into three segments, that are described as:

- i) Indonesian, i.e. economically active in the Indies (tropical agriculture, mining, etc.);
- ii) Dutch, i.e. involved in the production of Dutch goods (machinery, textile, etc.) to be exported to the Indies; or
- iii) intermediary, i.e. engaged in trade and shipping (this latter segment also includes the Dutch multinational firms).

Application of graph analysis techniques to these data leads to the following conclusions:

1. For the period around the transfer of sovereignty, a center-periphery structure is detected.
 - a) The intermediary segment, and especially the Amsterdam merchant banks, constitute a linking center between the Dutch and Indonesian segments.
 - b) At the same time, and in line with theories on dependency, within the Indonesian segment a peripheral sub-center appears to exist, consisting of some Dutch colonial banks.
2. In the second half of our research period this center-periphery structure breaks down.
 - a) The Indonesian segment falls apart entirely. The relevant firms cease to exist, or get isolated in the network of interlocking directorates.
 - b) There seems to be a fusion of the Dutch industrial, and intermediary commercial segments. This phenomenon may be interpreted theoretically as evidence of the success of the Dutch industrialization directed towards the European market under Atlantic auspices.
 - c) Within the combined Dutch and intermediary segments the center of gravity shifts somewhat from Amsterdam to Rotterdam.

FINNEY, Ben (Anthro, Hawaii) & Jeff JOHNSON (Coastal & Marine Resources, E. Carolina). "Living and Working in Space: A Social Network Perspective."

Some attention is now being focused on the nature of social systems to be created for various space contexts that would ensure safe and productive environments. This paper explores the creation and design of such social systems paying particular attention to the role of social structure, or more exactly social networks, in such an enterprise. A series of examples are analyzed for the purpose of identifying those features of social structure that contribute to optimal living and working arrangements within closed isolated social systems. Finally, this paper explores ways in which the social network paradigm may contribute to the design of social systems in space.

HAMMER, Muriel (NY Psych Inst.). "Issues in the Comparison of Open and Closed Social Networks."

One critical distinction between types of social networks is the mode of bounding of the network, with two extremes represented on the one hand by a fully pre-defined set of participants, with data about every X in relation to every other X, but to no-one outside the bounded set, and on the other hand, an initially open set, with data about every X in relation to any Y that arises in the course of data-collection. A good deal of substantive inquiry has used the open-network model, while many methodological developments have relied on fully pre-defined networks. This paper examines some of the relationships between them.

HART, Paul & Ronald RICE (Communic, UCLA). "The Development of the Electronic Publishing Industry in the United States."

The information industry in general, and electronic publishing in particular, are the product of the convergence of computing and communications industries. For example, electronic publishing is a process which involves information creation, information storage, database compilation, information brokering, information transmission, information reception, and information consumption. Four distinct components are required to provide these stages in the process: hardware, software, transmission facilities and information providers. Therefore, firms in different industries must participate in inter-industry ties

in order to acquire sufficient resources to provide these electronic publishing services. This study analysed 266 ties involving teletext and videotex services from 1979 through 1984, according to five decreasing levels of permanence in those ties: acquisitions or mergers, joint venture, network links, joint activities and contracts. Of all ties, 67% were related to teletext. Videotex services involved significantly more permanent ties, although a considerable portion of teletext's less permanent ties were due to contracts between newspaper and cable firms providing cabletext. Videotex ties continued to increase through 1983, while teletext ties continued to increase only through 1982. Consequences of these trends and differences in industry structure are discussed.

HART, Paul & Ronald RICE (Communic, UCLA). "The Evolution of the Information Industry: Concentration and Conglomeration Networks in Electronic Publishing, 1979-1984."

Electronic publishing, and its specific form called Videotext, is a high-growth segment of the information industry. Some manifestations, such as online text and numeric databases, have been growing at 30% a year. Other manifestations, such as interactive videotext, called videotex, has shown moderate consumer interest in pilot systems but has yet to reveal success in ongoing commercial services.

Electronic publishing is a mixture of several media and requires the services and technologies of several different industries: information content, transmission facilities, computer hardware for processing of the content, interface software for user access, and terminals to decode the broadcast or hardwired signal.

Mixing the uncertainty of the market for videotext services with the necessity for cooperative activities across formally discrete industries provides a great opportunity to test theories of organizational and industry resource dependency, and to describe trends of concentration and conglomeration in the information industry.

This study outlines the applicability of resource dependency theory to the current situation in the information industry, and provides a conceptualization of electronic publishing which allows analysis of interaction among firms and across industrial boundaries. A scale of strength of interaction (from acquisitions to service contracts) is used in hypotheses about the form, duration and content of interactions among media firms, database providers, transmission providers, hardware suppliers and software firms. Finally, these interactions are described by network analysis of firms coded by Standard Industrial Code, and compared yearly from 1979 through 1984.

HECKATHRON, Douglas (Hist, Missouri-Kansas). 1984. "Quantitative Analysis of Historical Change: Alternative Approaches."

This paper explores the applicability to historical analysis of several quantitative models with special reference to their breadth of explanatory scope, potential accuracy, and analytic power.

HOOKS, Paul & Tom BARANOWSKI (Sociomed Sci, Texas). 1984. "Social Network for Recruiting Triethnic Children for Cardiovascular Risk Research."

This paper applies a social network concept to recruiting children from three ethnicities to participate in a cardiovascular risk behavior research project. Social networking was employed by asking earlier participants to identify and contact family and friends who might also qualify for participation. The types of links among contacts were analyzed for presentation in this paper. Among Mexican-Americans social networking was productive, particularly along consanguineal, corparenthood and friendship links, yielding a participation rate of 86.4%. Among Anglo-Americans the social links tended to be concentrated among social and special groups, yielding a participation rate of 89.5%. Among Black-Americans the network links were among friends and considerably less among kin and group links, yielding a participation rate of 93.8%. This paper also presents social network graphs depicting types of linkages among contacts over time. The graphs will be compared across ethnic groups.

HURLBERT, Jeanne & Peter MARSDEN (Soc, NC-Chapel Hill). "Social Resources and Mobility Outcomes: A Reanalysis and Extension."

Lin, Ensel, and Vaughn attempted to determine the part played in status attainment processes by elements of the job search. Their work addresses several hypotheses, among them (1) that use of informal channels in job searches results in more desirable outcomes; (2) that persons using informal channels reach

higher status contacts via weak ties than via strong ones; and (3) that persons using informal channels attain higher occupational statuses via both high status contacts and weak ties.

This paper builds on the work of Lin et al. in three ways. First, we attempt to replicate their analysis using a different set of data on job search processes -- the 1970 Detroit Area Study. Second, we address several methodological issues in the earlier work, specifically the following: (a) the absence of a control for the occupational status of the job immediately prior to respondent's current position (Lin et al. control the status of respondent's first occupation); (b) the problem of sample selection bias in the testing of hypotheses (2) and (3) above (Lin et al. do not take account of the fact that their sampling procedure is selective of persons using informal methods of job search); and (c) the measurement of tie strength (we use several different measures of tie strength in exploring the impact of informal networks on occupational status).

Our final objective is to extend the sort of analysis described above to mobility outcomes other than occupational status (Lin et al. briefly consider income also). Among the outcomes we may consider are status advancement within the employing organization, firm size, industry location, job satisfaction, income, and work complexity.

JACOBSON, David (Anthro, Brandeis). "Boundary Maintenance in Support Networks."

Most studies of social networks, whether they are viewed as the context of stressful experiences or of supportive interactions, assume fixed network boundaries. This assumption is necessary in order to analyze structural characteristics such as network density. Actual networks, however, change over time and across situations and the assumption of fixed boundaries is inappropriate for processual questions. Examination of such changes reveals limitations in the structural analysis of social networks and points to mechanisms and strategies by which network boundaries are drawn and redrawn.

JOHNSEN, Eugene (Harvard & Cal-Santa Barbara). "Micro- and Macromodels for Agreement and Friendship."

In this paper we derive micro- and macromodels for groups under microsocial processes or mechanisms governed by agreement and friendship. Each of the microprocesses we study determines a micromodel in terms of permitted and forbidden triads, where a triad is forbidden if it exhibits a violation of the microprocess but otherwise is permitted. Each of these triadic micromodels, in turn, determines a macrostructure or macromodel of the group in which the permitted triads may appear but the forbidden ones do not. We shall present the pairs of micro- and macromodels corresponding to the above microprocesses and discuss the analysis which is involved. It is interesting to note that one model is the statement of Newcomb's idea of "positive balance" (1968), and that the corresponding micro- and macromodels define the "Direct positive influence" model of Johnsen and McCann (1982).

JOHNSEN, Eugene (Harvard & Cal-Santa Barbara). "Some Remarks on Empirical Model Development and Characterization."

In our investigation of the micro- and macromodels which exactly fit the various sets of empirical sociomatrices studied by Davis (1970), several interesting questions have arisen:

- 1) For a corresponding pair of micro- and macromodels, can the triadic micromodel (in terms of permitted and forbidden triads) be generated by an "elementary" microsocial process or mechanism?
- 2) Is there a way to show that a set of empirical data indicates not just a tendency of the structure away from randomness, but actually a tendency towards a particular model?

The first question arose in the development of the hierarchical 'M-cliques macromodel, which exactly fits the empirical triad data for the total set of Davis-Leinhardt sociomatrices. Previously, Holland and Leinhardt (1971) showed that the microstructure for the transitivity model is generated by the elementary microprocess of positive triplet transitivity, and recently we have shown that the microstructure for the direct positive influence model (Johnsen & McCann, 1982) is generated by the elementary microprocess of positive balance (Newcomb, 1968). We discuss a somewhat less elementary microprocess which generates the permitted and forbidden triads of the hierarchical 'M-cliques model, of which the direct positive influence model is a special case.

The second question has been asked previously by others and arose again in our study of the information given by the triad data derived from the Davis-Leinhardt set of empirical sociomatrices. Others have noted, in testing the aggregated data for the forbidden triads, that although the data may indicate a statistically significant tendency of the structure away from randomness it is not clear that this tendency is towards the suggested model. We observe, however, that if the empirical data are sufficiently good it is possible to actually show a tendency towards the particular model corresponding to the permitted and forbidden triads. This is done by showing that there is a single majority of the sociomatrices in the empirical set which exhibits the relative rarity of all of the forbidden triads simultaneously (and, if desired, the relative commonness of all of the permitted triads simultaneously), and not just separate majorities which exhibit the relative rarity (or commonness) of each of the triads individually. Computationally this can be easily accomplished, although it is not known to the author whether this has ever been done. If previously analyzed empirical data are sufficiently good it is possible to tease out this implication by a secondary analysis. As an example, we use data of Hallinan (1974) to show that in the case of her affect relation there is indeed a tendency of the group structure towards the hierarchical 'M-cliques model.

JONES, Brian, Bernard CALLAGHER III (Villanova) & Joseph MCFALLS (Temple). "Social Network Models of Gender and Illness."

A major barrier to the progress of social research on illness behavior is inadequate conceptual integration. The present report reviews this problem in the social support and sex-morbidity literatures, then tests social network models as a methodological solution. Log-linear contingency table analysis is applied to the results of a self-administered questionnaire, generating data for 297 systematically sampled students at a major eastern Catholic university. In a direct test, no support is found for the "sex role hypothesis" of common illness reports. Interaction with kin exhibits a more powerful relationship with illness symptoms than does interaction with friends, and the effect of relatives appears to be specific to dimensions of gender role.

KOCHEN, Manfred (Mental Health, Res Inst, Mich). "The Structure of Acquaintance Nets and Rates of Societal Development."

Selected steps in progress on the "small world problem" will be reviewed, to show the difficulty of finding models that can produce the spectrum of clusters that is observed in contact nets rather than a single large cluster of myriad tiny fragments. Empirical work now in progress in the Philippines and in Hong Kong to correlate the structure of the acquaintance nets with rates of economic, political, and social development will be presented and related to next steps in modelling. The relation of both empirical and theoretical findings to networking will be brought out, as will the potential of computer conferencing for such network-supported applications as the provision of support in health maintenance.

KRACKHARDT, David (Mgmt, Cornell). "Variations in Perceived Structures: Cognitive Networks, Local Aggregated Networks, and Voted Networks."

This paper proposed that perceived social networks can be classified into one of three types: cognitive, local aggregated, and voted. Based on a different set of assumptions, each is useful in answering different questions. While virtually all network analysis to date has been based on local aggregations, the argument is made that cognitive and voted networks are more appropriate in many cases. An empirical example of these networks in a small, west coast manufacturing firm illustrates the advantages of each.

KREMPPEL, Lothar (Soc, Stanford). "Does Social Relevance Affect Contact Between Individuals? An Empirical Study of a Large Network with a Homogenous Time Continuous Model by the Help of Event History Analysis."

A reanalysis of a complex dataset on contacts and relations among university freshmen is presented, which describes a social network among 208 beginners over almost ten weeks with up to 800 event sequences per person. The dataset stems from the structural analysis project "Studienanfaenger" which was carried out at Wuppertal by Hummell and Sodeur.

By transforming the original time budget/network information on social contacts into 'events', event history analysis can be used to estimate time continuous models. A homogenous time continuous model is presented, by which the influence of social significance on interpersonal contacts can be analyzed.

Thus a comparative analysis of contacts is carried out, using the information whether every person A reporting contacts to a person B reports at the same time to have a stable relation to B and by taking into account the same report of B.

The question is whether and how such 'social' contexts accelerate contacts between individuals - a basic question for every structural analysis of interpersonal relations. Contacts with asymmetric significance only for B but not for A (3) were found to be established fastest, contacts under symmetric significance (4) slowest. The duration of contacts with significance for A or B was found to be shorter than for contacts without significance. These results were studied more specifically, taking situational constraints into account in order to look for places where 'social contexts' modify contacts between individuals. Using the speed for establishing contacts under absence of interpersonal significance as a 'baseline', symmetric relations were found to accelerate contacts only in situations with little behavioral constraints and outside the institutional setting, while asymmetric importance accelerates contacts in places with rich opportunities for interpersonal contacts

KUO, Wen H. (Soc, Utah). "Transracial Social Networks."

The paper compares the patterns of transracial networks among four Asian-American groups for detecting the major factors which contribute or hinder the interracial relationships between the majority and minority groups. Investigated are the generational changes, the influence of culture, and the sources of social and structural barriers which had operated to prevent the building of transracial relationships. After examining the impact of the above factors on the interracial networks, the paper will further discuss the implication of the findings for the race relation researches. The data of the investigation is derived from a larger study which deals with the Asian-American's mental health and social support. And the present analysis focuses primarily on interracial social networks such as its size, density, nature of social ties as well as the amount of support provided by these interracial bonds.

LEE, Jeong Taik (Soc, Hawaii). "Research-related Communication Patterns in a Faculty and Graduate Students Network: A Structural Equivalence Approach."

This study seeks to examine what pattern of social relations among faculty and graduate students exists when they engage in research-related communication. To locate a small scale, informally interacting group across several departments at the University of Hawaii at Manoa, a two-stage sampling procedure was undertaken.

As a general approach to the study of social structures through a consideration of multiple networks, blockmodeling analysis was applied to identify an idealized pattern of interaction from the complex interweaving of hundreds of pairwise relationships.

The results of this study show that the informally interacting group whose members come from diverse departments at the university, exhibited a somewhat different pattern from the "center-periphery" pattern identified in the "invisible college" or in the same research areas (Crane, 1969; 1972; Mullins et al., 1977).

LOMNITZ, Larissa (Universidad Nacional Autonoca de Mexico). "Informal Exchange Networks in Formal Systems."

The present paper examines an aspect of "informality," namely the pervasive utilization of informal modes of exchange within the formal sector itself. These exchanges include various forms of trading influence and bureaucratic favors for equivalent services or cash. Depending on the political system, some forms of informal exchange may be tolerated while others may be severely repressed. Even in the latter case, however, illicit economic activities among the state bureaucracy are often seen as inevitable if not actually useful by members of elite groups within the formal system. I show that these activities are not random or chaotic but are based on informal networks following similar principles as those in shantytown networks: patronage, loyalty and confianza. Often the networks run underneath and parallel to the formal hierarchy.

The main points of this article are summarized as follows:

- (1) The more a social system is formalized, regulated and planned, the more it tends to create informal mechanisms which escape the control of the system;

- (2) Informal modes of exchange grow in the interstices of the formal system, thrive on its inefficiencies and lags and tends to perpetuate them by compensating for its shortcomings and by generating factions and interest groups within the system;
- (3) Informal activities, including strictly economic activities within the formal sector, obey a symbolic-cultural logic which differs from (and often clashes with) economic rationality or the formal ideology of the state;
- (4) The rules of sociability which govern informal exchange vary from culture to culture. Also, depending on the formal system and on the degree of repression, modes of exchange may fluidly grade into each other: patron-client relations are based on reciprocity networks and generate market exchange.

MARIOLIS, Peter (Spellman, Atlanta). "Models, Concepts, and Measures: Toward an Analytical Framework for Social Network Analysis."

This paper lays out the foundations of an analytical framework for social network analysis. It begins by introducing four major graph-theoretic models of social networks--graphs, hypergraphs, networks, and hypernetworks. The paper then identifies regions and subgroups as appropriate units of analysis for social network measures. The use of region and subgroup allows the network analyst to measure characteristics of any subset of ties or actors in a social network within a common framework. The paper then discusses measures of two characteristics that are commonly involved in social network analyses. Coherence is the propensity of the actors in a subgroup to have ties within the subgroup. Prominence is the propensity toward centrality of a subset of ties in a social network. The paper ends with a discussion of directions in which this framework can be further extended and of the implications of the adoption of the framework for social network analyses.

MARTINEZ, Ruth "Social Support among Puerto Rican Divorced Women."

This paper aims to determine the structure and function of social networks among Puerto Rican women undergoing a stressful life event (divorce). This analysis is based on a stratified probability sample representative of the island; 293 divorced women were interviewed. Information was obtained on the structure of network and type of help, received. Other variables considered are occupational strain, psychological well-being and demographic information.

Correlation was made between the dependent variable, social support and the variables mentioned above. The analysis shows the structure of network varies according to occupational status. Women who are employed and have less children report more family support than those with more children and who are unemployed.

MITNICK, Barry (Business, Pitt). "Agents of Legitimacy: Pantheonic Directorates and the Management of Organization Environments."

A peculiar feature of all or most human collective settings is the presence of a group of distinguished people in a peak position. Many such boards appear to do little or nothing of substance. Examples include boards of directors, legislatures, collective deities, letterhead lists, and so on. This paper identifies the pervasive existence of such collectives, terms them "panteonic directorates," and discusses their functions. An approach based on the theory of agency, i.e., agent-principal relations, is a key part of the analysis. Pantheonic directorates serve in part as legitimacy agents on the boundary of organizations. Several propositions are offered relating organizational and environmental variables to "legitimacy expense" (e.g., larger, more active, more lavish, more "heroic" boards) on such agents.

MIZRUCHI, Mark (Comp Ctr, Albert Einstein Med Schl, NYC), Peter MARIOLIS (Spellman), Michael SCHWARTZ (Soc, SUNY-Stoney Brook) & Beth MINTZ (Soc, Vermont). "Components of Centrality: A Dynamic Analysis."

This paper presents a way of analyzing network relations based on the metaphor of networks as channels through which units send and receive centrality. To conduct a centrality analysis one starts with a matrix of associations among the nodes of the network. The centrality of a unit is then proportional to the sum of its associations with every other unit, weighted by the latter's centrality.

The centrality of each node thus depends on the number of other nodes with which it is linked, the amount of association between it and each other node, and the centrality of the nodes with which it is linked. Using the appropriate powers of the association matrix, one can determine how much centrality each unit in a network gets from every other unit, including itself, in 1,2,3,...M steps. This partitioning of centrality facilitates the construction of measures of network characteristics appropriate to researchers' theoretical constructs. This paper focuses on two main themes: the distinction between derived and reflected centrality; and the sources of change in a unit's centrality over time. Both topics are illustrated with examples, and the relevance of these concepts to other network formulations are discussed.

MORGAN, David (Soc, Cal-Riverside). "Rehabilitating a Technique to Measure Perceived Networks."

Coxon has described a technique for measuring perceived social networks based on card sorts: the number of times any two people are sorted together generates a Co-occurrence matrix, and the over-lap between the sortings of any two people generates a Distance matrix. The Distance matrix is of particular interest because it captures similarity in perceptions of the network. One likely reason why these techniques have received relatively little attention is Coxon's own pessimism about their utility. This paper begins by answering the two major objections he raised in his initial paper: that perceptions of social networks are a peripheral question to the field, and that the crucial Distance matrix is severely distorted by a form of measurement error. Revised versions of Coxon's techniques are then applied to an empirical example involving the perception of patterns of off-court interaction by a women's volleyball team.

REIF, Steven (Soc, Kilgore C. TX). 1985. "An Analysis of Class-level Network Manipulations in a Capital-scarce Economy: Comayagua, Honduras."

This is a discussion of personal networks in the small city of Comayagua, Honduras. I briefly consider the urban community as a unit of analysis to gain an understanding both of the internal structure of the city and of the relationships between Comayagua and the larger Honduran society. The delineation of the structural dimensions of the community provides a basis for investigating the central issue of the paper, namely, how do diverse individuals employ personal networks to cope with aspects of their environment? It is determined that successful manipulation of the personal network often involves a series of calculated choices influenced by the maintenance of a structural balance between ego and the network members. Although the network investigations in this paper are exploratory and reflect a judgmental sample, social organization is predictive, so that individuals in similar situations will respond in similar ways, and an analysis of personal networks at various stratified levels will offer insights into the behavior of entire categories of persons.

SCHOTT, Thomas (Soc, Columbia). "Influence among Scientists: Mathematicians in Denmark."

Influence of an influencer on an influencee, generically, is conceived to be shaped by two conditions: resources possessed by the influencer, and opportunity for exchange between influencer and influencee. The causal configuration is: the influencer's resources are a potential for influence, and - as opportunity provides - they are converted into actual influence on the influencee. Hence, an individual's resources make for personal overall influentiality, while opportunity to interact with others variously constrain influence and thereby makes for differential influence upon them. The sources of influence are thus conceived of as a combination of individual and dyadic conditions and their effect as conditional, to be specified as a product. Analogously, influence in a pair is conceived of as a product of the influencee's susceptibility, the influencer's influentiality, and a purely dyadic influence component; each component can be estimated by log-linear analysis, given a network of influence among people. These decompositions of influence and of its sources make it feasible to seek to account for influentiality by resources, and for the purely dyadic component of influence by opportunity. - - This conception is applied to influence among scientists. A scientist's resources are presumed to be primarily expertise, and opportunity in a pair to be mainly proximity in specialization, common university affiliation, and association in research seminars. - - The model is examined empirically for the community of pure mathematicians in Denmark around 1980.

SCHUSTER, Tonya & Edgar BUTLER (Cal-Riverside). "Personal Networks and Support in Bereavement."

This paper explores the intensity, symmetry, range, density and clustering of personal networks in providing social support during bereavement. Personal, or egocentric, networks are distinguished here from social networks. Personal networks start from the perspective of a focal individual, or, as in the case of this research, a sample of focal individuals. Personal networks are in contrast to social

networks which are generally conceptualized as whole networks, or all ties of a specific type within a defined population.

Members of the personal network are also described in terms of relationship (relative, friend, neighbor, etc.), sex, age, marital status and distance of residence. The focal persons are delineated with respect to age, sex, marital status, functioning level, race, and socioeconomic status. In the analyses, characteristics of the focal persons are interrelated to the personal network dimensions described, the social characteristics of the members of the personal network, and support in bereavement. The data utilized in this paper are derived from a longitudinal community sample (1963--1984), with primary emphasis on a survey conducted in 1984 with the elderly portion of the representative community sample.

SEIDMAN, Stephen (Math, George Mason, VA). "Bridging the Gap between Network Researchers and Network Software: The Role of Computer Graphics."

The depth and scope of social network research is severely limited by the fact that currently available software does not incorporate the visual power of the graph representation of social networks. This paper will show how microcomputer-based interactive computer graphics can provide that visual power to social network researchers.

SHAW, Jeffrey (Bus Admin, NYU). "The Shaw-Denmark Social Support Inventory: Further Validation of the Scale."

The present research concerns the development of the Shaw-Denmark Social Support Inventory (SDSSI), an inventory to measure the sources of support one goes to for help with a personal problem. The initial version of the inventory consisted of questions on individual supports, which could be broken down into the sub-categories of relative, friend, and community resources, and also asked subjects about their satisfaction with their work and the neighborhood in which they live. The questions for the 13 individual supports concern: (1) the likelihood of going to each support for help with a problem; (2) which supports had been gone to in the past for help with a personal problem; and (3) how satisfied the subject was with each of the supports used in the past. The primary goal of the present research was to develop an inventory with the appropriate psychometric properties of reliability and construct validity to allow for the inventory's use in future social support research.

In addition to developing an inventory with the appropriate psychometric properties of reliability and construct validity, other relevant findings which emerged from the research were: (1) the SDSSI variable which correlated most strongly with adjustment was satisfaction with reciprocal relationships; (2) both Study 1 and Study 2 provided possible evidence of a "support-oriented personality," as those subjects who utilized community resources in the past also used friend and relative sources of support more than other subjects; (3) a four-way breakdown of subjects according to both sex and past use or non-use of community resources appears far more informative than a mere male-female breakdown; and (4) the 20 neutral adjectives of the Bem Sex-Role Inventory may serve as a possible mechanism for detecting the response styles of social desirability and acquiescence in a covert manner, though further research on this topic should be carried out.

SKVORETZ, John (Soc, South Carolina). "Random and Biased Networks: Simulations and Approximations."

Work by Rapoport and his colleagues in the 1950s and early 1960s developed the idea of biased/random nets as a theory of social network structure. This theory is generative in the sense that large and extensive empirical networks are viewed as outcomes compounded of many small and local events that produce characteristic patterns of connections between nodes/persons. It aims to explain variation in aggregate patterns by appeal to differences in local properties affecting linkages between nodes and how these differences ramify to affect the overall structure of the total network. While the theory is set out mathematically and uses formal logic to analyze the general model, the complexity of the compound outcome make exact theory impossible. Consequently, plausible approximations and approximation formulas are used to link up the local properties to global structure. Research reported in this paper attempts to check these approximations through simulation studies. Programs are developed which generate specific networks over a reasonably large ($S=100$) population consistent with certain parametric specifications which govern local patterns of connection. Properties of these networks are then compared with those predicted from the approximation arguments in an effort to refine those arguments to the point at which they can be used with confidence in other theoretical inquiries, such as recent applications of biased net theory to Blau's influential ideas on the social structural determinants of relational patterns.

TSAI, Yung-mei (Texas Tech), Wen-hui TSAI (Indiana-Ft Wayne) & Che-fu LEE (Catholic U.).
 "Neighborhood Social Network in Three Taiwanese Urban Communities."

In an effort to combat rising crime in cities in Taiwan, Wu Foundations began in the 1980's to solicit proposals to conduct scholastic research on crimes and crime preventions. The present study is a part of a larger project funded by the Wu Foundation for this specific purpose. The research project was to investigate the extent of the neighborhood interaction and cohesiveness on the reduction of various types of crimes. The assumption being that highly integrated neighborhoods are more likely to exert a greater degree of social control serving as watchful eyes to make the residents less likely to become victims of various crimes.

WELLMAN, Barry (Soc, Toronto) & Susan Gonzales BAKER (Soc, Texas). "The Users and Uses of Telephones: Implications for the Unbounded Telematics Society."

There are remarkable parallels between current speculation about the social implications of telematics (electronic mail, etc.) and the social history of the telephone. We use East Yorker data to study who uses telephones, in what kinds of personal networks, and with what kinds of relationships. We use this information to forecast the social implications of coming widespread telematics use. This, in turn, leads to deep thoughts about unbounded networks in general.

THESIS SUMMARIES

Lynne PHILLIPS (Anthro, Toronto). 1985. *"Gender, class and cultural politics: a case study of rural Vinces, Ecuador."*

This thesis examines the process of commoditization in agriculture in terms of its implications for gender, class and political struggle. The study focuses on a rural area in the Guayas River Basin of coastal Ecuador, the Basin being a target of a state-implemented agrarian reform programme in the 1970's. It is argued that the introduction of commodity forms has modified the texture of social relations in the Ecuadorian countryside to the extent that, while the specific character of existing social relations is key to the survival of the rural population in the face of an expanding capitalism, it also serves to limit the political expression of labouring women and men.

To support this argument a detailed examination of four 'arenas' of social life is provided. First there is a discussion of the history of the coast as a region and of the effects of the boom/bust development of coastal agriculture on the sexual division of labour and forms of political struggle in the countryside. Then the rural household is examined, with case studies showing the extent of differentiation within the area studied, as well as the effects of commoditization on women's work and women's politics within the household. An examination of production and reproduction within the area as a whole then clarifies the extent to which the daily lives of rural women and men are segregated and reproduced through gender-differentiated networks. Finally, the local emphasis on personalized ties (especially in the form of 'compadrazgo' and plural unions) is considered, and it is argued that while such ties benefit an emerging bourgeoisie and allow labourers to reproduce themselves on low wages, they further reinforce a division of labour by sex. In conclusion, the forms of political struggle revealed in previous chapters are viewed as specific expressions of the tension between the struggle of a gendered labour force to maintain some control over the means of production and both capital's and state's attempt to determine the conditions of production in the region.

SPECIAL JOURNALS

Abstracts from HEALTH EDUCATION QUARTERLY 12(1) Spring 1985. Special issue on Social Support.

ENG, Eugenia, John HATCH, & Anne CALLAN (Health Educ, North Carolina). "Institutionalizing Social Support Through the Church and into the Community." pp 81-92.

The positive influence of social support on such health related outcomes as patient adherence to medical regimens and stress reduction at the worksite has captured the attention of public health researchers and practitioners alike. Yet, the broader social outcome of building community competency to undertake and sustain health related solutions without constant intervention from professionals still remains elusive. The difficulty may lie with the need to uncover on each occasion the various roles and functions of social support structures that may or may not exist in a given community. The intent would then be to graft an intervention onto these existing roles and functions in order to mirror the naturally occurring social support structures. A conceptual framework that has been used to institutionalize health related activities through the role and function of the black Church, as a social unit of identity and solution for rural black communities in North Carolina, is put forth for consideration.

GOTTLIEB, Benjamin (Psych, Guelph). "Social Networks and Social Support: An Overview of Research, Practice, and Policy Implications." pp 5-22.

Following a brief overview of the stressful life events-illness model and its implications for intervention, this article highlights, the role of social support as a resource for resisting stress-induced illness and disability. It identifies three different connotative meanings that have been assigned to the social support construct, and describes their empirical operationalizations in several recent studies. Specifically, the social integration/participation formulation, the social network approach, and the social intimacy measurement strategy are described and contrasted. Within the latter approach, one study that illuminated types of informal helping behaviors is discussed in greater detail. A review of possible mechanisms whereby social support accomplishes its health-protective impact is also offered, and two types of planned interventions involving the mobilization or optimization of social support are spotlighted. The article concludes with ideas about ways that professionals can safeguard the natural helping skills of citizens and achieve an appropriate balance between formal and informal systems of service delivery in the health and human services fields.

GRAVELL, Joanne (Health Educ, New England Mem. Hospital), Jane ZAPKA (Health Admin, Mass), & Joyce MAMON (Pub Health, Johns Hopkins). "Impact of Breast Self-Examination Planned Educational Messages on Social Network Communications: An Exploratory Study." pp 51-64.

This two-part study examined the effect of college women's participation in a breast self-examination (BSE) educational program on discussion of BSE with specific members of their social network. In addition, the characteristics of college women who did report discussion with others were investigated as was the relationship between this discussion and the participants' mothers' breast cancer screening behaviors. Results suggest that a BSE education intervention which includes explicit messages to encourage discussion with social network members is effective in increasing communications with mothers, sisters and friends. College women who discussed BSE with their mothers were more likely to have mothers who have a high quality BSE practice and who state an intention to request a clinical breast examination at their next physician visit. The limitations of this study are discussed with recommendations for future research.

HIBBARD, Judith (Community Health, U of Oregon). "Social Ties and Health Status: An Examination of Moderating Factors." pp 23-34.

The goals of the study are to assess the relationship between social ties and health status and to determine if factors that may inhibit or enhance the mobilization of resources available in social ties specify this relationship. Two factors which may influence the effective use of social network resources perceived control and trusting others, are examined as possible moderating factors.

The study population includes 2,603 adults, who were randomly selected from among the enrollees of a large health maintenance organization. The subjects were part of a large household interview survey. Medical record data covering seven years of outpatient services were linked with the survey data on the respondents. The findings indicate that having more social ties, being more trustful of others and perceiving more control are all related to having better health. Perceived control does specify the relationship between social ties and health status. The findings suggest that a larger social network is more important for those less able to utilize the resources available in their networks effectively, while among those more able to mobilize support from their networks, size is less important.

The implications for health education research and practice are discussed.

ISRAEL, Barbara (Health Behav & Educ, Mich). "Social Networks and Social Support: Implications for Natural Helper and Community Level Interventions." pp 65-80.

The convincing evidence of the relationship between social support, social networks, and health status has influenced the development of program strategies which are relevant to health education. This article focuses on the linkage between social support and social networks and health education programs which involve interventions at the network and community level. Two broad strategies are addressed: programs enhancing entire networks through natural helpers; and programs strengthening overlapping networks/communities through key opinion and informal leaders who are engaged in the process of community wide problem-solving. Following a brief overview of definitions, this article highlights several network characteristics which are often found to be related to physical and mental health status. Suggestions are made for how these network characteristics can be applied to the two program strategies. Principles of practice for the health educator, and some of the limitations of a social network approach are delineated. The article concludes with a recommendation for engaging in action research - a perspective highly consistent with both the strategies discussed and the concepts of social networks and social support. This approach not only recognizes, but also acts to strengthen indigenous skills and resources.

McLEROY, Kenneth (Pub Health, North Carolina-Greensboro), Robert DeVELLIS, Brenda DeVELLIS, Berton KAPLAN (Pub Health, North Carolina) & James TOOLE (Med, Bowman Gray). "Social Support and Physical Recovery in a Stroke Population." pp 395-413.

Previous studies of the relationship between social support and physical health status have indicated that social support has a positive effect on morbidity, mortality, and recovery from chronic disease. However, the previous studies have differed in their definitions of the construct, with most studies measuring only one aspect of social support - usually emotional support. This longitudinal study of 339 stroke cases found that different types of social support (i.e., informational, effective, and instrumental) had differential effects on physical recovery (i.e., physical functioning) from stroke, with instrumental assistance having a significantly negative effect. Furthermore, selected characteristics of the patients' social networks had no direct effects on physical recovery. Alternative explanations for the findings - including issues of the direction of causality - are reviewed and discussed.

MORISKY, Donald (Pub Health, UCLA), Nancy DeMUTH (Pub Health, Johns Hopkins), Marion FIELD-FASS (Beloit Corp., Beloit WI), Lawrence GREEN (Health Promotion Research, U of Texas) & David LEVINE (Pub Health, Johns Hopkins). "Evaluation of Family Health Education to Build Social Support for Long-Term Control of High Blood Pressure." pp 35-50.

Sustaining patient motivation for long-term adherence to drug therapies remains a substantial problem for physicians, other health care providers, the patients themselves, and their families. Other therapeutic requests such as dietary changes and weight control may be even more difficult to maintain than taking pills. As part of a controlled experimental design implemented to improve family member

support for medical compliance among hypertensive patients. Family members were interviewed, counseled, and provided with a booklet for the purpose of educating and involving them in the home management of high blood pressure. The booklet identified ways the family member could assist the patient with medication compliance, appointment keeping, as well as diet and weight control. These items were identified and recorded as behavioral objectives in the booklet. Patients were followed for three years to assess long-term outcomes. Results showed a strong statistically significant difference between the experimental and control groups, with the experimental group demonstrating higher levels of appointment-keeping behavior, weight control, and BP under control (all p values $< .001$). Analysis of the main effects of the educational program demonstrated that the family member support intervention accounted for the greatest decrease in diastolic blood pressure variability, $R^2 = .20$, $p < .001$.

PILISUK, Marc (Behav Sci, Cal-Davis) & Meredith MINKLER (Soc & Admin Health Sci, Cal-Berkeley). "Supportive Ties: A Political Economy Perspective." pp 93-106.

The growing body of evidence linking social support and health has important implications for health promotion, disease prevention and treatment. But serious unsolved problems remain in the areas of research, practice and policy. Key among these are the ethical issues which arise when the reality of the importance of social support is translated simplistically into a policy emphasis stressing individual and interpersonal responsibility for health and justifying major cutbacks in health and social programs. This article examines the interdependencies between supportive ties on the individual and community levels and the larger social and political environments within which social networks operate. The effectiveness of families and other micro level support systems is seen as heavily dependent upon the adequacy of programs and policies on the local state and national levels which provide help with income maintenance, housing, transportation and other basic necessities. The cutting back of these more basic programs and services will be seen to disrupt the delicate web of natural relationships. Professionals concerned with the application of social support and health findings need to look beyond the individual and interpersonal levels toward policy and institutional level interventions. They thus may make an important contribution in advocating on behalf of those policies and programs which are critical to the effective functioning of natural helping networks, and which are at the same time faced with cutbacks. By helping alert colleagues, policy makers and the public both to the promise of the social support and health findings, and to the interdependence of support on local, state and national levels, health educators and others in the health professions may help to facilitate the effective application of these findings in policy and practice.

English Summaries from KÖLNER ZEITSCHRIFT FÜR SOZIOLOGIE UND SOCIALPSYCHOLOGIE 36(3) 1984.
Special issue on Social Network Analysis.

FEGER, Hubert & Ulfert DROGE. "Representation of Ordinal Data through Graphs: Ordinal Network Scaling." pp 494-510.

Ordinal Network Scaling represents ordinal dissimilarities $\delta_{ij}^i, j=1, \dots, N$ by a directed or undirected graph with non-negative weights. The points of the graph represent the N objects. The dissimilarities are represented by distances d_{ij} between the points i and j by a path length metric such that the relation between the dissimilarities δ_{ij} and the distances d_{ij} is strictly monotone.

For these representations a representation theorem is provided. Further, the uniqueness of the structure of solutions is expressed by a theorem which allows one to determine the set of all those lines common to all representations of a matrix (δ_{ij}) . Monte Carlo studies show that the lines common to all representations exhaust the set of lines of the representing graphs to ca. 90%. Thus the structure of graphs is to a large extent determined by ordinal data. Examples with different kinds of data demonstrate Ordinal Network scaling.

HUMMEL, Hans (Soc, Duisburg) & Wolfgang SODEUR (Soc, Köln). "Interpersonal Relationships and Network Structure. A Report on a Project for Analyzing the Structured Development among Beginning Students." pp 511-56.

This is a report on an empirical investigation of students during their first nine weeks at university, which focuses on the spontaneously evolving net of contacts and social relationships among 182 students.

The development of the net over time is described with the help of structural indices which are interpreted in comparison to biased nets, as well as in the light of theories of structural balance (in the tradition of Davis, Holland and Leinhardt). The problems of the empirical application of the D-H-L models are discussed in detail.

KAPPELHOFF, Peter. "Structural Equivalence in Networks: Algebraic and Topological Models." pp 464-93.

The definition of positions of structural equivalent actors in multiple networks and the resulting determination of role relations between positions characterizes a new approach to the study of social structure. The origin of the algebraic oriented role structure analysis is the formal representation of classificatory kinship systems as algebraic groups and the further developments of blockmodel analysis (Harrison C. White) are outlined. Another approach is the embedding of social relations by means of Euclidean distances in a social topology (Ronald S. Burt). Central to our discussion are not the technical details of the various blockmodelling methods, but the basic theoretical assumptions underlying the two different approaches. The algebraic approach is viewed as being related to structuralism, whereas the topological approach is based on a concept of structural action.

PAPPI, Franz Urban (Soc, Kiel) & Christian MELBECK. "The Power Potential of Organizations in Community Politics." pp 557-84.

The power potential of an organization in community politics is defined as the sum of its applicable influence resources. The power potential of organizations in a German town is measured by their reputation for power among members of the local elite. The more elite members nominate an organization i as "generally influential", and the more powerful the organizations j are which the respondent controls, the higher is i 's power potential. Elite members control the organizations via their leadership position. The controlling actors are the determining agents in the use of influence resources in the community. The thesis of a personalized influence system is that the actors use the organizations as resource pools, and not vice versa.

ZIEGLER, Rolf. "The Network of Interlocking Directorates and Financial Participations among German and Austrian Corporations." pp 585-614.

The study describes common directorships and financial participations among the largest 325 German and 259 Austrian corporations in 1976. Several approaches that explain the overlap among boards of directors are discussed. Whatever their origins, interlocks can be considered as potential channels for communication. Global and local properties of this diffusion network are analyzed and regions of different degrees of centrality are being distinguished. Differentiating among interlocks according to their multiplicity and to the type of directorship involved makes it possible to discern groupings of enterprises and domains of large financial institutions. The distribution of various categories of owners over the regions of centrality and the association between interlocks and financial participations indicate the important effect of ownership relations on the structure of common directorships. Finally, sectoral and regional aspects of the network of interlocking directorates are studied.

ZIEGLER, Rolf (Soc, München). "Norm, Sanction, Role. A Structural Reconstruction of Sociological Concepts." pp 433-63.

To be more than merely a fashionable metaphor or a bag of methodological tricks, network analysis must contribute to a more adequate conceptualization and analysis of the central problems of social science. Through discussion of the concept of norm-acceptance some basic characteristics of network analysis as a structural research program are presented. With the help of the idea of structural similarity the structure of positions and roles is abstracted from the network of social relationships among individual actors, and the existence of norms is ascertained by the pattern formed by the interlocking of various types of relations alone. This allows for a strict analytical separation between the acceptance of norms and norm-consciousness. Several examples are used to illustrate the procedure and to discuss critical objections.

Two recent issues of JOURNAL OF MATHEMATICAL SOCIOLOGY take the form of a feature article on a mode of structural analysis, a series of reaction papers that comment critically on the ideas in the feature article, and a response to the commentaries by the author(s) of the feature article:

V. 9, #4. (1984).

Feature article: "Baseline Models of Social Phenomena" by Bruce H. MAYHEW (Soc, U. of So. Carolina). Reaction papers by Jonathan H. TURNER and Robert A. HANNEMAN, I. Richard SAVAGE, H. Russell BERNARD and Peter D. KILLWORTH, Joseph E. SCHWARTZ and Peter M. BLAU. Response: "Chance and Necessity in Sociological Theory" by B.H. MAYHEW.

V. 10, #5. (1984).

Feature article: "Institutions as Production Systems" by Thomas J. FARARO (Soc, U. of Pitt) and John SKVORETZ (U. of So. Carolina). Reaction papers by: Morris ZELDITCH, Jr., Charles W. LIDZ, Adrian C. HAYES, and Margaret A. BODEN. Response: "Issues in Institution Representation" by J. SKVORETZ and T. FARARO.

Abstracts from JOURNAL OF MATHEMATICAL SOCIOLOGY Fall, 1984. Also published in book form as FARARO, Thomas J. (Soc, Pitt), ed. 1984. MATHEMATICAL IDEAS AND SOCIOLOGICAL THEORY: CURRENT STATE AND PROSPECTS. NY: Gordon & Breach. 175 p. \$24.50.

FARARO, Thomas. "Neoclassical Theorizing and Formalization in Sociology."

Contemporary theoretical discussion in sociology is characterized by a strong element of returning to the classics. "Neoclassical" theorizing is not just metatheoretical discussion, however, but rather consists in a composite orientation to a classic tradition which is valued and to some contemporary frame of reference which regards the advance of generalizing theory as the main purpose of sociology. In one aspect, the paper tries to show how classical ideas - from Comte and Spencer to Weber and Mead - can be or are imbedded in formal work, referring to the literature of formal theorizing and mathematical model-building. Formalization aims, methods, and contributions, in terms of developments since World War II, are reviewed. The author also tries to show how various formal-theoretic procedures can contribute to the advance of theoretical sociology, referring to generative processes, axiomatization within set theory, and related procedures that have been used in creating formal concepts and theories.

FREEMAN, Linton. "Turning a Profit from Mathematics: The Case of Social Networks."

"Instead of slavishly trying to emulate physics by using the kind of real analysis that worked there, social networks analysis has followed classical physics' lead by working together with mathematicians to develop new mathematical tools specifically tailored to its needs." Tracing the history of social networks analysis, from Galton and Watson to the most recent papers in journals, demonstrates the emergence of fruitful collaborations and other interactions between mathematicians and social scientists. On the one hand, mathematicians have influenced ideas and techniques in social network analysis; on the other hand, there has been an impact of social networks analysis on mathematics. This latter point is demonstrated in a discussion of graph theory, probability and statistics, and algebra. The upshot is that through this fruitful interplay of fields, as mediated through collaborative and other social relations, appropriate mathematical ideas are being developed and utilized in the analysis of patterns of social relations.

HAYES, Adrian. "Formal Model Building and Theoretical Interests in Sociology."

"Although mathematics is used more and more by sociologists in data analysis, the relationship between mathematics and sociological theory seems today more ephemeral than ever." To understand the current waning of enthusiasm in formulating sociological theory in formal mathematical terms, the author first traces the influence of neopositivism on mathematical modelling in sociology. The main problem, illustrated by Simon's formalization of Homans' small group theory, is that the mathematical version does not state the theory definitively, since only a partial image of its content is formalized and the richness of meanings conveyed by ordinary language is lost. Turning to some recent developments,

the author treats action theory and interpretive sociologies as areas of sociological theory undergoing exciting developments and in which some new formal but non-quantitative models may prove fruitful.

HECKATHORN, Douglas. "Mathematical Theory Construction in Sociology: Analytic Power, Scope, and Descriptive Accuracy as Trade-Offs."

The development of the field of mathematical sociology is analyzed as a process of balancing three competing objectives - analytic power, scope, and descriptive accuracy - with a particular focus upon means for increasing each without compromising the others. It is argued that recent developments in the fields of artificial intelligence and mathematical decision theory appear to be particularly promising.

MARSDEN, Peter & Edward LAUMANN. "Mathematical Ideas in Social Structural Analysis."

Social structural analysis is an approach to studying social structure that emphasizes the relatedness of units or actors, and gives well-defined meaning to structural concepts through the methods and techniques of social network analysis. Three broad strategies for representation of social structures have been developed: topological, graph-theoretic, and spatial models. Each of these makes use of mathematical ideas to give explicit meaning to sociological ones. These strategies are briefly reviewed here; we then turn to a discussion of accomplishments of structural analysis to date, consideration of theoretical, data/empirical, and institutional impediments to sustained progress, and assessment of prospects.

WILLER, David. "Analysis and Composition as Theoretic Procedures."

The conception of theory as "a set of procedures for generating mental images by analysis and composition of simple elements" is developed first by reference to the role of interpreted geometric models in physical science and then by reference to the author's own "elementary theory." The basic concepts are introduced by interpreting network points and lines in terms of sanctions and then composing relationships of exchange, conflict, and coercion and also types of exchange. The basic idea is that theoretic principles and laws are applied not directly to the world but to these geometric-like diagrams to generate models which are then compared with experimental and historical cases. An important aspect of this approach is that it connects with classical theoretical concerns of Marx and Weber, particularly in relation to coercive relationships.

WILSON, Thomas. "On the Role of Mathematics in the Social Sciences."

This paper argues for a heuristic rather than a fundamental role for mathematics in the social sciences. The priori argument for insisting on a natural-scientific and mathematical approach to the study of social phenomena is found to rest on an untenable assumption about the powers of standard logic. Further, the requirements of description in the natural sciences are found to conflict irreconcilably with the nature of social interaction and social organization. As an alternative to the natural-science model, it is proposed that the regularities described by mathematical models depend upon and reflect underlying institutional arrangements. Consequently, mathematical models represent the outcomes of basic social processes rather than those processes directly. Nevertheless, it is argued, mathematical models are extremely useful and, indeed, indispensable in attempting to unravel the complexities of social phenomena.

PEIL, Margaret (Anthro, Birmingham). (Issue ed.) Special Issue on "Urbanization in Africa." COMPARATIVE URBAN RESEARCH 10(2) 1985.

This symposium is designed to acquaint readers who specialize in other parts of the world with the type of work which has engaged Africanists. The main foci of attention in 1960s research were migration, unemployment and political movements in what were then newly independent countries. In the 1970s, concern for the informal sector and squatter housing was influenced by the rise of dependency theory, though many aspects of this theory proved less applicable to Africa than to Latin America. An examination of the relationships between town and countryside and between the elites and the urban poor reflected widespread interest in the increasing gap between the haves and the have-nots. Urban planning is a recent development in many parts of Africa, but it has received considerable impetus from the obvious need for a large increase in housing and the decision of some governments to create a new national capital. While much of the attention of both the government and academic researchers has been given to national capitals, there has been increasing interest in small towns as centers of development or of exploitation.

The articles presented here have been written to emphasize comparisons between cities, usually in more than one country. Although it was not possible to include papers on Francophone West Africa or on recent archeological developments, much of the rest of tropical Africa is represented, as are the points of view of political economists, geographers and sociologists.

Schatzberg compares the town he studied, Lisala in Zaire, with other small towns to examine the ways in which class and ethnicity influence the activities of government bureaucrats. Local government has been attenuated in many countries and authority is centralized; bureaucrats working for the national or regional government are circulated so that they will remain loyal to the central government rather than develop local ties. Transience, separate housing and relatively high salaries have the effect of encouraging bureaucrats to cut themselves off from the rest of the urban population. Ethnic differences reinforce this process. Integration appears to be more common in very small towns, where fewer and lower-level bureaucrats are stationed, than in middle sized towns where a critical mass is achieved. Permanent residents who are equally wealthy seem to be more integrated into the community than the travelling bureaucrats.

Ekpenyong studied artisans in five different trades in two state capitals of southeastern Nigeria, Port Harcourt and Calabar. The historical development of these cities and their level of economic activity produce differences in the way self-employed craftsmen carry on their businesses and in the demand for their products, services and apprenticeships. The ability to manipulate personal contacts which is necessary for success in business seems to alleviate the problem of exploitation by large contracting firms which has been complained of elsewhere; most Nigerians who get such contracts find them profitable in expanding their businesses. The free enterprise character of the Nigerian economy, with most artisans dealing mainly with individual customers or small-scale traders, probably provides a more favourable environment for self employed craftsmen than in countries where either the state or large scale firms monopolize most production.

Potts examines the decision-making process and development of Malawi's new capital city, Lilongwe, in comparison with other new capitals. Botswana and Mauritania had no internal capital during the colonial era, and Tanzania and Nigeria have opted for more centralized capitals. Escalating costs, controlling growth and competition from larger cities have been common problems, and true innovation is limited by the nation's historical background, political and cultural values and modern planning theories. Lilongwe has cost many times the original estimates, and has limited the development of other parts of the country. Migration to the new capital is always far more rapid than job and housing provision; it is difficult to get industry and commerce to move from large coastal centers, so the new capitals tend to be largely administrative. Planning segregates urban inhabitants by function and income far more than is common in traditional African towns. New towns often maintain much closer links to major cities elsewhere in the country than to their immediate hinterland, though nomads have made themselves at home on the outskirts of Nouakchott.

National governments have effective control over many aspects of urban life in Africa. Stren focuses on states rather than cities per se and demonstrates the fluidity of alliances between classes and the variability of government responses by examining Kenyan and Tanzanian housing policies over a thirty year period. Kenya has become a symbol of capitalist success in Africa, but has invested considerable sums in public housing. Tanzania has emphasized socialism and taken a largely laissez-faire approach to housing. Both now have large numbers of squatters, especially in their capitals. Kenya's recent conversion to World Bank policies has resulted in greater access of the poor to sites and services schemes, but the fortunate allottees often chose to live cheaply elsewhere in order to earn rent from their plots. Tanzanian bureaucracy has made it difficult for the poor to participate in site and service schemes, and prescriptions against landlordism make it not worthwhile to try.

Finally, Peil uses demographic data to measure changes over time in the nature of African cities. The stereotype of a highly temporary, largely male population was never very true for cities in some parts of the continent, but it is much less true today; even rapidly growing cities now tend to have relatively balanced sex ratios, and family life is the norm rather than the exception. The nature of that family life is partly reflected in household composition, which shows that large, extended households are far more common than in Euro-American society. High income households are consistently larger than low income ones, and are more likely to include relatives. This confirms the continuing value of kinship networks; those who are successful in town still accept a responsibility for their less-advantaged kin. There are certainly cases where this is not so, where kin are excluded from the home and, less often, denied assistance. But these appear to be less typical than is sometimes believed.

(From Introduction by Margaret Peil.)

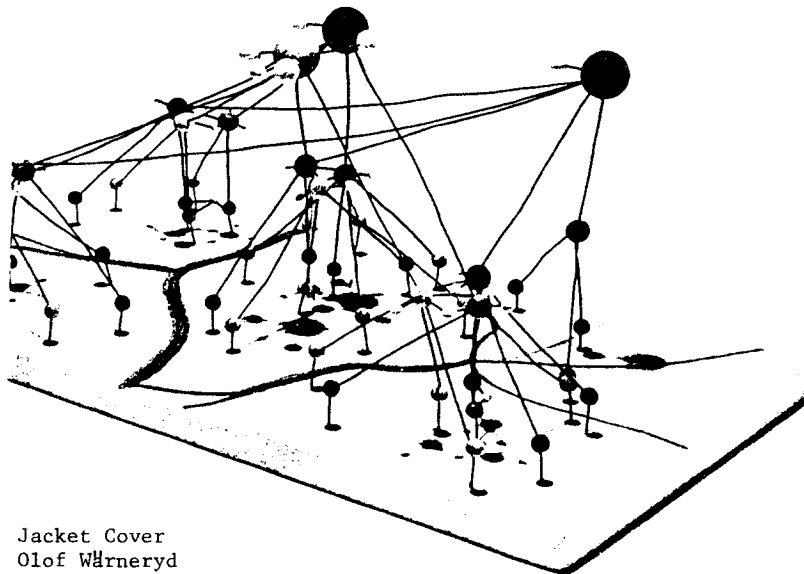
MACKENZIE, Suzanne, Jo FOORD & Myran BREITBART. 1984. ANTIPODE: A RADICAL JOURNAL OF GEOGRAPHY 16(3). Special issue. WOMEN & ENVIRONMENTS.

Includes a wide range of articles concerned with women and geography. The authors of the articles bring together knowledge of Canadian, American and British studies. A majority of the articles are written from a socialist feminist perspective. A few of them have been published elsewhere.

In the "Editorial Introduction" Suzanne Mackenzie makes clear the evolution of feminist research. She outlines a clear starting point, the underlying assumptions of work on women and the environment, for such research in geography. "The aim of the research has been to define the nature and the parameters of these differences (between men's and women's lives) and to study their implications."

Other contributors deal with a variety of issues raised by these differences. Gerda Wekerle presents some research on women's urban experiences in "A Woman's Place is in the City," and argues that major changes are needed in land use patterns in cities. Sue Brownhill, "From Critique to Intervention: Socialist-Feminist Perspectives on Urbanization" and Jane Lewis, "The Role of Female Employment in the Industrial Restructuring and Regional Development of the Post-War United Kingdom" use British examples to explore women's experiences. In "The American Family goes Camping: Gender, Family and the Politics of Space" Margaret Cerullo and Phyllis Ewen discuss gender divisions in one leisure activity. The issue also contains a review essay by Jane Darke that discusses four recent volumes concerning women and the environment.

The introduction states: "Our hope and expectation, as editors of this special issue, is that a serious consideration of the relationships between gender and space...will continue to emerge..."



Jacket Cover
Olof Wärneryd
INTERDEPENDENCE IN URBAN SYSTEMS

ABSTRACTS

ALWIN, Duane, Philip CONVERSE (Soc Research, Mich) & Steven MARTIN (Med, Baylor). "Living Arrangements and Social Integration." JOURNAL OF MARRIAGE AND THE FAMILY. Forthcoming.

Changes in the composition of American households over the past several decades - particularly increases in the numbers of persons living alone and single-parents living with their children - call attention to potential differences in levels of social integration that accompany differing types of living arrangements. In this paper we review the nature of trends in household living arrangements and examine the potential consequences of types of living arrangements for levels of social integration. With respect to the latter objective, we examine data from a 1978 national survey (N = 3,692) of the U.S. population, showing that persons living alone frequently exhibit higher levels on important measures of "Extra-household" social connectedness than those living with others. While lacking the social contact that naturally accompanies living with others, persons living alone appear to be no less attached outside the household and in some instances have higher levels of such contact. These results are supported by a complementary analysis of national data on time use, which confirms the broad outlines of these findings. We conclude from these analyses that, rather than being an isolating situation into which persons are forced against their will, living alone is often a preferred arrangement for which compensating mechanisms of social support often exist.

BEAULIEU, Lionel & Vernon RYAN (Food & Agric Sci, Florida). 1984. "Hierarchical Influence Structures in Rural Communities: A Case Study." RURAL SOCIOLOGY 49(1) Spring: 106-16.

An exploration of the effect of hierarchical positioning in the local community power network on hierarchical positioning in the action network. Placement in the power network is based on one's interorganizational leadership status, whereas location in the action network is derived from one's level of participation in locally oriented programs. Analysis of interview data from 32 residents of a small Indiana community reveals that hierarchical positioning in the power network serves as the critical determinant of location in the action network, even when personal assets of individual participants are considered.

BELSKY, Jay & Michael ROVINE. 1984. "Social-Network Contact, Family Support, and the Transition to Parenthood." JOURNAL OF MARRIAGE AND THE FAMILY 46(2) May: 455-62.

Assessed the effect of a new baby on social-network contact and family support in 72 families studied longitudinally. Analyses revealed that contact with parents' families of origin increased with time. The proximity of family of origin predicted quantity of family contact but not emotional and material support.

BLANKENSHIP, Virginia (Psych, Oakland U, Mich), Steven HNAT, Thomas HESS & Donald BROWN (Psych, U of Mich). 1984. "Reciprocal Interaction and Similarity of Personality Attributes." JOURNAL OF SOCIAL AND PERSONAL RELATIONSHIPS 1: 415-32.

In a study of the relationship between similarity of personality and interaction choices, 336 students gave up to ten choices within fifty person classes. Personality variables were measured two years before sociometric choices (before acquaintance) and at the time of the choices. Reciprocal interaction pairs were more similar on a derived authoritarianism scale of the Omnibus Personality Inventory (OPI) than no-choice pairs at the time of the choices, but not more similar before they became acquainted. Religious items accounted for the increased similarity. A Guttman scale of religious items was identified and scores were related to sociometric spaces generated with Guttman-Lingoes smallest space analysis. Church affiliation did not explain reciprocal interaction choices, but church attendance was weakly related to choices, with reciprocal pairs being more similar than no-choice pairs on frequency of attendance. Reciprocal interaction pairs which persisted to the fourth year were more similar on

intellectualism than persistent no-choice pairs and more similar than reciprocal interaction pairs which did not persist. These findings suggest that similarity leads to interaction and that interaction leads to increased similarity.

BLUM, Terry & Paul William KINGSTON (Tulane, New Orleans). 1984. "Homeownership and Social Attachment." *SOCIOLOGICAL PERSPECTIVES* 27(2) Apr: 159-80.

A multivariate analysis of survey data collected by Claude Fischer in northern California (To Dwell among Friends: Personal Networks in Town and City, Chicago: University of Chicago Press, 1982) is used to test whether or not home ownership is associated with attitudes and behaviors that seem supportive of the prevailing social order. Data were gathered through interviews of 973 household heads or their spouses. Home ownership has a zero-order relationship with each of three indicators of social attachment: attitudes indicative of traditionalism, participation in voluntary organizations, and informal interaction with neighbors. While the bivariate relationships between home ownership and each of the three social binds are reduced when socioeconomic status, life cycle, and ecological variables, and length of residence are controlled, the partial coefficients for home ownership remain statistically significant.

BRUGHA, Traolach (Soc Psych, Inst. of Psych, London). 1984. "Personal Losses and Deficiencies in Social Networks." *SOCIAL PSYCHIATRY* 19(2): 69-74.

Personal losses or exit events and deficiencies in personal social networks have both been shown to be associated with episodes of depression. This study found no evidence for an inverse correlation between exit events and primary social network variables in depressed psychiatric outpatients and in normal subjects. Social network deficiencies are probably stable over time and although they may increase the risk of developing depression, they cannot now be said to cause it directly. It is suggested that social network composition is influenced by both the innate affiliative tendencies of people and by their external social and cultural environment.

BRYM, Robert (Soc, Toronto). 1984. "Cultural versus Structural Explanations of Ethnic Intermarriage in the USSR: A Statistical Re-Analysis." *SOVIET STUDIES* 36 (Oct): 594-601.

According to the 'cultural' school of thought, ethnicity can persist and flower even when the economic and other material bases of ethnic solidarity are eroded since ethnic consciousness fulfils certain emotional, cultural or expressive needs independent of material circumstances. A second group of 'structuralist' scholars fully agree that the classical arguments greatly underestimate the staying power of ethnic consciousness but attributes the persistence of ethnicity to a number of material or structural forces largely ignored by the cultural theorists. Among students of Soviet society, the cultural theory appears to have gained wider acceptance than the second, structural viewpoint. Thus Silver (1978) seeks to demonstrate that religion and other cultural factors are better statistical predictors of ethnic intermarriage in the USSR than are sociodemographic or structural variables. The narrow task I have set myself in this paper is to question Silver's claim. However, it bears emphasizing that far broader political issues are at stake here. If it is indeed the case that national consciousness in the USSR is obdurate and cannot be effaced by the regime's effort to manipulate the material and social environment, attempts to manage conflict and still national discontent once and for all are likely to prove ineffective. But if national consciousness is subject to the constraints imposed and the opportunities afforded by social relations, the magnitude of national discontent can likely be lowered.

BRYM, Robert, A.R. GILLIS (Soc, Toronto) & Michael GILLESPIE (Soc, Alberta). 1985. "Anomie, Opportunity, and the Density of Ethnic Ties: Another View of Jewish Outmarriage in Canada." *CANADIAN REVIEW OF SOCIOLOGY & ANTHROPOLOGY* 22(1): 102-11.

This paper assesses two views of Jewish outmarriage in Canada. One focuses on anomie and the disruption of normative ties to best explain outmarriage. The other is a structural explanation which holds that outmarriage is largely a result of restricted opportunities to marry within the group.

The data are drawn from Statistics Canada, with each province as the unit of analysis. The data are more consistent with the structural view of outmarriage than with the anomie argument.

CHEAL, David (Soc, Winnipeg). 1985. "Moral Economy: Gift Giving in an Urban Society." Winnipeg Area Study Report No. 5.

I describe in general terms the social foundations for gift behaviour as they are found both in patterns of private symbolism and in patterns of public assistance. The data presented are drawn from the 1984 Winnipeg Area Study, a city-wide survey based on a simple random sample with 573 adult respondents.

Three major influences upon gift behaviour have been identified. They are: interaction processes within personal relationships; socially distributed economic resources; and socially defined statuses within systems of meaning. The findings about these three factors lead to two general conclusions.

First, it is necessary to stop thinking about valuable gifts simply as "supports" for those "in need." There is no evidence to suggest that valuable Christmas gifts are commonly used in this way. On the contrary, the evident tendency towards balanced exchange means that the net benefits from the ritual gifts transferred at Christmas are typically small. The fact that important Christmas gifts are rarely used as social supports suggests that the study of symbolic processes deserves much more attention.

Second, the functional theory of extended family aid has proven to be an unreliable guide to the interpretation of gift practices. What is needed instead is a theory of the structuring of behaviour. I have shown here that rules of transactional symmetry between confidants, and rules of transactional asymmetry between the occupants of different social statuses, combine with the resources of income and housing rights to structure gift behaviour in Winnipeg.

DANIELS-MOHRING, Debbie & Michael BERGER. 1984. "Social Network Changes and the Adjustment to Divorce." JOURNAL OF DIVORCE 8(1) Fall: 17-32.

Explored the social network relationships of divorced persons (N=42) prior to and following divorce. Subjects were administered the Tennessee Self-Concept Scale and the General Well-Being Schedule and completed a questionnaire. Findings suggested that changes in social networks from pre- to post-divorce tend to decrease the quality of adjustment.

DYEHOUSE, Janice (Cincinnati). 1984. "The Reward Value of Interaction as Mediator of Adolescent Suicide." NORTH CENTRAL SOCIOLOGICAL ASSOCIATION (NCSA). 1043.

Adolescent suicide has tripled in the past 25 years and is the third leading cause of death among adolescents. Despite this dramatic increase, little is known about its cause or prevention. Current understanding of the problem is characterized by weak and inconsistent research findings and theoretical framework. Here a social-psychological model is presented, linking the adolescent's social network with his self-concept, which in turn mediates the reward value of interaction, the outcome of which determines suicidal behavior. The adolescent's network diversity, integration, and commitment influence the salience of multiple identities. Depending on the identity salience, the adolescent will respond appropriately to complex situational stimuli; as capability to respond increases, the reward value of interaction increases, thus decreasing the likelihood of suicidal behavior. As the reward value of interaction decreases, the likelihood of suicidal behavior increases. Such variables as depression, anxiety, social isolation, and stress may be spuriously rather than directly related to suicidal outcomes. The model presents a social context mediated by a self-concept framework for testing hypotheses related to adolescent suicidal behavior.

ELL, Kathleen (S. Cal). 1984. "Note on Research. Social Networks, Social Support, and Health Status: A Review." SOCIAL SERVICE REVIEW 16 (March): 133-49.

A recently burgeoning body of research suggests that social ties increase people's immunity to physical illnesses. Study findings form a conceptual foundation for an emerging social support system theory that includes social network structure, social support content, and behaviors and social conditions involved in mobilizing support. As a result, knowledge about person-environment fit and health status is advanced. Social work has a special opportunity to refine further social support system theory and intervention.

FELD, Scott (SUNY-Stony Brook). 1984. "The Structured Use of Personal Associates." *SOCIAL FORCES* 62(3) Mar: 640-52.

There are often consistencies in the personal characteristics of associates chosen by a given person for a given reason. These consistencies are usually attributed to deliberate choices to use associates with certain characteristics, but the structured social contexts from which the associates are drawn may be important determinants of associates' characteristics. Analysis of data from a survey of 1,046 northern California residents conducted by C.S. Fischer (*To Dwell among Friends: Personal Networks in Town and City*, University of Chicago Press, 1982) indicates that associates serving certain purposes tend to be drawn from certain types of foci of activity, and foci of activity tend to include people with particular characteristics.

FIENBERG, Stephen (Stat & Soc Sci, Carnegie-Mellon), Michael MEYER (Stat, Wisconsin) & Stanley WASSERMAN (Psych & Math, Illinois). 1985. "Statistical Analysis of Multiple Sociometric Relations." *JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATIONS* 80(389) March.

Loglinear models are adapted for the analysis of multivariate social networks, a set of sociometric relations among a group of actors. Models that focus on the similarities and differences between the relations and models that concentrate on individual actors are discussed. This approach allows for the partitioning of the actors into blocks or subgroups. Some ideas for combining these models are described, and the various models and computational methods are applied to the analysis of data for a corporate interlock network of the 25 largest organizations in Minneapolis/St. Paul and for a classic network of 18 monks in a cloister. The computational techniques all involve variations on the standard iterative proportional-fitting algorithm used extensively in the analysis of multidimensional contingency tables.



"To my data, right or wrong."

Source: THE NEW YORKER, 5/84

FLEISHMAN, R. & A. SHMUELI. 1984. "Patterns of Informal Social Support of the Elderly: An International Comparison." GERONTOLOGIST 24(3) June: 303-12.

Compares patterns of support of the elderly in Jerusalem with those reported in other Israeli and foreign studies. Examines the role of ethnicity, sex, and age in explaining differences in patterns of informal support.

FRASER, Mark (Utah) & J. David HAWKINS (Washington). 1984. "Social Network Analysis and Drug Misuse." SOCIAL SERVICE REVIEW 16(March): 81-97.

This paper reviews social network analysis as an approach to describing the interactions of street drug abusers and as a research method characterized by continuing controversy. An analysis of drug abusers' networks over time indicates that underlying dimensions of social interaction are stable in the face of intervening residential treatment. Implications for the rehabilitation of street drug abusers are discussed in light of the network analysis.

GOODMAN, Catherine Chase. 1984. "Helper Bank: A Reciprocal Services Program for Older Adults." SOCIAL WORK 29(4) July-August: 397-98.

Describes a hypothetical program called the Helper Bank, which uses time instead of money as the medium of exchange for services. The reciprocal relationship allows older persons to volunteer to help others as well as provide for future needs such as shopping, transportation or housekeeping.

GOODMAN, Catherine Chase. "Natural Helping among Older Adults." GERONTOLOGIST 24(2) April: 138-43.

Surveyed 67 neighbors in retirement housing to identify characteristics and helping styles within an informal support system. Findings confirmed three exchange types: (1) high helpers, who exhibit a quasiprofessional style; (2) mutual helpers, who show an interdependent style; and (3) neighborhood isolates, whose social ties are outside the neighborhood.

HAYS, Judith. 1984. "Aging and Family Resources: Availability and Proximity of Kin." GERONTOLOGIST 24(2) April: 149-53.

Examined availability of children and siblings to a judgement sample of persons 45 and older drawn from a newspaper obituary section. Although 76.6% of the total were survived by nearby children or siblings, 24.7% of descendants 65 and over had no surviving children or siblings residing nearby.

HERMAN, Nancy (McMaster). 1984. "Conflict in the Church: A Social Network Analysis of an Anglican Congregation." JOURNAL FOR THE SCIENTIFIC STUDY OF RELIGION 23(1) Mar: 60-74.

While the social network analytic approach has gained increasing popularity, it has been employed rather infrequently in the study of the social organization of religious groups. The "blockmodel" analytic approach, developed by H.C. White and his collaborators (see SA 24:3/76H9905 & 24:5/11664), is used to examine and interpret patterns within and across social networks in a small Anglican congregation, using interview and questionnaire data obtained from 25 of the 40 members. The block-model interpretation identifies two opposing groups, each struggling for supremacy within the church. Group 1 (the Reformers), containing the minister and young to middle-aged congregational members, support changes to "modernize" the church. Group 2 (the Conservatives), containing older members who have attended a greater number of years, support adherence to traditional ideology, prayerbook, and hymns. Group 3 (the Followers), containing young congregational members, are not actually involved in the conflict between the two groups, but passively support Group 1 with its liberal views. Block-model analysis proves a valuable tool for understanding the social structure of religious groups.

HINDE, Robert (Med Research Council, Cambridge). 1984. "Why do the Sexes Behave Differently in Close Relationships?" JOURNAL OF SOCIAL AND PERSONAL RELATIONSHIPS 1: 471-501.

In this paper a possible framework for integrating the known facts about sex differences in close relationships are discussed. It points to parallels between the sex differences observed in present day societies and those that would have been expected in our environment of evolutionary adaptedness, but does not involve biological determinism and acknowledges that such parallels carry no necessary implications about the ontogenetic origins of the differences. Whilst recognizing the ubiquitous influences of socialization practices in producing sex differences in attitudes and behaviour, it suggests also that the reciprocal influences of sex differences on socialization practices must not be neglected.

HIRSCH, Barton & Thomas REISCHL (Psych, Illinois). In press. "Social Networks and Development Psychopathology: A Comparison of Adolescent Children of a Depressed, Arthritic, or Normal Parent." JOURNAL OF ABNORMAL PSYCHOLOGY.

The present study investigated how social networks were linked to symptomatology and self-esteem among three groups of high-risk and normal adolescents: 16 adolescent children of a depressed parent, 16 adolescent children of a parent with rheumatoid arthritis, and 16 adolescent children of parents free from psychological or physical disorder. While there were few between-group differences in mean levels of networks variables, there were striking differences between groups in the pattern of associations between network variables and mental health. For adolescent children of a depressed or arthritic parent, more social support for problematic situations, stronger friendships, and more parent-peer linkages were related to much poorer adjustment. For adolescent children of disorder-free parents, these same network variables were related to much healthier adjustment. The discussion considers how developmental, psychodynamic, and social-structural factors may interact to affect well-being.

HOUSER, Betsy & Sherry BERKMAN. 1984. "Aging Parent/Mature Child Relationships." JOURNAL OF MARRIAGE AND THE FAMILY 46(2) May: 295-99.

Interviewed 400 elderly women to identify factors contributing to mother's satisfaction with filial relationships. Satisfaction with filial relationships was found to be related primarily to satisfaction with quality of contact with children and secondarily to children's potential filial behavior and mother's satisfaction with quantity of contact with children.

KAHANE, Reuven (Hebrew U, Jerusalem). 1984. "Hypotheses on Patronage and Social Change: A Comparative Perspective." ETHNOLOGY 23(1) Jan: 13-24.

It is hypothesized that the pattern in which the contradictory elements of a given type of patronage system are combined explains its adaptability to different kinds of social change. Three "ideal types" of patronage systems are distinguished: (1) a hybrid type, in which the contradictory elements are fused; (2) a differentiated type, in which the elements are separated yet complement one another; and (3) a mixed eclectic type, in which they appear in an arbitrary fashion. It is hypothesized that the first is likely to be preserved and utilized to accelerate social change; the second will vanish, while the third will be transformed into an instrumental type. Three cases were chosen to test this hypothesis: the Japanese oyabun-kobun system, the Indian jajmani system, and the Javanese bapak-anak-buah network. In the oyabun-kobun system, the patron behaves concurrently like a father and a friend, judging his clients on both an achievement and an ascriptive basis. Under transitional conditions, this system bridges different institutional arrangements (modern & nonmodern), providing clients and patrons alike with a sense of security and order. In the jajmani system, the conflicting elements are separated, and each is used under different circumstances. Thus, this system neither mediates between different arrangements nor provides a sense of security. Finally, in the Javanese patronage system, there are no clear rules for coping with conflicting elements; they are sometimes differentiated and sometimes combined. Consequently, this type of patronage has only limited mediatory power and is often transformed into a type of bossism. These outcomes are explained theoretically by the concepts of distributive justice and equity.

KAYSER, Egon, Thomas SCHWINGER (Mannheim) & Ronald COHEN (Bennington, VT). 1984. "Laypersons' Conceptions of Social Relationships: A Test of Contract Theory." JOURNAL OF SOCIAL AND PERSONAL RELATIONSHIPS 1: 433-58.

This study sought to test three hypotheses derived from contract theory concerning laypersons' conceptions of social relationships. Data collected in a questionnaire administered to male and female university students at one West German university and one college in the United States provided evidence for distinctions among three relationship types: loving or caring relationships, friend or associate relationships, and work relationships. Each relationship type is distinguished from the others on the basis of a relatively unique configuration of three characteristic features: affective climate, the primary goal (and profile of subsidiary goals) of participants, and the relative importance of various resources exchanged in the relationship. The evidence also suggests that individuals possess similar configurations in conceptualizing social relationships in various types of small groups and social relations in various spheres of institutionally organized social activity. No significant sex or nationality differences were observed.

KESSLER, Ronald, Richard PRICE & Camille WORTMAN (ISR, Michigan). 1985. "Social Factors in Psychopathology: Stress, Social Support & Coping Processes." ANNUAL REVIEW OF PSYCHOLOGY 36: 531-72.

Over the past decade research on the influences of social and cultural factors on psychopathology has been dominated by an interest in stress and factors that modify its influence. In the first section we examine attempts to conceptualize and measure (acute and chronic) stress and to estimate its impact on emotional functioning. Yet it is increasingly clear that the vast majority of people who are exposed to stressful life events do not develop emotional disorder. In the second section, we focus on two vulnerability factors that may influence individual reactivity to stressful life experiences--social support and coping strategies. In the final section we discuss how recent developments in research on stress, social support and coping have influenced current work in the group (race, sex, class) differences area.

KILLIAN, Lewis (Soc, Mass). 1984. "Organization, Rationality and Spontaneity in the Civil Rights Movement." AMERICAN SOCIOLOGICAL REVIEW 49(Dec.): 770-83.

So-called "classical collective-behavior theorists" have been charged with placing too much emphasis on spontaneity and the emergence of new norms and structures in social movements. Empirical support for this charge and material for constructing an alternate model have been offered in recent revisionist studies of the Civil Rights Movement. This alternate model emphasized the importance of deliberate planning and pre-existing social structures in the development and growth of bus boycotts and sit-ins between 1955 and 1965. Reexamination of the Civil Rights Movement in Tallahassee, Florida, shows it to be a case which does not fit the alternate model in important respects. It is concluded that while organization and planning are key variables, social movement theory must take into account spontaneity and emergence, and the transformation of pre-existing structures.

KOENIG, Thomas & Michael RUSTAD (Soc, Northeastern). Unpublished paper. 1985. "The Challenge to Hierarchy in Legal Education: Suffolk and the Night Law School Movement."

An oversupply of lawyers is increasing the degree of hierarchy within the legal profession. This paper, based on archival materials, argues that a similar situation during the late 1920's led to a complex struggle between the elite law schools and their lower status, proprietary rivals over bar admission criteria. A review of this conflict, especially as it manifested itself in Boston, provides insights into the way contemporary legal education is organized today. A similar struggle between high-ranking professional schools and those of lesser status may again emerge as the professions become overcrowded.

KOENIG, Thomas & Tracey BOYCE (Soc, Northeastern). Unpublished paper. 1985. "Corporate Financing of the Christian Right."

The media generally interpret the antihumanist proposals and policies of the Reagan administration as a manifestation of the political power of a resurgent New Christian Right. In contrast, they portray the Old Right as relatively restrained--a force for moderation. This paper examines the accuracy of these commonly held perceptions. We found that the independent strength of the Christian Right has been greatly exaggerated and that much of their effectiveness is due to financial backing by corporations and trade associations. Humanists must not be complacent in the face of this well-financed attack on liberal ideals.

KRANNICH, Richard, Banu GOLESORKHI & Thomas GREIDER (Utah). 1984. "Rapid Growth and Personal Stress: An Assessment of Stress Levels, Network Ties, and Social Support in Energy-Impacted Communities." RURAL SOCIOLOGICAL SOCIETY .

Much of the sociological literature on western United States energy development suggests that energy-related growth in small communities results in social disruption at both the individual and community levels. Despite recent criticisms of this predominant social disruption perspective, there is substantial evidence that residents of energy boomtowns exhibit abnormally high levels of at least some social and psychological problems. Here, attention is focused on personal stress as a possible dimension of disruption that may accompany rapid community change and growth. Using survey data from 3 western communities with vastly different growth patterns, stress levels are examined via a multiple-item symptomatic index. In addition, a measure of the number of localized social network ties as reported by respondents, and a measure of social support availability as key independent variables that may help to explain variations in levels of stress across the 3 communities are analyzed. Results indicate a general absence of differences among the communities in terms of average stress levels. In contrast, respondents residing in a boom-growth community reported substantially smaller localized social networks and lower levels of support availability than did respondents from the preboom and stable study communities. Multivariate analyses indicate no support for the hypothesis that extensive network ties are associated with lower levels of stress, and only limited support for the hypothesis that high social support availability is associated with lower levels of stress.

LEFFLER, Ann, And Others (Soc, Utah-Logan). 1984 "When I'm Not With the Friend I Hate, I Hate the Friend I'm With: Contact, Support, and Hostility Networks in Community Life." Paper presented at the ANNUAL MEETING OF THE RURAL SOCIOLOGICAL SOCIETY.

A 1983 four-community survey of 220 rural Utah households had as its central analysis issue the extent to which conflict plays a modulating role in linking network positions. Not only do most network analysis approaches reflect an implicit assumption that network ties involving conflict are mutually exclusive from and incompatible with support ties, but there is a tendency to assume that networks channel only positive relations (the "amiability tilt"). Sites were selected to represent four major types of economic change currently being experienced in nonmetropolitan areas. A method was devised which measured conflict, support, and simple contact in such a way that none presupposed or eliminated another. Conflict definitely represented a common feature of important relationships and was a regular feature of network life. Conflict did not affect all community members in equal degree or form; indeed, male and female conflict patterns were so different that they actually appeared to inhabit socially different communities. Two common stereotypes depict American villages as tranquil and supportive, or riddled with hostility. Not only may both versions be right about the same relations, but the amiability tilt of network analysis needs correction.

LINGE, Godfrey (Geog, RSSS, Austl. Natl U). 1984. "Developing-Country Multinationals: A Review of the Literature." PACIFIC VIEWPOINT 25(2): 173-95.

The literature on multinational corporations continues to burgeon although with more questioning now of some of the earlier, simplistic assumptions about the processes of foreign direct investment and the 'actors' involved in it. It has recently been argued, for instance, that multinational corporations are 'a relatively discrete set of organisations within the capitalist system' rather than the ultimate organisational form to which - as some of the earlier literature suggests - all firms, enterprises and organisations can aspire. Elsewhere, attempts have been made to explain the growth of internationally widespread activities of enterprises by integrating the theory of the international firm, the theory of trade, and, less adequately, the theory of international capital markets. Each of these theories is itself evolving and can be viewed from very different perspectives. Furthermore, many questions remain only partially explored and others have all but been ignored: as one example, virtually nothing seems to have been said about the ownership of multinational corporations, their access to and sources of finance, and the actual or apparent separation of ownership, control and financial risk. Moreover virtually all the discussion to date has been in terms of multinationals headquartered in developed nations whereas, as this paper shows, there are growing numbers based in Third World countries.

LOMNITZ, Larissa (UNAM, Mexico City). "Networks, Trust and the Informal Economy in Centrally Planned Societies."

Studies on the informal economy in the Third World have evolved towards defining the informal sector in relationship to the state, that is, the sector that rules and controls economic activities. This paper analyzes some activities which escape the control of the state in the centrally planned economies.

They include exchange of bureaucratic favors ("connections"), different forms of corruption, and the "parallel" system of production and marketing. We show that economic laws, such as supply and demand, or bureaucratic rules of central planning are not sufficient to understand the logic of centrally planned economies. Most exchanges (including market-exchanges) are only possible through the existence and operation of culturally-determined social networks, where the element of trust among its members allows for the operation of an informal parallel economic system which exists side by side with the officially licensed system.

LOMNITZ, Larissa (UNAM, Mexico City). "Order Generates Disorder: Informal Exchange Networks in Formal Systems."

The present paper proposes to examine a different aspect of "informality" of the pervasive utilization of informal modes of exchange within the formal sector itself. These exchanges include various forms of trading influence and bureaucratic favors for equivalent services or cash. Depending on the political system, some forms of informal exchange may be tolerated while others may be severely repressed. Even in the latter case, however, illicit economic activities ("economic crimes") among the state bureaucracy are often seen as inevitable if not actually useful by members of elite groups within the formal system. I show that these activities are not random or chaotic but are based on informal networks following similar principles as those in shantytown networks: patronage, loyalty and confianza. Often the networks run underneath and parallel to the formal hierarchy.

The main points of this article are summarized as follows: (1) The more a social system is formalized, regulated and planned, the more it tends to create informal mechanisms which escape the control of the system; (2) Informal modes of exchange grow in the interstices of the formal system, thrive on its inefficiencies and lags and tends to perpetuate them by compensating for its shortcomings and by generating factions and interest groups within the system; (3) Informal activities, including strictly economic activities within the formal sector, obey a symbolic-cultural logic which differs from (and often clashes with) economic rationality or the formal ideology of the state; (4) The rules of sociability which govern informal exchange vary from culture to culture. Also, depending on the formal system and on the degree of repression, modes of exchange may fluidly grade into each other: patron-client relations are based on reciprocity networks and generate market exchange.

LOMNITZ, Larissa & Marisol PÉREZ-LIZAURO (UNAM, Mexico City). 1984. "Social Relations and Capital Accumulation: The case of the Mexican Bourgeoisie." CAPITAL & LABOUR IN THE URBANIZED WORLD 225-35.

The Latin American entrepreneur depends to a considerable extent on social resources for economic ends (Long, 1977; Aubey, 1979; Lipset, 1967; Strickon, 1965). It has been pointed out that 'social relationships that engender confidence and trust are critical resources in the entrepreneurial venture' (Greenfield and Strickon, 1979). In this paper we describe a period of over 100 years in the evolution of a Mexican urban kinship set which we call the 'Gomez family' and which has produced a series of prominent entrepreneurs and businessmen. The purpose of the paper is to relate the events of Mexican economic history since about 1850 with the evolution of the Gomez family in terms of origins of capital, economic decisions and the fate of family enterprise in Mexico in general. Most particularly, we want to show the importance that social networks have had in the development of the industrial enterprise.

Mexican economic history during the historical period of interest may be divided into three periods.

1850-1910: This period corresponds to the Reform, the Empire, the Restoration of the Republic and the administration of Porfirio Diaz: a time of deep crisis followed by thirty years of stability and the emergence of the modern state.

1925-1960: The thirty-five years which followed the Mexican Revolution, were a period of national reconstruction and modernization: policies of protectionism of national capitalism, import substitution and 'the Mexican Miracle' stimulated by the Second World War.

1960 to the present: In the present stage of Mexican history a marked change has occurred, because of the inability of Mexican business to resist the penetration of technically more advanced foreign and multinational corporations. Local industry looks increasingly to foreign business and the state for guidance and protection. Serious weaknesses appear in the structure of family enterprise.

LUND, Mary (Family Therapy, UCLA). 1985. "The Development of Investment and Commitment Scales for Predicting Continuity of Personal Relationships." JOURNAL OF SOCIAL & PERSONAL RELATIONSHIPS 2: 3-23.

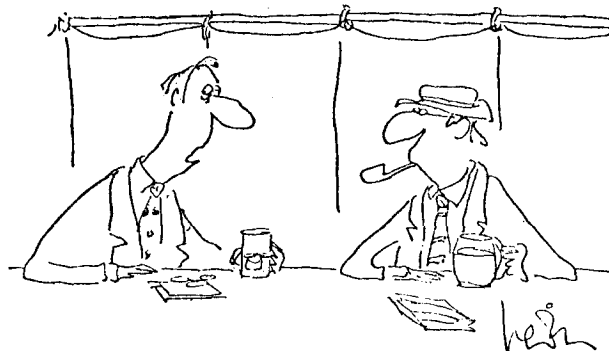
A longitudinal study of 129 graduating university students tested whether relationship continuity could best be predicted by a positive pull model, consisting of love and rewards, or a newly proposed barrier model, consisting of investments and commitment. The barrier model proved to be the best discriminator of whether relationships continued past graduation. Validity of the barrier model was further supported by conceptual distinctions found between Love and Commitment scales and by evidence for the importance of investments to the development of commitment. The combination strategy of scale development and examination of relationships over time produced new scales of Investments and Commitment.

MARSDEN, Peter (Soc, N. Carolina). 1985. "Latent Structure Models for Relationally Defined Social Classes." AMERICAN JOURNAL OF SOCIOLOGY 90(March): 1002-21.

Ronald L. Breiger raised an intriguing set of issues for mobility analysts by suggesting that attention must be paid not only to the pattern of mobility between social classes but also to the manner in which occupations are to be mapped into social classes. This article examines two related models - collapsibility and internal homogeneity - for analyzing occupational mobility tables according to this scheme, by reformulating them as restricted latent class models in which the unobserved class variables are made explicit. The parametric representation of both models provides additional insight into how they differ. In particular, it clarifies the different ways in which they operationalize the criterion of "common mobility chances" for aggregating occupations into classes. The latent class model also permits the formulation of a new model for relationally defined social classes, a model that recognizes that the correspondence between class boundaries and occupational boundaries may be imperfect and that "marginal" occupations may be mapped into two or more classes. A model of this sort provides a good fit to the classic 8 x 8 British mobility table; this model appears to be both conceptually and statistically simpler than the internal homogeneity model.

MAYER, Thomas (Behav Sci, Colorado:Boulder). 1984. "Parties and Networks: Stochastic Models for Relationship Networks." THE JOURNAL OF MATHEMATICAL SOCIOLOGY 10(1) May: 51-103.

Parties and other gatherings are claimed to be important for the development of friendship networks. The evolution of networks over time is examined in a stochastic model highlighted by the party event. This event occurs when a person in the network invites his or her friends to a gathering; the invited persons then also become friends. Party models are defined through differential equations incorporating their basic assumptions, and concepts for model analysis are explored, including those potential, equivalence class form, and degenerate models. Models for three-person networks are also provided.



Source:
THE NEW YORKER

"Well, I'll be damned if I'll defend to the death your right to say something that's statistically incorrect."

McCANN, Glenn, Dorothy MERCHANT, & Michael MONGER (NC State U). 1985. "Interorganizational Networks and Delivery of Social and Health Services in Nonmetropolitan Counties in N.C." SOUTHERN ASSOCIATION OF AGRICULTURAL SCIENTISTS, Rural Sociology Section.

An examination of the range, types, and frequency of organizational interactions associated with the delivery of program benefits by the County departments of Social Services and Health in two North Carolina nonmetropolitan counties. Directors, supervisors, and nonsupervisors were interviewed in two Social Service and two Health departments, and asked to indicate the frequency and kind of association he or she had with other organizations, both within and outside county boundaries, in connection with duties as a representative of the Social Service or Health Agencies. In each county and for each agency, a large number of interorganizational linkages were identified. Such linkages were found to exist between Social Service & Health departments. In addition, each of the agencies had numerous contacts with both governmental and private organizations within and outside the counties. A typology is presented that identifies types of interorganizational networking. One type is exclusively concerned with information sharing, whereby a large number of organizations convene periodically and their spokespersons tell each other what their agency is doing. At the other extreme, a type of interorganizational interaction is identified in which the organizational representatives, with each enjoying considerable autonomy from the parent organization, come together to work out a policy and program to deal with a particular social and/or health problem in the county. Other types of inter-organizational interaction focus on resource exchange, joint programs, and decision-making contexts. An attempt is made to characterize the "typical" interorganizational roles that are carried out by directors, supervisors, and nonsupervisors.

McINNIS, Kathleen. 1984. "Ethnic Minorities in Small Cities: Organizing Support Systems. The Case of the Southeast Asians and Mutual Assistance Organizations." Paper presented at the CONFERENCE ON THE SMALL CITY AND REGIONAL COMMUNITY 6th, University of Wisconsin at Stevens Point.

Focusing on the experiences of Southeast Asian refugees in small Wisconsin cities, this paper addressed two broad issues: First, how do non-white ethnic groups survive in their majority white environments? And second, what creative support systems have emerged from within these groups or from the interested efforts of non-minority community leaders? In the first part of the paper, problems that Southeast Asian refugees face in Wisconsin are reviewed; areas discussed include employment, language and adult education, racism, and cultural misunderstanding. This is followed by an assessment of the challenges that this ethnic group has presented for the small cities in which they have resettled; problems include demographic shifts, changes in service delivery, financial costs, and changes in community relations. Next, the primary ethnic support system used by the Southeast Asians and their advocates, the Mutual Assistance Associations, is described. The purpose, structure, location, and program activities of these organizations are outlined, and sources of their funding (state and local governments, voluntary agencies, and the private sector) are detailed. Finally, recommendations are offered for the development of similar support systems for any ethnic minority located in a small city.

McIVOR, Geraldine, and others. 1984. "Depression in Multiple Sclerosis as a Function of Length and Severity of Illness, Age, Remissions, and Perceived Social Support." JOURNAL OF CLINICAL PSYCHOLOGY 40(4) July: 1028-33.

Investigated correlates of depression in spinal multiple sclerosis outpatients (N=120). Results showed that the more depressed individuals tended to be more disabled, older, had never experienced a remission, and, in particular, perceived family and friends as providing less social support than those who were less depressed.

MITCHELL, Jim & Jasper REGISTER. 1984. "An Exploration of Family Interaction with the Elderly by Race, Socioeconomic Status, and Residence." GERONTOLOGIST 24(1) Feb: 48-54.

Questions the extended family hypothesis of Black aging. A survey of 334 elderly Blacks and 1,813 Whites indicates White elderly see their children and grandchildren more frequently, Blacks are more likely to receive help from children and grandchildren, and giving help is influenced more by socioeconomic factors than race.

MITNICK, Barry (Bus Admin, Pitt). 1984. "Agents in the Environment: Managing in Boundary-Spanning Roles."

The analysis of boundary-spanning personnel is approached from the perspective of the theory of agency, which seeks to model agent-principal relationships in diverse social settings. A typology of functions of boundary spanning is presented, which includes membership, positional, transactional, and symbolic roles involving both bonding and distinction. Through a review and integration of the literature on interorganizational unit formation, the agency approach is shown to augment common resource dependence approaches. Four brief cases concerning fleet and public affairs management are described as illustrations.

MITNICK, Barry (Bus Admin, Pitt). 1984. "The Bureaucrat as Agent."

The study of bureaucracy today consists largely of a collection of approaches that address its numerous institutional and behavioral manifestations. Examples include studies of professionals in bureaucracies; classic dysfunctions; external relations with legislatures, clients, and others; reward systems; and so on. There is little analytical or theoretical material that can help unify the study of these diverse phenomena.

This paper discusses the use of the "theory of agency" as an approach to the study of bureaucracy. Agency relationships pervade bureaucratic life; so do the "problems" that characterize agency in general. For example, public bureaus are delegated agents of the legislature; bureaucrats are agents in the organization; professionals exist in agency roles; bureaus seek to create agents in clients, regulated parties, and lower-level governments; implementation features principal control of agent incentive systems. Bureaucratic agents, and creators of agents, face the classic control problems as specification and monitoring/policing of agent acts. Indeed, a central dilemma of agency is that it often does not pay the principal to ensure perfect performance by the agent. This is true in bureaucracy as elsewhere; it is often rational to tolerate deviant behavior. This paper explores these and other issues in the understanding of agency and bureaucratic behavior.

MIZRUCHI, Mark (Albert Einstein College of Medicine). 1983. "Who Controls Whom? An Examination of the Relation Between Management and Boards of Directors in Large American Corporations." *ACADEMY OF MANAGEMENT REVIEW* 8(3): 426-35.

Most organization theorists believe that boards of directors in large American corporations are dominated by management. This paper argues that this view is based on a problematic definition of control. Several distinctions between long run and short run control are presented, and a framework in which boards of directors have control over managers is suggested. Case examples are given and possible objections are confronted. Finally, an agenda for further research on board-management relations is offered.

MORGAN, Leslie. 1984. "Changes in Family Interaction Following Widowhood." *JOURNAL OF MARRIAGE AND THE FAMILY* 46(2) May: 3-31.

Examined family reactions to widowhood using data from the Longitudinal Retirement History Study. Found that average frequency of interaction with available kin increased for both married and widowed persons over time, with greatest increase among women who became widowed.

MORRIS, John & Sylvia SHERWOOD. 1984. "Informal Support Resources for Vulnerable Elderly Persons: Can They Be Counted On, Why Do They Work." *INTERNATIONAL JOURNAL OF AGING AND HUMAN DEVELOPMENT* 18(2): 81-98.

Analyzed informal support system resiliency in a survey of 700 elderly. Data indicated the role of the informal network is more important than formal social supports. Children were the most likely network members, and most networks were characterized by active communication.

NAKAGAWA, Yuriko. 1984. "The Structure and the Function of Shinrui: A Case Study of Ohama Biwa-cho, Shiga Prefecture." SOSHIOROJI 28(3) Feb: 41-70.

The structure and function of Shinrui are clarified, based on a case study of Ohama, a typical, long-established village in north Shiga, Japan. Shinrui means kindred, specifically denoting various relations between two families, forming a network categorized by combinations of Honke (main family), Bunke (branch family), and kindreds, go-betweens, neighbors, friends, etc., who would, previous to World War II, have been referred to not as Shinrui but as Ikke. The most important closely related Shinrui are called Omo-Shinrui and are formed by the main family and the first branch family. Shinrui cooperate with one another during ceremonial occasions, rice planting, reaping, and building houses. The Shinrui relations in Ohama are not closed in Okonai groups, or in the modern neighborhood group that formed during World War II. The number of Shinrui families is determined by funeral purposes, since at least five or six families are needed to help in this regard. There is also a positive correlation between number of and Shinrui families claimed by a family and the family's social status.

PADGETT, John (Pol Sci, Chicago). 1985. "The Emergent Organization of Plea Bargaining." AMERICAN JOURNAL OF SOCIOLOGY 90(4) Jan: 753-800.

This article analyzes four systems of plea bargaining within American criminal courts. These systems are examples of centralized authority, centralized contract, delegated authority, and delegated contract. The guiding questions are: Why do informal role structures emerge in organizations? How are such role adaptations shaped by the formal structures they subvert? Stochastic models based on the existing research literature are developed to derive numerous empirical predictions about why different U.S. cities have different plea bargaining systems.

PANAYOTOPOULOS, A. & N. YANNAKOPOULOS (Grad School of Ind Studies, Greece). 1983. "Structural Changes in Residential Areas." ENVIRONMENT AND PLANNING A 16: 1665-70.

In this paper we use the theory of graphs to study the long-term (structural) changes in residential areas. It is assumed that a region corresponds to a graph, the nodes of which are identified with communities and the set of arcs with flows of composite goods. These communities are classified into sources (communities characterized by excess supply of goods), sinks (communities characterized by excess demand of goods), and centers of exchange. It is shown that every graph corresponding to an economic region possesses a core which describes the residential pattern of the region. Long-term changes in the region which lead to the appearance or disappearance of a supply center or a center of exchange lying outside the core and which affect the core are termed structural.

PASCOE, John & Jo Anne EARP. 1984. "The Effect of Mothers' Social Support and Life Changes on the Stimulation of Their Children in the Home." AMERICAN JOURNAL OF PUBLIC HEALTH 74(4) April: 358-60.

The relationship between mothers' life changes, social support, and the preschool home environment of their children was analyzed three years after all study children were discharged from a neonatal intensive care unit. Regardless of number of life changes, mothers reporting more social support provided a more stimulating home environment.

POWER, Thomas & Ross PARKE. 1984. "Social Network Factors and the Transition to Parenthood." SEX ROLES 10(11-12) June: 949-72.

A social support model for predicting the ease of transition into the motherhood role is presented. Four kinds of social network supports (relational, ideological, physical, and informational) and six social network agents (husband, friends, relatives, work associates, neighbors, and institutions) are considered. Policy and research implications are discussed.

PYNOOS, Jon, and others. 1984. "Intergenerational Neighborhood Networks: A Basis for Aiding the Frail Elderly." GERONTOLOGIST 24(3) June: 233-37.

Describes LINC (Living Independently through Neighborhood Cooperation), which formed intergenerational helping networks in which the elderly served as donors as well as service recipients. The project's evaluation indicated that frail older persons received services, acted as volunteers, developed friendships, and increased life satisfaction.

RENNER, Patricia & Alice EAGLY. 1984. "Sex Differences in Helping Behavior: A Meta-Analytic Study." Paper presented at the ANNUAL MEETING OF THE MIDWESTERN PSYCHOLOGICAL ASSOCIATION.

Whether or not there are sex differences in helping behavior is a question that has attracted interest from both theoretical and applied perspectives. A meta-analysis was conducted of 172 studies of helping behavior, coded for publication date, source, sex of author, sample size, setting, type of appeal for help, availability of other helpers, sex of victim/requester, and observation by another person. To generate measures of the extent to which each helping behavior was sex-typed in the male or female direction, undergraduate students rated a brief description of each helping behavior appearing in the studies in the sample. Results showed that, in general, helping behaviors were not strongly sex-typed. Men were especially helpful when under surveillance by persons other than the victim/requester, when a need was present, and when there was no direct request. Female victims/requesters received more aid, especially when the helper was under surveillance. The theoretical analysis of helping behavior in terms of social roles and social influence is generally consistent with the findings of the meta-analysis, suggesting that researchers should describe the variability of sex differences and attempt to account for it in terms of a detailed analysis of situations and behaviors. Although sex differences are seldom well represented by averaging them out, gender is sometimes an important variable in social interaction.

REVENSON, Tracey (Soc Ecology, UC-Irvine) & Jeffrey JOHNSON (Soc, NY). 1984. "Social and Demographic Correlates of Loneliness in Late Life." AMERICAN JOURNAL OF COMMUNITY PSYCHOLOGY 12(1): 71- .

Although loneliness is often viewed as a serious problem of old age, few studies have addressed either its measurement or prevalence among older populations. The present study analyzed survey data from newspaper questionnaires circulated in three North American cities (N = 2,206) in order to examine the prevalence of loneliness across the life-span and some of its correlates in late life. Loneliness decreased across the adult life-span, with respondents age 65 and older the least lonely; elders were also more satisfied with their social relationships. Neither gender nor living alone was related to loneliness for older people. The data also partially confirm the desolation hypothesis, suggesting that desolation, or the loss of an intimate attachment, rather than isolation per se is a major correlate of loneliness in late life. Further, recency of loss was strongly related to increased loneliness. Directions for future research and intervention are discussed.

RICKGARN, Ralph. 1984. "Developing Support Systems for Gay and Lesbian Staff Members." JOURNAL OF COLLEGE AND UNIVERSITY STUDENT HOUSING 14(1) Summer: 32-36.

Discusses the importance of developing a support system for gay and lesbian housing staff members. To engage in this effort, interpersonal relationship skills must be acquired, enhanced and utilized. Inclusive staff development and support systems can enable all staff members to contribute even more to the profession.

ROBERTO, Karen & Jean Pearson SCOTT. 1985. "Friendship Patterns Among Older Women." INTERNATIONAL JOURNAL OF AGING AND HUMAN DEVELOPMENT 19(1): 1-10. Paper presented at the ANNUAL MEETING OF THE NATIONAL COUNCIL ON FAMILY RELATIONS. 1981.

Examined the friendship patterns of older women (N = 150). Results indicated the older widowed women received more help from their friends than did married older women. In addition, significant differences in the morale of the older women were found according to the equity of helping behaviors with friends.

ROEHL, Janet & Morris OKUN. 1984. "Depression Symptoms among Women Reentering College: The Role of Negative Life Events and Family Social Support." JOURNAL OF COLLEGE STUDENT PERSONNEL 25(3) May: 251-54.

Investigated the influence of family issues and life events on the success of 322 female reentry students. Results demonstrated that negative life events and family social support have significant main and interactive effects on depression. Implications for counselling and research are discussed.

ROSENTHAL, Naomi (Soc, SUNY-Old Westbury), Meryl FINGERUTD (Soc, Queens, NY), Michele ETHIER (North Shore Youth Council, Rocky Point, NY) & Roberta KARANT and David MCDONALD (Soc, SUNY-Stony Brook). "Social Movements and Network Analysis: A Case Study of Nineteenth-Century Women's Reform in New York State." AMERICAN JOURNAL OF SOCIOLOGY 90 (March): 1022-54.

This article examines organizational affiliations of 19th-century women reform leaders in New York State as a case study of relations among social movements. Network analysis techniques are used for the construction of matrices that (1) map the interconnections between organizations, (2) measure the intensity and directionality of those interconnections, (3) illuminate clusters of proximate organizations, and (4) identify groups central to the clusters. The matrices show the primacy of suffrage and women's rights to reform activity during the period under study (1840-1914). Peak analysis finds important clusters of relations organized around the Women's Trade Union League, Garrisonian abolitionism, and Sorosis. Finally, directional analysis shows that women's organizing efforts can be divided into three distinct periods of activity between 1840 and 1914, with significant changes in the relations among organizations from period to period. The conclusion discusses the theoretical implications of these findings.

ROWEIS, Shukeiry (Planning/Geog, Toronto). 1983. "Urban Planning as Professional Mediation of Territorial Politics." ENVIRONMENT & PLANNING D 1 (June): 139-62.

This paper is about urban planning practice and urban planning theory...The role of urban planning in contemporary North America is to mediate ongoing territorial politics, mainly, but not exclusively, by providing professional interpretations of relevant territorial realities...Channels of mutual access (such as means of transportation and communication) and nodes of assembly (such as factories, homes, etc.) come to form networks...(Such) networks of material public goods make land parcels usable (that is, potentially useful to humans). They make possible and real the interdependencies among individual land occupants. But these networks do not determine or dictate how parcels of land are to be used, although they influence choices of use.

SANDLER, Irwin & Manuel BARRERA, Jr. (Psych, Arizona). "Toward a Multimethod Approach to Assessing the Effects of Social Support." AMERICAN JOURNAL OF COMMUNITY PSYCHOLOGY 12(1): 37- .

Two studies were done to assess the direct and stress-buffering effects of social support on psychological symptoms of college students. Three conceptually distinct measures were used to assess different aspects of social support: receipt of supportive transactions, satisfaction with support received, and social support network characteristics. The results indicated a significant direct and stress-buffering effect for support satisfaction in reducing psychological symptomatology. Two measures of support network size were used: number of people who were both a source of supportive and of upsetting interactions (conflicted support network), and number of people who were only mentioned as a source of support (unconflicted support network). Conflicted network size was positively related to symptomatology and increased the relationship between stress and symptomatology. No direct or interaction effects were obtained for unconflicted network size in predicting symptomatology.

SCHMALING, Karen, and others. 1984. "Parental Attachment, Social Support, and Current Life Situation." Paper presented at the ANNUAL MEETING OF THE WESTERN PSYCHOLOGICAL ASSOCIATION.

Attachment theorists argue that the nature of children's bonding with their parents has a significant impact on their adjustment throughout life, affecting ease of socialization and susceptibility to anxiety and depression. To examine the relationship between parental attachment, social support, and current life satisfaction, 251 college students (94 males, 157 females) completed the Social Support Questionnaire, the Parental Bonding Instrument, and a rating of current life satisfaction. An analysis of the results showed that lack of parental care in early life was related to socialization difficulties in adulthood. Retrospective reports of caring, socially supportive relationships early in life, were related to higher levels of adjustment in adulthood. However, the hypothesis that children with overprotecting parents would have socialization difficulties in adulthood was not supported. Fathers were rated as less caring and overprotecting than mothers. Finally, the study supported the validity of the Social Support Questionnaire.

SHRUM, Wesley (Louisiana State). 1984. "Scientific Specialties and Technical Systems." SOCIAL STUDIES OF SCIENCE 14(1) Feb: 63-90.

The concept of the scientific specialty, which has strongly influenced the sociology of science in recent years, has lately come under criticism in a number of published papers. Attention has been called to the need to include nonscientists and nonacademic research in studies of the research process. The concept of a "technical system" is proposed as a means of addressing the embeddedness of science in a matrix of other institutions. Technical systems are centrally administered networks of actors oriented to the solution of sets of related technical problems. They are characterized by relatively large size, cognitive complexity, sectoral diversity, occupational pluralism, and formal organization. Two systems in the energy field - nuclear waste research and solar photovoltaic development - are employed as empirical illustrations of this concept, on the basis of a bibliographic search, 100+ unstructured interviews, and 297 structured interviews with scientists, engineers, program managers, policymakers, and others. Theoretical problems in the sociology of technical systems include the operation of multiple reward structures, the origins and effects of interorganizational relations, and the role of the state in establishing and administering such enterprises.

STEPHENS, Mary Ann Parris & Murray BERNSTEIN. 1984. "Social Support and Well-Being among Residents of Planned Housing." GERONTOLOGIST 24(2) April: 144-48.

Examined social support networks for 44 residents of two planned housing facilities. While other residents often were regarded as sources of support, the focus of these networks lay with persons outside the housing facilities. The less healthy were more socially isolated, except in times of a medical crisis.

STUDER, K.E. (Soc, Virginia Commonwealth), E.J. BARBONI (Soc, Grinnell), & K.B. NUMAN (Soc, Virginia Commonwealth). 1984. "Structural Analysis Using the Input-Output Model: With Special Reference to Networks of Science." SOCIOMETRICS 6(6): 401-23.

Social science network analysis originated in the small group sociometric tradition, thus many of the common assumptions of network models are inappropriate theoretically and formally for the analysis of open systems of social relationships. Five common assumptions of network analysis are identified, discussed and criticized: (a) generators are homogeneous, (b) relationships are dichotomous, (c) groups have fixed boundaries, (d) relationships are symmetric, and (e) networks are static. It is suggested that an open input-output model overcomes many of the difficulties inherent in the more common network analytical techniques. After a formal treatment of input-output analysis, and its relationship to network analysis, some interpretations from exchange theory are suggested. This model helps the analyst overcome many of the theoretical difficulties encountered in other models and allows the researcher to specify how subsets of individuals are "embedded" within larger social contexts. Specifically, because society is comprised of numerous interacting subsystems, this model is particularly beneficial in describing how groups of scientists interface with each other and with the larger social domains.

SWEETSER, Dorrian Apple. 1984. "Love and Work: Intergenerational Household Composition in the U.S. in 1900." JOURNAL OF MARRIAGE AND THE FAMILY 46(2) May: 289-93.

Presents a causal explanation predicting kinship ties involving division of labor and the usefulness of kin. Data on white households in the Public Use Sample of the 1900 U.S. Census confirmed that wife's parents would be more common in nonfarm households, while husband's parents would predominate in farm household.

TANSEL, Barbaros (Georgia Inst of Tech), Richard FRANCIS (Florida) & Timothy LOWE (Purdue). 1983. "Location of Networks: A Survey. Part I: The p-Center and p-Median Problems." MANAGEMENT SCIENCE 29(4) April: 482-97.

Network location problems occur when new facilities are to be located on a network. The network of interest may be a road network, an air transport network, a river network, or a network of shipping lanes. For a given network location problem, the new facilities are often idealized as points, and may be located anywhere on the network; constraints may be imposed upon the problem so that new facilities are not too far from existing facilities. Usually some objective function is to minimize either a sum of transport costs proportional to network travel distances between existing facilities and closest new facilities, or a maximum of "losses" proportional to such travel distances, or the total number of new facilities to be located. There is also a growing interest in multiobjective network location problems.

Of the approximately 100 references we list, roughly 60 date from 1978 or later; we focus upon work which deals directly with the network of interest, and which exploits the network structure. The principal structure exploited to date is that of a tree, i.e., a connected network without cycles. Tree-like networks may be encountered when having cycles is very expensive, as with portions of interstate highway systems. Further, simple distribution systems with a single distributor at the "hub" can often be modeled as star-like trees. With trees, "reasonable" functions of distance are often convex, whereas for a cyclic network such functions of distance are usually nonconvex. Convexity explains, to some extent, the tractability of tree network location problems.

TANSEL, Barbaros (Georgia Inst of Tech), Richard FRANCIS (Florida) & Timothy LOWE (Purdue). 1983. "Location on Networks: A Survey. Part II: Exploiting Tree Network Structure." MANAGEMENT SCIENCE 29(4) April: 498-511.

The discussion of the fundamental p-center and p-median problems in Part I of this paper provides the basis for the work surveyed in Part II. Part II deals with the minimax and minisum location problems with mutual communication, location problems involving multiple objectives, the distance constraints problem and problems involving the location of paths. In addition, convexity issues in network location problems are discussed. Virtually all of this work exploits network structure. Specifically it is based on the assumption that the network is a tree. The conclusion section gives a brief discussion of the state of the art and of current trends in network location research.

THOMAS, Veronica and others (Urban Affairs, Howard U, Wash D.C.). 1984. "Help-Seeking Behavior among a Diverse Sample of Black Men and Women." Paper presented at the ANNUAL MEETING OF THE EASTERN PSYCHOLOGICAL ASSOCIATION.

This is a report on help-seeking behavior among a diverse sample of 451 black adults residing in Richmond, Virginia. The report defines "help-seeking behavior" as any communication about a problem or troublesome event that is directed toward obtaining support, advice or assistance in times of distress. The use of two types of support—"formal" or professional help, and "informal" (friend and relative) help - are described. The type of help provided by these sources and respondents' satisfaction with help received are also reported. Problem types were divided into five categories - financial, employment, crime, family, and health. The study's interview questionnaire is explained, and results are discussed. It is asserted that black help-seeking behavior has been little studied, even though some research has indicated that blacks are reluctant to seek help. The current study's findings are said to contradict this stereotype. Formal and informal sources of support are held to be critical in the lives of blacks when seeking aid to a problem; the type of support utilized, however, depends upon the nature of the problem encountered. The paper concludes with statistical tables describing the sample and showing results.

THOMPSON, Linda & Alexis WALKER. 1984. "Mothers and Daughters: Aid Patterns and Attachment." JOURNAL OF MARRIAGE AND THE FAMILY 46(2) May: 313-22.

Examined the association of aid exchange with attachment in student women and their mothers (139 pairs) and these same middle-aged mothers and their mothers (110 pairs). Different results for the two sets of intergenerational relationships are discussed in terms of individual and relationship development.

TRIMBLE, David, Jodie KLIMAN (Brookline, Mass), Albert VILLAPIANO (Human Resources, Brookline, Mass), & William BECKETT (Quincy, Mass). 1984. "Follow-Up of a Full-Scale Network Assembly." INTERNATIONAL JOURNAL OF FAMILY THERAPY 6(2) Summer: 102-12.

The authors conducted two full-scale network assemblies for the family network of a suicidal adolescent. Findings from the clinical follow-up and telephone interviews with 21 of 65 participants revealed benefits for the index family and the network members who participated in the meetings. A "ripple effect" in which the participants' own personal networks improved was also demonstrated. Benefits included resolution of a suicidal crisis, better understanding of depression and family stress, more adaptive responses to depression and suicidal risk, and improved personal relationships. No casualties from this intervention were discovered. This report is intended to stimulate future, more systematic outcome studies.

WELCH, Michael & John BALTZELL (Notre Dame). 1984. "Geographic Mobility, Social Intergration, and Church Attendance." JOURNAL FOR THE SCIENTIFIC STUDY OF RELIGION 23(1) Mar: 75-91.

Data from a comprehensive survey of the populations of 3 states (number of cases = 1,993; see Tittle, C., Sanctions and Social Deviance: The Question of Deterrence, New York: Praeger, 1980, for additional information about the sample) are used to estimate a path model that examines the effects of geographic mobility (GM) and social intergration on church attendance. Results suggest that GM inhibits attendance indirectly, through disrupting an individual's network of social ties and bonds of community attachment. These results support the widely accepted integration-disruption hypothesis. GM also exerts a modest direct effect on attendance. It is suggested that this relationship requires further examination.

WHITE, Randall (Anthro, NY). 1985. "Thoughts on Social Relationships and Language in Hominid Evolution." JOURNAL OF SOCIAL & PERSONAL RELATIONSHIPS 2:95-115.

This paper argues that the evolution of language must have been dependent on the development of social relationships. A broad range of ideas pertaining to the evolution of human language is first critically reviewed. Our state of knowledge with regard to neural, psychological, anatomical and sociocultural aspects of language evolution is outlined. It is argued that a number of major transformations between 100,000 and 35,000 years ago are best understood as reflecting the emergence of language-as-we-know-it. The selective advantages of this development are discussed. It is then suggested that this must have been a long, tortuous process, relying importantly upon the development of an appropriate set of social relations. Finally, consideration is given to the likely nature of social organization and relations prior to a modern level of language competence.

NEW BOOKS

BASSAND, Michel & Marie-Claude BRULHARDT (Arch, Lausanne Poly). 1980. MOBILITE SPATIALE. Saint-Saphorin, Suisse: Georgi. 300 p. S Fr. 48.

Cet ouvrage, en premier lieu, vise à rassembler et à présenter les travaux les plus significatifs des ces dernières années menés en Suisse et à l'étranger sur les principaux types de mobilité spatiale; en second lieu, il tente de clarifier le concept de mobilité spatiale, notamment par l'apport de certains travaux étrangers; enfin, il cherche à donner un aperçu général du problème en Suisse et de son impact sur le développement régional, en rassemblant des travaux épars et sectoriels.

BIEGEL, David, Ellen McCARDLE, & Susan MENDELSON (Soc Work, Pitt). 1985. SOCIAL NETWORKS AND MENTAL HEALTH: AN ANNOTATED BIBLIOGRAPHY. Sage. 392 p. \$25.

Offers access to current research on social networks. Approximately half of its 1,340 annotated entries are unavailable through computer searches of the literature and were generated by careful examination of various published and unpublished sources. Virtually all pertinent articles and books published through the end of 1982 are included.

The citations fall largely into two sections: mental health research, which includes such topics as network analysis, life stress, family support, and neighborhoods; and interventions, which consists mainly of research on self-help and mutual aid groups, but also covers clinical treatment, community support systems, and the like. The remaining entries are divided into sections on overview and theory, physical health research, and professional roles and policy. In addition to an author index, there is a detailed subject index. (Publisher's blurb).

CONTENTS: Introduction/ I. Overview and Theory/ II. Research Physical Health/ III. Research - Mental Health/ IV. Intervention/ V. Professional Roles and Policy/ Indexes.

BOULDING, Kenneth (Inst. Behav Sci, Colorado). 1985. THE WORLD AS A TOTAL SYSTEM. 224 p. \$25.

Examines the extent to which the Earth is a total system of interacting parts as well as the degree to which it is a "great mosaic" of isolated systems having little or no impact on one another. In addition, he paints, with what he calls a broad brush, some of the more important of these "static" and "dynamic" systems. Boulding's belief is that the world has moved a "long way" toward becoming a single economic, cultural, and communication system in the last century - although politically it has become more "fragmented and diverse." His hope is that his new book will "help to provoke a movement among the educational systems of the world for both research and teaching about the world as a total system..." (Publisher's blurb).

CONTENTS: Introduction. 1. What systems Can we Perceive in the World? 2. The World as a Physical System. 3. The World as a Biological System. 4. The World as a Social System. 5. The World as an Economic System. 6. The World as a Political System. 7. The World as a Communication System. 8. The World as an Evaluative System. References.

BRAUDEL, Fernand (Eng. ed.). 1984. CIVILIZATION & CAPITALISM, 15TH-18TH CENTURY. III. THE PERSPECTIVE OF THE WORLD. NY: Harper & Row. 699 p. \$33.

"Sees capitalism as a distinctive kind of exchange relationship, quite different from that which prevails in the normal market economy....Capitalism rests on the accumulation of power by multinational institutions and the resulting inequality between bargainers....The central figures are not industrialists but international bankers and traders....Braudel sees the economic history of early modern Europe as the

story of the successive primacy of individual trading cities whose accumulation of capital enabled them to dominate the world economy. They did this less by creating new trading networks than by linking old ones together....He is emphatic that economic development rests on an international division of labor and unequal exchange." (From Keith Thomas' review in THE NEW YORK REVIEW OF BOOKS, 22 Nov 84).

BRYM, Robert (Soc, Toronto), ed. 1985. THE STRUCTURE OF THE CANADIAN CAPITALIST CLASS. Toronto: Garamond Pr. 216 p. \$12.95.

On the structure and function of the Canadian capitalist class. Serious issue is taken with dependency theorist and left-nationalist interpretation.

CONTENTS: Robert J. Brym "The Canadian capitalist class, 1965-1985". William K. Carroll "Dependency, imperialism and the capitalist class in Canada". Jorge Niosi "Continental nationalism: the strategy of the Canadian bourgeoisie". Gordon Laxer "The political economy of aborted development: the Canadian case". Jack Richardson "A structural-rational theory of the functions of directorship interlocks between financial and non-financial corporations". Karen Anderson "The state, the capitalist class and the CPR". Michael Ornstein "Canadian capital and the Canadian state: ideology in an era of crisis". Diane Clark and Lorne Tepperman "Class consolidation in extra-market relations: the case of the Toronto General Hospital".

COHEN, Sheldon (Psych, Carnegie-Mellon) & S. Leonard SYME (Public Health, UC-Berkeley), eds. 1985. SOCIAL SUPPORT AND HEALTH. Orlando, FL: Academic Pr. 385 p. \$40.

This volume is intended as a guide for doing social support research, as a compendium of state-of-the-art work in this field, and as a source of information on the implications of existing work for social policy. We define social support as resources provided by others. Although his definition encompasses support provided by professional helpers, professional helping is not covered in this volume. Instead, we focus on unprofessional (informal) social support provided by friends, relatives, and acquaintances.

The volume contains four parts. Chapters in the first part "Issues in the Study of Social Support," provide a broad definition of social support, discuss major theoretical, methodological, and practical issues and show the relationship of social support to research and theory in the areas of social networks and interpersonal relationships. There are separate chapters on measurement issues and statistical issues in support research with an emphasis on research methods that allow causal inferences.

Chapters in the second part, "Social Support through the Life Cycle," provide special attention to the meanings and functions of social support at different times in life. Chapters in this part illustrate the varied nature and significance of such supports in infancy, childhood, adolescence, and adulthood and review the changing importance of family, friends, spouses, and children at different periods throughout the life cycle. Chapters in the third part, "Social Support and Disease Etiology," provide critical reviews and analyses of empirical and theoretical work on the relationship between support and etiology, prevention, and treatment of disease. There are separate chapters dealing with the role of support in coping with stress and with the association between support and physical and mental illness. Chapters in the final part, "Social Support Interventions and Health Policy," examine the effectiveness of support interventions, discuss the role of the physical environment in support development and maintenance, and discuss the implications of the existing literature on social support for health policy.

Contributors were encouraged to write chapters in a form that would be appreciated and understood across disciplines; they were told to discuss the major issues in their topic area, the methodological and conceptual problems that arise in addressing these issues, and the state of our present knowledge. In most cases, we requested selective and representative reviews of the literature, with critical and analytic comment and, when appropriate, an overview of alternative theoretical approaches. We also asked that gaps in empirical and theoretical work be pointed out. If a strong theoretical position was taken, the author was asked to identify alternative points of view. (From Editors' Preface).

CONTENTS: ISSUES IN THE STUDY OF SOCIAL SUPPORT - "Issues in the Study and Application of Social Support," Sheldon Cohen & S. Leonard Syme. "Social Networks and Social Support," Alan Hall & Barry Wellman. "Social Structure and Processes of Social Support," Leonard I. Pearlin. "Supportive Functions of Interpersonal Relationships," Thomas Ashby Wills. "Measures and Concepts of Social Support," James House and Robert Kahn. "Causal Inference in the Study of Social Support," David Dooley. SOCIAL SUPPORT THROUGH THE LIFE CYCLE - "Social Support through the Life Course," Richard Schulz & Marie Rau. "Social Support, Family Relations, and Children," Thomas Boyce. "Social Support and Health in the Middle Years: Work and the Family," Stanislav Kasl & James Wells. "Social Support and Health of the Elderly," Meredith Minkler. SOCIAL SUPPORT AND DISEASE ETIOLOGY - "Social Support and Mental

Health in Community Samples," Ronald Kessler & Jane McLeod. "The Relationship of Social Networks and Social Support to Morbidity and Mortality," Lisa Berkman. "Social Support and Styles of Coping with Stress," Susan Gore. SOCIAL SUPPORT INTERVENTIONS AND HEALTH POLICY - "The Role of Social Support in Adaptation and Recovery from Physical Illness," Camille Wortman & Terry Conway. "Social Support and Community Mental Health," Benjamin Gottlieb. "Social Support and the Physical Environment," Raymond Fleming, Andrew Baum, & Jerome Singer. "Policy Implications of Research on Social Support and Health," Charles A. Kiesler.

DRACHE, Daniel & Wallace CLEMENT (Soc, Carleton). 1985. THE NEW PRACTICAL GUIDE TO CANADIAN POLITICAL ECONOMY (rev. ed.). Toronto: James Lorimer. 200 p. \$9.50.

The original Practical Guide to Canadian Political Economy was published in 1978. The editors have now completed an updated and expanded guide, with a new introduction, and topic sections introduced by experts in the field. Each category has a brief intro by one of twenty-five experts who collected listings in their field. Categories include "Labour conflict and working-class organization," Craig Heron & Greg Kealey. "Industrialization," Tom Traves. "British Columbia," Patricia Marchak. "Canadian political theory," Arthur Kroker. "Industrial and commercial policy," Rianne Mahon. (From Publisher's blurb.).

EICHLER, Margrit (OISIE, Toronto). 1983 FAMILIES IN CANADA TODAY: RECENT CHANGES AND THEIR POLICY CONSEQUENCES. Toronto: Gage Publishing. 356 p.

The intent of the book is twofold: one intent is to bring together as much of the available information on Canadian families as I could scratch together, and the other intent is to try to refocus family literature and research in a number of ways.

The intent to refocus our research attention manifests itself in the discussion of four biases which I see as threads that go through the literature: the monolithic, conservative, sexist, and microstructural biases. To put this into positive terms, the first concern is to encourage a differentiated as opposed to a uniform view of families. That means that the focus is on the diversity of family types rather than on universalities or uniformities. This is reflected in the title of the book which does not talk about "the" Canadian family, but instead about Canadian families.

The second concern is to put forward the notion that there have been very major changes within Canadian families in the recent past and that this should become a central factor in our research. The focus is therefore on change rather than on stability, on historical differences rather than on continuities, and on the current situation rather than on the past.

The third concern arises from the premise that women and men experience the same families differently, due to their different structural positions. To represent this dual perspective consistently is therefore one of the aims of the book. Sometimes this was not possible due to lack of information; however, the important point is to constantly remind ourselves that such a dual perspective is something we should strive for, at least in terms of the questions we raise. A similar point could be made with respect to age: the same families are also experienced differently depending on one's status as a dependent child, adult, or senior citizen. However, carrying this second perspective systematically through the book has not been attempted, although the issue is occasionally alluded to: it would have meant writing another book, and one for which information would have been even more difficult to obtain.

Lastly, a major concern of the book is to try to integrate policy questions into our discussion about families. This includes an examination of how policies may influence behaviours within families, as well as an examination of the notions of families on which our current major relevant policies are based, and whether these notions are accurate. The focus is therefore on societal rather than on interpersonal issues, on the interactions of government, law, and other institutions with families rather than on the internal workings of families, on structural rather than on psychological variables. (From Author's Preface).

CONTENTS: Ch. 1 "Beyond the Monolithic Bias in Family Literature," Ch. 2 "Beyond the Conservative Bias in Family Literature," Ch. 3 "Beyond the Sexist Bias in Family Literature," Ch. 4 "Beyond the Microstructural Bias in Family Literature," Ch. 5 "Changing Patterns in Household Management," Ch. 6 "Patterns of Income Generation and their Effects on Families," Ch. 7 "Discrepancies between Marital and Parental Roles," Ch. 8 "Changing Patterns in Childcare," Ch. 9 "Legal Policies," Ch. 10 "Governmental Policies."

EISENSTADT, S. N. & L. RONIGER. 1984. PATRONS, CLIENTS AND FRIENDS: INTERPERSONAL RELATIONS AND THE STRUCTURE OF TRUST IN SOCIETY. Cambridge: Cambridge U Pr. 342 p. US \$14.95.

This book analyses some special types of these interpersonal relations - ritual kinship, patron-client relations and friendship - and the social conditions in which they develop. The authors draw upon a wide range of examples, from societies as diverse as those of the Mediterranean, Latin America, the Middle and Far East and U.S.S.R., in their study of the core characteristics of such relationships. They look at them as mechanisms of social exchange, examine their impact on the institutional structures in which they exist, and assess the significance of the variations in their occurrence. Their analysis highlights the importance of these relationships in social life and concludes with a stimulating discussion of the ensuing tensions and ambivalences and the ways in which these are dealt with - though perhaps never fully overcome. (From Publisher's blurb).

CONTENTS: 1. Personal Relations, Trust and Ambivalence in Relation to the Institutional Order. 2. The Construction of Trust in the Social Order and its Ambivalences: Viewed from the Development of Sociological Theory. 3. The Structuring of Trust in Society: Unconditionalities, Generalised Exchange and the Development of Interpersonal Relations. 4. The Basic Characteristics and Variety of Patron-Client Relations. 5. The Clientelistic Mode of Generalised Exchange and Patron-Client Relations as Addenda to the Central Institutional Nexus. 6. The Social Conditions Generating Patron-Client Relations. 7. Variations in Patron-Client Relations. 8. Ritualised Interpersonal Relations; Privacy and Friendship. 9. Concluding Remarks: The Dialectics of Trust and the Social Order.

FERRARINI, Elizabeth. 1984. CONFESSIONS OF AN INFOMANIAC. Sybex, Inc.

A chatty account of the author's initiation to the electronic age, starring some of the men she met on-line through The Source's dating bulletin board service via electronic mail. "It's convenient. The odds are in a woman's favor. The response is quick, and, since both people are paying to communicate, it is an equalizer. And as computer users, you have automatically shared some of the same experience.... The computer allows me to create any face I want." (From PC MAGAZINE, 30 Oct 1984).

FROW, Edmund & Ruth. 1982. ENGINEERING STRUGGLES: EPISODES IN THE STORY OF THE SHOP STEWARDS' MOVEMENT. Manchester: Working Class Movement Library. 496 p. £7.

In Britain the Shop Stewards' Movement developed with an entity separate from and complementary to the official Union machinery. Traces at the factory floor and union level the Shop Stewards' struggles. (From Publishers' blurb).

GOLDHABER, Gerald, Harry DENNIS, Gary RICETTO, & Osmo WIIIO. INFORMATION STRATEGIES: NEW PATHWAYS TO CORPORATE POWER (Rev. ed.). Fitzhewy & Whiteside. p. \$48.50.

In most corporations, it is taken for granted that the communication system is operating effectively. Yet recent studies seem to indicate that 25%-50% is an optimistic high in the communications area of most firms, and an appallingly low rate of 1-5% is not uncommon. Information Strategies explores the fallacies that cause complacency and an eventual communication breakdown. Topics found include: the OCD system; instructions and norms for implementing this system; a feedback model for evaluating present systems of organizational intelligence; and detailed explanations of the Scandinavian work emphasis on the achievements of Volvo and Saab plants in Sweden and Norway, which implemented these changes. (From Publisher's blurb).

GOTTLIEB, Benjamin. 1983. SOCIAL SUPPORT STRATEGIES: GUIDELINES FOR MENTAL HEALTH PRACTICES. Beverly Hills CA: Sage. 239 p. \$25.

Chapter 2 reviews contemporary studies investigating the role of social support in the coping process. The chapter begins by examining the direct and indirect ways that social support may affect health, assessing its place in a broader epidemiological context. In addition, the chapter provides a detailed discussion of methods of measuring social support, concluding with a multidimensional formulation of the construct.

Chapter 3 and 4 outline directions for mental health practice that involve the mobilization and strengthening of social support. Chapter 3 discusses preventive interventions on behalf of persons undergoing life transitions and stressful events that entail social readjustments, and outlines strategies of strengthening the informal sources of support existing in the natural environment. Special attention

is paid to the characteristics of helping networks in ethnic communities. Chapter 4 deals with the relevance of social support to the design of psychosocial rehabilitation programs and reviews several clinical strategies that directly involve the patient's social network. The chapter also touches on the sort of diagnostic assessment that is called for when the patient's network is drawn into the treatment process, and concludes by reviewing new approaches to the prevention of patient relapse that involve modifications of the family's affective influences.

The final section of the volume includes two chapters that consider the impact of social networks and social support on specific populations and settings. Chapter 5 deals with ways that social support can be brought to bear on the psychosocial problems faced by men recovering from an acute heart ailment and by women who have developed breast cancer. The value and design of supportive interventions in these areas of medical practice are discussed. The chapter also reviews recent work on social support in the workplace, examining how coworkers, supervisors, and the organizational structure can moderate work-related stressors.

The concluding chapter presents a broader social-ecological framework for analyzing the influence of social networks on the help-seeking process. It highlights the tensions and the benefits resulting from collaboration between professional mental health practitioners and laypeople, and it touches on certain societal trends that are bound to increase the need for support-mobilizing interventions in the future. (From author's Preface).

CONTENTS: SUPPORT NETWORKS AND MENTAL HEALTH: THEORY AND RESEARCH - "Early Theoretical Formulations." "The Nature of Social Support and Its Health Impact." MOBILIZING SOCIAL SUPPORT IN PRACTICE - "Preventive Interventions." "Clinical Practice." SPECIFIC APPLICATIONS OF SOCIAL SUPPORT - "Medical and Work Contexts." "Informal Care Among the Elderly." CONCLUSION - "Social Support and Professional Practice: A Broader Perspective."

HAGE, Per (Anthro, Utah) & Frank HARARY (Math, Michigan). 1983. STRUCTURAL MODELS IN ANTHROPOLOGY. Cambridge: Cambridge. 201 p.

Hage and Harary present a comprehensive introduction to the use of graph theory in social and cultural anthropology. Using a wide range of empirical examples, the authors illustrate how graph theory can provide a language for expressing in a more exact fashion concepts and notions that can only be imperfectly rendered verbally. They show how graphs, digraphs, and networks, together with their associated matrices and duality laws, facilitate the study of such diverse topics as mediation and power in exchange systems, reachability in social networks, efficiency in cognitive schemata, logic in kinship relations, and productivity in subsistence modes. The interaction between graphs and groups provides further means for the analysis of transformations in myths and permutations in symbolic systems. The totality of these structural models aids in the collection as well as the interpretation of field data. The presentation is accessible to the nonmathematical reader. It emphasizes the implicit presence of graph theory in much of anthropological thinking. (From Publisher's blurb).

In 1965, Harary, Norman, and Cartwright published "Structural models: an introduction to the theory of directed graphs". It is these sorts of structures that Hage and Harary discuss in the present volume, and it is these that form the content of the specialism now coming to be known as structural analysis. This kind of structuralism has grown out of the study of social networks and derives the majority of its analytical tools from graph theory, a branch of pure mathematics. Although many social scientists have contributed to the rise of structural analysis, many others have watched with somewhat skeptical interest. The specialism has been accused of failing to live up to its grandiose claims and of being excessively concerned with its esoteric techniques for their own sake rather than for their value in explaining social phenomena. Some critics have maintained that the anthropologist or sociologist who hopes to discover what goes on in the real world can gain nothing more from network analysis and graph theory than an unenlightening and unnecessarily complicated technical vocabulary in which to make imprecise quantitative statements about things we know already.

There has, in my view, been some force in this criticism, for in a rapidly developing specialty ideas do often race ahead of applications; progress would be slower if they did not do so. But now Hage and Harary have given us the answer to these critics. For here in this book they demonstrate with admirable clarity, and with an impressive range of illustrations, how the concepts and, more important, the theorems and techniques of graph theory can be applied to ordinary ethnographic evidence. They show convincingly that this application can yield results that could not have been obtained by unassisted common sense, results that add significantly to our understanding of the social and cultural processes taking place in the real world.

Hage and Harary have, in a sense, routinized or domesticated the analytical procedures of graph theory for use by practicing social scientists, anthropologists, and others. Several years ago, I drew a distinction between the use of the notion of social network as a metaphor and as an analytic tool.

Unfortunately, most of the examples I could find at that time showed graph theory being used in quite a rough-and-ready fashion, as it were, for bush carpentry rather than for cabinetmaking. Here in this new book we have at last a comprehensive range of examples of graph theory being applied to data from the real world with the elegance and precision we rightly expect from pure mathematics. Yet Hage and Harary write with the innumerate and mathematically phobic social scientist clearly in their sights, so that no previous acquaintance with graph theory is needed. Here indeed is an opportunity for conquering that phobia which still hinders the work of so many social scientists.

We probably have to resign ourselves to living with confusion about what is meant by structurism. But within this particular version of structural analysis, there is no excuse for confusion about what we mean by terms that are clearly technical. Regrettably, there is still a good deal of variation in the way in which different writers use terms that are derived from graph theory; indeed, some of the confusion stems from the pure mathematicians themselves. Hage and Harary provide us with a full and consistent technical vocabulary, and show us how to apply it in practical analysis. Let us hope that their usage will become generally accepted among social scientists. When notions taken from structural analysis pass into common speech (maybe with the next 20 years), we can expect confusion to grow again. But let's enjoy a Cartesian breathing space while we can. (From J.A. Barnes' forward).

CONTENTS: "Graph theory and anthropology." "Graphs." "Signed graphs." "Digraphs." "Graphs and matrices." "Structural duality." "Networks." "Graphs and groups."

HEALD, Tim (Ex-Balliol). 1983. NETWORKS: WHO WE KNOW AND HOW WE USE THEM. Sevenoaks, Kent, England: Hodder & Stoughton. 288 p. £2.25.

An expose of what really makes Britain and the British tick. From the traditional 'Old Boy Network' of Eton & Oxford, the Guards & the Garrick, to the networks of barristers', clerks and convicted criminals. ...Searching, anecdotal and revelatory...Not only a fascinating entertainment but also an invaluable guide on how you too can network. (From Publisher's blurb).

"A network is a club without premises, constitution, or life membership. Not simply a clique. Not quite an elite. Not exactly a trade union. But with some of the qualities of all these alliances." (Nicholas Tomalin, SUNDAY TIMES).

For Heald's view of INSNA, see NETWORK NOTEBOOK, this issue.

HUANG, Philip. THE PEASANT ECONOMY AND SOCIAL CHANGE IN NORTH CHINA. Stanford, CA: Stanford U Pr. \$37.50.

The author integrates three major traditions of peasant studies and uses vast quantities of new materials to present a convincing interpretation of the origins and nature of the agrarian crisis that gripped the North China Plain in the two centuries before the Revolution. Through a comparison of the histories of small family farms and larger scale managerial farms, he documents and illustrates the long-term trends of agricultural commercialization, social differentiation, and mounting population pressure. He shows how those changes combined to produce, within the small peasant economy, a noncapitalizing managerial elite and a partially proletarianized peasantry, a pattern of change different from and more volatile than the development in Western Europe of a capitalizing elite and a proletarianizing peasantry.

Institut Masyarakat Berhad. THE MALAYSIAN ECONOMY: STRUCTURES & DEPENDENCE. Consumers' Association of Penang, 87 Cantoment Road, Penang, Malaysia. 286 p. \$18.

First analysis of the structure of the Malaysian economy and its overdependence on the rich countries. Also gives structural reforms required for a self-sustaining form of development. (From Publisher's blurb).

JENSON, Jane & George ROSS. 1984. THE VIEW FROM THE INSIDE: A FRENCH COMMUNIST CELL IN CRISIS. Berkeley: U of California Pr. \$28.50.

The day-to-day workings of a Communist party cell in France and its links to national political formations.

JAKOBSON, Roman. 1985? VERBAL ART, VERBAL SIGN, VERBAL SIGN. Krystyna Pomorska & Stephen Rude, eds. Minneapolis: U of Minnesota P. \$12.95.

Eleven essays providing an introduction to his theory of linguistics and literature. Three accompanying essays discuss his role in the rise and spread of the structural approach to language and art as well as his semiotic studies. (From Publisher's blurb).

LANDAU, Robert, James BAIR, & Jean SIEGMAN, eds. EMERGING OFFICE SYSTEMS. Fitzhenry & Whiteside. \$44.95.

Addresses the pitfalls involved in the merging of information technologies. It focuses on why there are so many failures, mismatches and wasted funds and provides numerous examples of misuse of technology and the waste of money created by largely ineffective information systems. The book demonstrates that, if properly designed and used, the great variety of information machines now available can provide dramatic increases in information handlers' productivity. The book emphasizes human and organizational factors as the least understood of the issues surrounding planning and implementation of electronic office systems.

LEVI-STRAUSS, Claude. 1985? THE VIEW FROM AFAR. Eng. ed. NY: Basic Book. \$24.95.

The successor to STRUCTURAL ANTHROPOLOGY. Presents a "view from afar," spanning both the cultural distance that inevitably separates the anthropologist from his (sic) subject and the temporal distance gained by looking back at a long career. Wide-ranging essays. (From Publisher's blurb).

MARSDEN, Peter (Soc, N.C.-Chapel Hill). 1986. POWER AND INFLUENCE PROCESSES: APPLICATIONS AND EXTENTIONS OF A MODEL OF COLLECTIVE ACTION. Greenwich CT: JAI Pr. \$57.

This book develops the model of power and collective decision-making proposed by Coleman in THE MATHEMATICS OF COLLECTIVE ACTION. Its approach is to analyze power and influence processes by building initially elementary yet comprehensive models of those processes, and then to complicate those models by weakening restrictive assumptions. The basic model is first described, and then applied to data on community decision-making in three communities. Problems of operationalizing concepts of the model are discussed, solutions to those problems are illustrated, and suggestions for applications to other types of social systems (e.g. organizations) are made. The second part of the book extends the basic model, by introducing processes that operate by way of interactor social networks. This permits influence between actors to enter the process of interest determination. It also allows two types of strategic behavior in the context of restrictions on exchange: exploitative and brokerage behavior. These extensions of the model are illustrated with both empirical applications and simulations on artificial data. (Author's blurb).

McCLINTOCK, David. 1983. INDECENT EXPOSURE: A TRUE STORY OF HOLLYWOOD & WALL STREET. NY: Dell. 544 p. \$3.95.

The inside story of the removal of David Begelman from the presidency of Columbia Pictures and Alan Hirshfield from its parent conglomerate. Provides detailed evidence (and juicy gossip) on the age-old question -- who controls a corporation -- the board, the management, or the bankers?

"Like reading a great mystery....It's about structure, ethics, and power struggles....the drama of people taking sides." (Liz Smith, syndicated newspaper columnist).

Recommended summer reading.

MICHELSON, William (Soc, Toronto). 1985. FROM SUN TO SUN: DAILY OBLIGATIONS AND COMMUNITY STRUCTURE IN THE LIVES OF EMPLOYED WOMEN AND THEIR FAMILIES. Totowa NJ: Rowman & Allenheld. 185 p. \$28.95.

The book is concerned with what is different in the lives of employed mothers and their families, the conditions under which daily life takes place, personal outcomes and how communities can adapt to ease daily routines. The ramifications and interrelationships of outside jobs, household activities,

community structure and individual behavior in the lives of employed women are explored in depth with extensive data on over 500 families in Metropolitan Toronto. (From WOMEN & ENVIRONMENTS).

NIOSI, Jorge. CANADIAN MULTINATIONALS. Garamond Pr./Between The Lines. 216 p. \$10.95.

Canada is one of the principal exporters of capital to other countries. It is home to several multinationals which in their respective areas of activity are among the largest in the world.

This work considers the nature and role of over a dozen companies in the manufacturing, mining and public service sectors, challenging existing theories of multinationals.

OBERAI, A.S. (UN Int'l Labor Office) & H.K. MANMOHAN (Punjab). 1984. CAUSES & CONSEQUENCES OF INTERNAL MIGRATION. NY: Oxford U P. 434 p. \$19.95.

Investigates determinants and socioeconomic implications. The functions of migration on the transformation of rural and urban economies are examined as well as the effects of migration on production, agricultural productivity, technological change, population growth, structure and level of employment, and income distribution between and within rural and urban areas. (From blurb).

PIORE, Michael & Charles SABEL. 1985. THE SECOND INDUSTRIAL DIVIDE: POSSIBILITIES FOR PROSPERITY. NY: Basic Books. \$21.95.

Argues for an economic system of decentralized 'flexible specialization' that responds to the demand for a greater variety of customized goods, and allows both a wide distribution of property and a broadly shared authority over investment. A study in institutionally-grounded political economy, a conjecture on the history of technology under capitalism and a contribution to the current debate on industrial policy. (From blurb).

PLAKANS, Andrejs (Hist, Indiana). 1985. KINSHIP IN THE PAST. NY: Basil Blackwell. 304 p. \$39.95.

An anthropology of European family life, 1500-1900.

ROGERS, Everett (Annenberg School, S. Cal) & Francis BALLE, (eds.). 1985? THE MEDIA REVOLUTION IN AMERICA & WESTERN EUROPE. Norwood, NJ: Ablex & Montreal: U Pr de Montreal.

Eighteen chapters by European and American scholars discussing differences and convergences in approaches to studying new communication media.

SCOTT, John (Soc, Leicester) & Catherine GRIFF. 1984. DIRECTORS OF INDUSTRY: THE BRITISH CORPORATE NETWORK 1904-1976. Cambridge: Polity Press. 272 p. £19.50

This book uses techniques of social network analysis to investigate the changing structure of business relations in Britain. It is the first attempt to use interlocking directorships in a systematic way to explore some of the fundamental issues in the analysis of business. Models of finance capital, resource dependence, bank control, and class cohesion are discussed. It is argued that their merits can be assessed only on the basis of a network approach to intercorporate relations. In the first chapter the authors present their theoretical framework and introduce some of the key network concepts. Later chapters investigate the concentration of capital, internationalisation, the public sector and industrial sectors, and regionalism. Questions of family and kinship are approached from a network perspective and the business links created by kinship are analysed. The authors discuss the role of banks in intercorporate networks and investigate the inner circle of finance capitalists who sit on their boards.

CONTENTS: The Enterprise and the Intercorporate Network; Network Structure and the Concentration of Capital; Regional and Sectoral Structuring; Family, Kinship, and Corporations; Finance Capital and Finance Capitalists; The Banks: Problems of Influence and Power.

SKOCPOL, Theda, (Soc, Chicago), ed. 1984? VISION & METHOD IN HISTORICAL SOCIOLOGY. NY: Cambridge U P. \$13.95.

Examines the careers and contributions of nine major scholars: Marc Bloch, Karl Polanyi, S.N. Eisenstadt, Reinhard Bendix, Perry Anderson, E.P. Thompson, Charles Tilly, Immanuel Wallerstein and Barrington Moore, Jr. The essays convey the vision and values each has brought to his work as well as analyzing and evaluating the research designs and methods used by each. (From blurb).

STOKMAN, Frans (Research Methods, Groningen), Rolf ZIEGLER (Soc, München), & John SCOTT (Soc, Leicester), eds. 1985. NETWORKS OF CORPORATE POWER: A COMPARATIVE ANALYSIS OF TEN COUNTRIES. Cambridge: Polity Press (and Oxford & N.Y.: Basil Blackwell). 304 p. £25.

This volume is the outcome of a six-year research project involving collaborative research by teams based in a number of countries in Europe and America. It applies techniques of social network analysis to data collected on the top companies in ten countries and presents a detailed comparative analysis. A theoretical introduction and a general comparison are followed by studies of each country and an investigation of international business connections. A final chapter draws out some of the main conclusions and implications. The book is unique in its comparative approach, based on similar data selection and analysis procedures in each of the participating countries.

CONTENTS: "Theoretical Framework and Research Design," John Scott. "National Networks in 1976: A Structural Comparison," Frans Stokman and Frans Wasseur. "The Interaction Between Interlocking Directorships and the Economic Behavior of Companies," Wim Meeusen & Ludo Cuyvers. "Austria Incorporated," Rolf Ziegler, Gerhard Reissner & Donad Bender. "Industry and Banking in the German Corporate Network," Rolf Ziegler, Donald Bender & Hermann Biehler. "The Dutch Network: Types of Interlocks and Network Structure," Frans Stokman, Frans Wasseur & Donald Elsas. "The Banks in the Centre: Integration in Decentralized Switzerland," Peter Rusterholz. "Financial Groups in the Belgian Network of Interlocking Directorships," Ludo Cuyvers & Wim Meeusen. "Finnish Interlocking Directorships: Institutional Groups and their Evolving Integration," Ilkka Heiskanen & Erkki Johanson. "French Interlocking Directorships: Financial and Industrial Groups," David Swartz. "Property, Capital and Network Structure in Italy," Antonio Chiesi. "Bank Spheres of Influence in the British Corporate Network," John Scott & Catherine Griff. "Regionality and Integration in the American Interlock Network," James Bearden & Beth Mintz. "The Transnational Network," Meindert Fennema & Huibert Schijf.

THUNBERG, Anne-Marie, Kjell NOWAK, Karl Erik ROSENGREN & Bengt SIGURD. 1982. COMMUNICATION AND EQUALITY: A SWEDISH PERSPECTIVE. Stockholm: Almqvist & Wiksell. 178 p. \$29.50.

The first chapter outlines the authors' basic concern that social hierarchy leads to communicative disadvantages for individuals lacking power. The theoretical perspective in the second chapter emphasizes symbolic interactionist over structuralist analysis, highlighting the initiative of the individual in social action...The topics of chapters 3 and 4 are social differentiation in complex society and unequal access to communicative resources...Chapter 5, focuses primarily on the family's network of social contacts and with 'communication climates' that differ from family to family... Chapter 7 examines the differential interests of workers and management in terms of information flow within a company. (From Karen Larson's review in CONTEMPORARY SOCIOLOGY, 11/83).

TILLY, Charles. 1984. BIG STRUCTURES, LARGE PROCESSES, HUGE COMPARISONS. New York: Russell Sage. 171 p. \$22.95.

Tilly contends that twentieth-century social theories (concerning, for example, the development of capitalism and the formation of national states) have been encumbered by a nineteenth-century heritage of "pernicious postulates," such as the belief in societies as distinct entities and in differentiation as the master principle of social change. Tilly subjects each misleading postulate to rigorous criticism, challenging along the way many standard social science paradigms and methodologies. As an alternative to those timeless; placeless models of social change and organization, Tilly argues for a program of concrete, historically grounded analysis and systematic comparison. To illustrate the strategies available for such research, Tilly assesses the work of several major practitioners of comparative historical analysis. (From blurb).

The Russell Sage Foundation's invitation to write an essay on "comparative and interdisciplinary research in the social sciences" gave me a welcome chance to reflect on the strengths and weaknesses of the schemes we customarily use to analyze large social processes and to speculate on their origins. That part of the assignment kept me in familiar surroundings; I have spent many years studying large processes such as proletarianization, urbanization, and statemaking.

Given the drift of recent work on large processes, however, I felt I should also discuss the ways in which people analyze very large social structures such as systems of states and make comparisons among them. There I left my own turf: Although I have sometimes speculated on big structures and huge comparisons, and have read other people's work on the subject attentively, I have never undertaken serious empirical work on my own along those lines. When I have worked through huge comparisons for my own purposes, they have almost always fallen into the category this book calls "individualizing" comparisons: attempts to clarify the characteristics of the case at hand by means of contrast with another well-documented case. Familiarity with statemaking and collective action in France, for example, has often helped me think through the links between statemaking and collective action in Great Britain, and vice versa; but I have never undertaken a sustained comparison between the two states for the purpose of identifying principles of variation in statemaking, collective action, or the links between them. Thus I come to the discussion of large processes as an old hand, and to the discussion of big structures and huge comparisons as an interested outsider.

Nevertheless I enjoyed whittling the new log. Scattered thoughts and dissatisfactions, long accumulating, came together in a rush. Words tumbling onto the page. Some of them looked interesting enough to keep. The resulting book falls far short of documented intellectual history, systematic review of literature, or close textual exposition and criticism. It comes closer to what the French call a 'prise de position': statement of a view to be argued and explored later on. An extensive bibliography of the work I have consulted on these matters will, I hope, provide some compensation for the book's failings. (From Author's preface).

CONTENTS: Intellectual Equipment; Four Pernicious Postulates; Four More Pernicious Postulates; Comparing; Individualizing Comparisons; Universalizing Comparisons; Finding Variation; Emcompassing Comparisons.

TUFTE, Edward. THE VISUAL DISPLAY OF QUANTITATIVE INFORMATION. Conn.: Graphics Pr. (Available only by direct order from Graphics Press, Box 430, Cheshire Conn. 06410). \$34.

This beautiful and illuminating book belongs on every data person's bookshelf. Tufte provides a series of admirable graphics presenting rich data in highly effective and attractive ways. These good examples are interspersed with hilariously bad ones. Tukey's influence shows, not only in examples like the boxplot (which Tufte revises in several useful ways) but also in cute new language like "chartjunk" (roughly, all the clutter that were better erased). Tufte has some strongly held views and expresses them pungently. His advice ranges from the very broad (do not underestimate the intelligence of the reader) through the strategic (play down or eliminate data grids so the data show up more clearly) to many practical details (do not rely on red-green contrasts invisible to those with the most common form of colour blindness). Often Tufte shows the same data in the originally published graphic, then an improved one or a series of improvements; or he splits the original version into the essential lines and the junk, the message visually divorced from the clutter. With telling examples, pithy comments and overall wonderful production, the book inspires one to do better. Tufte does not provide any guidance specific to network graphics like sociograms, but his basic principles can be transferred to our area -- and should be. (Reviewed for CONNECTIONS by Bonnie H. Erickson, Soc, Toronto).

TURSHEW, Meredith. 1984? THE POLITICAL ECOLOGY OF DISEASE IN TANZANIA. New Brunswick, NJ: Rutgers U P. 260 p. \$25.

Argues that disease in Tanzania is not the inevitable consequence of climate or geography but the result of colonialism and capitalism. (From blurb).

VERDERY, Katherine. 1983. TRANSYLVANIAN VILLAGERS: 3 CENTURIES OF POLITICAL, ECONOMIC & ETHNIC CHANGE. Berkeley: U of California Pr. 436 p. \$29.95.

This book is centred on three themes: ethnicity, economics and the influence of the state. It is Verdery's wish to explain and to show the interrelationships of these three themes in the lives of the Transylvanian villagers...The theoretical framework of the first theme is credited to Barth's... discussion of ethnic boundaries, ...Verdery (studies) ethnic relations within the context of changing economic and political spheres and traces the development of complementary views of ethnicity by three

component language groups. The approach taken (in the analysis of economic change and underdevelopment) is neither exclusively that of 'world system' nor of 'local response', but an integration of the two. (For the three themes), the author chooses to see the state as 'organizations or organizational forms' consisting of units of still larger forms which constitute an interstate system. (Edited from Vincent Erikson's review in CANADIAN REVIEW OF SOCIOLOGY & ANTHROPOLOGY, 2/85).

WALTON, John (Soc, Cal-Davis). 1984. RELUCTANT REBELS: COMPARATIVE STUDIES OF REVOLUTION AND UNDERDEVELOPMENT. NY: Columbia U. Pr. 230 p. \$10.

'Reluctant Rebels' combines historical studies of national revolts in the Third World with a theoretical interpretation that demonstrates why these events belong to the proper study of revolution. The Huk rebellion in the Philippines, the Mau Mau revolt in Kenya, and Colombia's Violencia are viewed as national struggles of classes and status groups, rather than simply as peasant insurrections, and in their causes and consequences, are shown to closely resemble other successful revolutions.

The study has three primary purposes: 1) to suggest a rationale for reconceptualizing and broadening the categories in which we think about rebellion in the underdeveloped world; 2) to present a fresh perspective on explaining contemporary revolution based on a political focus within the global economy which may supplement and extend current approaches; 3) to convey through historical interpretation the nature and origins of revolutionary upsurges in conjunction with simultaneous domestic and international currents.

CONTENTS: National Revolts: A Framework; The Huk Rebellion; La Violencia; The Mau Mau Revolt; Explaining Revolutionary Situation; The Consequences of National Revolts; The Revolutionary Past and Future.

WALTON, John (Soc, Cal-Davis), ed. 1985. CAPITAL AND LABOUR IN THE URBANIZED WORLD. Beverley Hills, CA: Sage. 256 p. £21.95.

The distribution of capital and labour in the contemporary world is undergoing a radical change. Traditional industries in the West are in decline while in the third world cheap, plentiful labour is available and increasingly attractive.

This book analyzes the implications of this situation for both developed and less developed nations. It examines the impact such a shift of resources will have on the rich western nations that dominate the international system. Also it describes the likely domestic consequences for countries which have to reconcile the clashing interests of domestic capital and labour and to attract vital foreign industry and investment.

Chapters concentrate on the theoretical, political and national issues involved. They examine the friction that is created by the divergent interests of competitive regions and countries. Special attention is given to the dangers inherent in an economic system that allows rival states to move capital and labour freely throughout the world.

Among the topics discussed are the dramatic urbanization of the Arab Middle East following the oil boom, the problems of unequal regional development, internal migration and urban planning in the third world, and the plight of the middle classes of Latin America who are faced by the expansion of modern state economies and the intervention of international capital.

CONTENTS: INTRODUCTION - "The Third 'New' International Division of Labour," John Walton. STATE, CAPITAL AND REGION - "Capital and the National State: A Historical Interpretation," Paul Singer; "Internationalization of Capital and the Regional Problem," Dieter Lapple; "The State and Issues of Regional Analysis in Latin America," David Slater. URBAN SYSTEMS AND PROCESSES - "Urbanization, Migration and Models of Development in Latin America," Alejandro Portes; "Urbanization and Social Change in the Arab World," Janet Abu-Lughod. FORMS AND POLICIES OF INEQUALITY - "The City in Permanent Transition: The Consequences of A National System of Industrial Specialization," Patricia Arias & Bryan Roberts; "Capital Accumulation and Housing Production in Latin America 1960-80," Samuel Jaramillo & Martha Schteingart; "The Planning Process and the Division of Labour in a New Industrial City: The Case of Ciudad Guayana, Venezuela," Cathy Rakowski; "Social Relations and Capital Accumulation: The Case of the Mexican Bourgeoisie," Larissa Lomnitz & Marisol Perez-Lizaur.

PROBNET: A program to calculate the probability of network connectedness

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It can be very useful at times to be able to estimate the probability that a set of nodes will be linked together to form a connected network. For example, when planning the methods of analysis to be employed in a study, one may wish to estimate the probability that interviewing a particular set of N persons - to be asked to name n friends, acquaintances, etc. - will yield a connected network. Alternatively, one may have data on a set of N persons who are linked together to form a network and wish to estimate the probability that the connectedness is merely a chance occurrence.

Work by Gilbert (1959) provided exact and asymptotic methods for estimating the probability P that N nodes all will be connected together given a common probability p of a link between two nodes. Subsequent work by Naus and Rabinowitz (1975) provided methods for estimating the expected number of connected components, which may range from N (where each node is itself a connected component, i.e. none are linked) and 1.0 (where all are connected together), and for calculating the variance of the expected number of connected components. The program PROBNET provides these estimates.

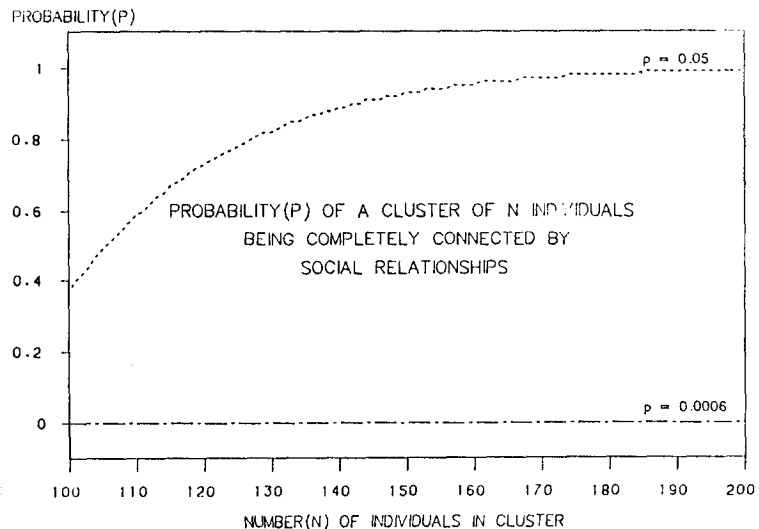
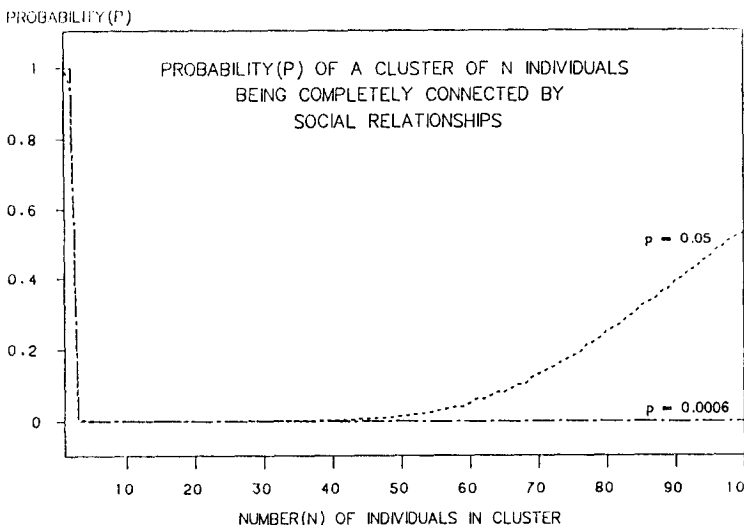
To illustrate one possible use, when the acquired immune deficiency syndrome (AIDS) was first recognized, the question naturally arose as to whether or not an infectious process was involved. The identification of a cluster of 40 patients with AIDS who all were connected together, directly or indirectly, by sexual contact suggested a transmissible agent (Auerbach *et al.* 1984). In such cases, however, the further question arises as to whether or not a connected network of this kind might be the result of a random rather than an infectious process. Combining the highest number of sexual contacts reported in this group (1560 per year; mean: 226; range: 10-1560) and an estimate of 2,500,000 male homosexuals (between 15 and 54) in the United States in 1980 yields an estimated probability of contact between two nodes of $p = 0.0006$ (Kloudahl, 1984). And, entering this value into the PROBNET program produces the probability estimates (Exact ≤ 100 ; Asymptotic > 100) plotted in the Figures below. As is evident from the Figures, even on the assumption of a very small population of male homosexuals in the U.S. and a very high rate of sexual contact among them, the probability that a cluster of 40 individuals would be connected together by chance is *zero* using this model. For comparative purposes, included in the Figures are the estimated probabilities of connectedness (P) where the common probability of a link is $p = 0.05$.

It will be recognized that Gilbert's model deals with the simplest case in which the probability of a link between every two nodes is the same. The estimates yielded by this model can be useful for a variety of purposes, but clearly there is a need for more work on sophisticated network probability models as well.

PROBNET is written in Fortran 77.

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ON DESIGNING THE DATABASE FOR A NETWORK STUDY

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Several recent articles (e.g. Songquist (1982), Songquist (1980), Mulherin, Kawabata and Songquist (1981) have elaborated a set of concepts for dealing with social network data structures. This note builds on these and sets forth several principles of practical use in setting up a data model for a network study.

Theory and the practicalities of data collection will have determined the entities of interest to the study, the types of relationships between them that are to be depicted in the study data, and the attributes of these entities and relationships. The study design problem is how to choose a concrete set of files and file structures to represent them.

Some useful criteria for deciding are:

- (1) FACE VALIDITY -- The entities empirically represented as "cases" should intuitively feel OK as a representation of the social system being investigated.
- (2) EFFICIENCY -- The files and file structures chosen should lead to minimal storage and effective computer processing in conventional statistical packages as well as easy interfacing to a variety of network analysis programs.
- (3) CONSISTENCY -- The data organization should not require extreme effort to avoid making processing errors.

Social scientists' use of what computer science data-base authors term "normalization theory" in designing file structures for social network studies facilitates the achievement of these objectives.

There are two concepts involved in normalizing a data structure: the idea of a "primary key", and that of "functional dependency". Neither is really complicated once one gets past the jargon. The basic idea of a primary key is that there needs to exist a variable (or set of them) whose values uniquely determine which "case" you are working with. This might be a person number, person name, corporation number, or the values of several such "identifier" variables taken together. The idea of functional dependency is that if you know the value of one variable (usually the "primary key") for a "case", the value of another variable is completely determined.

Normalizing a social network data structure model preparatory to setting up the files for a study involves paying particular attention to establishing primary keys and applying the principle of functional dependence. The basic idea is you should NOT try to group certain attributes together in a single file, but should put them in different files. You decompose files by separating out groups of variables and storing them in different places. A complex file is split down the middle into two simpler ones. Then the processing operators select, project, and join can later be used to combine information from several of these basic study files for specific processing steps.

STEP 1. If you have REPEATING GROUPS in your data structure, separate them out and put them by themselves all alone in a file. Include the primary key of their "parent" as a field in this file. This leads to what's termed "first normal form" (1NF). For example, separate information about parent corporations and their subsidiaries into two files:

CORP: (CORP#, CORPNAME, SUBSIDIARY#, INDUSTRY, ASSETS, SUBSIDIARY#, INDUSTRY, ASSETS)

is split up into:

PARENT: (CORP#, CORPNAME)

DIVISION: (CORP#, SUBSIDIARY#, INDUSTRY, ASSETS)

(Note: primary key is underlined).

This gives you 1NF. A file is in 1NF if all the attributes have "atomic" values (i.e. no attribute has two or more values).

STEP 2. Make sure that the attributes you have in a file really belong to that particular entity and to no others. Remove attributes that aren't fully dependent on the primary key (i.e. are dependent on only part of the primary key). An example:

BRIBE: (CORPORATION, OFFICIAL, DATE, AMOUNT\$, INDUSTRY)

is broken down into:

CORP: (CORPORATION, INDUSTRY)

TRANSACTION: (CORPORATION, OFFICIAL, DATE, AMOUNT\$)

The problem is that industry isn't an attribute of a particular bribe; it's an attribute of the corporation giving the bribe. Industry isn't fully dependent on all of the existing primary key, only on one part of it (CORPORATION). A file is in second normal form (2NF) iff it is in 1NF and every non-key attribute is fully dependent on the entire primary key. The solution is to decompose the original file into two others that are both in 2NF.

This illustrates the three main types of problems one may have with a set of files that are un-normalized: insert, delete, and update anomalies. In the original file, you cannot insert information about a corporation's industry unless you already have a bribe on record for them. If you delete information about a bribe, you inadvertently lose information about a corporation's industry. Industry information appears once for each bribe, which is redundant and potentially expensive in storage and processing costs. You must locate and change each copy if you have to change one of them.

STEP 3. Get rid of "transitive" dependencies. Attribute C is functionally dependent on attribute B, which, in turn, is dependent on the primary key. Again, the remedy is to decompose the offending file into two parts. A file is in 3NF if and only if it is in 2NF and every non-key attribute is NON-transitively dependent on the primary key. An example:

CAMPAIGNWORKER: (PERSONNAME, AGE, CANDIDATE NAME, CAMPAIGN BUDGET)
 CANDIDATE: (CANDIDATE NAME, CAMPAIGN BUDGET)
 WORKER: (PERSONNAME, AGE, CANDIDATE NAME)

CAMPAIGNWORKER has been broken into two files, both in 3NF. (It is assumed here that a worker is assigned to only one candidate, but that a candidate may have many workers.) CANDIDATE NAME is placed in the WORKER file as a "foreign key". A foreign key is a field whose domain is the primary key of another file. This permits you to perform a join between these two files and to connect up the information in each. The foreign key is placed in the "child" file pointing to its "parent".

STEP 4. Separate out "intersection entities" and "transactions". Fourth normal form (4NF) requires decomposing files so that in the resulting set the only dependencies are single-valued dependencies from the primary key to each of the non-key attributes. You start from 3NF. For this one, a look at a specific example will be helpful. Here's a data structure from a study of a nursery school. There are two "multi-valued" dependencies, each one independent of the other. Each mother's name determines a set of children which is mutually exclusive of all other such sets of children. In addition, each mother has her own income-history set, which is different from all other income history sets. In one case we have combined data from what are better conceptualized as two kinds of entities (mothers, children) into one entity (attender). In the other case, we have failed to provide a satisfactory representation of over-time data as a set of transactions.

ATTENDER: (MOTHER , INCOME, YEAR, CHILD) .

<u>MOTHER</u>	<u>INCOME</u>	<u>YEAR</u>	<u>CHILD</u>
Sanchez	6800	1979	Maria
Sanchez	6700	1980	Maria
Smith	4567	1979	Jean
Smith	5678	1980	Jean
Smith	4567	1979	Robert
Smith	5678	1980	Robert
O'Toole	8765	1979	Sean
O'Toole	7777	1980	Sean

The file as is is subject to addition, deletion, and update anomalies. The solution is to decompose it, separating the pair of multivalued dependencies:

PARENT: (MOTHER,CHILD)
 INCOME HISTORY: (MOTHER,YEAR, INCOME)

In addition, separate files for mothers and children would typically be established to record attributes of mothers and attributes of children.

Decisions about decomposition don't depend on which records you happen to have in the file at any particular time; rather, they depend on the semantics of what the attributes mean to you in terms of your theory.

One last example illustrates the concept of an "intersection entity", the use of which facilitates getting network data into 4NF. If you start with two or more types of entities, and the relationships between them can be "many-to-many", you will have to add a new type of entity in order to get your data into 4NF. Consider a study of corporations, persons, and elite social clubs — three kinds of entities. A person may be a director of several corporations and a member of several clubs (or maybe member of none). A corporation has many directors; a club has many members. To represent this data structure in 4NF form, two intersection entities will be needed: directorships and club memberships.

CORP: (CORPNAME, ASSETS, LOCATION)
 PERSON: (PERSONNAME, HOME ADDRESS, AGE, SEX)
 DIRECTORSHIP: (PERSONNAME,CORPNAME,DATE STARTED, WHETHER OFFICER)
 CLUB: (CLUBNAME, LOCATION, POLITICAL ORIENTATION)
 MEMBERSHIP: (PERSONNAME,CLUBNAME, STARTING YEAR)

Additional files could also be created depicting connectedness between corporations and social clubs via the memberships of directors, etc.

DISCUSSION. Designing a data structure for a complex network study turns out not to be a simple matter if the criteria mentioned at the beginning of this note are to be met. Yet, the concepts of functional dependence, primary key, 1-4NF, and decomposition of a file provide a straightforward means of achieving them. The results are a set of files which can be used with the selection, projection, and join operations to reorganize information for obtaining answers to queries and performing statistical operations. Files in 4NF are acceptable to all statistical packages and are easy to deal with using special purpose programs if the package you have access to cannot handle multiple input files.

Files depicting intersection entities (i.e. directorships and memberships) can easily be converted into adjacency matrix format for use in network analysis, clique detection, or clustering algorithms via simple Fortran programs. Yet, they preserve the analyst's ability to use a conventional statistical package to perform analyses in which the unit (or "case") is the pair. An arbitrarily complex social system can be represented in 4NF. The data may not actually be easy to deal with, but in 4NF they will be easier to deal with than if they are organized in any other way.

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(NETWORK NOTEBOOK continued from page 20)

NEW JOURNALS

WORLD CULTURES is a quarterly, using diskettes to access, discuss and contribute to the cumulative cross-cultural database. DOUGLAS WHITE general ed; MICHAEL BURTON & KARL REITZ are assoc eds. Distribution on floppies for any type PC offered. Sample composition, bibliog, cumulative codes and codebooks and sampling frames will be published for a variety of samples. Contact Doug White at Soc Sci, Cal-Irvine, Irvine CA 92717. Subs: \$60/yr + \$95 1-time database entry fee.

POWER & ELITES is published 2x/yr. Ed by THOMAS DYE (Florida St) & WM. DOMHOFF (Cal-Santa Cruz). First issue includes Mark Mizruchi's "An interorganizational model of class cohesion". Subs: \$12/yr from Associated Faculty Press, 90 S. Bayles Ave, Port Washington NY 11050.

ANET PARADOX is a "noteletter" devoted to theory and techniques of decentralized networking. "Anets" are free, centerless, personal linkages ranging from traditional nets of friends to futuristic high-tech meshings. It is sent only in exchange, info for info (published or unpublished), no subs. Somewhat of a cross between a newsletter, a series of fliers and a features syndicate. For sample, send stamped, self-addressed article or a lengthy description of your networking to Annette, c/o Correspan, Box 759, Veneta, OR 97487.

BULLETIN DE METHODOLOGIE SOCIOLOGIQUE is a new quarterly published by the Laboratoire d'Informatique pour les Sciences de l'Homme. It publishes methodological articles and serves as a newsletter for the Methods research committee (RC-33) of the International Sociological Association. KARL VAN METER, the editor, appears to be very active and interested in network analysis. (Issue #2, 4/84, reprints three 1975 INSURGENT SOCIOLOGIST articles on ruling classes and corporate interlocks by William Domhoff, Edmund McLaughlin, John Sonquist and Thomas Koenig.) Apparently available free on request. For info contact the editor at LISH, 54 Bd. Raspail, 75006 Paris (Tel: 222-83-96).

NETWORKING JOURNAL is an outgrowth of the former NETWORKING NEWSLETTER. The first issue includes "Convening an Information Philosophy," "Is Government Going Out of Date," "The Lattice Organization," "Online Networking" and "Networker's Burnout". Subs and info from the Networking Inst, Box 66, West Newton, MA 02165. Single issues \$10.

JOURNAL OF SOCIAL & CLINICAL PSYCHOLOGY has expanded in its third year. Intimate relationships, and stress and coping are among its areas of interest. It features reports of clinical and experimental research at the "interface of social & clinical psych." Ms. to JOHN HARVEY, ed, Psych, Texas Tech, Lubbock. Subs: \$22.50 from Guildford Press, 220 Park Ave S, New York City 10003 (free sample on request).

NEW IDEAS IN PSYCHOLOGY is "an international journal of innovative theory" with an interdisciplinary emphasis. Now in its second year, it wants to cover exploratory theorizing, broad problems, new hypotheses, how ideas develop. Ms. to P. Moessinger, 46 rue des Mariachers, 1205 Geneve. Subs (3x/yr): \$65 from Pergamon Pr (Headington Hill Hall, Oxford OX3 0BW). Free sample.

EUROPEAN JOURNAL OF COMMUNICATION will start in 1986, publishing work by European scholars on such topics as media institutions, theories of communication, technologies, research methods, social consequences of communication. Ms. to Erik Rosengren, Unit of Mass Communication, Gothenburg U, Box 4850, Gothenburg S-40221, Sweden.

MICROCOMPUTERS FOR INFORMATION SCIENCE is a quarterly devoted to the application of micros for information management and processing in libraries and info centres. Ms. to CHING-CHIH CHEN, ed. in care of Ablex Publishing, 355 Chestnut St, Norwood NJ 07648. Subs: \$28.50.

The newsworthy thing about AMERICAN DEMOGRAPHICS is that it is appearing on the newstands all over the San Francisco area. A glossy, Transaction-style, magazine with lots of ads, graphics and pictures, it seems aimed at explaining/selling demographic analysis to businesspeople and the public at large. Vol 6, #5 (5/84) is a special baby boom issue; it includes Nathan Keyfitz, "The baby boom meets the computer revolution." Sub: \$48 (12 issues); \$5/issue to Circulation Dept, American Demographics Box 6543, Syracuse NY 13217. Ms. to BRYANT ROBEY, ed., American Demographics Inc, Box 68, Ithaca, NY 14851 USA.

BERKELEY PLANNING JOURNAL is new, put out mostly by faculty and students of the Cal-Berkeley Dept of City & Regional Planning. The first issue includes pieces by Peter Marris. "The future of social policy in America," Gary Pivo, "Use value, exchange value, and the need for land-use planning," Karen Christensen & David Drury, "Agreeing to disagree: a 3-D framework for planning without consensus" and Amy Glasmeier, Peter Hall & Ann Markusen, "Metropolitan bi-tech industry growth in the mid-70's." Subs: \$10 (2 issues) and Ms. to the Dept of City & Regional Planning, Univ of Cal., Berkeley, CA 94720, USA.

JOURNAL OF INTERDISCIPLINARY ECONOMICS wants to relate soc, psych, history and anthro to the now-isolated central body of economic doctrines. Ed, Ken Penney, Exeter. Subs (quarterly): £ 19 from A B Academic Publishers, Box 97, Berkamsted, Herts HP4 2PX, England.

AFRICAN URBAN QUARTERLY is intended to serve as a clearing house for research dealing with analytical, descriptive, evaluative and prescriptive problems concerned with comparative urbanization and development planning, linking Africa and the rest of the world. Wants reports of empirical investigations, studies of methodological problems, studies of "real world situations", philosophical analyses of urbanization and planning, policy research, practice and prescriptions. Ed, R.A. OBUDHO, African Studies, SUNY-Albany, Albany, NY 12222.

AS OTHERS SEE US, I. -- SOCIAL SCIENCES & HUMANITIES COUNCIL OF CANADA

"Dear Professor Wellman: I have to confirm that the Council has found itself unable to offer (INSNA) a grant (under its 'Aid to International Secretariats' programme)... Members of the committee came to the conclusion that your request could not be considered eligible under the terms of this program (because) INSNA does not satisfy our criteria of 'major international scholarly association'; it is a network and not, according to our interpretation, a scientific association. I must also add that there is no Canadian learned society affiliated with INSNA..."

AS OTHERS SEE US, II. -- Tim Heald, NETWORKS (pp. 207-09)

"In Canada I not only discovered a similar network of networks, even down to a miniature imitation OBN based mainly on Upper Canada College and a handful of other public schools, I also found that Toronto was the headquarters of The International Network for Social Network Analysis. This institution, based on the Sociology Department of the University of Toronto was started in 1977 as a "clearing house" and, according to its "Co-ordinator", Barry Wellman, it has 300 members from all over the world, most of them social scientists, mathematicians and statisticians. It has a magazine called CONNECTIONS and is affiliated to another called SOCIAL NETWORKS (described dauntingly as 'an International Journal of Structural Analysis')."

"Much of what these 'network analysts' have to say is fairly impenetrable or downright depressing since their main purpose appears to be to reduce life to algebra. The jargon is full of 'nodes' and 'blockmodelling' and 'matrices', such as, 'The total number of organizations to which an individual belongs is the sum of the row corresponding to that individual.' Professor Wellman and his colleagues seem to be more concerned with 'the pattern of ties' and 'the nature of links' than with the individuals involved in such relationships. Individuals, as far as I can make out, are merely nodes.

"Wellman himself in a working paper on 'Network Analysis from Method and Metaphor to Theory and Substance' deplores the emphasis on 'the persuasiveness of verbal descriptions' and 'descriptive techniques, verbal persuasiveness and esthetic (sic) appeal for acceptance' ; more mathematics; more 'top-down structural analysis'.

"So far so bad; but what is appealing about the various academic studies by INSNA members and sympathisers is the catholicity of subject matter and an absence of critical cant. In Britain the idea of the 'social network' is popularly associated almost exclusively with the idea of the OBN and its smaller components. It is also, almost always, A Bad Thing. Whenever there is a scandal in Britain the phrase 'old boy network' is trotted out to explain it. It was the explanation for the Philby, Blunt, Burgess, Maclean debacle; it was the explanation for security lapses at Buckingham Palace which allowed an intruder to make his way into the Queen's bedroom. For many people it appears to be the single most important cause of Britain's decline and fall.

"For Wellman and his fellow academics, however, networks are by no means restricted to the ruling classes let alone to the public school. Certainly there have been academic studies of OBN type networks of power such as one called "Interlocking Corporate Directorships as a Social Network" by Koenig and Gogel but generally speaking the academics are at least as concerned with networks among ordinary people. These might be families in the East End of London, or the citizens of Hobart, who suddenly found their inter-city networks sundered when the river bridge linking them collapsed. Academic network analysts have considered the use of networks in 'parenting', 'job getting', 'schizophrenia' and the 'urban village'. They have considered how Third World immigrants have kept their old networks intact in industrialized societies.

"They do not seem to agree about much. Some are psychiatrists; some are sociologists; some are mathematicians; and they bend the concept of networks to their own ends just as they bend the language to exclude the layman (thus forming their own network from which non members of the International Network for Social Network Analysis are naturally excluded). They are however united in the belief that throughout the world and at every level of society there are a whole series of eccentrically composed informal organisations which exist independently of the formal. Everyone has his or her own network. Everybody belongs to other people's. There are networks like the OBN itself so huge and impersonal that they resemble multi-national companies and there are networks so tiny that they are scarcely more than 'dyadic' ('one-to-one') relationships. And however you do it, whatever your standpoint or methodology, the network analysts are agreed that, in Wellman's words, "The most direct way to study a social system is to analyse the pattern of ties linking its members." It is instructive to discover that so many of Mrs. Thatcher's cabinet ministers have Cambridge/Bow Group links or that sergeant majors and barristers' clerks follow family traditions or that the inmates of Her Majesty's prisons have network ties which persist after they have been released. The network connections of Sir Geoffrey Howe or Sergeant Janes of the Devon and Dorsets or Ronnie Bender of Maidstone Gaol help us to understand the world about us."

Ed's note: When I was in London, 4/85, the new paperback ed of this was on the hot new issues table of Foyle's.

But 'sic' yourself, Timmy. Didn't they ever teach you at Balliol that there's more than one way to spell 'esthetic'. Canada ain't been your colony for a while, linguistic or otherwise.

AFGHANI NETS

"The population as a whole is quite unequivocally on the side of the resistance, but not necessarily for political reasons. It is personal ties that really count: each and every Afghan feels he belongs to a communal group (or gawm) which may be anything from a tribe or a clan to an extended family or ordinary village community." (From Olivier Roy's story in LE MONDE, MANCHESTER GUARDIAN WEEKLY, 18 Dec 83).

GEORGE WASHINGTON ON INTERORGANIZATIONAL NETS

"All obstructions to the execution of the laws, all combinations and associations under whatever plausible character, with the real design to direct, control, counteract, or awe the regular deliberations and action of the constituted authorities, are destructive of this fundamental principle, and of fatal tendency. They serve to organize faction, to give it an artificial and extraordinary force, to put in the place of the delegated will of the nation the will of the party, often a small but artful and enterprising minority of the community.

"However combinations or associations of the above description may now and then answer popular ends, they are likely, in the course of time and things, to become potent engines, by which cunning, ambitious and unprincipled men, will be enabled to subvert the power of the people, and to usurp for themselves the reins of government." (From FAREWELL ADDRESS, 1796).

SUPPORT NETWORKS IN VOGUE

"Much of life appears to conspire against ties that bind. Frequent moves, living alone, the demands of a career on free time and family life can all mean that it's a lot more difficult than it used to be to make and to keep good friends...Yet scientists are discovering that having a strong social network may be essential, in the long run, to your health. This new knowledge was the impetus behind an ingenious new program begun by the California Dept of Mental Health called, 'Friends Can Be Good Health,' (headed by Charles Roppel). They are trying to teach us...that health relationships are just as necessary to maintain good health as are exercise and proper nutrition.

"'We're talking about hundreds of studies now,' says Robert Taylor (an associated San Francisco psychiatrist). 'They show that people who are connected to other people, either friends or family, tend to have longer lives and less incidence of a variety of diseases--not just depression but unexpected things like heart disease, certain forms of cancer, and strokes.'

"...(The program) comes equipped with a beautifully produced 64 page book of stories, poems, tests and diagrams to help people understand the role of personal relationships in their lives. Two short films, FRIENDS & RELATIONS, starred everyone from Ed Asner to Whoppi Goldberg, and a self-assessment brochure allowed people to check both their levels of stress and social support.

"The Californians start with two exercises. First, write your name at the center of a piece of paper. Think about the people with whom you have the closest bonds, those who have given you support throughout your life, and those who are mainstays for you now. With yourself in the middle, how would you arrange the names around you? Does it surprise you how many--or how few--people you can really count on?

"The second exercise consists of making 2 lists: Write down the people you feel the most comfortable with and those you have warm feelings for. People doing these exercises often astonish themselves--names pop up that they haven't thought of in years; others notice how neglectful they've become of people they cared for deeply.

"(The Dept has) also launched the California Self-Help Center, a computerized data bank with its own toll-free number to link hundreds of support groups of people who share common concerns, from Parents of Asthmatic Children to Overeaters Anonymous.

"Most of us, of course, do not consider our friends as some sort of new megavitamins to pop whenever we feel a cold or an emotional chill coming on...These days many of us seem to be more passionate about running or working or eating to win. Neglect friends and you lose." (From Maureen Orth, "Friends for Life," VOGUE, 4/85).

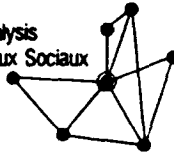
WHAT TO GIVE YOUR YUPPIE FRIENDS PARTICIPATING IN THE NEW BABY BOOM

TEACHING YOUR BABY TO USE A COMPUTER (Bantam Books) by Victoria & Frederick Williams (Annenberg School, S. Cal).

And did you hear about the computer jock who asked his kid if he wanted a pet. "That's for sissies," the kid said. "Gimme a VAX!"

The International Network for Social Network Analysis
Le Réseau International pour l'Analyse des Réseaux Sociaux

Centre for Urban & Community Studies
University of Toronto
425 Spadina Avenue, 4th Floor
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Circle desired ones.

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7	2-3	1984	Giant double issue (128 pages). Special price: \$8.00
7	1	1984	Current Directory--all members' names & addresses
6	3	1983	Scherer's 'terse summary' of most network findings
6	1	1983	Abstract bonanza issue (over 100!)
5	2	1982	Granovetter's original 'weak ties' paper--1st time in print
5	1	1982	Harrison White on 'interfaces'
4	3	1981	Comprehensive Directory--largest ever--still useful
2	3	1979	Membership Directory--a collector's item
2	1	1979	Peil--Africa; J.C. Mitchell & Lin Freeman; Bernard & Kilworth

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