

CONNECTIONS

VOLUME VIII NUMBERS 2-3

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Double Issue

J. Clyde Mitchell x 3

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CONNECTIONS

. *small print*

EDITORIAL OFFICES: Centre For Urban & Community Studies, University of Toronto
455 Spadina Avenue, Toronto, M5S 2G8 Ontario, Canada 978-3930/2072

EDITOR & CO-ORDINATOR: Barry Wellman ASSOCIATE EDITOR: Jack Richardson

ASSOCIATE CO-ORDINATORS: Sharon Bolt
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Alicia VanDerMeer

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COMPUTER EDITOR: John Sonquist (University of California-Santa Barbara)

ASSISTANT EDITORS: Walter Carroll (Soc & Anthro, Goucher College, Baltimore MD 21204)
David Bunting, Economics (Eastern Washington U, Cheney WA 99004)

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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

The most important thing is the renewal form, enclosed. This giant double issue is the last one of Volume 8, 1985. INSNA/CONNECTIONS is the same low price as last year; SOCIAL NETWORKS is up a bit. Please send your money now. Absent-mindedness is a pain in the neck...We feature three (count 'em) pieces by Clyde Mitchell: a report on the 'Drizzlebelt' network conference, a neat paper on Monte Carlo simulations, and an account of some interesting computer programs...Next thing you know he's gonna make the Kalela dance on-line...Plus a sneak preview of Joel Levine's world atlas of corporate interlocks...Plus a posthumous paper on community by Philip Abrams...Plus a guide on how to use SAS to study personal networks by Barry Wellman and Susan Gonzalez Baker...Plus, plus many other wonderful things too numerous to mention. Renew now!!!

We're a Little Early...And a Lot Late

This is a double issue. It is both Volume 8, #2 (supposedly the Summer issue, but why am I shoveling snow tonight) and #3 (the "a little early" Winter issue). It's a true-life double issue, twice as many pages and it finishes off our 1985 model year.

What's going on? Several things delayed #2. First, it took longer than expected to finish my book, but it's done! (SOCIAL STRUCTURES, coedited with S.D. Berkowitz; available from Cambridge U. Pr. in about a year with many of your favourite authors--It's great!) Having made it thru grad. school, I should have known that it's impossible to do a book and live a normal life simultaneously. (Older, fatter, balder, maybe nicer, but certainly not wiser.) Grant proposal deadlines reared their ugly head, too. (The never-ending story of East York.) Second, circumstances forced us to shift our membership files (and mailing labels) from our APL-based mainframe program to a microcomputer-based data-base programme (CORNERSTONE; and so far we are not thrilled with it.) This has taken time and heartache. (Last week's discoveries included labels stuck under the printer platen (roller), learning that printer rollers are not routinely removable, and finding that Bob & Doug MacKenzie run every computer repair shop in Toronto.)

On the up-side, we've got the computer running, the book is mostly out of the way and INSNA itself is happy and well-organized. Someone has even volunteered to do the likely-abstract titles search in CURRENT CONTENTS--a mighty deed. This noble fellow is Walter Carroll (Assistant Prof. of Soc., Goucher College), and he not only receives thanks, he is rewarded with being Assistant Editor! Carroll is interested in historical sociology, political elites, the state, and kinship systems. He should keep us well-covered.

Electronic Networking Association

ENA is a new organization seeking to promote electronic networking in ways that enrich individuals, enhance organizations & build global communities. It's entirely electronic. Work meetings take place online in a distributed system of conferences on multiple networks. Material & ideas are exchanged among the networks by volunteer 'porters' who pick up material on the UNISON network & bring it to their 'home system' for discussion & input by members. Some of the projects under discussion are: exploring ways to make international systems more accessible to people in more countries, finding ways to remove cost barriers, supporting educational & business uses, providing info about e-mail legal issues.

ENA is on UNISON, Meta, EIES, PARTI (The Source), DELPHI, CompuServe (GO WEC), FULCRUM & The Well e-mail networks. It's sponsored an in-person conference (guess there's still some need to press the flesh) conference 7-10 Nov. 85 in Washington DC.

Info from Lisa Carlson, ENA, c/o Executive Technologies Inc., 2357 Lehigh St, Allentown PA 18103.

SocNet & PoliNet

SocNet & PoliNet are newly-created e-mail facilities aimed at academics. Just like the late, lamented (and somewhat ambiguous) network analysis on EIES experiment a few years ago, these networks are designed to let departments and faculty communicate using e-mail, computer conferencing, newsletters and specialty topic-oriented bulletin boards. Access thru microcomputers, modems via either the TYMNET or UNINET systems. (TYMNET is available in the US, Canada, Western Europe, Australia, Indonesia, Japan & several other nations.) There's an Advisory Board of luminaries--none of whom are network analysts or persons with experience on the EIES network. Membership (1-time fee) is US\$100 for departments & US\$29.95 for individuals. Connect time rates are \$16/hr (day), \$6/hr (nites & weekends).

Info from Frank Howell, Social Science Research & Institutional Computing Lab, North Carolina State U, Box 8101, Raleigh NC 27695. Howell has an article hyping the nets in recent issue of SOCIAL SCIENCE MICRO-COMPUTER REVIEW (which he edits).

(Ed.'s note: I'd appreciate receiving comments from those joining SocNet. I'm rather skeptical of the hype--and the costs after the grants run out.)

Please Give Us Your Electronic Mail Addresses

As the preceding 2 announcements indicate, electronic mail/computer conferencing is growing rapidly. Some INSNA folks have suggested that we include electronic mail addresses in the next Directory. Please fill out this portion of your renewal form.

You may already be on an e-mail system without knowing it. May big universities are already connected, mainframe-to-mainframe, thru BITNET (USA), NETNORTH (Canada), EARNET (Europe) & Janet (British understate-ment--avoiding capitals). To communicate with you, people need to know your personal logon name & your university's network node name (altho the latter is often publically available in network directories. To communicate with INSNA send a message to WELLMAN at UTOREPAS. (Note do not send it to UTORONTO--it's the wrong computer.)

Networkers Without Ties

Can you believe it? Only 4 folks wanted to buy an Old Boys Network tie. Offer cancelled. Check Loehmanns for remainders.

Info Flows

Rob HISCOTT (Soc, Queen's, Canada), former Assistant Editor, awarded Toronto Ph.D...Karen CAMPBELL appointed Assistant Prof. of Soc at Vanderbilt...Katherine FAUST appointed Assistant Prof. of Psych at Illinois... Ron BURT appointed Chair at Columbia Soc...John DELANY now seeing corporate interlocks from the inside as the Account Supervisor in charge of the Continental Illinois Bank account for Fallon, McElligot Rice, a Minneapolis advertising agency...Joanne MILLER appointed to Soc, Queens (NYC) & Russell Sage Foundation... Nick MULLINS now Prof of Soc at Virginia Tech...Carolyn MULLINS is Associate Prof. of English at Virginia Tech, teaching them to write real good science papers...John BOLLAND now Research Associate at Inst. for Soc. Sci. Res., U of Alabama...Mark GRANOVETTER promoted to Prof. of Soc, SUNY-Stony Brook...Ditto for Mike SCHWARTZ...Douglas HOFSTADTER now "Professor of Human Understanding" at Michigan (aren't we all?)... Jane HOOD now at Soc, New Mexico-Albuquerque...Noah FRIEDKIN's (Ed, Cal-Santa Barbara) had a baby...Robert BRYM (Soc, Toronto) new Editor of CANADIAN REVIEW OF SOCIOLOGY & ANTHROPOLOGY...Steve HOBFOLL (Psych, Tel Aviv) new Associate Editor of JOURNAL OF SOCIAL & PERSONAL RELATIONSHIPS...Melinda CUTHBERT (Soc, Yale) nominated for Cdn. Soc & Anthro Assoc's Committee for the Status of Women...Mike USEEM appointed Assoc Dean of Liberal Arts at Boston U...Clifford Clogg (Soc, Penn St) new Editor of SOCIOLOGICAL METHODOLOGY... Ron BREIGER, Nancy HOWELL are each spending the year at the Ctr. for Advanced Studies in the Soc Scis, Palo Alto, CA...Bonnie ERICKSON promoted to Prof. at Toronto (Soc)...Joel LEVINE promoted to Prof. at Math/Social Sciences, Dartmouth...Simon LANGLOIS (Soc, Laval) elected President de l'Association Canadienne des Sociologues de Language Francaise...Mike WEINSTEIN elected President, Hawaii Sociological Assoc. & appointed Grad. Chair, Soc, Hawaii...James KUKLINSKI appointed Asst Director, Survey Res. Lab, U Illinois... Former CONNECTIONS typist, Maria JACOBS appointed Literary Editor of CANADIAN WOMEN'S STUDIES. (She's also Editor of Poetry Toronto & Asst Ed. of the CANADIAN JOURNAL OF GENETICS & CYTOLOGY)...Eliot LIEBOW (ex-NIMH) new retired--can be reached at 301-593-6030...Charles TILLY (Hist & Soc, New School) appointed first Reviews Editor of new SOCIOLOGICAL FORUM (more on this below)...Fernand BRAUDEL (Hist, College de France) dead at 83...Reuben HILL (Soc, Minn) died of a heart attack...Alex LEE (Nancy Howell's son) died in a truck crash in the Kalahari this summer...Frank SIMS (Soc, Penn St) died recently after a lengthy illness...And finally I note the passing of E.B. White, the longtime author of THE NEW YORKER's "Talk of the Town" section. I hope the scientist types who read this don't get too upset, but one of the main reasons I edit CONNECTIONS (& write NETWORK NOTEBOOK) is to try to be a little like E.B. White--at least a few times a year.

Help Wanted--Analysiswise

"I am looking for a way to analyze the process of factioning in Japanese radical groups. The phenomenon is basically a tree structure which expands over time, but 2 branches sometimes fuse for a while. Please send any suggestions or studies of analogous phenomena, computer programs, etc. to Pat Steinhoff, Soc., U of Hawaii, Honolulu, Hawaii 96822."

(Ed.: Did you know I once turned down a job at Hawaii to go to Toronto. Did you know its -7°C outside now, which is why I'm inside writing CONNECTIONS rather than outside on the beach which is where many of my genes belong?)

Personal Relationships/Sage Divorce

The PERSONAL RELATIONSHIPS book series is no more. Vol 1, UNDERSTANDING PERSONAL RELATIONSHIPS came out last spring, published by Sage, London; Vol 2, INTIMATE RELATIONSHIPS is due out early 1986, published by Sage, Beverly Hills. Editorial shifts at Sage plus Steve Duck moving to Iowa from Lancaster are stated as the reason for the series' end.

Networking Institute

The Networking Institute is going thru many changes. They've doubled staff, developed a computer conference, and publish a nice membership Directory (full of folks who want to change the world--all or part--thru networking), a NETWORKING JOURNAL & a NETWORKING NEWSLETTER. Membership: \$75/yr from TNI, P.O. Box 66, West Newton MA 02165.

Tilly Passing in Review

Charles Tilly (Hist & Soc, New School for Social Research), the 1st review editor of the new SOCIOLOGICAL FORUM (official journal of the Eastern (US) Sociological Society) writes:

SF will try to breathe life into sociological reviewing. It will try not to become a reviewer of record, a semi-official scorekeeper of wins and losses in publishing. In order to accomplish both, the journal will discuss only a limited number of books, and will concentrate on review-essays either reflecting on the questions raised by books that are likely to make a difference to sociological work, taking up several books at a time, or both. Although the editors will search hard for scholars who can write those sorts of essays with wit and intelligence, they will also consider unsolicited review-essays. The editors will insist on clear, lively writing, and will feel free to reject contributions because of their length, awkwardness, or obscurity. Within the limits of good taste and legal responsibility, they will encourage statements of speculation, political analysis, and personal opinion. They will keep the review pages open to many points of view, including those with which they disagree. The editors will try to keep the review-essays bright, vigorous, varied, and unpredictable.

Here are some forms with which we will experiment:

- Essays by groups of graduate students who have carried on extensive discussions of recent books
- Reviews of recent non-book writing (articles, dissertations, working papers etc.) on important subjects
- Recruitment of a few recurrent reviewers who will have exceptional freedom to comment on their recent reading
- Discussions of books by their own authors
- Essays emphasizing the methods, language, and/or philosophical structures of significant works
- Treatments of the impact of widely-discussed books, including critiques in other publications
- Reviews oriented mainly at what is not happening in crucial fields, and saying what ought to be done about it
- Analyses of non-sociological works, including literary works, that have unusual value for sociological reflection and/or practice
- Satire, verse, dialogue, and other literary forms

Some of these will fail; as they do, we will not hesitate to abandon them. The point is to bring energy, clarity, and pleasure into sociological reviewing.

JOURNAL INFO

Actually our 1st item is, sadly, the death of a journal. Bill Domhoff writes that POWER AND ELITES closed after 1 issue "because of all kinds of problems with the publisher."

SOCIOLOGICAL FORUM says it will emphasize innovative articles that stretch the boundaries of social science & integrative articles that link subfields of sociology or relate sociological research to other disciplines, providing a larger focus on complex issues. Vol 1, #1 (on your newsstands about now) features "Concentration & control" by Harrison White, "The tyranny of here & now" (a review essay) by Charles Tilly

and "Where do organizational forms come from?" (The Stork Club?) by Michael Hannan & John Freeman. Ms. and subs. (\$25) to Robin Williams, Ed., Soc Dept, Uris Hall, Cornell U, Ithaca NY 14853.

DYNAMICS & THE STABILITY OF SYSTEMS is a new quarterly exploring the relationship of chaos & stability. Based at the U of Waterloo (Ontario, Canada), it will be open to articles relating to economics, biology, chemistry, physics, mechanics, electrical controls & social sciences.

HOUSING STUDIES is a new interdisciplinary international quarterly for theoretical, analytical and specific studies in the developed world. The Editorial Board includes Peter Williams, Inst. of Housing, 12 Upper Belgrave St., London SW1X 8BA (01-245-9933-7). Subs: £28 from Longman Group, 4th Ave, Harlow, Essex CM19 5AA, England.

COMMUNITIES is a 'trade journal' for folks living in intentional communities, communes, et al. Articles describe existing communities, suggest new types, & examine lessons learned from their evolution. Info: 126 Sun St, Stelle, IL 60919.

COMMUNITY SERVICE NEWSLETTER (bimonthly, 12 p.) promotes the small community as a basic social institution involving organic units of economic, social & spiritual development. It has articles, book reviews & news focusing on concerns relevant to the family, intentional communities & small towns. Info: Griscom Morgan, Community Service, Inc., P.O. Box 243, Yellow Springs, OH 45387.

BS (Black Sheep) is a semi-regular bulletin, issued 10 times/yr. It is aimed at people who have in common with each other that they have little in common with most people. Contributions wanted about your 'Eccentric Living' & others' boring habits. Subs (£1) & info from Ingo Porada, 102 Carysfort Rd., London N16 9AP.

POPULATION RESEARCH & POLICY REVIEW is a new journal (3x/yr) of demographic research. It will also publish papers that critically examine population policies already in effect and those seeking to identify the wider ramifications of such policies & the factors that influence them. The editors want a broad focus, with papers investigating phenomena that are affected by- or affect- population dynamics, even if they don't normally fall under traditional demographic-journal topics. Ms. Larry Barnett, Ed., Delaware Law School, Widener Univ., P.O. Box 7474, Wilmington, DE 19803, USA. Subs (Dfl. 150) to Elsevier Scientific, P.O. Box 211, 1000 AE Amsterdam, The Netherlands.

SOCIAL SCIENCE INFORMATION STUDIES publishes papers on information problems of the social sciences, (e.g., user studies, data bases, networks), and the application of social science research methods to information research. Ms. to T.D. Wilson, ed., Univ of Sheffield, Dept of Information Studies, Sheffield S10 2TN, England. Subs. (\$48, quarterly) to Business Press International, 205 E 42 St, New York NY 10017.

JOURNAL OF POLICY ANALYSIS & MANAGEMENT brings together specialists with an interest in the formulation of public policy and management of public institutions. Raymond Vernon (Harvard), ed. Subs. info from John Wiley, Dept 2-1390E, 605 3rd Ave, New York NY 10158 (800-525-5368).

AMERICAN JOURNAL OF ISLAMIC STUDIES is a quarterly containing articles, meeting news, professional news and reviews. Info, Assoc of Muslim Social Scientists, Box 38, Planfield IN 46168.

SCANDINAVIAN HOUSING & PLANNING RESEARCH is interdisciplinary, publishing papers and book reviews dealing with physical, social, economic and political aspects of housing and planning--from local to national levels. Ms. to Lennart Lundqvist, National Swedish Inst for Building Research, Box 785, S-801 29 Gavle. Subs (quarterly), SwKr 350 from Almqvist & Wiksell, Box 45150, S-104 30 Stockholm.

CHANGING WORK is a quarterly about changing the means, ends and social relations of production. The first issue includes features on a marketing association for & co-ops, the Spanish Mondragon production co-ops, a nurse who's set up her own community practice and an effort to convert a McDonnell-Douglas plant from military to civilian production. \$10/yr from P.O. Box 5065, New Haven CT 06525.

INTERSPECIES COMMUNICATION Newsletter links researchers working to understand what is communicated between man and animals. Info: 8556 Sand Point Way NE, Seattle, WA 98115.

THE POWER EXCHANGE ("A Newsleather for Women") "targets that hard-to-fit lesbian leather crowd" with a "jumble of news items, safety tips, letters, drawings, and resource lists...(Its) gossip and chats are the stuff of which grapevines are made." VILLAGE VOICE 5 March 85. Info: P.O. Box 527, Richmond Hill, NY 11418. Subs: 6 issues/\$15.

It seems that the growth industry in journals is now for microcomputers (but none of them told me how to fix my printer). Here's a bunch of them:

COLLEGIATE MICROCOMPUTER is a quarterly examining micros in the undergraduate curricula. It's examined statistical software, essay-writing, computer-aided instruction, teaching teachers to program, etc. Subs. (\$28) & ms. to the journal at Rose-Hulman Inst. of Technology, Terre Haute IN 43803.

COMPUTERS AND THE SOCIAL SCIENCES is a new journal designed to supply information regarding the impact of computers on society, & on the relationship between computers & the social sciences. Ronald Anderson (Soc, Minnesota) is Ed.; Rob Kling (Info Sci, Cal-Irvine) & Nick Mullins (Soc, Virginia Tech) are on the board. The first issue has a nice article by Edward Brent, "Relational Data Base Structures & Concept Formation in the Social Sciences." The journal also maintains an electronic mail Bulletin Board System (5 pm to 10 am) via 612-376-1634 to answer calls & transmit messages from the computers & social sciences community. Subs: \$25 from Paradigm Press, P.O. Box 1057, Osprey, FL 33559.

SOCIAL SCIENCE MICROCOMPUTER REVIEW is a quarterly for info. on the research & teaching applications of micros. A recent issue included a sales pitch for SocNet (an electronic mail system for social scientists), a how-to use micros in teaching criminology, & a dBase III intro. Ed.: G. David Garson, Soc. Sci. Res & Instructional Computing Lab, North Carolina St. U, Raleigh NC. Subs: \$24 to Duke U Pr., 6697 College Station, Durham NC 27708.

PROCESSED WORLD, published irregularly, is "The Magazine with a Bad Attitude". PC Magazine says it's an "electric mix of bizarre humor, rebellious fiction, investigative reporting & left-wing ideology." (Note: PC Mag. labels things 'left-wing' quicker than I would. The issue I saw is mostly about workers bitching about their boring, deskilled, loss-of-control jobs using micros, terminals, process controls, et. al.) \$10 for 4 issues from 55 Sutter St, #829, San Francisco CA 94104. (415-626-6048).

SCOPE (Scholarly Communication : Online Publishing & Education) is a bimonthly newsletter designed to keep academics, etc. informed about computing developments in the social sciences and humanities. Every issue includes news of hardware, software, campus activities, databases, publications, conferences, research grants. The one issue we saw ran 8 closely-printed pages. \$52/yr. from Paradigm Press, P.O. Box 1057, Osprey FL 33559.

UNESCO Cuts Hit Social Sciences

UNESCO, hit by US & British withdrawal, will likely reduce substantially the C\$842K which the International Social Science Council has been receiving. (source: SOCIAL SCIENCES IN CANADA, 11/85)

Italy--Italian Ph.D.s Only?

New Italian rules mean that Ph.D.s taken outside of Italy will not be recognized when new university appointments are made. Interestingly, Ph.D. programmes have only been introduced recently in Italy. (source: SOCIAL SCIENCES IN CANADA, 11/85)

Sage Advice

Sage Publications has been one of the most active network/structural analytic publishers. Their London office often sells for sterling what their Beverly Hills office sells for \$\$s. INSNA gets both mailing lists. We've noticed that London charges in sterling about what Beverly Hills charges in US\$. That means that unless the pound takes a nose dive, it's probably better to do all ordering thru Beverly Hills.

Peter D'Abbs--Where Are You?

Does anyone know the whereabouts of Peter D'Abbs? Our last address was Social Sciences, Western Australian Inst. of Tech., but Vol 7, #2-3 of CONNECTIONS got returned 'Left Unknown'. Next time anyone is wandering the outback near Perth could they check this one out.

Peter & Nan Give INSNA a Mitzvah

Here's a great gift idea! Peter Marsden & Nan Lin are devoting all future book royalties from their book, SOCIAL STRUCTURE & NETWORK ANALYSIS. We sure can use it. Next time you've edited a multi-authored book whose royalties are winding down gracefully, think of INSNA. A candle will be lit in your honour.

UPPER CRUST LIVES ON; ITS MAKEUP CHANGES

Being born into a fine old family helps a great deal if you want to be part of the elite, but there are other ways of joining, aside from the vulgarity of inventing a great new widget and trying to buy your way in (which, as you also suspected, only works to a limited degree).

Sometimes an accident of history helps, as Lorne Tepperman (Soc, Toronto) has discovered in his research on elites:

In the 1920's, Toronto's upper class had a much lower birth rate than did the middle and working classes. This meant its own children weren't numerous enough to fill all the elite jobs when they grew to adulthood, and this became a factor in allowing significant numbers of middle class people to move in.

The move coincided with a surge of economic growth after the Second World War and with it, "an increase in the number of command positions in major corporations," Tepperman said in an interview.

"Even if all the children born to the elite of the 1920's had taken elite positions, they would only fill 40 to 50 per cent of the jobs created by 1950."

(This pattern, however, was probably a one-time phenomenon because the birth rate of the middle and working classes has now fallen similarly.)

An elite-dominated sector is defined as one in which most top-level jobs are held by people from old families. The oldest sectors of the Canadian economy, such as banking, are almost entirely dominated like this, he said.

In a period of limited economic growth, such as the one we are currently experiencing, there is less room for those from below. However: "When new sectors of the economy open up, these provide tremendous opportunities for individuals and groups who have been blocked in elite-dominated sectors."

Where might such an opening come next? "If I knew that I'd be sitting in the Vatican and people would bow down to me," Tepperman said laughing. "You're asking me to tell you where new economic growth is going to take place."

But, he adds more seriously, it is conceivable that the next surge may involve the selling of some resource which has not been in demand until now, such as water. "Whatever the new sector is, it will be technologically as well as capital intensive."

"The transition from the nineteenth to the twentieth century is a transition from the history of great men to that of great organizations," Tepperman said. "And since a key role in these organizations is directorship, those who become directors capture the power." Those who are merely wealthy still have an inside track, but the ability to capture power in large organizations becomes more important.

Social responsibility is now exercised in the boardroom, not on the public stage, and people don't see themselves as individually responsible in the way they once did. One factor responsible for this change is the development of bureaucracy in business, which has made managerial expertise increasingly valuable and permitted the organization of thousands of people and "masses of power."

Tepperman and his colleagues have studied much of this pattern of change through studying succeeding boards of the Toronto General Hospital, an elite organization founded as a public charity by Family Compact members in 1818. The membership of the hospital board has remained consistently upper class while accommodating shifts within it, they discovered. In the early twentieth century, new blood from the provincial government and the academic world was brought in, and more recently, Jews and women appeared on the board.

"The appearance of these groups signifies that these populations have to be addressed if you want to mobilize their support. It doesn't mean you are necessarily going to be taking them home to dinner," Tepperman said.

(From Margot Gibb-Clark's story, TORONTO GLOBE & MAIL, 23 Aug 84.)

THATCHERISM AND NETWORKS

"To drag Britain from the old state to the dawn of the new we need our Mrs. Thatcher & we needed strong central power, wielded in traditional hierarchical style, to cut through the jungle of interest groups & cartels & clear the undergrowth in preparation for the spread of the network society. In particular we needed this kind of approach to break up the dominant but fundamentally bogus form of consensus which the old producer groups had so successfully formed & projected in the 'seventies' in Britain. The consensual tendencies of the future, which government leaders will be expected to reflect & articulate will be of a wholly different kind, coming up from individuals & groups rather than imposed from the top of the pyramid..."

"The advanced societies wanting less government will still have to deal with the centralised governments of less mature countries who will be throwing their weight around. So strength in international affairs will require a much lighter touch at home. Come to think of it, that sounds a bit like the style of British Government before Marx and before the rise of the modern industrial state. And perhaps that reflects a certain reality. Maybe the information society, with its computers in millions of homes, is really the old little bourgeois society, with its tight little network of contacts and interests, writ large. The bourgeoisie wanted to be left at home alone to pursue both its individual and communal interests, while government sent gunboats abroad. The labouring classes were meant to underpin this

comfortable state of affairs. Could it simply be that the powerful tools of the micro-electronic age are now about to do for everybody what the workers did for the haute bourgeoisie of the past?"

(excerpted from "Political Dilemma: Is Government Going Out of Date," by David Howell (British Tory MP), NETWORKING JOURNAL 1(1), 1985.

Stien Rokkan Prize in Comparative Research

The prize is intended to crown a seminal contribution in comparative social science research written in English, French & German by a scholar less than 40 years old on 31 Dec 86. It can be a manuscript, printed book, or collected works, in each case published after 1984. Manuscripts must be delivered by 1 Feb 86. Info: Secretary General, International Social Science Council, UNESCO, 1 rue Miollis, 75015 Paris, France.

Granovetter Wins in Theory

For the 2nd year in a row a network analyst has won an American Sociological Association's Theory Prize. This year Mark Granovetter (SUNY-Stony Brook) took top honours for his essay, "Economic Action & Social Structure: A Theory of Embeddedness" (AMERICAN JOURNAL OF SOCIOLOGY, forthcoming). The award announcement read: "Your essay, though consistent with previous work for which you have been justly recognized also contributes substantially to the growing body of work in economic sociology. It is all the more impressive that you accomplished this while also shedding light on what most would agree has again become the central debate in central theory: the problem of embeddedness of social action."

Grants for Social Support with the Bereaved

The US National Institute of Mental Health is seeking applications for research on intervention with bereaved individuals & families through a mutual support approach. Areas of specific research interest are:

The characteristics of different mutual support interventions and their ability to prevent negative health and mental health consequences, reduce psychological distress, and also promote social and emotional functioning.

The characteristics of individuals who seek or make use of mutual support interventions and the relationship of those characteristics to outcomes.

Controlled experiments of the development, implementation, outcome, and evaluation of new mutual support programs with bereaved persons.

The empirical testing with controlled research designs of existing mutual support programs for bereaved persons.

The comparison of members' characteristics, processes, and outcomes of specifically created mutual support programs with existing naturally occurring mutual support programs.

The comparison of mutual support interventions with psychotherapeutic and/or pharmacological interventions.

The differential effect of mutual support interventions designed for various phases and aspects of the bereavement process, e.g., anticipatory grieving, immediate distress, longer term social adaptation.

The refinement of methodologies for preventive intervention research for studying naturally occurring support, such as mutual support groups.

The refinement of existing measurement instruments to assess different aspects of support.

Empirical studies of bereaved individuals or groups for whom there are few research findings, e.g., community samples of bereaved children, non-Caucasian and non-middle class samples, adults who lose a parent or sibling, family units, survivors of suicide.

Research which follows up subjects for at least two years.

Research comparing bereavement with other life stressors.

Research documenting and refining risk factors for poor outcome following bereavement in preparation for designing interventions.

The differential impact of interventions on high- versus low-risk individuals.

Applications should be based on hypotheses generated from basic research on both the grieving process and social support/mutual support, should focus on mutual support interventions with bereaved persons or families, and should also address:

Age, sex, socioeconomic status, ethnicity, and other relevant characteristics of subjects, e.g., relation to deceased, prior health and mental health status, and their relation to the intervention content and outcomes.

The nature of the death, e.g., accident, terminal illness, acute illness, suicide, violence.

The phase of bereavement to which the intervention is addressed.
 An awareness of cultural diversity in reactions to bereavement.
 Intervention content and goals.
 Type of intervenor (professional, lay, religious) and relation to outcome.
 Specification and justification of intervention outcomes and their measurement, e.g., behavioural, psychological, and social.
 Comparison of self-report and objectively measured outcomes.
 Linking of outcomes to be assessed to intervention content and goals.
 Possible iatrogenic effects of intervention.

Potential applicants are encouraged to seek preapplication consultation from: Anita Eichler, Project Officer; Bereavement Research Institute; Center for Prevention Research; Division of Prevention and Special Mental Health Programs, NIMH; Parklawn Bldg--Room 11C-06; 5600 Fishers Lane; Rockville MD 20857 (301-443-4283).

Grants for Methods for Studying Mental Health Service Systems

The US National Institute of Mental Health is encouraging research directed toward the improvement of methods by which to conceptualize, identify, measure, characterize, analyze, and describe features of mental health service systems at local community, State, or national (including comparisons with other nations) levels. The projects should develop generalizable knowledge and be applicable to clinical & administrative practice. Priority will be given to projects which propose methods that are economical to use (it's only the Star Wars loonies who get the big bucks) & apply to a range of research issues & situations.

Areas in which research will be supported are:

The development, testing, and refinement of methods for identifying, assessing, and analyzing the pattern of relationships among mental health service organizations within a mental health service system (community, State, region, or Nation), and between mental health service organizations and other components of the mental health service system (e.g., other types of service providers, those who need and/or seek services, and service regulators).

The development, testing, and refinement of theories, concepts, and research methods for characterizing the structure, boundaries, and functioning of mental health service systems (derived from any of a variety of research disciplines, including, but not exclusively, organizational sociology, economics, applied history, operations research, mental health administration, mental health services research, and clinical fields).

The development, testing, and refinement of methods of assessing power, identifying control points, and characterizing decision-making within the mental health service system.

The development, testing, and refinement of system measures, as they influence the delivery of care, and the reciprocal impacts of such services on the general social, economic, and political environment, and on the mental health service system itself.

The development, testing, and refinement of simulation, modeling, and other operations research procedures to characterize the functioning of various mental health service systems.

The demonstration of ways to adapt existing methods of measuring service system characteristics and customary procedures of recording program and service information to yield measures of use in comparative studies of service systems.

The development of procedures to answer statistical and logical problems of dealing with all the components of a system in aggregate (e.g., the ecological fallacy).

Info from Charles Windle, Chief, Service System Research Program, Division of Biometry & Epidemiology, Parklawn Building --Room 18C-03, NIMH, 5600 Fishers Lane, Rockville MD 20857 (301-443-4233).

NSF, Networks and Mobility

The US National Science Foundation have identified "Networks" and "Markets" as 2 of its 3 priority areas in the social sciences.

Mark Granovetter (SUNY-Stony Brook) & Peter Marsden (North Carolina) have been appointed to the NSF's sociology review panel.

Grant Getting, Sociology, US National Science Foundation, 1984

Structural/network analysts garnered 22/63 (35%) of the grants:

Howard Aldrich (North Carolina), "Collaborative research on the creation & persistence of business interest associations," \$48,798.

H. Russell Bernard (Anthro, Florida), "An experimental approach to the study of social structure," \$53,122.

- Judith Blau (SUNY-Albany) & Peter Blau (Columbia) "Collaborative research on the social roots of art."
- Michael Buroway (Cal-Berkeley) "Factory organization in Eastern Europe."
- Christopher Chase-Dunn (Johns Hopkins) "World division of labour & the development of city systems, 1880-1980," \$31,520.
- Linton Freeman & A. Kimball Romney (Soc Sci, Cal-Irvine), "Systematic patterns of response error in retrospective reports of behavior."
- Joseph Galaskiewicz (Minnesota), "Nonprofit response to shifting resource markets," \$29,547.
- John Heinz (American Bar Foundation), "Washington representatives & national policy making," \$90,000.
- Charles Kadushin (CUNY Grad Ctr), "Micro-computers & social networks."
- James Lincoln (Arizona), "Collaborative research on occupations, organizations & inequality in job rewards: a comparison of the US & Japan," \$23,001.
- J. Miller McPherson (South Carolina), "The dynamics of organizational competition for members," \$41,049.
- Patrick Nolan (South Carolina), "Complexity, structural resistance to change & societal development: an empirical test," \$21,898.
- Orlando Patterson (Harvard), "A comparative quantitative analysis of slave systems," \$68,991.
- James Rule & Paul Attewell (SUNY-Stony Brook), "The new uses of information: impacts in organizations," \$29,201.
- Marybeth Shinn (NYU), "Organization, group & individual strategies for coping with stress among working parents," \$59,852.
- Michael Useem (Boston U), "Collaborative research on higher education, social structure & labor market," \$10,258.
- Immanuel Wallerstein & Terrence Hopkins (SUNY-Binghamton), "The origin and structure of a world economy," \$55,236.
- Ron Burt (Columbia), "Inter-corporate relationships & market constraints," \$66,766.
- Edward Laumann (Chicago), "The social organization of national polity domains," \$74,499.
- Alejandro Portes (Johns Hopkins), "The adaptation process of Cuban & Haitian refugees in the US," \$71,047.
- Charles Tilly (New School of Social Research), "Social change & collective action," \$110,000.
- Erik Olin Wright (Wisconsin), "Comparative study of class structure & class consciousness," \$80,877.
- Glenn Yago & Michael Schwartz (SUNY-Stony Brook), "The causes & consequences of plant closings," \$14,554.
- Robert White (Indiana), dissertation award, working with David Knoke, \$4,028.

KEEPING CONNECTED

I. Theodore Dreiser, AN AMERICAN TRAGEDY

Many have identified the word "dream" as appearing more frequently than any other word in the novel, "over one hundred times" by one calculation...The word "connection," used almost exclusively in its meaning of social contact, appears at least two hundred and seven times...Clyde is from youth obsessed with his lack of "contacts and connections" (30). The word appears in quotation marks early in Book Two to indicate the idiom of Dillard who is envious of Clyde's "class and connections" (196). The most important aspect of its use is that it increases over the novel's course, particularly following Clyde's fixation with his social aspirations in Lycurgus. The word appears one-hundred-and-eighty-six times in Books II and III as compared to twenty-one times in Book I, a considerable difference even allowing for the different page lengths of the three books. "Connection" appears on the average of once every seven pages in Book I, and once every three and a half pages in Books II and III, that is with twice the frequency. The differing rates of the word's usage corresponds significantly to Clyde's growing absorption into the hegemony of the American class structure, a process ruled by an obsession with connections. In my view, the frequency of the word stands as a crucial index to the novel's "political unconscious."

From Susan Mizruchi's Ph.D. thesis (Princeton), "The Power of Historical Knowledge: Reconstructing the Past in Hawthorne, James & Dreiser".

II. Driving Libraries Crazy

In addition to INSNA's journal, CONNECTIONS has also been the name of a still-active 20th-century American poetry magazine, a Madison, WI underground newspaper, the newsletter of the Cal-Berkeley Ctr for the Continuing Ed. of Women, and organization founded by & for prisoners & their families, and a radical American studies journal. (Source: Cal-Berkeley library files)

Just think, we almost called ourselves TIES AND BONDS.

(continued on page 98)

THE STATE OF THE NETWORK: A REPORT TO MEMBERS-Barry WellmanPEOPLE

We're undergoing some changes in personnel and administrative philosophy. Jack Richardson, who's worked hard (as Associate Editor and Coordinator) in administering INSNA is cutting back heavily in order to be Assistant Prof. at McMaster University. While he's still available for editorial consultation, Sharon Bolt is our principal administrator. Sharon is the administrative secretary at the Centre for Urban and Community Studies here, and a whiz at books, dealing with subscribers, etc. She's already whipped our chaos into shape this past year, and our complaints have dropped way down. Because Sharon is not a scholar helping INSNA as a labour of love, it is only fair that we pay her a modest honourarium. On the other hand, the saving in mental costs to me (R.W.) -- and the gain in efficient service to INSNA members -- makes it worth it.

We've also switched to a paid basis in several other areas. The Sociology Department here cut back its typing support several years ago, and for the past two years we've had to pay typists (anywhere from \$300 to \$500 -- please note, these are depreciated Canadian dollars) principally to do the abstracts and book stuff. We're also paying very modest sums to chase up abstracts and get mailings out. All told, these changes mean that INSNA is paying out about \$2,000 a year (about \$7.50/member) more than it was a few years ago.

So far we can handle it. Our recent dues increase from \$12 to \$15 helps (decided on at the last Sumbelt), we've picked up a few more institutional subscriptions (@ \$25), subs. to SOCIAL NETWORKS are picking up (and we get a nice fee for everyone we handle) and most importantly, we have benefited from the strength of the American dollar (US\$15 = C\$20). Right now, we have a cushion in our bank accounts to help hold dues at current levels.

DIRECTORY

A big project this past summer was moving our directory/ mailing list from a mainframe/APL program to a microcomputer. This had to be done because the Sociology Department's new mainframe doesn't support APL. In any event, the program was very expensive in terms of computer time; while we hadn't been paying for it, the powers that be were unhappy.

Fortunately my research project was buying a microcomputer anyway. While my research had no need of a hard disk (we use a mainframe for SAS), INSNA did for efficient use of the mailing list/directory and for our proposed new abstract service. Hence I took it upon myself to contribute \$2,500 of INSNA funds to an upgraded, hard-disk microcomputer (IBM AT).

I thought long about this because of the substantial commitment of INSNA money, but I consulted informally with a number of you who said "Sure, go ahead!" The \$2,500 just about covers the cost of the hard disk and database program (CORNERSTONE). (For those of you appalled by these prices, please note that these are Canadian dollars, that Canadian prices are much higher than American, that 47th St. Camera does not have a branch here, and we got probably the best price available in Canada.)

After the usual adventures in computerland, we've implemented the directory/ mailing list (Alicia Van Der Meer, an undergraduate working on a federal summer grant did most of the work, and did it well. She's staying on, at INSNA expense, to maintain it.)

The new program also gives us more capacity to do flexible searches -- answering such queries as which organizational analysts live in California. Most likely we'll expand our keyword list for the next directory so that we can develop this service.

ABSTRACT DATABASE

Alicia & I also worked this summer on preparing a database for abstracts, books and theses. Our hope is to move from typing (or even word processing) this stuff for CONNECTIONS to preparing them with a database program. In this way, not only would the entries be published in CONNECTIONS but they would be available on-line for future searches (e.g., studies of gerontology and social support in 1985).

We're proposing to edit each abstract, etc., for keywords as well as entering its text directly. In this way we can do standardized and more rapid retrievals, albeit at the cost of increased editorial time. Our draft list of keywords is appended. PLEASE COMMENT ON THEM BY MARCH 1. Note that increasing the number of keywords will increase editorial coding time (but also give more retrieval capacity). The current list is a tradeoff. Besides content keywords, we also propose codes by discipline (e.g., sociology), source (e.g., journal article), type (e.g., computer application).

We think we need a better database program than CORNERSTONE to implement this. The problem is that CORNERSTONE only takes 255 character fields. While it can have multiple fields (thereby giving us the 4K characters or so we need for an abstract) it insists on starting each of these fields on a new line. This would produce unsightly holes in the text, and CORNERSTONE does not have much word processing/formatting flexibility.

WE NEED INFORMATION ABOUT A BETTER DATABASE PROGRAM THAT WOULD HAVE THE FOLLOWING FEATURES (ranked in order of desirability):

- can handle at least 400 words of text (1,000 would be better) in a single entry.
- has enough word processing capability that we can print from it directly to CONNECTIONS.
- can handle IF statements, so that we can vary formats between books and articles.
- a relatively untrained typist can use it.
- relational, so as to link to other files.
- can be searched within the abstract, as well as by keyword.

Some suggested candidates having some or all of these features are: DBaseIII, NOTEBOOK II.

Does anybody have any hard knowledge about this?

As this database cumulates, we'll use it for specialized searches, bibliographies. I can see INSNA publishing, for example, a bibliography on support or corporate interlocks. (Undoubtedly we'd have to charge at cost+ for this.) Folks at the Sunbelt suggested this -- and being we have to prepare the abstracts for CONNECTIONS anyway -- once we get going we should have this powerful extra capability for little extra cost. Comments?

ADVISORY BOARD

INSNA is now about eight years old and our Advisory Board is now eight years older (as if you hadn't noticed). We haven't done much about changing it except to drop inactive members and add a few people playing heavy editorial roles. True, the Board hasn't been very active in recent years, but I think it's time to come alive, giving advice immediately and thinking about future leadership (I'm going to get tired, someday, or there may be a palace revolution, or who knows). A stagnant board membership means that to some extent we're not as representative of our membership.

We have no formal committees and hence, no formal ways of changing membership. As a first step, I'm asking each member to examine their souls and ask if they truly want to contribute substantially to the operations of INSNA.

As a second step, I'm asking each INSNA member to suggest 2-5 names of potential new board members. As always, we're interested in a diversity of approaches, substantive concerns, disciplines, nationalities.

AUTOBIOGS

I also want feedback from members on a proposed new CONNECTIONS project. Almost all of us have served on tenure or promotion committees (often for each other). I've often been struck, when reviewing someone's life work at how a few common intellectual themes keep coming through. Perhaps this is obvious when looking at someone like me (who hasn't been able to get out of East York) but getting at common themes becomes somewhat harder when dealing with folks like Ed Laumann or Harrison White whose substantive areas keep hopping around.

Hence it seems to me to be a useful thing for CONNECTIONS to publish short intellectual autobiographies (perhaps we can think of a less awesome title) in which we pull together the themes which have preoccupied us during our careers. This would be coupled with bibliographies of key works. We might call it "Apologia pro sua Vita" (although saintliness will not be a prerequisite). Please comment and agree to this. If only 1 or 2 do it, it will be awkward, but if we all do it, it will be wonderful.

MEETINGS

INSNA has two sessions set up at the ISA World Congress for New Delhi, India next August (micro (me) & macro (John Scott)). In addition, Joe Galaskiewicz & I are organizing a "community networks" session for the Community section.

We seem now to have two annual "-Belts": "Sun-" and "Drizzle-". To the consternation of our Deans and envy of our friends, the Sunbelt is chugging along fine - thanks mostly to the hard work of a half dozen people. The Drizzlebelt is a smaller, more tentative affair, but fun for participants. More Belts are in order. Perhaps Spetse in June (the Retsinabelt?).

INSNA has also been represented informally at recent American and Canadian Sociological Association meetings and the (British) Urban Change conference. We're happy to send a batch of forms out to intrepid members setting forth to other meetings.

BACK ISSUES

Only the following back issues of CONNECTIONS are still available. \$4.00 each. Send checks to INSNA.

<u>Vol. #</u>	<u>#</u>	<u>Year</u>	<u>Features</u>
8	1	1985	Sonquist on databases; Barrera on support; Klov Dahl's PROBNET
7	1	1984	Current Directory--members' names, addresses, interests
6	3	1983	Scherer's 'terse' summary of network findings
6	2	1983	Research roundup issue
6	1	1981	Abstract bonanza issue (over 100!)
5	1	1982	Harrison White on 'interfaces'
2	3	1979	Early Membership Directory--a collector's item!
2	1	1979	Peil on Africa; J.C. Mitchell & Lin Freeman; Bernard & Kilworth on 'small worlds'

HOW WE PREPARE CONNECTIONS

At present CONNECTIONS is typed, not word processed, on an IBM Selectric (Prestige Elite, 12 pitch). It is typed on oversized paper, with the body of the text on each page measuring 9" x 12". We reduced each page 25% as we photo-offset it onto standard 8½" x 11" paper. This saves greatly on printing and postage costs. We estimate that each CONNECTIONS page is the equivalent of three standard double-spaced typed pages.

Papers, Research Reports, Computer Stuff: We either solicit them or they come in on their own. All are informally refereed, but we enthusiastically avoid the fuss of a full-fledged refereeing system. We need more of this material, especially papers critiquing the field, proposing interesting ideas, providing new techniques. We would especially like to publish short reports of hot new findings. All authors retain total control over their material for future use. Wellman copyrights each issue purely to provide blanket legal protection against someone else using it without the author's permission.

Thesis Summaries: We publish just about all that are sent in, but not enough are. Please have your students do this routinely upon completion. We will even take good Master's summaries. No proposals please.

Abstracts: This is the most time-consuming part of CONNECTIONS to prepare. We first search the back issues of CURRENT CONTENTS for likely titles. We then photocopy the abstracts at the University of Toronto library, adding on relevant bibliographic material. (Most of this work has recently been done by Alicia VanDerMeer.) At each stage, there is a filtering process. We also find other abstracts through computerized database searches, but such databases tend to be out-of-date and very incomplete. All this material is typed.

We also find other abstracts through attending conferences and by mail from members. (Please send us everything you do.) WE NEED YOUR HELP HERE. When you are sitting bored at a conference, please mark the likely abstracts in your program and mail them to us. Conference papers provide advance info on what's hot, and they are the toughest abstracts to find.

Books: We scan journals, publishers' mailings, etc. to find likely books. If we can get the books, we usually excerpt the preface and list the table of contents. Otherwise, we use the publishers' blurb, removing all the hype. IF YOU WRITE A BOOK, PLEASE HAVE YOUR PUBLISHER SEND A COPY TO CONNECTIONS. IT WILL PROBABLY BE ONE OF YOUR BEST SOURCES OF EXPOSURE.

By the way, the one place we sell sets of mailing labels is to publishers. So far, Academic, Butterworths and Sage have bought them to publicize INSNA members' books. We also make a few bucks too. Suggest it to your publisher for your next book, s.v.p.

Our Biggest Lack: Controversy, and other input from INSNA members. A very meek and mild-mannered bunch. Write soon, and write often!

THE BOTTOM LINE

As of January 1, 1986 we have 278 members, holding steady for the past few years (but down from our 325 peak. After paying for printing and posting this issue, we should have a cash reserve of about C\$4,500 (US\$3,200). Several nice features are already in hand for 1986.

PROPOSED KEYWORDS FOR INSNA ABSTRACTS

*(FIRST DRAFT: Additions, Subtractions, Comments Wanted Please)**Send comments to Keywords, INSNA, Centre for Urban & Community Studies, 455 Spadina Ave., 4th Floor, Toronto, Canada M5S 2G8 (or enclose with renewal)*

<u>SOURCE</u>	<u>DISCIPLINE</u>	<u>UNITS OF ANALYSIS</u>
article in book	anthropology	community
conference paper	archeology	international links (world systems)
edited book	biology	migration
journal article	communications	nations
monograph (unified book)	community-development	regions
textbook	computer	rural
thesis	criminology	suburban
unpublished paper	demography	urban
	economics	
	education	
	epidemiology	
	geography	
	gerontology	
	history	
	information	
	management (business admin.)	
	mathematics	
	medicine	
	philosophy	
	planning	
	political science	
	psychiatry	
	psychology	
	public-health	
	social-work	
	sociology	
	statistics	
	theology	
<u>TYPE OF ARTICLE</u>		<u>TYPE OF RELATIONSHIP</u>
bibliography		coworker
collection (series of papers)		distance (geographical)
computer application		frequency of contact
general review essay		friendship
historical		generations
longitudinal changes		interpersonal attraction
monograph		intimacy
other		marital
qualitative methods		children - kinship
quantitative methods		kinship
critique		parent - adult child
methods		parent - child
teaching		patron - client
theory (ie., structuralism)		reciprocity
		telematics
		telephone
		strength of ties
		worker - boss

AUTHORITY RELATIONSHIPS

authority flows
 communication within organization
 decision making (problem solving)
 dependency
 dominance
 power
 social control

LARGE-SCALE CHANGE

development (economic, social)
 population (trends)
 social movements
 technology, innovations

NETWORK STRUCTURE

blockmodeling (blocks)
 centrality
 clustering
 cohesion (integration)
 composition
 density
 graph analysis
 groups
 macrostructure
 microstructure
 size

PERSONAL ATTRIBUTES

animals
 ethnicity (ie., Italian, Jewish)
 gender (male/female)
 life cycle (infant, preschool child,
 child, adolescent, young adult,
 adult, middle aged, aged)
 life style (ie., homosexual, housewife)
 major life change: widowhood, divorce,
 illness, death, etc.
 race (ie., black, white)
 social class

ORGANIZATIONS AND INSTITUTIONS

agriculture
 corporations
 crime
 education
 government
 hierarchies
 housing
 interorganizational links
 mobility (occupational, social, movement
 within organization/class, etc.)
 multinational corporations
 occupation
 politics (and political parties)
 recruitment
 religion
 science
 sports
 stratification
 strikes
 transportation

SUPPORT AND WELLBEING

attitudes (prejudice, reference groups,
 social comparison)
 emotional support (includes empathy, etc.)
 exchange (gift giving, etc.)
 formal health care (doctors, hospitals, etc.)
 informal financial aid
 informal information aid
 informal services
 mental health
 physical health
 social service agencies (ie., welfare)
 stress (distress, strain)
 support
 wellbeing (global)

MEETING CALENDAR

SUNBELT SOCIAL NETWORK CONFERENCE, 13-16 Feb 86, Santa Barbara

The major forum for network analysts, sponsored by INSNA & the Cal-Santa Barbara's Math & Soc departments. Reg. \$35 for INSNA members (students \$15). At beautiful Miramar Hotel: 500' of private swimming beach, tennis courts, spa, et al. Free time every aft. for informal discussion & sun. Hotel reg. (by 23 Jan 86 for special conference rates) direct to hotel: Box M, Santa Barbara CA 93102 (tel. 805-969-2203). Conference reg. c/o Sociology Dept., U of California, Santa Barbara CA 93106.

Program chair: Eugene Johnston (Math, Cal-Santa Barbara; 805-961-2060; 961-2171). Local arrangements: John Sonquist (Soc, Cal-Santa Barbara; 961-3118, 961-3314).

Keynote address, Thurs. afternoon, by J. Clyde Mitchell (Oxford): "Networks and Ethnicity."

Tentative sessions planned:

- "Micro-Evolutionary Processes for Structural Change," John Boyd (UC Irvine, 714-833-5427) and G. Pollock.
- "Computers and Software for Social Network Analysis," John Sonquist (UC Santa Barbara, 805-961-3118, -3314).
- "Social Support Networks," Barry Wellman (U of Toronto, 416-978-5263).
- "World Network Systems," Doug White (UC Irvine, 714-452-8229).
- "Participant Perceptions of Network Structure," Sue Freeman (UC Irvine, 714-856-6698), and David Krackhardt (Cornell, 607-256-4627).
- "Triangulation--Several Methodologies on One Data Set," David Krackhardt (Cornell, 607-256-4627).
- "Primate Networks," Alexandra Maryanski-Turner (UC Irvine, 714-856-5898).
- "Networks in History," Andrejs Plakans (U of Pittsburgh, 412-624-5538).
- "Embedding Control in Networks," Harrison White (Harvard, 617-495-3821).
- "Organizational Networks," Noah Friedkin (UC Santa Barbara, 805-961-2840).
- "Tutorial on UCINET--Varieties of Analysis of Network Data for the IBM PC," Kim Romney (UC Irvine, 714-833-6797) and LIN Freeman (UC Irvine).
- "Centrality," Philip Bonacich (UCLA, 213-825-3017).
- "Measurement," Eugene Johnston (UC Santa Barbara, 805-961-2629).
- "Inequality in Networks," Peter Marsden (U of N Carolina, 919-962-7200).
- "Contributed Papers," Eugene Johnston (UC Santa Barbara, 805-961-2629).

CANADIAN SOCIOLOGY & ANTHROPOLOGY ASSOCIATION, Winnipeg, May 1986

SELECTED SESSIONS, Organizers and Descriptions:

SOCIAL PSYCHOLOGY, David Gartrell (Soc, Victoria). Features papers representing advances in research specialties within psych. as well as efforts to take stock of the current state of these specialties or of the broader empirical and theoretical scene in the field.

WOMEN & CLASS REPRODUCTION, Nancy Mandell (Soc, York, Toronto). The variety of ways in which women reproduce social class. This includes the role of women as caregivers maintaining new members, supporting those who do paid work & caring for aging parents; as emotional labourers facilitating & managing the flow of communication; as educators helping their children assume their own class position; as providers of communication between the home & school, the elderly & children's activities. By focusing on all the ways women maintain class relations, their private work becomes visible.

OCCUPATIONAL CONTROL, ORGANIZATIONAL CONTROL & THE LABOUR PROCESS: THE STRUCTURING OF WORK IN CANADIAN SOCIETY, Allan Gordon (Soc, Carleton). Explores on theoretical & empirical levels the labour process within an occupation (or profession), firm, or industry in Canada. Involves analysis of the social relations of control at work to determine what types of control (occupational, administrative, worker, etc.) are involved in the planning, coordination & execution of work.

HISTORICAL SOCIOLOGY & THE WORLD-ECONOMY, Joe Galbo (684 College St, Toronto, M6G 1C1). A comparative historical approach to analyzing large scale social change, e.g., household economy, proto-industrialization, labour-force formation, the rise of a capitalist world-economy, 3d world development, world-systems analysis.

THE STATE OF THE ART IN CANADIAN SOCIOLOGY. An invited session in which 6 contributors to a CANADIAN REVIEW OF SOCIOLOGY & ANTHROPOLOGY special issue (1985) on leading-edge work discuss & defend their positions. Includes R.J. Richardson (Soc, McMaster; presenting) & Barry Wellman on "Structural Analysis," Margit Eichler (Soc, OISE) on "Feminist Sociology" and Patricia Marchak (Soc, Brit. Columbia) on "Political Economy".

INTERNATIONAL INSTITUTE OF SOCIOLOGY, Albufeira, Portugal, 16-20 June 86

The IIS (an outfit I never heard of until recently) was established in 1893. It is clearly making revitalization efforts, opening up membership, lowering dues & eliminating initiation fees.

The theme of their 28th International Congress is "Competition & Solidarity in a World of Post-Industrial Nations." Lots of thematic & non-thematic sessions at the seacoast Portuguese resort town of Albufeira. Accommodations in hotels & cottages of various prices. Info from Edward Borgatta, Soc, Mailstop J M 20, U Washington, Seattle WA 98195.

INTERNATIONAL CONFERENCE ON PERSONAL RELATIONSHIPS, Herzlia, Tel Aviv, Israel, 6-11 July 86

The daily themes are: Growth of Relationships; "Normal" & "Abnormal" Relationships across the Life Cycle; Communications in Relationships.

Invited speakers include Michael Argyle, Carl Backman, Sharon Brehm, Jesse Delia, Robert Hinde, Steven Hobfoif, Ted Huston, Harold Kelley, Eleanor Maccoby, Arie Nadler, Irwin Sarason & Sharon Schwartz.

Conf. reg.: US\$140. Room & board (5-star Sharon Hotel): US\$145-165.

Submit papers, reg., & get info from Robin Gilmour (Psych, Fylde College, U of Lancaster, Lancaster LA1 4YF, England).

XI WORLD CONGRESS OF SOCIOLOGY, New Delhi, 18-22 Aug 86

Two sessions are being organized by INSNA. One, being organized by John Scott (Soc, Lancaster) is on Inter-group/Inter-organizational Networks. Paper titles not available yet.

The other session, Interpersonal Networks, organized by Barry Wellman (Soc, Toronto), has the following papers:

"Industrialization and Community in an Indian Context," (Leslie Howard, Whittier).

"The Network Basis of Social Support," (Barry Wellman and Paula Goldman, Toronto).

"Social Support and Adaptation to Work Stress in Interns and Residents," (Victor Marshall, Toronto).

"Friends and Associates: A Blockmodel Analysis of Informal and Formal Status Structures of Community Elites," (Albert Hunter, Northwestern).

"Inter-racial Relations in Adolescence: A Network Analysis of Friendship and Interaction Patterns During School Years," (Wesley Shrum, Louisiana State).

"The Strength of Ties and Social Distance in Intraorganizational Networks," (William Stevenson & Donald Wilson, Grad Schl of Management, Cal-Irvine).

"Measures of Reciprocity in a Social Network: A Study of Some Villages in West Bengal," (A. Ramchandra Rao & Suraj Banyopadhyay, Ind. Stat. Inst.).

While the official deadline for World Congress submissions has long passed, the ISA's usual state of bureaucratic complexity and decentralized disorganization (yes, they can be combined), means that many sessions may well have openings. Here are some likely sessions, organizers (& addresses--all Dept of Sociology, University of ---, unless otherwise stated). For complete info see ISA BULLETIN 39:

"Changes within institutions," Aaron Antonovsky (Soc of Health, Ben Gurion U, Beersheva, Israel).

"Relationships among institutions," Jeylan Mortimer (Minnesota).

"The information & communication revolution & its impact on national & international power structures," Erwin Scheuch (Inst Angew. Sozialforsch, U Köln).

"Strains in economic development," Walter Korpi (Swedish Inst Soc Res, Stockholm U).

"The social consequences of the internalization of the economy," Alberto Nartinelli (Milano).

"Theoretical & methodological issues in the study of the economy & society," Neil Smelser (California-Berkeley).

"International and national financial institutions & socioeconomic policy," Harry Makler (Toronto).

"Transnational corporations & technology transfers," Ziangming Chen (Duke).

"Volunteers & community service," Dan Ferrand-Bechmann (Ctr d'Etudes des Solidarites Sociales, 9 Chemin de la Tour des Chiens, 38700 Corenc, France).

"Changes in the international economic order: patterns of migration & the internationalization of ethnic issues," A.R. Saiyed (Soc, Jamia Millia Islamia, New Delhi 110 025, India).

"Changes in family structure," Betty Cogswell (Family Medicine, North Carolina).

"Individualistic v. structuralistic theories of social change," Ortwin Renn (Programgruppe Technik und Gesellschaft der Kernforschungsanlage, Postfach 1913, 5170 Julich, West Germany).

"Gender & development in the context of the world economy," Randall Stokes (Massachusetts-Amherst).

"Dependence, development & social transformation," Y Michal Bodemann (Toronto).

"Sociology of aging: theoretical issues & social policy," Victor Marshall (Behavioural Sci, Toronto).

"Family, kin & intergenerational supports," Kari Waerness (Bergen, Norway).

"Structuralism in verbal & visual texts," Sheldon Klein (Comp Sci, Wisconsin).

"Methodological issues in sociological research," David Jackson (NIMH, Rockville MD 20857).

"Advances in survey methodology," Robert Groves (ISR, Michigan).

"Complex models for social science data analysis," Gerhard Arminger (Econ, Bergisch Univ, Wuppertal).

"Issues in qualitative data interpretation," Uta Gerhardt (Abt. Medizinische Soziologie, J. Leibig U, 6300 Giessen, West Germany).

"Methodological issues in typological analysis," Kenneth Manton (Ctr Demographic Studies, Duke).

"Empirical social science research techniques & marxism," Pauline Vaillancourt (Pol Sci, UQAM, Montreal H3C 3P8).

"The change in interpersonal relations," Galina Andreyeva (Prospekt Kutuzov 1/7, F. 107, Moscow).

"Sociopsychological changes in personality," A. Singh (Psych, Ranchi 834001, India).

"Rational choice theory: limitations & alternatives," Werner Raub (Soziologie, Erlangen Nurnberg, 8500 Nurnberg, West Germany).

"Food production, consumption & utilization in the 3rd World," Ivan Sergio De Sousa (EMBRADA, E. Venancio 2000, POB 04.0315 70333 Brasilia).

"Food production, consumption & utilization in industrial societies," Howard Newby (Essex).

"Agricultural labour markets," Alessandro Bonnano (Missouri).

"Agricultural markets & technical change," Lawrence Busch (Kentucky).

"Current advances in micro-sociology: theoretical issues & empirical research," Theodore Mills (Ctr Study of Human Groups, SUNY-Buffalo).

"Micro-macro dynamics: conceptual frameworks & empirical research," Jacek Szmata (Jagiellonian U, Grodzka 52, 31-0044 Krakow, Poland).

"Research design as a process: flexibility & rigidity," Gary Albrecht (Pub Health, Illinois, Box 6998, Chicago IL 60680). Assessing the relative risks & advantages of being flexible or rigid in designing & conducting research.

"Community networks," Joseph Galaskiewicz (Soc, Minnesota) & Barry Wellman (Soc, Toronto).

"Sociology & rehabilitation," Gary Albrecht (Pub Health, U Illinois).

11th INTERNATIONAL CONGRESS ON CYBERNETICS, Namur, Belgium, 25-29 Aug 86

The Congress will take place in the Institut d'Informatique, Facultes Universitaires Notre-Dame de la Paix, 21 rue Grandgagnage, B-5000 Namur, Belgium.

Sessions will be by symposia, with moderators & speakers addressing focused subjects. They include (with moderators):

LES CONCEPTS DE COMPLEXITE ET D'ENTROPIE D'UN SYSTEME (F. Collot, France).
 THEORIES DE L'INFORMATION ET STRATEGIES OBSERVATIONNELLES (R. Vallee, France).
 HOLISTIC, INTEGRATIVE DYNAMICS IN HUMAN BEHAVIOR (C. Fink, USA).
 INFORMATION, STRESS & ACCIDENTS (D. Fink, W. Germany).

Reg: BFr 3,000 to 5,000 (US\$75-125) & info: Association Internationale Cybernetique, Palais des Expositions, Place Andre Rijckmans, B-5000 Namur.

AMERICAN SOCIOLOGICAL ASSOCIATION, New York City, 30 Aug-3 Sept 86

Selected Sessions (Organizers, Addresses)--contact immediately:

SOCIAL NETWORKS (Karen Cook, U of Washington).
 SOCIAL STRATIFICATION (Erik Olin Wright, Wisconsin).
 BIOSOCIOLOGY (Ivan Chase, SUNY-Stony Brook).
 COMMUNITY (Diane Barthel, 3 Malting Yard, Wivenhoe, Colchester, Essex, England).
 DEVELOPMENT, DEPENDENCY & THE WORLD SYSTEM (Susan Eckstein, 15 Davis Ave, W. Newton MA 02165).
 HUMAN ECOLOGY (Ivan Szelenyi, Wisconsin).
 ECONOMY & SOCIETY (Ivar Berg, Pennsylvania).
 SOCIOLOGY OF EDUCATION (Charles Bidwell, Chicago).
 SOCIOLOGY OF EMOTIONS (Francesca Cancian, Social Sciences, Cal-Irvine).
 FAMILY & KINSHIP (Reginald Clark, 1050 North College, Claremont CA 91711).
 HISTORY & SOCIOLOGY (Viviana Zelizer, Barnard College, Columbia U).
 HISTORY OF SOCIOLOGY & SOCIAL THOUGHT (Charles Camic, Wisconsin).
 INDUSTRIAL SOCIOLOGY (Delbert Miller, Indiana).
 MICROSOCIOLOGY OF INTERACTION (Barry Schwartz, Georgia).
 SOCIOLOGY OF LABOR MARKETS (James Baron, Business School, Stanford).
 MEDICAL SOCIOLOGY (Mary Gross, Public Health, Cornell Med. C., 1300 York Ave, NYC 10021).
 METHODOLOGY (Ross Matsueda, Wisconsin).

ORGANIZATIONS (Michael Hannan, Cornell).
 POLITICAL SOCIOLOGY (Carlos Waisman, Cal-San Diego).
 POPULATION & DEMOGRAPHY (Charles Hirschman, Cornell).
 PROFESSIONS & OCCUPATIONS (Andrew Abbott, Rutgers).
 RURAL SOCIOLOGY (Stephen Bunker, Johns Hopkins).
 SOCIOLOGY OF SCIENCE & SCIENTIFIC KNOWLEDGE (Stephen Cole, SUNY-Stony Brook).
 SEX & GENDER (Margaret Anderson, Delaware).
 SMALL GROUPS (Edward Lawler, Iowa).
 THEORY (Peter Blau, Columbia).
 URBAN SOCIOLOGY (Sharon Zukin, Brooklyn).
 ROUNDTABLE ON COMMUNITY (Barry Wellman, Toronto).
 MARXIST SOCIOLOGY (Walda Kurtz Fishman, Howard).
 SOCIAL EPIDEMIOLOGY OF AIDS (Ronald Kessler, Michigan).
 CLASS STRUCTURES IN THE NEWLY-INDUSTRIALIZED COUNTRIES (Gary Gereffi, Duke).
 GENDER, RACE & LABOR IN THE WORLD ECONOMY (Kathryn Ward, Southern Illinois).
 SOCIAL MOVEMENTS & THE LIFE COURSE (Beth Hess, 2 Hampshire Dr., Mendham NJ 07945).
 SOCIAL CHANGE & THE LIFE COURSE (Glen Elder, North Carolina).

OIS-86: ACM CONFERENCE ON OFFICE AUTOMATION SYSTEMS, Providence, 6-8 Oct 86

An interdisciplinary conference with topics including Knowledge bases, Needs & organizational factors, Human interfaces, Impact of computer manufacturing. Submissions explicitly requested from the social sciences. Papers to Stanley Zdonik, Computer Science Dept., Brown U, Box 1910, Providence RI 02912. Other inquiries to Rita Desormeau, tel: 401-863-3302.

ASSOCIATION FOR HISTORY AND COMPUTING, Westfield College, London, 21-23 March 86

Inaugural conference of a new society which aims to act as a forum and a means of communication for historians at all levels of expertise. The society plans meetings, seminars, courses and a journal (HISTORY AND COMPUTING).

The conference itself will have four themes:

Computing facilities for the historian: equipment, software, advisory services.

Projects: current and completed.

Methods and techniques: source materials, data preparation, acquiring and developing skills, statistics, record linkage, family reconstitutions, other qualitative and quantitative techniques.

The teaching of computing for historians; computer aide instruction.

Info from Peter Dooley, History, Westfield College, U of London, Kidderpore Ave, London NW3 7ST.

(continued from page 88)

III. Stephen Johnson

"Most empirical data is probably not well modeled by clusters. Such clusters as are truly present will be found by almost any clustering method. Thus in the absence of significance of tests, cheap methods seem preferable to expensive ones." (in CURRENT CONTENTS, 24 June 85, p. 16)

IV. Bill Domhoff on Elites

I came to the conclusion in the mid-70s that all power structure research should be conceived for research purposes in terms of networks. The upper social class is clearly a network of families & social institutions; the corporate community is a network of institutions linked by common directors & money flows; the connections between policy planning groups & government involve flows of people & information; and so forth." (letter to Wellman, 11 June 85)

A Possible Job Opportunity for Those Suffering From Academic Burnout

"(Canadian Prime Minister) Brian (Mulroney) is a network guy, on the phone all the time to pals, acquaintances, even strangers, taking stock, reaching out, wheeling & dealing, trying to feel his way to solutions. He'll move all right, but only after seeing what the boys think along the networks..." Jeffrey Simpson in the (Toronto) GLOBE & MAIL, 15 June 85.

(continued on page 149)

LEVINE'S ATLAS OF CORPORATE INTERLOCKS

In 1972, Joel Levine pretty much started the corporate interlock trade with his ASR paper, "The Sphere of Influence". In 1984, he has published his comprehensive Atlas. It is in two volumes, with many multicolored maps. It is truly an atlas, using maps and data to describe networks, not geography. Patterns of corporate interlocks are reduced to maps by means of two unique algorithms (centroid scaling; frequency reconstruction scaling) that provide an overview of the relative positions of key corporations, groups of corporations, and directors.

The network includes 400 of the largest publicly held corporations of the world and their 8,000 directors. Who are the members of the Chicago group of corporations? Map and data show the group. What is the pattern of the Texas group? The map suggests that there is no Texas group; paths from Houston to Dallas are likely to pass through New York. What is the path from New York to Paris? Maps and data show the two groups and indicate intermediaries.

This 1st edition is based on primary and secondary sources available in January, 1980. Volume 1 discusses the techniques and the data, and presents extensive maps of world interlocks and various sectors. It contains a lengthy table listing all of the corporations in the network and their boards of directors. Volume 2 is one table, listing each of the 8,000 directors, the corporations on whose boards they sit, and the other members of these boards. Thus these data (on 400 pages of tables) are organized for quick reference to corporation-to-corporation interlocks and to the indirect contacts by which directors may reach boards of other corporations.

Published by WORLDNET, Box A-201, Hanover, NH 03755. 2 volumes. 501pp + many plates. \$495.00

The following excerpts from Levine's Atlas are used by permission and are copyright (c) 1985 by Joel Levine (Soc, Dartmouth).

For this atlas two distinct techniques of social cartography have been applied to the data of corporate interlocks. One, centroid scaling (CS), is particularly adept at separating a large network into distinct sub-structures. On CS maps of the corporate network these sub-structures of persons and corporations stand apart from the larger structures to which they are connected. Applied to the international network, CS cartography displays the division of the overall structure into separate corporate centers. Among the separate centers the map shows a remarkably regular triangular pattern which represents the large-scale shape of the international network.

The second mapping technique, frequency reconstructive scaling (FRS) is better suited to the mapping of the centers themselves. It provides additional information about the international network and weighs complex links to produce an approximate, "best fit" map of the interior of the English-speaking / U.S. cluster of corporations.

INTRODUCTION TO CENTROID SCALING

A social map reduces the likes of AT&T and other major corporations of the world to the status of mere points on a map connected by lines to other points on the map of the corporate network. As a sociologist my problem is to understand this network in the crude, almost a-theoretical, sense of being able to represent it, to describe its form, and to distinguish important links from those that are not. Is the organization centralized around an elite or is it decentralized and in some sense egalitarian? Are there some positions that dominate the whole and, if so, then which individuals, which corporations, what industries, and what kinds of interests command the key positions?

The plan is to map the network of corporate interlocks, showing its structure, such as the simple map diagrams of Figures 1 through 3 show the communication pattern of a small group of individuals. Then, inspecting the maps, we should be able to see the pattern of the network. The first step, and the problem in this introduction, is: How do I draw the map? If "the corporate network" were a network of half a dozen individuals and directors, the answer would be simple: Just place the points on a page, draw the lines of connection, and then move everything until the map looks good. Unfortunately, the corporate network described here involves hundreds of corporations and individuals and it would include thousands, were we to exceed the limits of the atlas. The data set for corporate interlocks is large, the pattern is complicated, and, if at all interesting, the results (and, therefore, the methods) will be subject to too much dispute to allow us to simply place a few points on the page and connect the dots.

To illustrate the problem, I will begin my maps by drawing Canadian Imperial Bank as a point and by extending lines from Canadian Imperial to four individuals and, beyond these individuals, to four corporations that were interlocked with Canadian Imperial. This creates the map of the network of five corporations and four directors shown in Figure 4. As drawn, the map shows Canadian Imperial at the center of a "star" shaped network including Canadian Pacific Railroad, Massey-Ferguson (a Canadian corporation), American Airlines (a U.S. corporation) and Royal Dutch/Shell (a British-Dutch corporation).

As drawn, the general shape, the centrality of Canadian Imperial, and the non-centrality of the others, are obvious and well-represented. The map organizes these data and enables one to "see" a fair representation of the structure of this nine point network.

Unfortunately, these nine points barely begin to represent the true complexity of the phenomenon. Even staying with Canadian Imperial but going beyond these nine points, Canadian Imperial was also linked to INCO, Midland Banks, W.R.Grace, Caterpillar Tractor, and U.S. Steel. Some of these corporations were linked to Canadian Imperial by one director, but others were linked by two, and some of these directors link Canadian Imperial to more than one other corporation. Moreover, the nine corporations also had direct links among themselves. Figure 5 shows the extension of the sociogram to ten corporations and thirteen individuals. In reality, the network around Canadian Imperial may be quite complex. With this small subset of the full data of the atlas, it is not at all obvious whether this network has some simply-described structure, much less whether Canadian Imperial would be "central" had I not arbitrarily placed it in the middle of the page.

These twenty-three points (thirteen directors and ten corporations) create a potentially unmanageable thicket of information. If I were to fill the atlas with maps of this type, extended to hundreds of corporations and directors, I might succeed in making a spectacular picture, but probably fail to make one that was useful.

Beyond problems created by the complexity of corporate networks, any analysis of corporate interlocks poses a serious problem of objectivity. A hand-drawn map will inevitably show some conformity to the prejudices of the

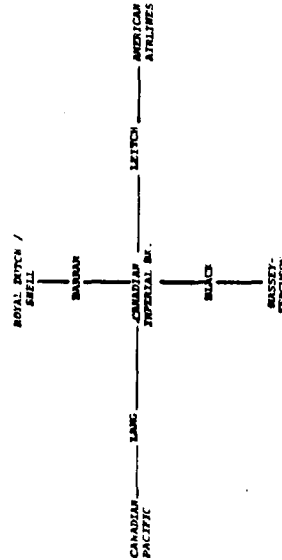


Figure 4
Canadian Imperial Network: Nine Point "Star" Network

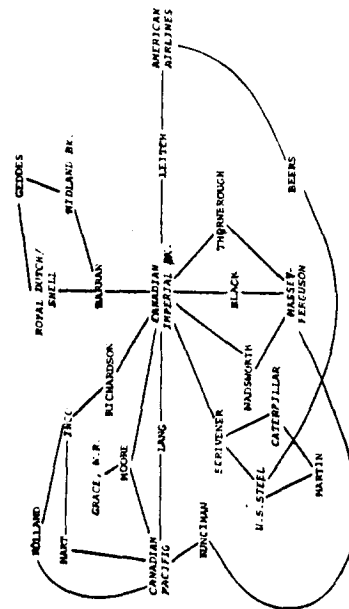


Figure 5
Canadian Imperial Network: Twenty-Three Point Extension

analyst, giving undue weight to facts that fit, and neglecting data that do not conform. Too much is "known" about the subjects of this network; there have been too many arguments. Elite theorists and pluralists, market theorists and Marxists are in hot dispute over the nature of this complex structure. There is too much temptation to bypass inference and proceed instead to the mere illustration of "analyses" achieved by some other method: Canadian Imperial is in the center of Figures 4 and 5 for no other reason than that that is where I chose to start my drawing. X is important, let us draw the map that shows its connections. X is powerful, let us document its dominion. It is essential to analyze corporate interlocks by methods that minimize the effect of prejudgment, so that the maps reflect the data, not the mind of the analyst.

The first of two methods that I will apply to these data is a relatively new technique known, technically, as "Pick / Any Centroid Scaling". Centroid scaling is straight-forward: It attempts to draw a social map in which each separate person and corporation is located at the center of the elements to which it is linked. It is a large scale equivalent of the small group sociogram.[2]

To demonstrate the procedure let me suppose, for example, that the ten corporations and fifteen directors associated with Canadian Imperial are simply twenty-five points, drawn as they were in Figure 5, but superimposed over a set of coordinate axes so that each point becomes associated with a pair of numbers, Figure 6.

Using these coordinates, Canadian Imperial is at (0,0), American Airlines at (2,0), Royal Dutch/Shell at (0,2), and so forth for these 22 points. To bring this arbitrary map one step closer to a centroid solution we simply move each point to the "centroid" (the average location) of those points to which it is linked. Thus, Geddes, who is connected to Royal Dutch/Shell at (0,2) and Midland Bk. at (.75, 1.5), is better-mapped with horizontal location .375 (the mean of the 0 for Royal Dutch/Shell and the .75 for Midland Bk.) and vertical location 1.75 (the mean of the 2 for Royal Dutch/Shell and the 1.5 for Midland Bk.), that is, at the centroid (.375, 1.75). Barran, who is linked to Royal Dutch/Shell at (0,2) and to Midland Bank at (.75, 1.5) and to Canadian Imperial at (0,0) is better-mapped at the centroid (.25, 1.17).

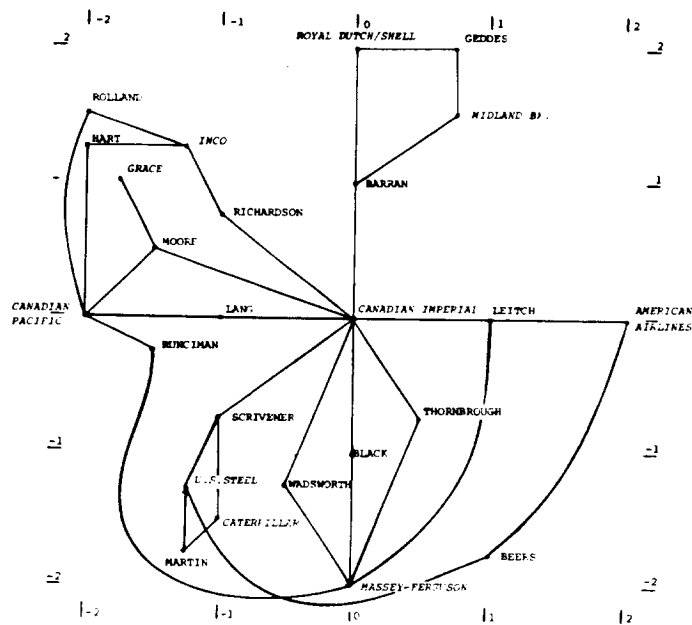


Figure 6
Canadian Imperial Network: Twenty-Three Point Extension Superimposed Over Coordinate Axes

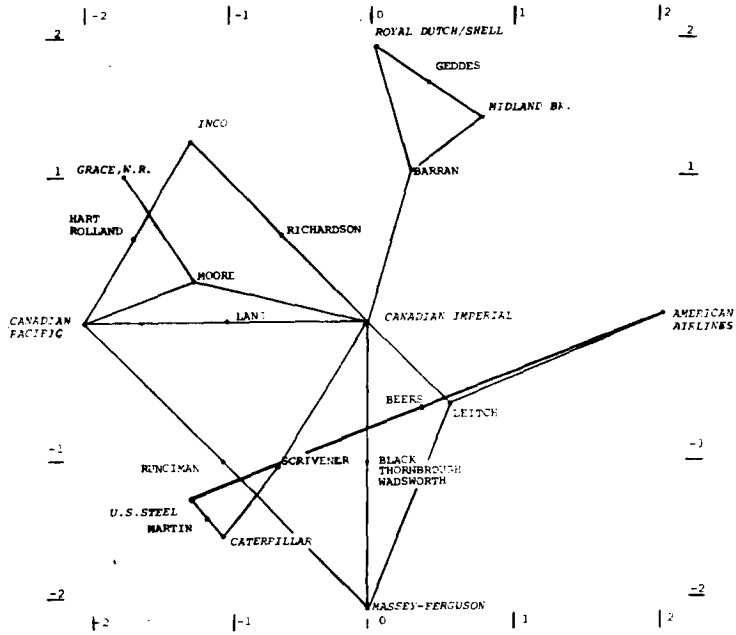


Figure 7
Canadian Imperial Network: Mean-Shifted Directors

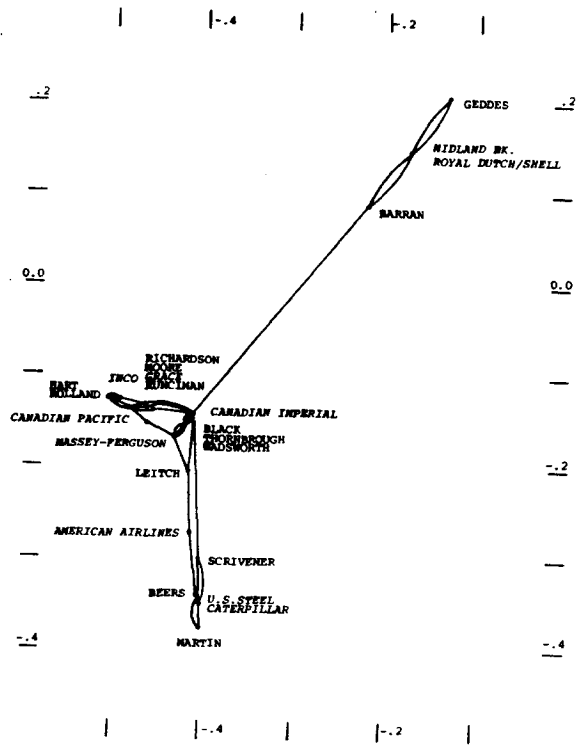


Figure 8
Canadian Imperial Network: Mean-Shifted 10 Iterations

Mean-shifting the ten points for the corporations results in the somewhat changed map in Figure 7. The corporations are now centered with respect to their directors but the directors are not yet centered with respect to the corporations. Mean-shifting the fifteen points for the directors corrects this problem. But now, unfortunately, the problem is reversed. American Airlines is properly centered with respect to the previous locations of John Leitch and William Beers, but they themselves have been moved to their own centered positions.

Computing means once again produces a third set of locations, now twice-removed from the original drawing. Repeating this process, again and again, gets closer to a solution. Continuing for ten steps, ten steps removed from the original, leads to the map of Figure 8. The most obvious feature of the map is that it is clearly segmented into three pieces, separating Barran, Royal Dutch/Shell, Midland Bank, and Geddes as a group from a U.S. group (at the bottom) and a mostly Canadian group (to the left and center). Royal Dutch/Shell and Midland Bank have assumed identical locations, as they should: They are equivalent in so far as these data are concerned. Similarly, Wadsworth, Black and Thornborough occupy identical locations as they too are structurally equivalent with respect to these data.

Numerically, the figure as a whole is collapsing (note that the scale of the coordinates has been expanded in the drawing). As each separate point has been moved to the location of the mean of its associated points, the whole set of twenty-five points has collapsed into the middle of the graph and the horizontal and vertical dimensions have become similar. This "collapse" is remedied by rotating the graph (so that the longest dimension of the figure lines-up with the horizontal axis) as in Figure 9, and then multiplying each coordinate by a number that expands the scale.

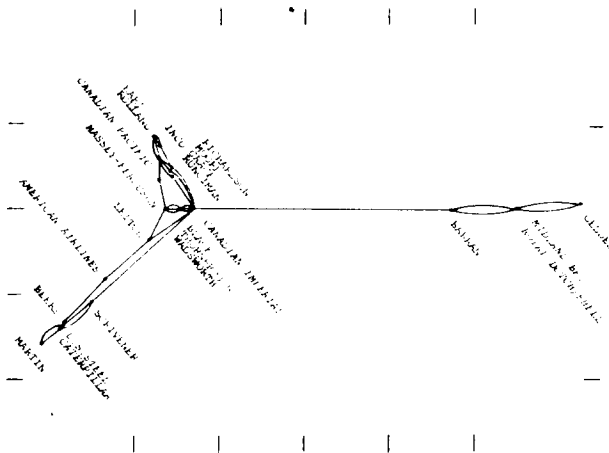


Figure 9
Canadian Imperial Network - Rotated Prior to Vertical Expansion

Still this is not the solution, although the configuration is relatively clear. It can be proven that by simply repeating this procedure, one map after another, again and again, the maps converge to a "stable" map.[3] It is stable in the sense that if it is subjected to any more averaging (any more movement of the corporations and directors), nothing happens: The map gets "smaller" (the outer points, and therefore all other points, keep moving toward the center) but the relative locations stay constant. This is the centroid solution.

The result for these data, many steps later, is the centroid scale map of Figure 10. Repeated many hundreds of times, this is centroid scaling. The procedure is extremely reliable. Although the starting configuration may be biased, the end result is virtually independent of the starting point, depending only on the data. The number of dimensions that is appropriate to a large data base (such as the one to follow) is difficult to determine, but a more serious technical problem (numerical rounding errors within the practical limits of computing costs) has kept my practical limit to nineteen dimensions.

The centroid solution for this example presents the overview in a way that is relatively easy to "see" and think about compared to the original drawing (although the data are, of course, the same): It shows a U. S. branch at the upper left, a Canadian branch below (excepting Grace), and a European branch to the upper right. The map is, moreover, objective: Anyone working with the same data and using the same technique will arrive at the same result.

The structure is both globally simple and locally complex. The centroid map of these data shows a center like the "star" of Figure 1, but it also shows that these data are very unlike any of those simple sociograms because no one corporation is as critical to the whole as is the center of the simple "star". It is a simple centralized branching structure but (with as few as twenty-five points) it is redundant so that neither of the two dense branches is completely dependent upon any one person or corporation. That is, if Canadian Imperial or some of its links were, inadvertently, "missing" from my data, then although one of the three branches would drop-off, the relation between the other two branches would remain intact.

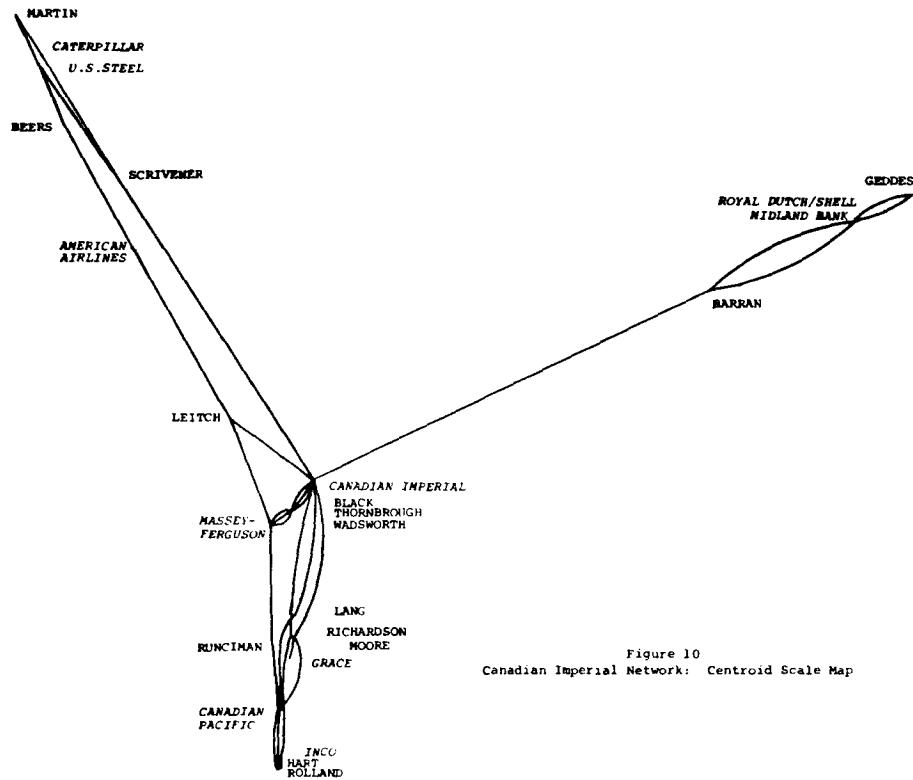


Figure 10
Canadian Imperial Network: Centroid Scale Map

THE INTERNATIONAL NETWORK

Mapped by centroid scaling, the primarily North American and European corporations divide themselves into five distinct groups. Four of these are national groups, including corporations of Germany, France, Switzerland, and Holland. The fifth group, which is by far the largest and most complicated of the five, includes U.S., Canadian, British, and South African corporations, spanning national boundaries and great geographical distance.

The gross pattern of relations among the five groups is quite clear. The international network is neither highly centralized, with New York or London at its center, nor is it without pattern. The pattern of the network is triangular or, more precisely, a high-dimensional generalization of a triangle having five vertices and ten edges, one edge connecting each pair of corporate centers. The implication of this international pattern is that the international system it describes is multi-centered. No group lies directly between two others as in the "star" example and each of the five groups has direct access (along the edges) to each of the other four groups.

INTRODUCTION TO FREQUENCY RECONSTRUCTIVE SCALING

The chief drawback of the CS technique is the mirror image of its advantage. One dimension at a time it makes clear statements, but the result is a very high dimensional map. One dimension distinguishes the English-speaking center from all others. Another distinguishes the French center from the rest. Together they produce the English / French / "other" triangular structure. It takes four dimensions for the CS technique to distinguish the five international centers and, extending the technique to nineteen dimensions barely penetrates the information at the fringes of these major groups. Nineteen dimensions barely begin to discriminate details inside the center of the large English-speaking group. Thus, except in the case of exceptionally clear global patterns (such as the triangles of dimensions 2,4,6, and 11), the CS maps are too detailed and too high-dimensional to provide a comprehensible overview of this organization.

The stronger Frequency Reconstructive Scaling technique (FRS) is better suited to the dense interiors of these structures.[9] Compared to CS cartography, the FRS cartography used in Part II is based on strong assumptions that provide a set of hypotheses about the nature of the data. Where the simpler CS method leads to elaborate results, the more complex FRS method can, when it is correct or approximately correct, yield a better summary map.

The additional assumptions of the FRS cartography include:

1) Proportionality Between Numbers of Interlocks and Organizational Distance.

Where CS scaling specifies only that directors lie between corporations and vice versa, the FRS model attempts to specify the number of directors, 0,1,2,3, or more, linking every pair of corporations. All things being equal, two corporations sharing many directors are "near" and two corporations sharing few directors or none are "far". Specifically, this FRS model hypothesizes a negative exponential relation between distance and the number of interlocks. By this negative exponential relation, if one unit of distance implies 4 interlocks, then two units specifies 2 interlocks, 3 units implies 1 interlock, and four or more units of distance implies there will be no interlocks at all: Adding one unit halves the specified number of interlocks. Thus the FRS assumptions attempt to specify "near" or "far", going beyond the simple centering of CS technique.

As an indirect consequence of this proportionality assumption, FRS cartography can generate two- or three-dimensional approximations to high-dimensional maps. These maps approximate the detailed structure with an overview of the corporate organization

2) Non-Euclidean "City-Block" Distance

For most people, "distance" is an unanalyzed concept: We know what distance is from direct experience with the physical world as well as from the abstractions of grade-school geometry. However, from the mathematical point of view there are infinitely many ways to describe distance. Among these, Euclidean distance is most commonly used because of its applications to the physical world. But for the world of human behavior, questions of the "correct" method for measuring distance must be re-considered.

For the corporate data, I have hypothesized a "city-block metric". Using this concept of distance, the distance between two points is measured as if one had to walk from one corporation to another along a north-south / east-west grid of streets. For example, in the sociometric "star" of Figure 4, the distance between Canadian Pacific and Royal Dutch is four: The sum of two, following the grid "east" from Canadian Pacific to Canadian Imperial, plus two, following the grid "north" to Royal Dutch. This concept of distance is a working hypothesis corresponding to the presence of paths between directors and corporations. In the star of Figure 4 there is no direct path from one point of the star to another: There is no direct path corresponding to the direct Euclidean hypotenuse between Canadian Imperial and Shell, nor is there any obvious behavioral logic to the (Euclidean) assertion that distance is the square root of the sum of the two squared distances. Using the city-block metric, the distance between two points is simply the sum of the coordinate distances, measured as if communication could only proceed horizontally and vertically.

As a consequence of this assumption, FRS mapping with city-block distance is sometimes able to reduce the technical complexity of a map. For example, referring again to the "star" around Canadian Imperial, each of the four peripheral corporations is equidistant from the other three. A Euclidean metric would force a choice between misrepresentation and high dimensionality: The star shown in that Figure arbitrarily places Canadian Pacific further from American Airlines than from Massey Ferguson (Euclidean distance), contrary to fact. Using Euclidean distance the only way to make all four of these corporations equidistant is to build a map in three dimensions. The "city-block metric" represents these distances accurately in two dimensions. Thus, the city-block hypothesis can, where it is appropriate, lead to simpler maps of the corporate network.

3) Corporation-Specific Activity Constants

In ordinary physical communication networks there are many exceptions to the general rule that great distance corresponds to less communication or more difficult communication. In the physical world I, at my home in rural New Hampshire, am close to dozens of small New England towns and far from New York City. Yet in most cases it is easier, faster, and cheaper for me to visit New York City. In the physical world New York has access that transcends physical proximity and the same is likely to be true in the social world of corporate interlocks. Therefore, I have modified the FRS technique with corporation-specific activity constants that modify the relation between the distance and the frequency of interlocks.

Using activity constants, two corporations with one interlock may be either very close or very distant depending on the value of their constants. If two corporations are distant, but linked to each other, then their activity constants are large; if two corporations are close, but unlinked, then their activity constants must be small, and all things being equal, their constants are proportional to the number of links between them. Thus, two corporations with high activity constants may act like two major airports in the physical world: They can be linked across great distance without any implication that they are linked to all the low-activity corporations (minor "airports") that lie between. They can be linked without being close.

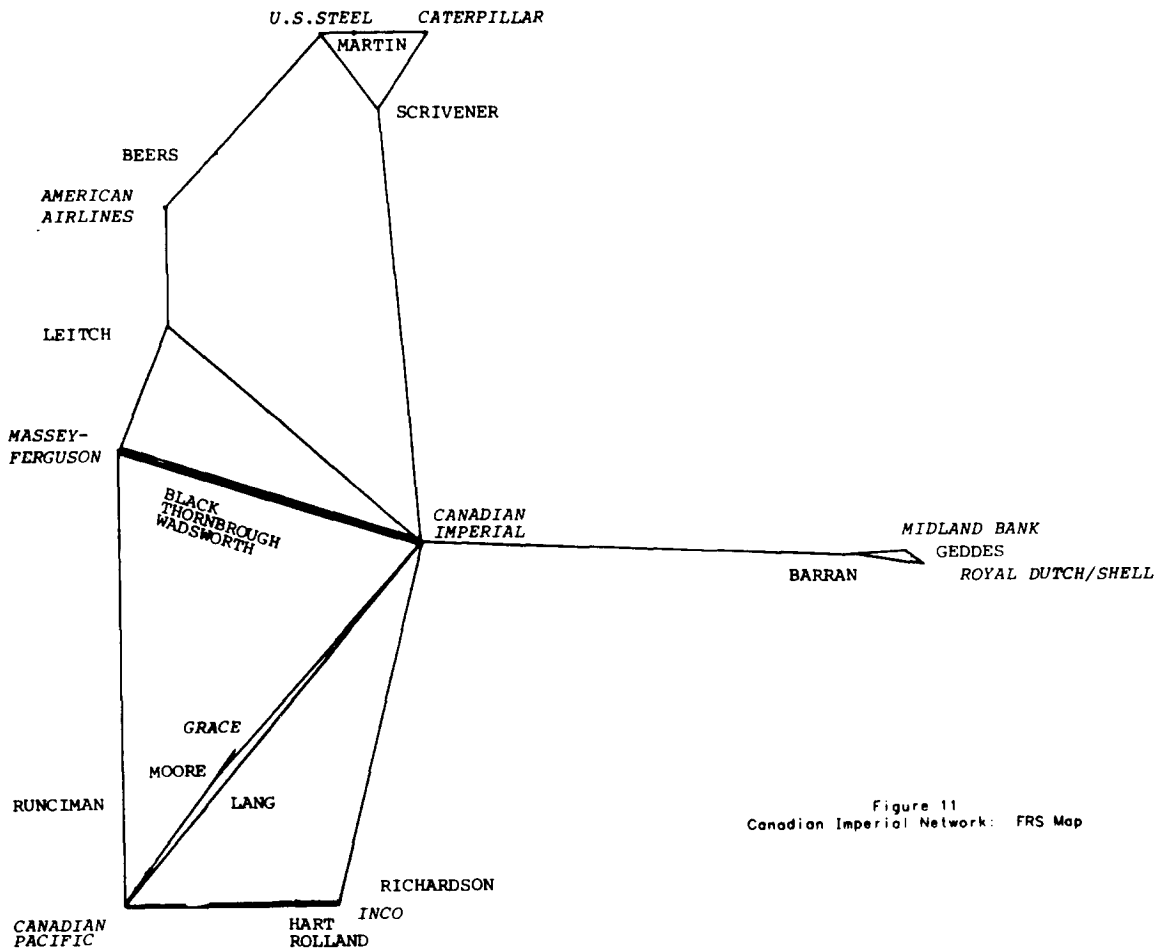


Figure 11
Canadian Imperial Network: FRS Map

The effect of these working assumptions, proportionality, city-block distance, and the existence of activity constants, is clarified by examining Figure 11 which shows the application of the FRS technique to the abbreviated Canadian Imperial network (returning to the Canadian Imperial network analyzed by CS methods in Part I). In the Canadian Imperial example, Canadian Imperial has the highest activity constant and is, therefore, the least important factor in locating a corporation: Because all of the other nine corporations have such links, the links provide little information to distinguish one corporation from another. Thus, de-emphasizing links to the center, the FRS map displays the detail of the Canadian Imperial group as an arc surrounding the center at Canadian Imperial. Where the CS map emphasized three-way segmentation of the network, the FRS map emphasizes pattern within the core of the network.

THE UNITED STATES AND THE ENGLISH SPEAKING WORLD

Overview of the Structure

The international corporate network is elegantly simple: It is multi-centered, leaving a few links to carry the weight of association among the centers. One center, The English-speaking corporations, is by far the largest, including more high-asset public corporations than the rest of the network combined. It includes the large United States, Canadian, British, and South African corporations.

Surely the first visual impression of this network, FRS-2, is that it is packed and complicated, with links running in every direction. Where the international structure looks elegantly simple, the internal structure of this center appears tangled and complex. It is a different kind of phenomenon entirely. This may be the single most important characteristic of the corporate network. Where the essence of the international structure is discontinuity, with large gaps separating distinct international centers, the essence of the English-speaking structure is continuity. There are no gaps marking-out boundaries between segments of the English-speaking structure. This visual evidence is a sharp contrast to organizational patterns that might have occurred but did not: It is not multi-centered on the pattern of the larger international network: New York and San Francisco and Houston are not set apart in discrete domains on the same pattern as New York, Paris, and Bonn. It is not centralized in the simple sense of the "star" of Figure 1. Although it has a central region, it lacks a central point. It has a periphery, but the distinction between center and periphery is one of degree.

If, as is not the case, the pattern of the English/U.S. structure were simple, if, for example, the whole were held together by a few key individuals, then simplistic models of power might well be appropriate. On the contrary, the redundancy means that for any key elite that might connect specific corporations and individuals, there is usually an alternative path that bypasses that elite. From one corporation to another, from one person to another, there are usually many separate paths.

Consider, for example, the paths that connect two moderately distant points, First National Boston, Sector C1, and Citicorp, Sector B2, near the middle of the whole English-speaking center. The two banks have no direct connection, but the two share directors with five other corporations, all of which complete the link. The separate paths include ten person-to-person paths between the two corporations, using fourteen individuals.

The network does have a center and the center is in New York City, but the complex web of relations that characterizes this network appears to give it robust independence of any few individuals and corporations. It is like an ingrown small town: The approximately 200 corporations and 400 individuals are joined, over and over again, in different combinations until the individuals have blended together into a complex community. If, for example, half of the New York corporations and all of their directors were somehow removed from the network, it is likely that the redundant unity of the English-speaking world would remain intact.

THE ENGLISH-SPEAKING / U.S. CENTER: MICHIGAN

Michigan

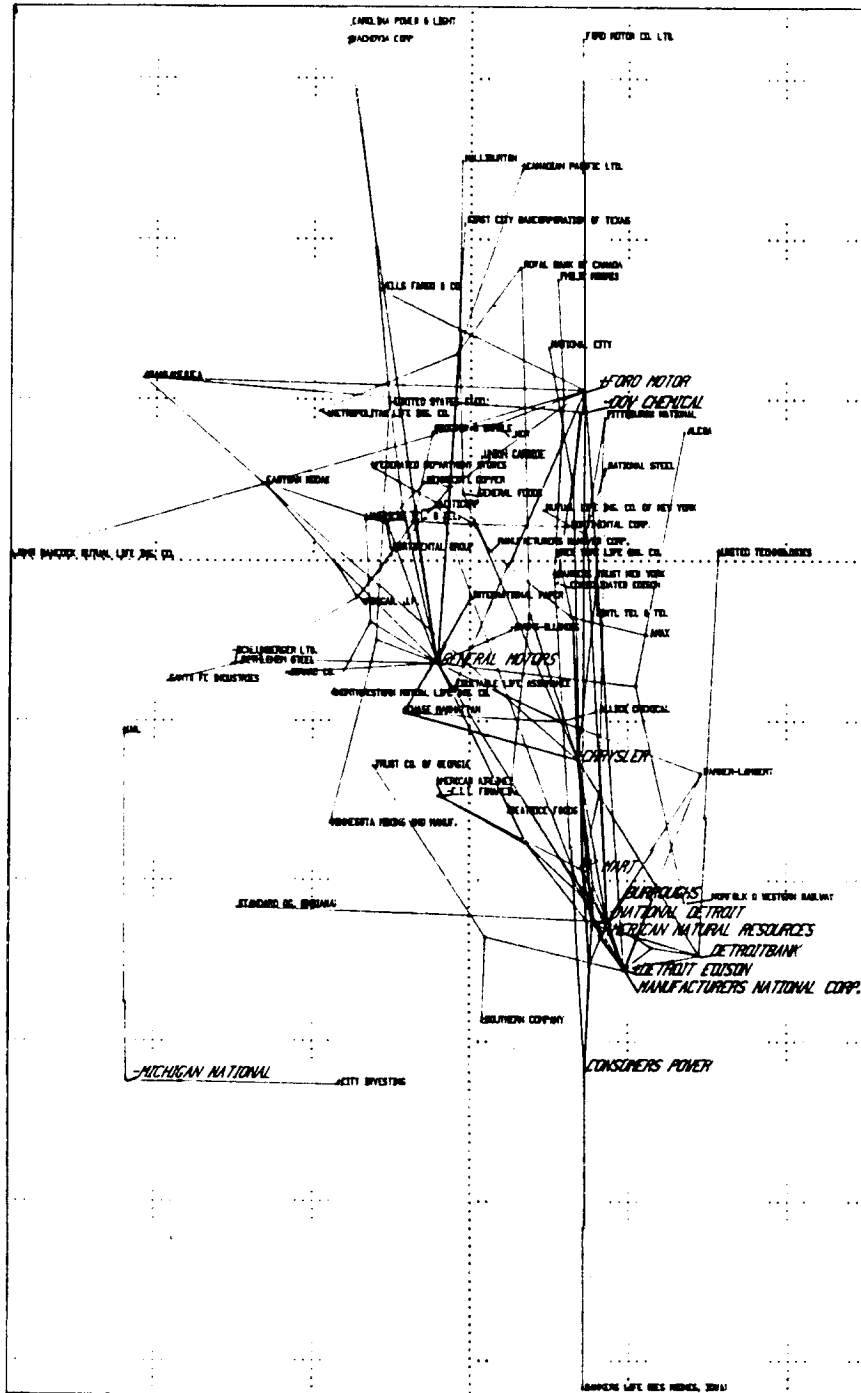
American Natural Resources	(Detroit)
Burroughs	"
Chrysler	(Highland Park)
Consumers Power	(Jackson)
Detroit Edison	(Detroit)
Detroitbank	"
Dow Chemical	(Midland)
Ford	(Dearborn)
General Motors	(Detroit)
K Mart	(Troy)
Manufacturers National Corp	(Detroit)
Michigan National	(Bloomfield Hills)
National Detroit	(Detroit)

It is well known that General Motors, Ford, and Chrysler are geographically centralized in Detroit, yet the map shows that they are organizationally decentralized. Apart from these three automobile corporations, the non-automobile cluster presents a densely self-connected cluster at the lower-right of the map. It is linked to the three automakers, but each of the three automakers stands apart from the other two and apart from the Detroit cluster.

Each one of the auto companies is itself widely linked, in contrast to the regionalism that dominates most corporations. Among the three, Chrysler is closest to the Detroit group. Its twelve linking directors give it twenty-five interlocks, twenty-eight per cent of them linking it to Detroit. Ford, with twelve directors forming seventeen interlocks, has only two Detroit links, while G. M., with eighteen directors forming forty-four interlocks, has four links to two Detroit corporations, spreading its links to all four quadrants of the map.

Ford's juxtaposition with Dow is partly based on common third parties (Bankamerica and K Mart); the two are unlinked. One of the two, Dow, is pulled upward on the map by its link to National City; the other, Ford, is pulled upward by its link to Ford Ltd. of England as well as by links to Philip Morris and Wells Fargo.

The G.M.-Ford edge of the larger G.M.-Ford-Detroit triangle abuts the region of the map occupied by the Cincinnati-Cleveland arc visible in the map of Ohio. The two sets are linked, National City to Dow and K Mart, NCR to Ford, Procter & Gamble to Ford and G.M., and Federated to Chrysler.



J. Clyde Mitchell (Nuffield College, Oxford)

SOCIAL NETWORK ANALYSIS IN GREAT BRITAIN

Introduction

The phenomenal increase of interest in formal methods of social network analysis in the last decade in North America has apparently not been paralleled in Great Britain. Ironically the initial impetus for the use of the notion of the social network in the analysis of sociological as against social psychological data arose in Britain in the 1950's but the formalization of analytical procedures could only come about when the procedures based originally on graph theory could be incorporated in computer programs. In the United States the stimulus for the development of both the mathematical bases for network analyses and the production of computer programs to execute analyses in respect of them, came from the work of the sociometrists. It is however only since the 1970's that computer programs have become generally available for network analysis - a reflection perhaps of the widespread provision of computing facilities in universities after that date. Both the leading journal in the field (SOCIAL NETWORKS) and the house journal of INSNA, the International Network of Social Network Analysts (CONNECTIONS) currently carry notices of new programs available for network analysis.

The extent to which interest in social networks exists in Britain as against in particular in North America is reflected in the membership of the International Network of Social Network Analysts. In the most recent issue containing the directory of members (Spring 1984) the percentage of members coming from North America is 83 whereas that from Great Britain is only 5 percent. Clearly membership to an organization of this kind is only a crude indicator of the interest but the disparity between 83 and 5 is sufficiently great to confirm the subjective impressions that those of us in Britain active in social network analysis have been aware of for some time.

We can only speculate about why there should be this disparity of interest. One possible reason is that information about what can be achieved using network analysis programs is not easily available in Great Britain. At present, for example, there seems to be no single register of network analysis programs available to potential users in Britain. As a contribution to the beginning of such a register I append in an Appendix a listing of some programs for network analysis that Prof Coxon and I are aware of. These are available to users in Britain through the university computer communications network system (JANET).

It was with considerations of this kind that Prof A.P.M. Coxon at Cardiff, and I at Oxford, both of whom have been long interested in network analysis, decided that it would be worthwhile to bring together people who have been working on the formal analysis of networks and some of those whose main interest was substantive in order to exchange information about existing programs and procedures and to discover where needs most urgently lie.

At the outset we were confronted with difficulties since no list of persons interested in network analysis was available to us in Britain. We had in effect to generate such a list from our own contacts. This list, inevitably, was only partially complete. Coxon and I decided that there were likely to be two rather different audiences in a meeting of this kind and that accordingly we should arrange for two sessions with rather different emphases. The first would be essentially a 'work in progress' session necessarily rather technical in character. This session would be concerned with theoretical work which was likely to have some application in the future. We expected that those with methodological interests or applied interests would dominate in this session. A second session would be designed to cater for those interested mainly in substantive issues but who may be interested in learning about ways of analysing social network data. We tried to arrange for examples of analyses using currently available programs to be presented in this session. We applied to the ESRC and were given a small grant to enable us to mount a workshop at which these aims could be effected.

The Social Networks Workshop: Nuffield College. 2 June 1984

A workshop was duly arranged. Between 18 and 26 people attended the sessions.

In the 'work in progress' session in the morning the following papers were delivered:

J. CLYDE MITCHELL (Nuffield, Oxford). "Monte Carlo Runs of some Blocking Measures".

One of the unresolved problems in one of the popular methods of network analysis-- i.e. of block-modelling whereby a set of elements are partitioned into subsets which share patterns of relationships with other elements in the set as against those in other

subsets--is at what stage has an optimal solution in which the minimum number of participants and the maximum differentiation of block densities been achieved? Five hundred random nets, i.e. with a minimum amount of intrinsic blocking were blocked and two different measures of blocking computed for all partitions in all five hundred runs. The object was to establish the trend of blocking measures under random conditions so as to lead to inferences about the point at which blocking measures may be taken to represent the optimum blocking state. Work is proceeding along these lines.

F. CRITCHLEY (Statistics, Warwick). "Some Statistical Aspects of Blockmodels"

Perfect blockmodels are models in which the elements can be partitioned into subsets all of whose members are structurally equivalent, that is, have exactly the same pattern of relationships to and from all other elements. Such models are uniquely defined and easy to compute but are very rare in practice. In contrast imperfect blockmodels, that is situations approximating though not reaching the perfect case, are quite possible in practice but may not be unique and are hard to compute.

This paper addresses the questions: i. how to define an imperfect blockmodel, ii. how to determine it for a given set of data, iii. how to measure the goodness-of-fit of such a model, iv. how to choose an 'optimal' model, for example within a nested sequence of blockmodels as produced, say, by CONCOR.

Several answers to each question are suggested. Exploratory and confirmatory analyses are sharply distinguished. Generally, the imperfect nature of the blockmodel is mirrored in a stochastic model for the data.

M. EVERETT (Math, Thames Poly). "On the Dimension of a Graph".

Almost every study of social networks involves discussion of the parameters, factors or dimensions underlying and embodied in the pattern of relations being examined. Examination of the dimensionality of a network provides information on its structural complexity; e.g., is the pattern complex or simple? Current concepts of dimensionality have limitations in that they cannot be applied directly to graphs and are not generalizations of geometric dimensions. This paper overcomes some of these problems by introducing a new concept of dimensionality based upon strictly geometric considerations.

A.P.M. COXON (Soc., Wales-Cardiff). "Entailment Analysis: Graphical Structures of Beliefs and Attitudes".

Entailment Analysis confronts dichotomous (or dichotomized) data with logical relations as models of their contingency. In particular, material implications, positive contrast ('hand') and equivalence are used to define a network of inter-relations - 'implication' producing a partial ordering through transitive closure and 'contrast' dissociating subgraphs. Developments in Entailment Analysis were summarized and illustrated using occupational belief data generated during the Project on Occupational Cognition.

After lunch the session was devoted to the use of packages and programs in the analysis of empirical data. The following papers were delivered:

F.J.A.M. VAN VEEN (Amsterdam). "GRADAP: A Package for Network Analysis."

GRADAP is a package for network analysis based on graph theoretical notions. It has been in existence in Holland for some time. It is a very useful general purpose network analysis package using an SPSS-like set of command cards. General measures such as centrality and procedures such as clique detection are incorporated in the package. There was considerable interest in having this package available in Britain but unfortunately the program appears to be highly machine-specific (CDC CYBER) so that its implementation in Britain depends upon a) locating a machine with the specific characteristics that match the Dutch machine, b) persuading the personnel attached to this machine to undertake the implementation of the package and c) ensuring that the package is available to users through the university computer network communications system.

C. PAYNE (Computing, Social Studies, Oxford) "Network Analysis using Existing Packages".

Operations on network data may be performed using some ingenuity, by widely available standard statistical packages, which have good relational data management facilities, such as P-Stat or SAS. Examples of such analyses were presented suggesting that if users do not in fact have specific network programs they nevertheless are able to conduct some analyses of their data.

Elinor KELLY (Extra-mural Studies, Manchester) and J. Clyde MITCHELL (Nuffield, Oxford). "Formal Analyses of Data from a Study of Homeless Families in Manchester".

Dr. Kelly described the method of collecting data relating to the social links of a set of homeless families in Manchester in respect of five different aspects of social relationships: frequency of contact, self-defined closeness, extent of convivial links, extent of emotional and given or received, and practical aid given or received. Dr. Mitchell then illustrated the analysis of samples of these families using programs available in Oxford. These included graph theoretical procedures and block-modelling procedures. Computer drawn diagrams were used to illustrate the analyses.

M. EVERETT (Math, Thames Poly). "The Use of Cycle-tracing Algorithms to Determine the Structure of Homeless Families" (as used in previous paper).

By previous arrangement the data analysed by different procedures was reanalysed using a program written by the speaker to determine the structure of the networks using cycle-tracing procedures. This enabled the audience to compare the results obtained by different procedures on the same set of data.

Conclusions

The workshop at Nuffield College was a beginning in an educational process which will need to continue for some time before its original aims can be achieved viz the dissemination of knowledge about and the facilities for network analysis in Britain. There seemed little doubt that those who attended the workshop found it very worthwhile since many had not been exposed to the way in which network analysis may be used in the analysis of empirical data, nor what new work was proceeding in the field.

Unfortunately the programme turned out to be overloaded so that there was insufficient time for questions and discussion. However it was decided that continuing interest in the field might best be ensured by constituting a Social Networks Section to the British Sociological Association so that a register of interested persons could be established and regular meetings arranged. To this end a notice was placed in the B.S.A. newsletter to discover how much general interest there is in the proposal. Dr. John Scott of the Dept of Sociology, University of Leicester has agreed to be convenor of the Section if it is established. A data base of those interested in this development has been established, including information on interests and current research.

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MONTE CARLO RUNS ON TWO BLOCKING MEASURES

*J. Clyde Mitchell (Nuffield College, Oxford)**

One of the problems in using network blocking procedures such as CONCOR is that of deciding at what stage the blocking has reached an optimal level. Optimum blocking implies that the over-all differentiation of block densities is maximized while the number of blocks, or the level of partitioning of the original network, is minimized. Clearly one extreme of blocking is provided when the original set of sociomatrices remains unpartitioned, i.e., the number of partitions is zero and the block density is precisely equal to the original over-all density in the matrix. At the other extreme is the state when the partitioning has proceeded to the point when each block is composed of exactly one cell so that the range of densities between blocks is maximized at 1.0 and 0.0 (zero-one matrices assumed) while the number of partitions is also a maximum.

If the data are reasonably well structured i.e., that partitions occur such that some blocks are much denser than the over-all and others much sparser - then at some level of partitioning of the set of matrices an optimal blocking may possibly be designed which is parsimonious in the sense that the greatest differentiation of block densities has occurred with the smallest number of partitions.

It is characteristic of CONCOR procedures that any of the blocks after some number of partitions may be further partitioned (unless, of course, the block is maximally dense or completely sparse) and that such a partition will further differentiate the block densities so as to increase the over-all block density differentiation. If this is so then one way of determining the optimal blocking solution would be to determine at what stage of blocking a further partitioning of blocks would not appreciably increase the differentiation of block densities.

Blocking Measures.

Over the years several different measures of 'blocking' have been proposed, most of them based on the extent to which dense blocks exceed the over-all density of the sociomatrix and the sparse blocks fall short of the over-all density of the socio-matrix. One measure which has been proposed is the Carrington-Heil-Berkowitz (1980) CHB B. This may be expressed as:

$$B = \sum_{i=1}^k [(d_i - d_t)^2 * (c_i/c_t) * (1/(1 - d_t)^2)] + \sum_{j=1}^l [(d_j - d_t)^2 * (c_j/c_t) * (1/d_t)^2]$$

where d_i is the density in dense block i
 d_j is the density in sparse block j
 d_t is the over-all density
 k is the number of dense blocks
 l is the number of sparse blocks
 c_i is the number of cells in dense block i
 c_j is the number of cells in sparse block j
 c_t is the total number of cells in the matrix

In effect CHB B is the sum of the squared differences between dense block densities and over-all density in a matrix weighted by the proportion of cells in the dense blocks and by the reciprocal of the squared complement of the over-all density added to the squared differences between the densities in sparse blocks and the over-all density weighted by the proportion of cells in the sparse cells and the reciprocal of the squared over-all density.

It is easy to show algebraically that if there is no blocking at all, then the individual block densities are exactly the same as the over-all densities and CHB B = 4.0. It follows that the CHB B is a measure of 'fit' in the sense that it only achieves the value of 1.0 when the dense blocks are all precisely 1.0 and the sparse blocks exactly 0.0. It is, in fact, a measure of the extent to which the blocking approximates the 'fat' fit condition.

Monte Carlo runs on CHB B

It is of interest to know how CHB B behaves when there is in fact no intrinsic blocking in the data. In order to test this CHB B was computed for blockings of 500 pairs of purely random zero-one matrices. A program was written which allocated links at random in rows and columns of a matrix (or matrices) of a specified order to a specified density of links (either symmetric or asymmetric). In the data reported here two asymmetric matrices of order 16*16 were allocated random links to a density of 0.1750 and 0.1083 respectively. These densities were chosen so as to duplicate those in an empirical set of data against which I wished to compare the results. Each matrix was created using a random procedure to allocate entries to off-diagonal cells of the matrices. The resulting matrices were then partitioned using CONCOR. Joint CHB B was calculated for each partition and each partition repartitioned until the resulting partitions were made up of 3 elements or less. Since CONCOR will find blocks even if the links are purely at random, the CHB B were recalculated at each partition by accepting the size of the blocks - i.e., as determined by the partition of the two random matrices but by allocating elements to each partition purely at random insofar as the calculation of densities were concerned. Therefore although block sizes remained constant, it was purely a random process whether links were allocated to particular blocks or not in order to calculate densities. I refer to random blocks as those derived from the blocking of the original random matrices and random links as links ascribed to random blocks purely at random to counteract the effect on calculations to the unavoidable modifications of density due to CONCOR procedures.

Table 1 sets out the mean value of CHB B at each partition of the matrix.

Table 1 Mean CHB B for 500 blockings of two stacked 16*16 random nets of density 0.1750 and 0.1083 respectively.

Number Blocks	Random Links	Random Blocks	Real Data
0	0.000	0.000	0.000
4	0.040	0.077	0.530
9	0.100	0.171	0.700
16	0.179	0.281	0.712
25	0.267	0.380	0.766
36	0.365	0.478	0.812
49	0.469	0.575	0.838
64	0.565	0.664	0.a

^a It needed only six partitions to achieve a solution of three or less elements in each block in the real data.

The difference between the values in the column headed 'random blocks' from those in the column headed 'random links' is due to the blocking of the original random net by CONCOR. The values for the CONCOR blocking of the random nets and for the completely random allocation of links to the blocks, however, display a pleasingly linear trend when plotted against the number of blocks in the partitioned matrices. The values both increase as the block sizes become smaller and smaller and reach a value of 0.469 and 0.575 by the time that the partitions in the real data achieve a size of three or less. The value in the column headed Real Data refer to the CHB B for an analysis of some actual well-structured data referring to the practical aid and emotional support pertaining among the sets of kin and friends with whom a homeless woman had contacts during her crisis of homelessness.¹ In these data, in contrast to the random nets, the value of CHB B reaches 0.700 after two partitions (as against a random link values of 0.100 or a random block value of 0.171). The increase in CHB B after three partitions is nearly linear so that the point of inflection of the curve of values for the real data would seem to be near the third partition. This would suggest that the point of optimal partitioning is at that point in these data. The results for the homelsss family data are presented only as an illustration in order to show how CHB B behaves with well-structured data.

Monte Carlo Runs on a 'Lean fit' Measure.

A measure of blocking effectiveness which is not tied to the somewhat unreal absolute standard of a 'fat fit' would obviously have some advantages. One such measure may be constructed on the basis of the extent to which the links in a sociomatrix are concentrated only in dense blocks irrespective of whether these links in fact fill the blocks completely. The rationale for a measure of this sort is simply that if all available links are located within dense blocks and there are in fact no links in the remaining sparse blocks, then a state of de facto optimal blocking has been reached. A measure of this sort should preferably vary between 1.0 when all links are concentrated in dense blocks and 0.0 when the density of all blocks in the matrix are exactly the same - i.e., that of the over-all density of matrix. This latter condition would exist if in fact no blocking were possible. A measure of this sort may be constructed by comparing the average density of dense blocks with the average density of sparse blocks in the matrix. It could be expressed in the following form

$$M = 1.0 - (g_s/c_s)/(g_d/c_d)$$

where:

g_s is the sum of all links in blocks of density less than the over-all density in the matrix.

c_s is the sum of the cells contained in all sparse blocks.

g_d is the sum of all links in blocks of density higher than the over-all density.

c_d is the sum of all cells in dense blocks.

If the density of all blocks is the same throughout the matrix then the ratio of the mean density of sparse blocks to the mean density of the dense blocks would be 1.0 and the value of M would be 0.0 indicating no blocking. On the other hand, if the mean density of the sparse blocks is exactly zero, then the value of M would be 1.0 indicating optimal blocking.

As with CHB B, pairs of 500 CONCOR blockings of stacked 16*16 random matrices with an achieved density of 0.1750 and 0.1083 respectively were conducted and the proportional concentration of links in dense blocks (i.e., M) computed for each blocking. As with CHB B, the measure was computed both for the random blocks and for the random distribution of links within these blocks. Table 2 sets out the values of these two measures and that for the set of data derived from the homeless families study as a contrast.

Table 2. Proportional Concentration of Links in Dense Blocks

Number Blocks	Random Links	Random Blocks	Real Data
0	0.000	0.000	0.000
4	0.354	0.488	0.987
9	0.518	0.660	0.993
16	0.642	0.767	0.987
25	0.723	0.830	0.989
36	0.797	0.885	0.995
49	0.875	0.932	0.995
64	0.954	0.984	0.a

^a It needed only six partitions to achieve a solution of three or less elements in each block in the real data.

Unlike CHB B the trend of the proportional concentration of links does not increase in a linear fashion with increasing number of blocks over which the measure is being computed. Instead it increases more rapidly in the earlier stages of blocking and eases off as more and more partitions are performed. The difference between the values for the random links as against the random blocks decreases from 0.134 to 0.034. The contrast with the

measure as computed for real data, however, is dramatic since the measure reached a value of 0.987 (as against a random measure of 0.354) at the first partition, and peaks at the second partition at 0.993. Thereafter it falls slightly to 0.987 before increasing with several more partitions to 0.995. By comparing the increase in the value of the **proportional** concentration of links in dense blocks per number of additional blocks included in the measure, an indication can be obtained as to when further partitions of the matrix are not adding significantly to the concentration of links in dense blocks and so provide a basis for deciding when to stop blocking. I have been using this measure on real data sets for some time and on the whole it seems to provide a workable way of deciding an optimal blocking point in data. In the data considered here the partition into three sets, confirmed also by CHB B, has a pleasing substantive interpretation. The first block consists entirely of the respondent herself, four friends with whom she built up links in a women's refuge after her relationship with her violent common-law husband had broken up together with two social workers who had given her considerable help during her crisis. The second partition consists of her common-law husband, his parents and his siblings. The third block consists of the respondent's mother, her own sister and her sister's husband, from all of whom she had become distanced after her former marriage had broken up. The marginally less than perfect lean fit of 0.992 rather than 1.000 arises because the respondent still recognises receiving some practical aid from her mother so that one of the sparse block densities is not exactly zero.

Conclusion

Obviously if it were possible to compute the expected value of either CHB B or M and determine what their distributional properties were, then we would be well on the way to comparing some achieved measure with the random expectation of that measure and to computing the probability that the difference could have arisen by chance. Standard test, such as skewness and kurtosis on the two measures described here show that their random distributions appear to be normal. The problem is how to calculate the standard deviation of the measure without running a large number of Monte Carlo trials.

Bibliography

Carrington, P.J., Heil, G.H., and Berkowitz, S.D. 1980. 'A goodness-of-fit index for block models' Social Networks 2: 219 - 234.

Notes

*Clyde Mitchell has recently retired from Nuffield and can be most conveniently reached at his home: 25 Staunton Road, Headington, Oxford, England OX3 7TJ

¹I am grateful to the Nuffield Foundation, London, for a small grant to pay for the collection of these data; to my colleague Dr. Elinor Kelly of the Extra-mural Department of the University of Manchester who has been involved with me in the substantive analysis of these data and who supervised the collection of the data and its coding; and to the Social Work Team attached to the Homeless Families Unit of the Housing Department of a large English conurbation without whose cooperation these data could not have been collected.

General Social Survey Network Items

This is the final set of network items adopted for the 1985 General Social Survey. Items have been renumbered here to function as an independent set for inclusion in other surveys. A name generator elicits the names of discussion partners from respondents. Name interpreter items then elicit relations among the first five people named, attributes of those people, and qualities of relationship between respondent and each person. The network items were administered toward the end of the interview. The 1985 GSS went into the field during February, March, and the beginning of April with a target sample size of 1,500 respondents. Past surveys have returned completed interviews with 1,468 to 1,613 respondents. The respondents constitute a full probability sample of the "total noninstitutionalized English-speaking population of the continental United States, 18 years of age or older." The complete 1985 GSS data set will be available on computer tape in July through the Inter-University Consortium for Political and Social Research. Persons whose institutions are not members of the Consortium should obtain the data from the Roper Public Opinion Research Center (Box U-164R, University of Connecticut, Storrs, CT 06268). The network data will be available on the tape as raw response data. Construction of even the simplest network measures such as density or proportion of discussion partners who are kin will have to be carried out by end users. Detailed discussion of the items is available in "Network Items and the General Social Survey," R. S. Burt, *Social Networks*, 6(1984), 293-339. Further details on the GSS can be obtained by writing to Dr. Tom Smith, National Opinion Research Center, University of Chicago, Chicago, IL 60637, or by telephoning Dr. Smith at (312) 962-1200.

1. From time to time, most people discuss **important matters** with other people. Looking back over the last six months -- who are the **people** with whom you discussed matters important to you? Just tell me their first names or initials. IF LESS THAN 5 NAMES MENTIONED, PROBE, Anyone else? ONLY RECORD FIRST 5 NAMES.

LIST ALL NAMES IN ORDER ACROSS THE TOP OF THE MATRIX ON FACING PAGE. THEN WRITE NAMES 2-5 DOWN THE SIDE OF THE MATRIX.

2. INTERVIEWER CHECK: HOW MANY NAMES WERE MENTIONED? _____

0.....(SKIP TO Q. 13)

1.....(SKIP TO Q. 5)

2+.....(GO TO Q. 3)

3. Do you feel equally close to all of these people?

Yes.....(GO TO Q. 4).....1

No.....(ASK A).....2

A. Which of these people do you feel especially close to? REFER TO MATRIX ON FACING PAGE FOR NAME NUMBERS. CODE ALL RESPONDENT FEELS ESPECIALLY CLOSE TO, IF ONLY ONE MENTIONED, PROBE: Anyone else?

Name 1.....1

Name 2.....2

Name 3.....3

Name 4.....4

Name 5.....5

Addendum, General Social Survey Network Items, page 2 of 5

4. IF LESS THAN 5 NAMES MENTIONED CROSS OUT UNUSED BOXES.

Please think about the relations between the people you just mentioned. Some of them may be total strangers in the sense that they wouldn't recognize each other if they bumped into each other on the street. Others may be especially close, as close to each other as they are to you.

First, think about [NAME 1] and [NAME 2].
ASK Q. 4 FOR FIRST PAIR.

A. Are _____ and _____ total strangers?

IF YES.....ASK Q. 4A FOR NEXT PAIR DOWN
IF NO.....ASK Q. 4B

B. Are they especially close? PROBE: As close or closer to each other as they are to you.

IF YES.....ASK Q. 4A FOR NEXT PAIR DOWN
IF NO.....ASK Q. 4A FOR NEXT PAIR DOWN

PERSON	NAME 1	NAME 2	NAME 3	NAME 4	NAME 5
NAME 2	A. Yes...1 No....2 B. Yes...1 No....2				
NAME 3	A. Yes...1 No....2 B. Yes...1 No....2	A. Yes...1 No....2 B. Yes...1 No....2			
NAME 4	A. Yes...1 No....2 B. Yes...1 No....2	A. Yes...1 No....2 B. Yes...1 No....2	A. Yes...1 No....2 B. Yes...1 No....2		
NAME 5	A. Yes...1 No....2 B. Yes...1 No....2	A. Yes...1 No....2 B. Yes...1 No....2	A. Yes...1 No....2 B. Yes...1 No....2	A. Yes...1 No....2 B. Yes...1 No....2	

INTERVIEWER CHECK: BE SURE YOU ANSWERED Qs. 2 & 3

Addendum, General Social Survey Network Items, page 3 of 5

FILL IN NAMES IN ORDER. ASK EACH QUESTION ABOUT ALL PEOPLE MENTIONED, THEN GO ON TO NEXT QUESTION.

We'd like to find out a little about each of these people.

Name 1	Name 2	Name 3	Name 4	Name 5
--------	--------	--------	--------	--------

Q5. [NAME] is [male/female]? Is that correct? MAKE YOUR BEST GUESS BASED ON ALTER NAME. ASK FOR EACH NAME.

Male.....1	Male.....1	Male.....1	Male.....1	Male.....1
Female.....2	Female.....2	Female.....2	Female.....2	Female.....2

Q6. Is [NAME] Asian, Black, Hispanic, White or something else? ASK FOR EACH NAME.

Asian.....1	Asian.....1	Asian.....1	Asian.....1	Asian.....1
Black.....2	Black.....2	Black.....2	Black.....2	Black.....2
Hispanic.....3	Hispanic.....3	Hispanic.....3	Hispanic.....3	Hispanic.....3
White.....4	White.....4	White.....4	White.....4	White.....4
Other.....5	Other.....5	Other.....5	Other.....5	Other.....5
REFUSED.....8	REFUSED.....8	REFUSED.....8	REFUSED.....8	REFUSED.....8
DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9

Q7. This card lists general levels of education (HAND CARD Q7). As far as you know, what is [NAME]'s highest level of education? PROBE: What is your best guess? RECORD VERBATIM IF NOT CODEABLE. ASK FOR EACH NAME.

1-6 years.....1	1-6 years.....1	1-6 years.....1	1-6 years.....1	1-6 years.....1
7-9 years.....2	7-9 years.....2	7-9 years.....2	7-9 years.....2	7-9 years.....2
10-12 years.....3	10-12 years.....3	10-12 years.....3	10-12 years.....3	10-12 years.....3
High School Grad...4	High School Grad...4	High School Grad...4	High School Grad...4	High School Grad...4
Some college.....5	Some college.....5	Some college.....5	Some college.....5	Some college.....5
Associate degree.....6	Associate degree.....6	Associate degree.....6	Associate degree.....6	Associate degree.....6
Bachelor's degree...7	Bachelor's degree...7	Bachelor's degree...7	Bachelor's degree...7	Bachelor's degree...7
Grad/professional...8	Grad/professional...8	Grad/professional...8	Grad/professional...8	Grad/professional...8
DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9

Q8. Thinking about how often you usually talk to [NAME], on average, do you talk to [him/her] almost every day, at least once a week, at least once a month, or less than once a month? ASK FOR EACH NAME.

Almost every day...1	Almost every day...1	Almost every day...1	Almost every day...1	Almost every day...1
At least weekly.....2	At least weekly.....2	At least weekly.....2	At least weekly.....2	At least weekly.....2
At least monthly...3	At least monthly...3	At least monthly...3	At least monthly...3	At least monthly...3
Less than monthly..4	Less than monthly..4	Less than monthly..4	Less than monthly..4	Less than monthly..4
DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9

Q9. Have you known [NAME] for less than three years, three to six years, or more than six years? ASK FOR EACH NAME.

Less than 3 years...1	Less than 3 years...1	Less than 3 years...1	Less than 3 years...1	Less than 3 years...1
3 to 6 years.....2	3 to 6 years.....2	3 to 6 years.....2	3 to 6 years.....2	3 to 6 years.....2
More than 6 years...3	More than 6 years...3	More than 6 years...3	More than 6 years...3	More than 6 years...3
DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9

Addendum, General Social Survey Network Items, page 4 of 5

Name 1

Name 2

Name 3

Name 4

Name 5

Q10. Here is a list (HAND CARD Q10) of some of the ways in which people are connected to each other. Some people can be connected to you in more than one way. For example, a man could be your brother and he could belong to your church and be your lawyer. When I read you a name, please tell me all the ways that person is connected to you.

How is [NAME] connected with you? PROBE: Any other ways? ASK FOR EACH NAME.

Spouse.....01	Spouse.....01	Spouse.....01	Spouse.....01	Spouse.....01
Parent.....02	Parent.....02	Parent.....02	Parent.....02	Parent.....02
Sibling.....03	Sibling.....03	Sibling.....03	Sibling.....03	Sibling.....03
Child.....04	Child.....04	Child.....04	Child.....04	Child.....04
Other family.....05	Other family.....05	Other family.....05	Other family.....05	Other family.....05
Co-worker.....06	Co-worker.....06	Co-worker.....06	Co-worker.....06	Co-worker.....06
Member of group..07	Member of group..07	Member of group..07	Member of group..07	Member of group..07
Neighbor.....08	Neighbor.....08	Neighbor.....08	Neighbor.....08	Neighbor.....08
Friend.....09	Friend.....09	Friend.....09	Friend.....09	Friend.....09
Advisor.....10	Advisor.....10	Advisor.....10	Advisor.....10	Advisor.....10
Other.....11	Other.....11	Other.....11	Other.....11	Other.....11
SPECIFY:	SPECIFY:	SPECIFY:	SPECIFY:	SPECIFY:

DON'T KNOW99	DON'T KNOW99	DON'T KNOW99	DON'T KNOW99	DON'T KNOW99

Q11. How old is [NAME]? PROBE: What is your best guess? ASK FOR EACH NAME.

ENTER AGE [][]	ENTER AGE [][]	ENTER AGE [][]	ENTER AGE [][]	ENTER AGE [][]
REFUSED.....8	REFUSED.....8	REFUSED.....8	REFUSED.....8	REFUSED.....8
DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9

Q12. What is [NAME]'s religious preference? Is it Protestant, Catholic, Jewish, some other religion, or no religion? PROBE: What is your best guess? ASK FOR EACH NAME REPEATING CATEGORIES AS NECESSARY.

Protestant.....1	Protestant.....1	Protestant.....1	Protestant.....1	Protestant.....1
Catholic.....2	Catholic.....2	Catholic.....2	Catholic.....2	Catholic.....2
Jewish.....3	Jewish.....3	Jewish.....3	Jewish.....3	Jewish.....3
Other.....4	Other.....4	Other.....4	Other.....4	Other.....4
SPECIFY:	SPECIFY:	SPECIFY:	SPECIFY:	SPECIFY:

None.....5	None.....5	None.....5	None.....5	None.....5
REFUSED.....8	REFUSED.....8	REFUSED.....8	REFUSED.....8	REFUSED.....8
DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9	DON'T KNOW.....9

Addendum, General Social Survey Network Items, page 5 of 5

SPOUSE -- your wife, or husband, or a person with whom you are living as if married

PARENT -- your father or mother

SIBLING -- your brother or sister

CHILD -- your son or daughter

OTHER FAMILY -- for example, grandparent, grandchild, cousin, aunt, uncle, nephew, niece, or an in-law

COWORKER -- someone you work with or usually meet while working

MEMBER OF A GROUP TO WHICH YOU BELONG -- for example, someone who attends your church, or whose children attend the same school as your children, or belongs to the same club, classmate

NEIGHBOR -- someone outside your own household who lives close to you in your neighborhood

FRIEND -- someone with whom you get together for informal social occasions such as lunch, or dinner, or parties, or drinks, or movies, or visiting one another's home; this includes a "boyfriend" or a "girlfriend"

PROFESSIONAL ADVISOR OR CONSULTANT -- a trained expert you turn to for advice, for example, a lawyer or a clergyman

OTHER

Show Card Q10 Distinguishing Kinds of Relationships

THESIS SUMMARIES

Katherine FAUST (Ph.D., Soc Sci, Cal-Irvine): 1985. "A Comparative Evaluation of Methods for Positional Analysis of Social Networks."

This dissertation investigates three well known methods for positional analysis of social networks. The methods are CONCOR, STRUCTURE and REGE. Theoretical concepts of role, position and status are reviewed and motivate an approach to positional analysis based on relational similarity. Formal approaches employing structural equivalence and its generalizations are discussed. The three methods are described and both general and program specific issues in computation are examined.

Using a combination of actual data sets and constructed examples the results of the three methods are compared, with particular attention to whether the results of the analyses correspond to our intuitive and theoretical expectations for positions in network data. Results indicate that both CONCOR, based on correlation, and STRUCTURE, based on distance, locate groups of actors who are proximate in a network. REGE, on the other hand, groups together actors who are similar in the types of relations they possess.

Alexandra RADKEWYCZ (M.Sc., Behav Sci, Toronto): 1985. "The Relationship Between Integration and Social Support of the Elderly in the Toronto Ukrainian Community."

This thesis is a study of the kinds of social supports available to the elderly in the Ukrainian community of Toronto. It examines access to support from two levels:

- a) the kinds of services and resources available at the community level for the general membership and specifically for the elderly,
- b) and what formal and informal community sources the elderly themselves actually draw upon for their support.

Data were collected in two stages of interviews with thirty-two Ukrainian organizational leaders and subsequently with eighty-nine elderly respondents.

Via the blockmodeling technique, a model of organized community was constructed in which it was shown that the majority of sampled centres for the aged are clearly on the periphery of the community with respect to most of the resources which pass from organization to organization. The implications for support services as a concrete and important collective community priority were then noted. Most notable, it was demonstrated that a community which is not integrated on several specific dimensions such as economic or informational ties is hampered with regards to efficient service delivery and in its potential to mobilize quickly in the event of a crisis.

Qualitative data was also examined in relation to the structural patterns of the Ukrainian community. Such data showed how a specific community zeitgeist can simultaneously insulate but also segregate a particular sector of the organized community, such as the senior citizen's clubs. As a result, such a segregated sector may be better at providing certain types of aid for those embedded within it as, for example, emotional support rather than novel types of resources as, political advocacy for the aged, material aid or consumer information. The cultural trappings of community life can protect the aged from a devalued status, but they cannot improve the status of the centres for the aged into a more powerful one; one which is an integral part of the inner core of the organized community.

Three general measures of support were examined at the individual level. These were emotional, large and small service aid, collapsed from a total of several discrete variables of support. Widespread involvement in the community was found to be significantly related with the ability to obtain greater amounts of help from organizational sources and higher rates of help in general. Specifically, activity in senior's clubs was found to be associated with a greater reliance on non-organizational friends, while activity in a non-senior's club was related to obtaining help from organizational sources be it indirectly from other members or directly from the staff or programs within organizations.

Thus, horizontal and vertical types of integration into the community furnished access to different sources and types of support. While widespread involvement in the organized community did provide the respondents with concrete instances of support, many of the elderly who pursued more circumscribed communal activities were found to have built up support networks outside of the boundaries of organized community life, but within the Toronto Ukrainian population as a whole. However, as with the majority of world-wide studies examining social support and the elderly, the bulk of the support on all three general support measures was found to be provided by the family, in particular the spouse and children.

SPECIAL JOURNALS

Abstracts from SOCIAL SCIENCE HISTORY 7(2) Spring, 1983.

The studies are coordinated to provide an overview of the American corporate network. They also have a common format, in that the introductions are generally brief and the results are presented before any theoretical implications or explanatory speculations are discussed. At the same time, there was little or no collaboration among the authors, and they were free to disagree with each other.

The studies are arranged in a sequence that begins historically and then widens to include probes into various aspects of the modern corporate network. The issue begins with a paper by David Bunting that is based on interlocking directorates among the largest banks, insurance companies, and railroads for selected years in the nineteenth century and the first part of the twentieth century. Although the data for 1816 and 1836 are limited to banks, insurance companies, and railroads based in New York, they present a strong case that a corporate network has existed since the rise of modern corporate enterprises in the second decade of the nineteenth century. This surprising finding is at odds with the generally accepted wisdom that interlocks are a phenomenon of the late nineteenth century.

William Roy then traces the development of the national corporate network in the late nineteenth and early twentieth centuries. Using a sample of 12 industrial sectors that range from railroads to book publishing, his major finding is that a national network developed during this period around a core of railroad, coal, and telegraph companies, with banks slowly moving toward the center of the network as the twentieth century began.

Mark Mizruchi picks up where Roy leaves off, analyzing the development of the network from 1904 to 1974. He shows that there is remarkable stability in the corporate community throughout this period despite certain minor changes on some measures, and he finds that banks are a central point in the network in all periods. The several different measures he applies to his data base allow him to explain why different theorists have reached varying conclusions about the evolution of the corporate community. He is able to argue that there has been an institutionalization of intercorporate relations, rather than a managerial revolution.

The article by Beth Mintz and Michael Schwartz deepens our understanding of the modern corporate network by examining the long-standing and controversial question of whether or not there are "interest groups" within the corporate community. Using new criteria for defining an interest group that seem to be more faithful to the concept as it was originally defined, they conclude that interest groups were a minor occurrence in the network of the 1960's.

My article with Harold Salzman expands our conception of the modern corporate network by studying the directors of several different types of nonprofit organizations that have been claimed to be close to or part of the corporate community. Using the same measures employed by Mizruchi, the major finding of the analysis is that many of these organizations are central elements in the corporate community when all directorship ties are included in the analysis, but that their centrality declines greatly when only the officers of these corporations and nonprofit organizations are considered.

The final article, by Donald Palmer, steps back from a concern with a specific time period or type of organization to tackle the more general question of the significance or meaning of corporate interlocks. It sheds light on this question by examining what happens when an interlock is accidentally broken by such events as death or retirement. Palmer's findings on several hundred broken ties in the 1960s allow him to test hypotheses from the interorganizational and intraclass theories of corporate interlocks. These two theories are explained fully in the first half of this paper, and they are discussed by Roy as well. Although none of the authors besides Palmer claims that his or her findings are an attempt to test two competing theories in any strict sense of the word, those who do address the issue believe their results are highly compatible with a version of the class theory and difficult to explain from the competing perspective.

The net result of these six studies, then, is a panorama that has historical depth and systemic width. They leave no doubt that American corporate history includes a complex pattern of corporate interlocks that have existed since the beginning of the modern industrial economy, and there is at least the preliminary suggestion that the network includes far more than the banks and corporations. (From Introduction by G. William Domhoff (Cal--Santa Cruz) Guest Editor.)

Abstracts from JOURNAL OF SOCIAL ISSUES 40(4) 1984. Issue Editors: Arlene BROWNELL & Sally SHUMAKER.

EDITOR'S INTRO: Social support is currently one of the most frequently investigated phenomena in the social and health sciences. Over 450 studies have been published in the single discipline of psychology in the two years since "Social Support Networks" was entered as an index term in *Psychological Abstracts*. Yet, due primarily to the atheoretical nature of the work in this area, much of the research and application has failed to recognize the complexities of the support phenomenon. The purpose of these two consecutive numbers of the JOURNAL OF SOCIAL ISSUES is to address several problems and gaps in the theory, research, and application of social support, and to propose some solutions. The present edition, Part I, focuses on social support theory and research. The second edition, Part II, will focus on social support interventions and policy.

Mark CHESLER (Soc, Michigan) & Oscar BARBARIN (Soc Work, Michigan). 1984. "Difficulties of Providing Help in a Crisis: Relationships Between Parents of Children with Cancer and Their Friends." 113-34.

Parents of children with cancer experience substantial stress over a long period of time. One way that parents cope with such stress is to seek social support from various sources, especially from close friends. Interviews with a sample of these parents, as well as with some of their close friends or informal "helpers," illustrate the difficulties involved in both seeking and providing help in the midst of a crisis. Among the major difficulties parents and their close friends report are managing the emotional impact of the illness, intrusions into privacy or the prior boundaries of relationships, the creation of a stigma or an aura of "non-normality," finding methods for being useful and feeling effective, and dealing with sex-role barriers to a full range of helping interactions. These difficulties are discussed and analyzed primarily in a qualitative framework; special attention is paid to deriving an understanding of their meaning from the actual experiences and reflections of parents and friends engaged in the helping process.

Charlene DEPNER (Youth Dev't, Stanford), Elaine WETHINGTON (Soc Psych, Michigan) & Berit INGERSOLL-DAYTON (Soc Work & Psych, Portland). 1984. "Social Support: Methodological Issues in Design and Measurement." 37-54.

Despite plentiful evidence of a link between social support and adaptation to stress, we still know virtually nothing about why this connection exists. This paper is designed to help the researcher plan a study that offers the optimal test of any given explanation. We assume that the research is founded on a conceptual model of the association between stress, support, and strain. The specificity of such a model will depend upon what has been established from existing knowledge. The paper focuses on key issues in measurement, design, and analysis. A fundamental problem in measurement of social support is how to select from a host of possible strategies. The measurement section introduces important considerations that should govern that choice. The design section alerts the reader to sources of bias that commonly constrain the inferences that can be drawn from social support research. It also addresses the thorny problem of timing measurement to capture a process that transpires over time. The analysis section illustrates how structural equations can be used to model specific social support effects and discusses the circumstances that would make inclusion of additional variables advisable. Finally, we consider the limitations of relying exclusively on quantitative data and illustrate ways in which qualitative research can be used to develop unique information about the role of social support in circumventing the effects of stress.

Christine DUNKEL-SCHETTER (Psych, UCLA). "Social Support and Cancer: Findings Based on Patient Interviews and Their Implications." 77-98.

Past research indicates that social support is beneficial to cancer patients in adjusting to the stress of the disease. In this article, a brief review of research on social support is provided as a framework within which support among cancer patients can be examined. Research on cancer is then reviewed, and selected results from an investigation of 79 cancer patients are reported. The findings indicate that: health care providers are particularly important sources of support to cancer patients; of several types, emotional support is seen as especially helpful; and the types of support seen as most helpful by those with cancer depends on who provides them. In addition, variability in stress among cancer patients mediated the frequency of interpersonal problems, and the association between support and various indices of adjustment. Implications of these results for future research on social support in stressed populations, especially cancer patients, are discussed.

Kenneth HELLER (Psych, Indiana) & William MANSBACH (Psych, Maryland). 1984. "The Multifaceted Nature of Social Support in a Community Sample of Elderly Women." 99-112.

Forty-three elderly women at two low-income city nutrition sites participated in a study of social ties and social support. As predicted, discrete facets of support were differentiated from among a variety of social network and support variables. Age was negatively related to

network size, amount of emotional support, and time spent with confidantes and relatives. With age controlled, the best predictors of life satisfaction were network size, frequency of church attendance, and proportion of network members considered intimates. Results are discussed with regard to the multidimensionality of the social support construct.

Marybeth SHINN (Psych, NYU & Russell Sage Fdn), Stanley LEHMANN (Psych, NYU) & Nora WONG (Psych, Michigan). 1984. "Social Interaction and Social Support." 55-76.

Typical research models of social support are overly simple on two grounds. First, they treat social support as exogenous to the model. That is, models incorporate the effects of social support on stressors and on psychological distress, but typically ignore the influences of stressors, psychological distress, personal characteristics of recipients, and environmental constraints on support. Second, the models typically consider only positive consequences of social interactions, although these interactions may also have negative consequences. Further, actions that are perceived as helpful by the donor, the recipient, or both can have harmful effects if they do not fit individual circumstances. Five dimensions of fit between the characteristics of the recipient and those of the supportive act are proposed: amount, timing, source, structure, and function. Implications for research and intervention are discussed.

Sally SHUMAKER (Behav Med, Nat'l Insts of Health) & Arlene BROWNELL (Psych, Indiana). 1984. "Toward a Theory of Social Support: Closing Conceptual Gaps." 11-36.

We define social support as "an exchange of resources between two individuals perceived by the provider or the recipient to be intended to enhance the well-being of the recipient." We then discuss the assumptions and implications of this definition and address several gaps in the support literature. Specifically, we consider the costs and benefits of supportive exchanges for both participants, the dual and possibly incongruent perceptions of support held by the provider and the recipient, and the importance of non-network sources of support. In addition, we distinguish between the health-sustaining versus health-compensating functions of support and how these functions link with the resources provided in supportive exchanges. We next address the factors that can influence support effects and suggest a broad range of outcomes for both the provider and the recipient. Finally, we distinguish the dimensions of support from the contextual variables that can influence its quality and effectiveness.

INSNA note: Last issue we announced the birth of a new journal, POWER AND ELITES, edited by Thomas Dye and G. William Domhoff. We present here abstracts from the first and only issue of that journal (vol 1(1) Fall, 1984). It has folded, Domhoff writes INSNA, because of irreconcilable differences between the editors and the publishers.

Clarence STONE (Maryland). "New Class or Convergence?: Competing Interpretations of the Impact of Social Complexity on the Structure of Urban Power." 1-22.

Contemporary society is complex society. That is an important fact, but one with implications that are variously understood. For some, complexity means a shift in the base of power from property to knowledge--a shift that enhances the position of policy entrepreneurs and program administrators at the expense of business elites, and facilitates the growth of government. But there is another view, one not treating knowledge and property as competing bases of power. This second view, one that focuses on the political importance of large-scale organizations, is perhaps less widely understood. My aim is to present the main tenets and assumptions of both views. One I shall call the "New Class scenario," in recognition of the argument that the knowledge stratum of complex society works through the public sector to achieve aims antagonistic to those of propertied elites. The other I shall term the "convergence scenario," to emphasize the contrasting view that knowledge and property, instead of being antagonistic bases of power, are often brought together within large-scale organizations and in accommodations between large-scale organizations.

I shall also describe development policy in Atlanta so that we can see which scenario it best fits. While Atlanta's development experience follows more closely the convergence scenario, the specifics of that experience suggest some refinements in the convergence argument. Other observations in other communities and in different policy arenas can be expected to add to our understanding of the relationship between property and knowledge under conditions of social complexity.

Mark MIZRUCHI (Albert Einstein C. of Med). "An Interorganizational Theory of Class Cohesion: Incorporating Resource Dependence Concepts into a Social Class Model of Inter-corporate Relations." 23-36.

In this paper I develop a model of capitalist class cohesion which employs concepts developed within the resource dependence perspective. Specifically, I show how certain resource dependence propositions can be employed to account for sources of economic and political

behavior within the business community. In order to do this, it is necessary to state at the outset that I am assuming the general viability and utility of analyzing intercorporate relations from within the class framework. But given this assumption, I plan to show the compatibility of certain aspects of the RD model with the class perspective.

Beth GHILONI (UC--Santa Cruz). "Women, Power, and the Corporation: Evidence from the Velvet Ghetto." 37-49.

This paper takes an in-depth look at women in a departmental branch of the corporation, public affairs, whose activities closely resemble the volunteer activities of upper-class women. It examines some of the ways that corporate public affairs provides a context in which large numbers of women may be utilized in managerial capacities in the corporation, but in a stereotypical way. On the one hand, it will show that the women who make up approximately thirty to forty percent of the public affairs department have an important role in representing the corporation to the outside world. On the other hand, it will show that women are stereotyped in such a way that they are second-class citizens within the corporation. That is, women are playing an increasingly important role in maintaining corporate power, but they are not likely to gain corporate power as a result. Expanding on the work of Kanter (1977), this study of public affairs department demonstrates how women's structural position in the corporate division of labor shapes their opportunities for promotions, status, and prestige. In stressing the structural problems facing women, it raises questions about the growing body of research which stresses that such social-psychological variables as socialization, family interaction patterns, and work-place dynamics are the key barriers to women's low levels of intra-generational mobility.

Donn KURTZ II (Louisiana), Ryan BARRILLEAUX & Pamela Ann MOSES. "Institutions, Leaders, and Interlocking in a Southern State: Louisiana." 51-67.

The purpose of this paper is to apply Dye's (1976) institutional approach to leadership to a single state to answer the following questions. (1) What are the top institutions in Louisiana and who are their leaders? (2) What is the structure of this state's leadership and how does it compare to that of the nation? (3) Is there a state elite or are there merely discrete collections of community leaders who happen to reside in the same state? The paper begins by identifying the major institutions and leaders in Louisiana (as of early 1978) and by noting some of the deviations from Dye's method of identification. A discussion of interlocking and specialization forms the second section. The third portion of the paper introduces the concepts of "geographical interlocking", "core cities", and "key institutions" to investigate the existence of an inner circle of state leaders. Finally, part four examines the relationship of the key institutions and the inner circle to other groups potentially relevant to this type of study.

John BOLLAND (Kansas). "The Limits to Pluralism: Power and Leadership in a Non-Participatory Society." 69-88.

In the years immediately following the major studies of community power conducted during the 1950s and the 1960s, several observers attempted to catalog what we had learned from this research. For over a decade following these conclusions, little research was conducted in the area of community power--no doubt a reaction to the rancorous debate between the pluralists and the elitists--and the conclusions have stood unchallenged. But given a number of social trends that have occurred during the last two decades, it seems worthwhile to reexamine these conclusions about the structure of power in American cities. Specifically, these trends are described and their implications for power in American communities are analyzed. These trends are then explored in two Midwestern communities, and their implications for power in these two cities are studied.

Frederick WIRT (Illinois). "External Influences upon Community Power: Rethinking the Present and Future." 89-98.

A new "search for community power" (Hawley and Wirt, 1976) compels one veteran to call for new questions. This essay suggests: What are the consequences of external influences upon community power systems?

In most past research the unit of analysis was one or more communities and key political actors within each. Whether the method was positional, elite, or pluralistic, whether one studied a single city or a set, and whatever the issue examined, the focus of study was usually internal. There are exceptions, of course; Hunter (1953) and Wirt (1974) pointed to the consequences of some external forces on local decision making in big cities, and Vidich and Bensman (1958) explored the same in a "small town in a mass society."

But an intriguing question remains. What if the external world intruded to alter local power, issues and actors? This article suggests two ways of conceptualizing that interaction between the boundaries and sketched three kinds of external axes (Walton, 1967) which might make for new research directions.

Abstracts from the Conference on SOCIAL NETWORKS FROM CRIB TO CRADLE: STUDIES OF THE SOCIAL NETWORKS OF CHILDREN, ADOLESCENTS, AND COLLEGE STUDENTS. (CUNY, Feb, 1984).

John ANTROBUS, Robert DOBBELAER (Psych, CCNY) & Suzanne SALZINGER (Psych, NYS Psych Inst). "Social Networks and College Success or Grade Point Average and the Friendly Connection."

It is proposed that large, college-based social networks of close friends would be a particular asset to students at CCNY where few students come from families or communities that have an established tradition of college attendance. It is assumed that one's network of college friends provides models for the acquisition of good versus poor academic skills as well as a source of personal support when personal stressors threaten the student with academic failure or dropout.

Results showed that students tend to select as close friends other students who are similar to themselves in gender, race, ethnic group and academic achievement. Although country of origin and language were not studied here, informal observations suggest that these factors are also a basis for establishing college-based friendships in the first year. There is no additional evidence that the academic performance of the network supports the performance of the student who selects the network. Some racial and ethnic integration takes place within the first semester of attendance at CCNY. Among the college-based social networks of the four groups studied, Black, Hispanic, Chinese and White, all showed an increase in close friends chosen from among racial and ethnic groups other than their own, relative to the racial and ethnic composition of their network of off-campus friends.

Dale BLYTH (Cornell) & Carol TRAEGER (Ohio State). "The Impact of Quantity, Frequency, and Intimacy of Perceived Significant Other Relationships on Early Adolescents' Self-Esteem."

This study investigated the association between global self-esteem and the adolescent's perception of relationships with three different types of people: Parents, Same-Sex Peers, and Opposite-Sex Peers. Both the frequency and intimacy of each type of relationship and the quantity of peer relationships as predictors of self-esteem are explored. Because of the changing influences of parents and peers during adolescence, the strength of this relationship was tested at several grade levels. Sex differences were also examined. The sample of 1617 male and female seventh through tenth graders living in intact families was drawn from a suburban white middle class school district in Omaha, Nebraska. The sample was divided into two random halves for some analyses in order to permit split-half replication and make more effective use of the large sample size. Although the relationships were weaker than expected, more intimate relationships with parents were related to higher self-esteem. The effects were not differential for grade and sex. The relationship between same-sex peers and self-esteem was not stronger for females as the literature had indicated. Rather the findings indicated more overall prediction of self-esteem for males using both intimacy and frequency. In fact, for males, frequency of contact was often more influential than intimacy in explaining variance in self-esteem. Relationships with opposite-sex peers did not affect self-esteem at this age. The findings are interpreted in light of problems with other studies and the need for further research.

Moncrieff COCHRAN & David RILEY (Cornell). "Mother Reports of Children's Social Relations: Antecedents, Concomitants and Consequences."

The social networks of six-year-old American children, as reported by their mothers, were explored for insight into both cause and consequence. Analyses systematically contrasted the social relations of four groups: Black and White children living in one-parent and two-parent households. The analyses were guided by five aims: to describe the size and composition of the children's networks; to determine the relation of the child network characteristics with the family socio-economic status; to explore the extent and composition of membership overlap in the network of mothers and children; to describe the content of the activities engaged in by children with the non-parental adults in their networks; and to examine the relation of the child network to the child's academic success in the first grade. The subgroup contrasts built into these analyses provided insight into the ecology of children's networks, including evidence on the differential importance of particular social settings and role relations--the neighborhood, the school, kinship ties--as contexts for the development of significant social relations. Particular kinds of activities--outings and task-oriented interactions--with non-parental adults were strongly associated with early school success, especially in a single subgroup, the White one-parent families.

The discussion of findings considers the following issues: the validity of maternal reports of child networks; the societal implications of the findings on cross-race social bonds; the neighborhood and school as contexts for child network building; the evidence that some Black parents may be guiding their children's social ties away from the kin group and toward a bi-racial social world, different from the world the parents grew up in; the importance of non-parental adults and non-kin in the lives of urban American children; and the pervasive influence of maternal education on social ties beyond the family.

Candice FEIRING & Michael LEWIS (Rutgers Med Schl). "The Child's Social Network: The Effects of Age, Sex, and Socioeconomic Status from Three to Six Years."

This study examined the characteristics of the child's social network as it changes over age within the preschool period. Of particular interest is how the social network changes as the child moves from a more home-centered existence at three years of age to a more school-centered existence at six years. Also of concern is the effect of sex and socioeconomic status on the nature of the child's social network. Eighty five children and their mothers were studied as part of a longitudinal research project. Mother reports were studied as part of a longitudinal research project. Mother reports of the child's contacts with relatives, adults and peers were recorded when the child was 3 and 6 years old. The results show that the child's social network composition and contacts change with age and vary as a function of the child's sex and socioeconomic status. For example, from 3 to 6 years children decrease contact with relatives and increase contact with peers and non-relative adults. Across age, but especially at six years of age, male subjects have more contact with male than female friends and female subjects have more contact with female than male friends. These findings illustrate how sex role socialization patterns are reflected in contact with same sex peers compared to opposite sex peers in the social network. In general, the findings suggest that the social network structure provides different types of interaction opportunities according to developmental level as well as sex and socioeconomic status of the child.

Linda GUTWIRTH. "Social Networks of American-born Children of Haitian Immigrants."

Drawing from recent ethnographic literature, interviews with Haitian patients attending prenatal, general medical and psychiatric services of a local university hospital, and anthropological fieldwork in the Haitian communities of the New York metropolitan area, this paper provides comparative data on the social networks of American-born children of Haitian immigrants.

Discussion focuses on: (1) methodological issues that arise in considering information on the social contacts of young children derived from participant-observation versus open-ended but structured interviews about the children's immediate personal networks of people involved in their usual activities, as reported by their adult caregivers, and (2) some theoretical and practical implications of the findings for an understanding of child socialization and parent-child relationships in a cultural group in which forms of marriage, domestic family organization, child care, and economic support of the household differ from those of the dominant group in the surrounding host society.

Jane HAMPSON (Psych, CUNY). "Social Networks in Relation to Individual Differences in Style of Language Acquisition."

Previous studies have noted systematic individual differences in children's patterns of language acquisition, which Nelson (1973) has called the expressive-referential distinction. The primary identifying characteristic of referential children is the high proportion of object-referent words (nouns) in their early vocabularies, while expressive children produce more social-expressive phrases and action words. The current study sought to examine this widely recognized distinction in relation to the child's social network. Ten 22-month-old firstborn subjects were videotaped during a half-hour free play session with their mother in their own home. Information regarding the children's social networks was gathered by means of telephone interviews sampling seven different days of the week. Each child's spontaneous utterances were separately analyzed from responses to mother's questions and commands, based on a belief that it is impossible to identify the child's style unless constraints imposed by the discourse partner have been taken into account. Both spontaneous and response utterances were subjected to a form analysis (noun/total words) and a function analysis. A functional analysis of mother's utterances was also performed, and the functions of mother's speech were correlated with children's spontaneous and response measures. While mothers' use of 'referentially-constraining' questions was found to be significantly correlated to children's use of nouns in response, no function of mothers' speech correlated with spontaneous noun usage by the child. However, spontaneous noun usage was found to be significantly and positively correlated with the proportion of adult contacts in the child's social network and negatively related to the number of peer contacts. The results supported the major hypothesis of the study, namely that a child whose social network contained a large proportion of adults would be interacting in situations conducive to learning labels for objects, while a child who interacts with a large number of peers would be more likely to use language to express needs and to regulate the actions of others. In addition, this study argues for a methodological approach to individual differences which limits the constraints imposed by the discourse partner.

Juliana Rasic LACHENMEYER & Linda CULBERT (Soc Sci, Fairleigh Dickinson U). "Social Networks of the Commuting College Student."

This study presents the first two years of a four year longitudinal study of the social networks of commuting students at a large, private university. The Friendly Network Questionnaire (Antrobus, Dobbelear, & Salzinger, 1985) was first administered to sixty-four freshpersons. A follow-up was completed a year later on thirty-four of these students. Data

collected at the end of the first year focused on the relationship between social networks (size of on-campus and off-campus networks, reciprocity, and mean number of activities with on-campus friends), stressors (life events and number of hours work) and academic performance as measured by Grade Point Average. Gender and ethnic differences on the above factors and how each of them relate to college performance were explored. The second year follow-up additionally, looked at the density of on-campus networks, and student report of "closeness" of individual faculty. The ways in which the social network of students in a private university were elaborated, and questions were asked to determine parents' educational and occupational background as well as students' perception of parental support for and commitment to their education. Major findings on social networks included a positive correlation between GPA and the mean number of activities with on-campus friends. For students with high GPA's who worked long hours, their number of on- and off-campus friends affected the probability of transferring to another university. Some significant findings were that life events were more often experienced during the first year; these were negatively correlated with academic performance. Also, students who worked jobs had higher GPA's than those who did not. As work hours increased up to a maximum level, academic performance was also higher. Suggestions are made for further research along with a discussion of alternative ways of analyzing individual networks: some possibilities are concepts such as focal friends, probable contacts and potential contacts.

Gary LADD, Craig HART, Emily WADSWORTH & Beckie GOLTER (Purdue). "Preschooler's Peer Networks in Nonschool Settings: Relationship to Family Characteristics and School Adjustment."

This study was undertaken to explore relationships among family variables, early nonschool peer networks, and children's social functioning in preschool. The sample was comprised of 26 younger (23 - 40 months) and 33 older preschool children (41 - 55 months) and their parents. Characteristics of children's nonschool peer networks, family characteristics, and parental planning functions were assessed by asking parents to complete a structured questionnaire one month prior to their children's enrollment in a half-day preschool program. Depending on children's ages, teacher and peer ratings were used to assess children's social and school adjustment on three subsequent occasions (fall, winter and spring).

Parental reports indicated that the nonschool peer networks of older preschoolers were characterized by a larger number of peers, and greater proportion of younger children, a greater proportion of playmates residing in out-of-town locations and more time spent playing in network members' homes. Conversely, younger children's networks were comprised of more older children. They also had more multiple contacts each week with peers. No age group differences were found for number of play groups or the average length of relationship with peers.

The findings also indicate that children with two working parents have larger peer networks and a greater number of play groups. Families with higher income levels had children who played more often in network member's homes.

Finally, a negative relationship was found for younger children, at the outset of the school year, between number of network play groups and teacher's classroom adjustment ratings. The opposite was found for older preschoolers. The proportion of younger children in the child's network was not predictive of classroom social or school adjustment. However, for older preschoolers, classroom adjustment was positively related to the proportion of same age companions and negatively related to the proportion of older companions in the nonschool network. Also, older preschoolers who spent more time in network member's homes tended to have higher levels of classroom peer acceptance by the middle and end of the school year.

Susan McHALE & Wendy GAMBLE (Human Dev't, Penn). "The Social Networks of Children with Handicapped and Nonhandicapped Siblings."

One goal of our research was to obtain information from children with handicapped siblings about their social contacts with adults and children in and outside their nuclear families. After describing the extent and nature of children's and mother's networks we examine the correlations between network involvement and the well-being of both mothers and children.

Subjects were 53 children and their mothers, 26 of whom had a younger mentally retarded child in the family, and 27 of whom had a younger child in the family who was not mentally retarded. The older children and their mothers were interviewed at home about their social contacts and about their personal well-being. Analyses revealed few differences between the support networks of mothers and siblings of handicapped and nonhandicapped children. Those differences that emerged suggested that mothers and siblings of disabled children have a slight tendency to experience more contact with and receive more support from some of their relatives. For the children in both groups, perceived acceptance by peers, their own self-esteem and their mothers' self-esteem are associated with the child's social network involvement,

and children's self-esteem also is related negatively to the extent of their mothers' depressive symptoms. Mothers' network contact is related to their self-reported symptoms of depression.

Suzanne SALZINGER (NY St. Psych Inst) & June HAMPSON (Grad Ctr, CUNY). "Social Networks of Mother and Child: An Examination of their Function in Developing Speech."

This study examines the differential use of social and personal speech, as well as the adequacy of their speech, in toddlers, aged 20 to 24 months, in relation to some of the dimensions of the child's own social network and the maternal social network.

Mothers were interviewed for information about their own networks when their children were 29 months old. The children's social networks were determined by mothers' report of their children's social contacts, first during the initial social network interview, and subsequently in seven daily logs, each representing a different day of the week. The child's speech was taped in a free play situation, at home, in the presence of its own mother, and another toddler and its mother. The speech data were collected twice, once at 20 months and again at 24 months. Social speech was defined as speech addressed to another person; personal speech was defined as speech which is emitted when the child doesn't display any intention of communicating with another person. Adequacy of speech was defined in terms of its comprehensibility to a listener.

The major hypothesis of the study was that the child's social network would be predictive of the child's differential use of social and personal speech, while the child's network itself would be predicted by features of the mother's network. Specifically, it was expected that social speech would be found to be a function of the child's contact with peers and that speech adequacy would be a function of the child's contact with adults.

Results showed that the extent of the child's contacts with adults was determined by the characteristics of the mother's network, but the child's contact with peers was not. Social speech, as predicted, was found to be associated with the child's contacts with peers and speech adequacy was found to be associated with the extent of the child's contact with adults.

Constance SUTTON (Anthro, NYU) & Muriel Hammer (NY St Psych Inst). "The Social World of the Yoruba Child."

This paper deals with the children's patterns of kinship and friendship ties among the Yoruba of Nigeria. It is intended to provide a cultural contrast against which to interpret generalizations emerging from studies of American children.

The data were collected in Nigeria through ethnographic observation and systematic interviews with 130 Yoruba men and women who provided information about their own histories as children, about their own children, and about other children in their current households.

It is clear that children have a different cultural role among the Yoruba than among Americans, and that the Yoruba child characteristically spends time daily with larger numbers of people, particularly extended kin (both adults and children), and, conversely, very little time either alone or with only a parent present.

Because of extensive kin contacts, migration, a conscious cultural emphasis on social contacts, and a culturally approved pattern in which most children are fostered by kin for extended periods, Yoruba children typically develop a much broader range of experiential knowledge of their own society than do American children. The implications of these children's social networks are considered, in terms of the acquisition of cultural knowledge and social skills, and in terms of possible psychological and psychiatric consequences.

Joan VONDRA & James GARBARINO (Human Dev't, Penn). "Social Influences on Adolescent Behavioral Problems."

Interest in the empirical link between social competence, social support, and individual well-being motivated the research reported in this study. Using data from an investigation of adolescent maltreatment the present study explored individual differences in adolescent social functioning and related these differences to hypothesized parental and familial influences, as well as to adolescent psychological adjustment. A three-level model of causal influence was proposed and tested.

In the original study, sixty families with a youth between the ages of 10 and 16 were interviewed in their homes by a three-member team, who collected data individually from the mother, father, and adolescent. On the basis of their behavior problem scores, the sample of 33 male and 27 female adolescents did, in fact appear to contain a number of "troubled" youth, an object of the original study. Age and gender differences in both the size and

percentage of kin in the social network and in its relationship to family functioning and mental health were found.

Path analysis revealed that adolescent social functioning was predicted by the amount of support the teenager reported receiving from his or her parents. Social functioning, however, did not independently predict adolescent mental health. Although the restricted path model was not powerful enough to reject the fully specified model, it was effective in revealing differences relating to externalizing versus internalizing adolescent behavior problems. Acting out behaviors tended to be more a function of the support adolescents felt they received from partners, whereas withdrawn, internalizing behaviors were more a function of the cohesiveness of the family system. Possible mechanisms to explain these results as well as directions to take for improving the "fit" of the causal model are discussed.

Selected Abstracts from annual meeting of the CANADIAN SOCIOLOGY & ANTHROPOLOGY ASSOCIATION. Montreal. June, 1985.

Richard APOSTLE, Gene BARRETT, Tony DAVIS & Ken KASDAN (Gorsebrook Inst for Atlantic Canada Studies, St. Mary's U, Halifax). "Small Capital in Fish Processing."

This paper will examine the reasons for the persistence of small capital in the harvesting and processing of fish in Nova Scotia. In particular, we will discuss the economic and social connections between fishermen, and the ways in which processing plants organize production. We will also focus on the extent to which communities are dependent upon the processing operations which are located in them, and the ways in which fish plants utilize labour reserves in these communities.

Marie CAMPBELL (Soc Work, Carleton). 1985. "Managerialism: A Class Phenomenon in Nursing."

Increasing "managerialism" in the nursing profession can be seen as a class phenomenon. A division, which has been developing for some time between nurses who do hands-on or "front-line" work and nurses who organize, supervise, evaluate, and instruct, is intensified when modern management methods are implemented in (Canadian) hospitals. Imported into the human service not-for-profit sector from capitalist industry, document-based management technologies make it possible for hospitals to intensify nurses' work and efface the level of services offered. Nurses' professional control over their practice is eroded as part of these same processes. Evidence supporting this argument comes from historical and textual analysis of the record-keeping system in place in an Ontario hospital. The work-up of individually-experienced nursing interactions into records which have a specific management function is one instance of a phenomenon Smith (1984) calls textually-mediated social organization, and is historically-specific phenomenon of the current stage of corporate capitalism. How the professions are being incorporated into a ruling apparatus, and what that means for nurses at different "levels" is addressed in this paper.

W.K. CARROLL (Soc, Victoria, B.C.). "Approaches to Analyzing Corporate Networks."

This presentation takes stock of the literature on network analysis of corporate power structures. Several methodological and substantive issues are reviewed, including the unit of analysis in intercapitalist networks, the functions and meanings of interlocks, and the explanation of interlock patterns. Discussion of these issues highlights the lessons that have been learned from the study of corporate networks and suggest an agenda for further work in this area.

W.K. CARROLL (Soc, Victoria, B.C.). "Labour, Community, and the State: Political Protests in British Columbia 1983-1984."

This paper will analyze the development and evolution of the Solidarity Coalition, a movement of unions and popular organizations that arose in response to the austerity program imposed by the B.C. government in July, 1983. The analysis will be theoretically informed by the political economy of advanced capitalism (particularly the writing of Offe, Therborn, and Urry) and the sociological theory of resource mobilization (particularly the writing on Gamson, Jenkins, and Tilly), and will focus on the dialectical relationship between actions of the state and of Solidarity, each serving as constraining premises for the other. Solidarity's transformation after the "Kilowna Accord" from a mass-action defensive movement motivated by immediate political threats to a professionally-staffed organization oriented less to mass action than to popular education and the development of progressive policy alternatives will be viewed as a logical, though not inevitable, outcome of the changing opportu-

nities for action that are themselves the result of earlier interactions with the state.

David CHEAL (Soc, Winnipeg). "Showing Them That You Love Them."

In this paper the author explores some of the implications of a symbolic interactionist approach for understanding the dynamics of gift transactions. Qualitative data are drawn from a study of giving on ritual occasions in Winnipeg. Following Herbert Blumer, gift giving is described as a socially defining process that consists of the mutual signifying of meanings and the taking account of the meanings thus signified. Special attention is paid to the transmission of meaning as a communicative event. According to the pragmatic semiotics of Charles Morris, communicative action involves making choices between available modes of signification. Five modes of signifying the value of a significant other through gift transactions are identified. The relationships between these modes of signification and economic relations in a capitalist society are discussed. The author concludes that a critical symbolic interactionism has much to contribute to our understanding of the dilemmas and contradictions of intimacy in a capitalist society.

June CORMAN (Soc, Carleton). "Making Ends Meet After The Layoff Notice."

For five generations, thousands of Hamilton wage earners have worked in the steel industry. High demand for steel increased employment in the 1970's and positive economic and social effects rippled through the local economy. Low demand for steel in the 1980's reversed this trend and resulted in thousands of workers being laid off. This paper examines the consequences of these layoffs for steelworkers and their families. How long was their unemployment experience? Did their health suffer? What kind of coping strategies did they use to make ends meet? The impact of unemployment is looked at by variations in age and sex. The paper argues that three factors ought to be examined to understand the consequences of unemployment: personal characteristics, network of community resources, and the structure of opportunities within commuting distance.

C. David GARTRELL (Soc, Victoria, B.C.). "Structural Approaches to Social Cognition."

How people perceive others, their attributes, and the social environment is a prosaic but basic question. Psychologists have cut a wide swath through this terrain but have left much of its sociological content buried under a heap of cognitive hypotheses. Nowhere is this more true than in the area of "social evaluation". Theories of reference groups, social comparison, equity and justice, relative deprivation, and subjective social class have structural roots stretching back to the last century yet have received most of their contemporary development at the hands of psychologists. In this paper I outline past developments and review more recent, structural approaches to social evaluation in a diverse array of substantive areas, including attitude formation, stress and health outcomes, diffusion of innovations, class consciousness and the justice of pay. Some suggestions for further development of these structural initiatives are offered.

Allan GORDON (Soc, Carleton). "Occupation and Class in Advanced Capitalist Society: The Case of Engineering in Canada."

This paper examines the relationship between the class location of engineers and their position in the technical relations of production ("technical location"), using Erik Olin Wright's conceptual and operational definitions of class location in capitalist society. Wright's definition of occupation, as a position within the technical relations of production, is problematic. For this reason, this paper presents a refined, although preliminary, conceptualization of "technical location": and describes a variety of indicators that could be used to measure this concept (e.g., "job"; time spent on paper work; time spent dealing with people; time spent dealing with things; etc.). In addition to exploring the conceptual connections between class and "technical location," within the engineering profession in Canada, this paper also explores the empirical relationship between these two variables, using qualitative and quantitative data obtained from a variety of secondary and primary sources (Canadian census tables; articles in the professional journal of the Engineering Institute of Canada; and unpublished tables obtained from the Canadian Council of Professional Engineers).

Svein JENTOFT (Inst of Fisheries, Dalhousie). "Dreams and Disillusionment: A Comparative Perspective of Fishery Cooperatives."

The co-operative mode of organisation has been regarded as the rational way to solve problems of coordination and management within the fisheries, at least from the fishermen's point of view. By taking control over processing, marketing and sometimes financing, fishermen hoped to break the relation with private fish buyers and merchants, thereby freeing

themselves from exploitation and external control. Fishery co-operatives have been established in western industrialised countries, often in competition with a private capitalistic sector. They have also been the most widespread device of organising fishermen for economic and social development in Third World countries.

This paper addresses the lessons which can be drawn from organising co-operatives in various fisheries. The results are not particularly encouraging. We discuss some of the problems and obstacles confronting co-operatives, and what can be learned from the failures as well as the successes.

Laura JOHNSON & Rhona ABRAMOVITCH (Social Planning Council of Metropolitan Toronto). "Parenting in a Changing Labour Market: A Pilot Study fo the Social Impact of Paternal Unemployment."

Labour market forces in Canada have created a new form of the family--one in which the father is unemployed and the mother is employed outside the home. This exploratory study investigates some of the social effects of such paternal unemployment. Using in-depth personal interviews with a sample of thirty Toronto area fathers of children ages six and under, the survey probes the impact of unemployment on the fathers themselves and on their relationships with members of their families. In particular, the study examines the effect of fathers' unemployment on their relationships with their young children.

M.J. KELNER (Behav Sci, Toronto). "Confessions of a Social Scientist in a Medical School."

The position of social scientists in medical schools is not a comfortable one. There is a basis lack of fit between the perspectives of physicians and that of social scientists who work in medical faculties. In teaching programs, the divergence stems from the individualistic orientation of medicine as contrasted with the more structural abstract perspective of social science. Negotiation is needed between these two orientations, and also with the pragmatic concerns of medical students. In research, the conflict is between the individual and structural explanatory models. These models identify different kinds of problems and different sorts of solutions; structural models often point to economic and political explanations of illness and inadequate care. Finally, the issue of professional dominance and the freedom of social scientists to choose their own research questions and explanations must be assured.

Peter LI (Soc, Saskatchewan). "Toward A Theory of Racial Oppression."

Despite the popular belief that racial groups are based on skin colour, this paper argues that racial categorization is the product of social processes whereby superficial physical features are used to segregate the dominant and subordinate groups for the purpose of exploitation. Race relations, accordingly, are unequal relationships which are justified by an ideology of racism. This paper develops a theoretical argument of racial oppression which suggests that initial racial contact, the subsequent relationships of production, and the resulting unequal power structure has important impacts on the type of race relations emerging. The paper also compares race relations under colonialism and capitalism by way of contrast.

Anthony MANI (Soc, McGill). "Mobility in a Segmented Labour Market: Evidence from an Italian Steel Centre, 1959-1983."

This study is an empirical analysis of those aspects of dual-segmented labour market theories concerned with "barriers and linkages" which are supposed to have an impact on intersegment mobility and differential patterns of job recruitment and work histories. A single, clearly defined, industrial labour market area is investigated. In the case chosen, the Italsider integrated steel complex at Taranto (Puglia), Italy, there is an unmistakable "core" producer with its concomitant primary segment workforce, i.e., these employed directly by the company itself. Individuals who work for the sub-contractors, which are in a subordinate (peripheral) relationship to Italsider, represent the secondary segment of the Taranto labour market. Two sources of information are used: the personnel files of the steel centre and similar data for subcontracting workers, and, questionnaire items from two sample surveys, one of Italsider workers and the other of the area's overall labour force. Segments are compared on labour mobility, geographic movement, occupational distributions. The implications of the findings for the theory of segmented labour markets, particularly firm-community relations, are discussed.

Peter SINCLAIR (Soc, Memorial U, Newfoundland). "The State and the Reproduction of Small Capital: The Fisheries of Northwest Newfoundland."

This paper will examine the contribution of state policy to small enterprise reproduction in a particular subregion of Newfoundland. The impact of licensing regulations, subsidies and unemployment insurance programs on the structure of the independent capitalist sector will be examined in light of the recent restructuring in this industry and the emergence of a large state capitalist enterprise.

Barry WELLMAN (Soc, Toronto). "Thinking Structurally."

After a decade of active growth, it's time to take stock of structural analysis. Three popular questions are addressed: 1. What's so special about structural analysis--doesn't everyone do it? 2. Isn't 'structural analysis' just another name for 'network analysis'? 3. Isn't structural analysis something Levi-Strauss does? The basic tenets of structural analysis are presented and I argue, chauvinistically, that it has developed in especially interesting ways in Canada. Some substantive findings from community studies are presented to clinch the matter.

Abstracts from SOCIAL NETWORKS 7,2 (June, 1985).

Steven PAULSON (Bus Admin, N. Florida). "A Paradigm for the Analysis of Interorganizational Networks." 105-26.

Network analysis is becoming popular in the study of interorganizational relations (IOR). It focuses attention directly on the relationships themselves, provides efficient descriptive summaries for entire systems of such relations, often includes intuitively appealing diagrams and is flexible and adaptable to a variety of situations. This flexibility, however, is due in part to the large number of different techniques which have been labeled "network" analysis. For the researcher who is attempting to use network analysis, this situation can result in a perception of vagueness and uncertainty rather than "flexibility" and produce the feeling that the techniques are not accessible. The purpose of this paper is to begin fill in the gap between IOR researcher needs and the specific techniques of network analysis. The field is reviewed, specific techniques are discussed and classified; a guide to selecting techniques is presented and directions for future IOR analysis are given.

Seymour SUDMAN (Survey Research Lab, Illinois). "Experiments in the Measurement of the Size of Social Networks." 127-51.

This paper reports the results of a series of experiments conducted to measure the effects of alternative procedures for determining the size of social networks. The three methods tested are recall, recognition, and numerical estimation. Respondents were selected from work, church, and social groups. The major findings were that recall estimates are substantially below those obtained by recognition methods and become worse for larger groups. On average, numerical estimates are reasonable approximations of network size estimates based on recognition, but there is substantial variability in the accuracy of individual reports on number of close friends than of friends or acquaintances. There are order effects on numerical estimates of network size and better estimates are obtained by first asking about close friends. Finally, there is some evidence that respondent characteristics such as age affect recall of network size.

Muriel HAMMER (NYS Psych Inst). "Implications of Behavioral and Cognitive Reciprocity in Social Network Data." 189-201.

Cognitive maps of social behavior are of interest for theoretical as well as methodological reasons. The issue that has primarily been addressed, in comparing cognitive with behavioral social network data, is whether the participants' level of accuracy in reporting their social behavior is high enough to warrant the use of cognitive data as a substitute for behavioral data. The present paper focuses, instead, on what these imperfectly matched sets of data may tell us about low level processes of cultural codification, namely, those revealed by the transformation of behavioral interaction to cognitive report. Specifically, the analyses undertaken here indicate that the discrepancies between the two kinds of data are systematic, and that the cognitive data reflect an integration of the participants' direct relationships with each other into the set of relationships they observe as well as participate in. Participants tend to discount their high-frequency co-interactions for whom they are reciprocally high. Thus, in reporting their direct relationships, they are

in effect codifying them in terms of indirect relationships--namely, the relationships their co-interactions have with others in the set.

John BOLLAND (Inst for Soc Sci Research, Alabama). "Perceived Leadership Stability and the Structure of Urban Agenda-Setting Networks." 153-72.

A number of recent studies have addressed the informal social structure surrounding urban decision making, showing its implications for collective political action. This paper extends these analyses by asking a prior question: what factors affect the structure of political networks? Specifically, the paper develops a model suggesting how one such factor, perceptions of political leadership and the expectations of political conflict they may engender, affect the structure of urban agenda-setting networks. Data collected from six cities show perceptions of leadership stability to be strongly correlated with four structural characteristics of these networks.

Christopher HIGGINS (Mgmt Sci, Waterloo), Ronald McCLEAN (York, Canada) & David CONRATH (Mgmt Sci, Waterloo). "The Accuracy of Biases of Diary Communication Data." 173-87.

A study to determine the accuracy and reliability of telephone communications data obtained via self-recording diaries was undertaken. The methodology involved comparing data obtained from the diaries to the more objective data provided by the recording capabilities of a PBX (Private Branch Exchange). Two questions formed the basis for the analysis. First, what is the level of accuracy of diary data, and second what biases are inherent in data obtained from self-recorded diaries. The findings indicate that diary data significantly understate the actual frequency of communications. There were also several biases inherent in the diary data. One involved a significant understatement of very short communications (i.e., those lasting less than 90 seconds). The others showed an under-recording of received calls and a likelihood to record internal rather than external calls. The conclusion drawn is that in the absence of objective data (i.e., data obtained from machine recording) diaries can provide usable data as long as one pays attention to the biases inherent in their use.

Abstracts from THE AMERICAN SOCIOLOGY ASSOCIATION ANNUAL MEETING. Washington, DC. August, 1985.

Mitchel ABOLAFIA (Cornell). "MARKET CRISIS AND ORGANIZATIONAL INTERVENTION".

Crises in a variety of financial and agricultural markets are an increasingly prominent aspect of economic and social life in the eighties. The purpose of this paper is to frame market crisis as an inter-organizational phenomenon susceptible to sociological analysis. The paper compares the Efficiency Model from neo-classical economics with two behavioural models, Market Politics and Market Sector. Analysis of the models indicates that the Efficiency Model is biased against the recognition and prediction of crisis. The two alternative models identify explanations of crisis in factors associated with internal market dynamics and institutional controls, respectively.

James BARON, Frank DOBBIN, & P. Devereaux JENNINGS (Stanford). "WAR AND PEACE: THE EVOLUTION OF MODERN PERSONNEL ADMINISTRATION IN U.S. INDUSTRY".

This paper charts the transformation of the employment relationship in different industries during the early part of this century, based on a representative sampling of U.S. business organizations. The first section of the paper documents changes in the control systems that prevailed in U.S. industries between the Depression and the end of World War II. Our descriptive analyses generally corroborate portraits of how and where technical and bureaucratic controls evolved that have recently been provided by neo-Marxists. The second section of this paper sketches an explanation for the rapid diffusion of bureaucratic controls which apparently occurred between 1939 and 1946. We examine the role of three key constituencies in shaping modern systems of workforce control: labour unions, personnel professionals and the state. In particular, our analyses underscore the tremendous role of government intervention in manpower activities during World War II in bureaucratizing employment. This effect of the state blurs the distinction between "efficiency" and "control" explanations of bureaucratic controls and internal labour markets, calling attention to institutional sources of change in organizations' employment structures. The concluding section highlights the implications of our findings for efforts to understand the employment relationship.

Catherine Begnoche SMITH & Vivian HIXSON (Michigan). "INSIDE ACADEMIA: STRATIFIED LABOUR MARKETS IN PROFESSIONAL EMPLOYMENT".

Male and female assistant professors in temporary and tenure-stream appointments in the sciences, humanities, social science and business colleges of a large university were surveyed in 1984 in order to assess their access to resources, rewards, and communication channels at work. Ninety (71% of those selected) returned usable responses. These data are used to test whether junior faculty employment fits the description of a dual labour market. Chi-square analysis for the effects of type of appointment on access to career resources, perceptions of benefits, rewards of work and security of future academic employment largely confirm the prediction that temporary academic work is distinct from tenure track work along many dimensions. Implications of the general lack of administrative guidelines are considered.

Denise BIELBY & William BIELBY (UCLA). "MEN'S AND WOMEN'S WORK COMMITMENT AND ALLOCATION OF EFFORT".

Our study concerns the ways men and women become committed to their work and family roles. We propose to study how those roles become sources of identity, how individuals develop preferences for a particular balance of work and family activities, and how commitments are affected by work experiences. Hypotheses about the commitment process are derived from three different perspectives and evaluated with a longitudinal statistical model based on the 1973-1977 Quality of Employment Survey Panel Study. Our study will identify similarities and differences between men and women in their commitments to work and family. We will examine the degree to which sex differences in commitment work are accounted for by: (1) the cumulative impact of prior experiences and investments in work and family spheres; (2) the rewards and opportunities available to men and women at work and at home; and (3) the ways men and women internalize normative prescriptions for adult roles. Supplementary analysis will examine consequences of work commitment for employment behavior, organizational commitment and the allocation of effort, and trends in commitment from the late 1960s through the early 1980s.

Jeffrey BROADBENT (Mich). "COMMUNITY STRUCTURE AND MOVEMENT MOBILIZATION: ENVIRONMENTAL MOVEMENTS IN JAPAN".

The major problem with models of social movements is that they don't bridge the gap between organizations, social structure, and ideological content. Smelser's and collective behavior models tend to say that beliefs arbitrarily create organization. Resource mobilization models clarify the structural conditions which facilitate mobilization, but do not predict which interests will be acted upon. This paper takes a step across that gap. Analysis of twelve Japanese environmental movements, using data from the author's field work, demonstrates the importance of three variables: leader/follower ties; leader's motivation; structural context of action. Leaders do not "convince" followers about an issue. They lead because of social ties or similar interests. The precise quality of these ties depends upon the pre-existing local social fabric of the community or stratum in which mobilization occurs. This varies from vertical deferential patronage relations to individualistic capitalistic boosterism for mutual profit. Within a patronage fabric, the ideological motivation of the leader may set the goal of the movement. Ties of dependency create a built-in set of constituents. The leader can select from the range of cultural potentials which goals to emphasize. He or she may swing the movement to the left, or may be coopted by the state or other elite and suppress dissent. Within a boosterism fabric, groups mobilize according to their self-defined mutual economic interests. Process analysis shows that in both cases, leaders act as moral entrepreneurs who mobilize their followers on the basis of solidarity or mutual profit, not ideology.

Ronald BURT (Soc, Columbia). "THE STABILITY OF AMERICAN MARKETS".

PURPOSE: Extend the application of a network model of market constraint over time and into non-manufacturing to determine the stability of the model as an exogenous concept predicting the structure of large corporations and the control firms have over price in their market transactions.

Esther Ngan-Ling CHOW (American U). "PAID WORK, HOUSEHOLD WORK AND SUPPORT NETWORK OF THE ASIAN AMERICAN WOMEN".

The aim of this paper is to examine the relationship between paid work and household work and to explore how such a relationship between the work and family systems affects the structuring of support networks among the employed Asian American women. Related literature in sociology and social science indicates exclusive research attention has been paid to the effects of women's employment status on the family. Research seldom questions the type of paid work that women do and how it differentially affects family organization and functioning. More specifically, this paper attempts to compare the household division of labour and support network among Asian American women involved in professional (i.e., professional, managerial, and technical jobs) and non-professional (i.e., white collar and blue

collar jobs) kinds of paid work. Several dimensions of housework are compared: What housework is done? Who does it? How much housework is done? Support networks are examined in terms of their nature (internal and external) and sources of help (many vs. few) available to the employed Asian American women for dealing with work and family interface.

It is hypothesized that professional Asian American women will have different patterns of household division of labour and support network than the non-professional Asian American women: (1) they do less housework; (2) their spouses do more; (3) their division of household labour is less differentiated by sex; (4) they rely more on the external support network (external to the family and kin systems, such as friends and hired hand help) and (5) they have a wider range of support sources. Data collected via questionnaire and indepth interview methods from a cross-sectional survey study with a disproportional stratified random sample of 121 Asian American women are used to test these hypotheses. The results of data analysis are presented and the implications of the research findings are also discussed.

Adele CLARKE (Tremont Res Inst, UC - San Francisco). "RESEARCH MATERIALS AND THE PRODUCTION OF SCIENTIFIC KNOWLEDGE: THE CASE OF RESEARCH ON REPRODUCTION IN MEDICINE AND BIOLOGY, 1900-1940".

At the turn of the century, biological and medical researchers were shifting from natural history and morphological approaches to experimental research, from problems of form to those of function. This shift to a more physiological biology had major consequences in terms of research materials and led to increased demand for in vivo and fresh materials, large quantities of same species materials, and research colonies for on-site materials access. The life sciences thus generated an array of new infrastructural organizations to support research including biological supplies and technical equipment industries and research colonies. This paper examines initial colony development illustrated through reproductive research and focused on primate colonies. The sociological significance of colonies lies in their status as new forms of social institution given impetus by changing intellectual commitments. The high costs of in vivo primate materials drew researchers into new relations with external funding sources and into the arena of "Big Science".

Lynn DAVIDMAN (Brandeis). "FAMILY, COMMUNITY, AND ROOTS: THE APPEAL OF ORTHODOXY TO CONTEMPORARY WOMEN".

This paper presents an analysis of the experiences of a group of young, professional Jewish women who decide as adults to become Orthodox. In my interviews with women in a "modern Orthodox" Jewish community, the quest for family, community, and roots - i.e., a theme emphasizing connections with others - was much more prominent in their accounts than the search for God and spiritual meaning. Their stories differed from most contemporary accounts of religious conversion in which the themes of spiritual questing and the search for meaning predominate. While the women in my study were seeking a meaningful life, they imagined and articulated this meaning in terms of the relationships and interconnections among people. This finding fits in with current literature on women's development, which theorizes that women's sense of self is developed and experienced in terms of the relationships which shape their lives. The data suggest that perhaps when the attention is focused only on women, we are afforded the opportunity to see new dimensions of the meaning of religion in people's lives.

Rollin DAVIS (Nebraska - Lincoln). "THE OWNERSHIP AND CONTROL OF THE LARGEST FINANCIAL INSTITUTIONS IN THE UNITED STATES".

This paper describes the ownership and control of the 232 largest financial institutions in the United States in 1977. Using a minimum of five percent of stock ownership as a basis for corporate control, data from the Corporate Data Exchange's Stock Ownership Directory: Banking and Finance (1980) were analyzed. Management control was found among 150 corporations (64.64%); 36 corporations (15.52%) were under family control; and 16 corporations (6.90%) were under the control of other financial corporations. Eighteen corporations (7.76%) were under mixed forms of control. Six corporations (2.59%) were under foreign control. One corporation (.43%) was under the control of a nonfinancial corporation. No data were available for five private companies (2.16%). Members of the families that owned controlling blocks of stock actively exercised control in 24 corporations (10.3%), thereby indicating the combination of ownership and management in one-tenth of the financial corporations.

Mary Lou DECIANTIS & David MEYER (Brown). "BANK LENDING POLICIES AND DIRECTOR NETWORKS".

In analyses of the "power elite" and interlocking directorates, banks have been found to have extended their control and to be at the center of power networks. The power elite perspective suggests that, controlling for size and type of bank, the distribution pattern of lending capital will be found to vary by the bank's position in the capitalist class structure. Research has found that banks characterized by a high level of interlocks with large business corporations and high ratios of their members involved in exclusive social clubs are the leading disinvestors of capital from older urban

areas. Ratcliff (1979, 1980) found that the class composition of a bank's board of directors was a more powerful predictor of lending policy than the size of a bank as measured by deposits. Ratcliff's results were suggestive but researchers have not systematically extended his pathbreaking research.

Susan DEVOS (Wisconsin - Madison) & Steven RUGGLES (Minnesota). "KINSHIP AND THE LIFE COURSE".

The family and kin group provide the first line of support and obligation for most individuals. The nature of involvement with kin changes as individuals age from infancy to adulthood to old age, but the kin network changes too as kin members also experience demographic events: birth, death, and marriage. This paper explores the connections between the life course and the kin group.

Analysis of age and kinship presents daunting theoretical and methodological difficulties. A central concern of many anthropological studies is the delineation of rules of kinship that dictate which kinds of potential relatives are recognized as kin (e.g. patrilineal vs bilineal). Our main focus is the demographic determinants of the kin group. The frequency and timing of births, deaths, and marriages defines the biologic context within which rules of kinship operate. Our concern is with the variation over the life course in the characteristics of the kinship universe as a product of these demographic factors. We are concerned with how the relationship responds to variations in the demographic regime.

We discuss the advantages, as well as disadvantages, of using microsimulation to examine the connection between an individual's life course, change in the nature of his or her kin group and demographic rates. Microsimulation allows us to follow the kinship path of individuals as they age. Finally, we employ a microsimulation model of kinship developed by Ruggles to examine the connection between an individual's life course and his or her kin group, and its sensitivity to overall demographic conditions.

Janice DYEHOUSE (Cincinnati). "NICHE OVERLAP AND COMPETITION AMONG THREE HEALTH CARE DELIVERY ORGANIZATIONAL FORMS."

Using an ecological perspective this study examined the pattern of competitive relationships that emerged as a new health care delivery organization, the Freestanding Emergency Center, entered the niche occupied by two existing health care organizational forms; the office practice of private physicians and the hospital emergency room. Using McPherson's (1983) method of measuring organizational niches in social space, the percentage of niche overlap was determined. It was predicted that the greater the niche overlap, the greater the intensity of competition. Organizations with a greater percentage of their niche occupied by another organization will compete more heavily than those organizations with lower niche penetration. A content analysis of the changes in advertisements in the Consumer Yellow Pages of the telephone directory from 1980 to 1984 served as a measure of competition. The findings of this content analysis support the predicted direction and intensity of competition among these three organizational forms. Based on the findings of this exploratory study the concept of niche overlap provides useful insights into understanding the dynamics of organizational survival.

In the second phase of the study demographic data from census tracts located within the Freestanding Emergency Centers' niches were used to describe the population characteristics needed to support this new organizational form. Population characteristics appear relatively homogeneous across the eight niches of the Freestanding Emergency Centers. This description serves as a baseline model to be used for future comparisons in predicting and explaining organizational survivals, deaths or mergers.

Bernard FARBER & Karen SMITH (Arizona). "TIES WITH SIBLINGS AND CHILDREN AMONG RESIDENTS OF SUN CITY".

This research compares the strength and extent of ties to brothers and sisters with those to adult sons and daughters for elderly persons living in the Sun City, Arizona, area. The analysis concerns effects on kin contact and assistance deriving from (a) whether the elderly persons have children and/or siblings and (b) the individual's conceptualization of kinship. These conceptualizations are distinguished according to line-of-descent or nuclear-family emphasis. Persons who conform to a line-of-descent perspective interact with children more than they do siblings and compensate for lack of children by a large amount of contact with siblings. In terms of assistance, they offset the lack of either siblings or grown children by a steady rate of reliance regardless of which is available. Persons who conform to nuclear-based perspectives interact with siblings and children equally, but do not seem to compensate for lack of children by contact with siblings. They do not rely upon siblings for assistance, whether or not they have grown children. This analysis indicates the importance of sibling relations for older people, but it also argues that siblings are not a predictable substitute for adult children. Rather, the saliency of kinship predispositions intervenes in defining the potential support resources of older persons.

Joe FEAGIN (Texas) & Beth Anne SHELTON (Oberlin). "COMMUNITY ORGANIZING IN HOUSTON: SOCIAL PROBLEMS AND CITIZEN RESPONSE".

Northern cities have received most of the attention in the urban literature; Sunbelt cities like Houston have been neglected, yet they are an interesting mixture of the old and new. They are similar to northern cities in some ways, such as urban problems, but different in other ways, such as business control and the weakness of citizens' movements.

Houston's growth has contributed to its image as a perfect example of a pro-business, free enterprise city, but there are limits and costs to this growth. In this paper we examine the nature of growth in Houston, the costs associated with that growth and the varied community responses to growth. We focus primarily on community and neighborhood based organizations, unions, environmental groups, and business organizations and their impact on the nature of urban development in Houston. The relatively weak progressive and community based movements, combined with the weak environmental and union movements are examined in light of the issues around which such groups might be expected to organize.

The conflicts between community based and business organizations over the form of development and the provision of city services are examined and the implications of these conflicts for development assessed.

Claude FISCHER (UC-Berkeley). "TECHNOLOGY'S RETREAT: THE DECLINE OF RURAL TELEPHONY, 1920-1940".

Between 1920 and 1940, about a million American farms lost or forsook telephone service, a drop of over one-third, even though other modern technologies were spreading rapidly at the same time in the same population. This paper reviews several speculative explanations for the little-known and anomalous "retreat" in technological modernization, including a few that point to a decline in farmers' demand and a few to a decline in telephone supply. State-level statistical analysis reveals the large-scale correlates of the decline. A review of fragmentary market studies suggests how farmers and vendors viewed their choices. This episode carries some lessons for both models of technological development and the social history of rural America.

Mark GRANOVETTER (SUNY-Stony Brook) & Roland SOONG (Arbitron Ratings Company, New York). "THRESHOLD MODELS OF INTERPERSONAL EFFECTS IN CONSUMER DEMAND".

The neoclassical economic theory of consumer demand, with rare exceptions, abstracts away from interpersonal influence. The present paper concerns the impact on markets of a particular kind of interpersonal effect: that the decision whether to purchase depends on the number of others who have previously done so. In some cases this effect is that of a "bandwagon": the correlation between one's purchases and those of others is positive; but there may be a "reverse bandwagon" as well, where one is less likely to buy the more others have done so. The various reasons for these effects, and the range of products for which they can be expected, is explored. Formal analysis follows the authors' previous work on "threshold models of collective behaviour"; the aim here is to construct demand schedules in the presence of interpersonal effects, and, with some simple assumptions about supply, to investigate whether there exist stable equilibrium prices and quantities, and how such equilibria are approached. The resulting model is a system of two coupled, first-order non-linear difference equations. For some parameter values, stable price-quantity equilibria can be found. For many others, equilibria are asymptotically unstable, and the system trajectory consists of cycles of longer periods, and ultimately lead to what has been called "chaotic" system behaviour, essentially indistinguishable from random noise. Thus, even under assumptions of perfect information, profit maximizing firms and utility maximizing individuals, oscillatory and even completely indeterminate market situations may result.

Frank LECHNER (Emory). "SIMMEL'S CONTRIBUTION TO THE ANALYSIS OF SOCIAL DIFFERENTIATION".

On the basis of Simmel's first monograph and some relatively unknown parts of his work, this paper argues that Simmel provides a systematic approach to differentiation as well as its correlates and consequences for culture, individual and society. Arguing that Simmel's work is "multidimensional" both in terms of presuppositions and in terms of theoretical generalizations, the paper emphasizes the substantive correspondence between Simmel and Parsons in their interpretations of modernity.

Lorraine MAJKA & Shirley NUSS (Wayne). "THE IMPACT OF CONSERVATIVE FORCES ON GROWING SOCIAL MOVEMENTS".

This research investigates the impact of networks of conservative forces on growing social movements in the Detroit area during two periods: the 1930s and early 1940s, and the 1960s and early 1970s. These time periods were selected because they have been characterized as eras of activism and social turmoil.

Networks of conservative forces were composed of interlocked corporate elites, conservative political organizations, extremist groups, public and private police, and federal agencies. The impact of these forces is assessed through examining both the organizations' activities and the consequences of their actions and activities. The data for this research were collected from an extensive examination of a variety of documentary sources and informant interviews. The data suggest that conservative forces had a major impact in the Detroit area during these time periods. Further, the data suggest that since these organizations had national linkages, they had an important impact on the course of socio-political history during these time periods.

Nancy MARSHALL (Wellesley). "THE SIGNIFICANCE OF GENDER IN WORKING CLASS WOMEN'S SOCIAL NETWORKS".

The research discussed in this paper originated from a desire to develop a greater understanding of women's relationships with other women - the reality of female relationships, the role that gender and gender roles play in social relationships, the connections between social structure and social relationships, and the relational basis for collective forms of solidarity. The paper focuses on the significance of gender in working class women's social networks.

The data was collected in a Northeastern urban community, generally known as a white ethnic Catholic working class city. The data was gathered through a series of intensive interviews with 28 white, working class, married mothers of young children; most of the respondents were not employed, or were employed less than 20 hours a week.

The respondents were found to live in a world where the majority of their social contacts are with women. Gender is a significant factor in the structuring of the respondents' social world through the sexual segregation of society and the gender roles assigned to women. Because mothers share a common interest in childrearing and homemaking, find that other women are primary sources of child-care and emotional support, and participate in a system of generalized reciprocity between women, the social networks of white working class mothers are likely to contain a high proportion of women, and these women are likely to be contacted more frequently than are men in these same social networks.

Sarah MATTHEWS & Tena ROSNER (Case Western Reserve). "THE DIVISION OF FILIAL RESPONSIBILITY BETWEEN DAUGHTERS IN OLDER FAMILIES".

This exploratory research conceptualizes older families as systems in which all of the adult children share filial responsibility. Fifty pairs of sisters with at least one Parent aged 75+ were asked to explain in open-ended interviews which of them did what for their old parent(s) and why. Data from the 23 pairs who were the only children in their families were analyzed qualitatively for this paper. The sisters clearly felt that responding to the needs of their old parent(s) was a shared responsibility and they coordinated their efforts. Their "vocabularies of motive" or their explanations for their own and their sisters' participation in the provision of care to the parents indicates that reasons make sense within the context of a given family. Although the same explanations were used by sisters whose relationships were not amicable, arriving at an equitable division of responsibility was more difficult to justify. Tension between a daughter and a parent threatened to undermine commitment to shared filial responsibility.

David MEYER (Brown). "THE ECONOMIC INTERMEDIARY IN NONLOCAL EXCHANGE".

Exchange among local economies is considered an essential factor in economic growth and development. The larger markets opened by exchange make possible specialization of labour and economies of scale. The intermediaries who control and coordinate this exchange have been recognized as pivotal actors in national and international economies. They consist of traders in the ancient empires; merchant wholesalers between the fifteenth and eighteenth centuries; financiers since the sixteenth century; corporate headquarters since the late nineteenth century; and a variety of other specialties including commodity brokers, export/import agents, and insurance firms. Some of the major social theorists who incorporated the division of labour into their theoretical frameworks identified the integrating role of these intermediaries. In spite of the importance attributed to intermediaries, scholars have not identified a common set of principles by which they function and change over time. The purpose of this paper is to propose such a set of principles. First, the major social theorists' comments on the division of labour and the role of intermediaries are synthesized. Based on these theorists and on case studies of intermediaries, a set of principles of intermediary activity is proposed. The principles are intended as a contribution to the recent work on the sociology of markets. These principles also have application to the ecological conception of the system of cities which has used the notion of key function to refer to the integrating role, but which has not elaborated the notion further.

Alana MITCHELL-HUTCHINSON (UC-Berkeley). "IN CAHOOTS: THE ANTI-AUTHORITY SENTIMENT IN FRIENDSHIPS".

Evidence from friendship studies suggests that friendship is based on mutuality of world view. For the present study, one key to mutuality of world view is the actor's response to authority. This paper argues that a necessary condition for best-friendship is a shared degree of distance from authority. This study is based on 18 months of daily field observations in two day-care centers. The author observed over one hundred children with attention to their degree of defiance towards authority figures and the nature of their interactions with peers. The conclusions suggest that social adjustment to the peer group at age 3 is predicated upon earlier patterns of sociability that are largely determined by the child's response to and interactions with authority figures.

Mark MIZRUCHI (Computer Center, Albert Einstein College of Med). "INEQUALITY, DIVISION OF LABOUR, AND ORGANIZATIONAL PERFORMANCE: A STRUCTURAL ANALYSIS OF PROFESSIONAL BASKETBALL TEAMS".

This paper examines the relation between an organization's internal structure of activities and its performance, employing data on professional basketball teams. Two broad positions are presented: a "humanistic" position which suggests that relative equality of reward and absence of division of labour positively affect performance; and a "bureaucratic" position which suggests that hierarchy and division of labour promoted increased performance. Twenty-two professional basketball teams over a three-year period are examined on two measures of inequality, three of specialization, and one of integration. The measures are based on distributions of team activities that are definitionally independent of performance. Specialization is negatively related to performance. One measure of inequality is positively related while one measure is negatively related. Integration is positively related in a simple correlation, but is not a factor when other variables are controlled. The results, although providing some support for both perspectives, generally favour the humanistic model.

Jeanine MOUNT (Wisconsin) & Robert PERRUCCI (Purdue). "WHAT IS AN INTERORGANIZATIONAL RELATIONSHIP? A COMPARISON OF DIFFERENT UNITS OF ANALYSIS AND CONTENT OF TIES".

This paper examines the differing forms that interorganizational relationships (IOR's) can take. We focus on a community-based network of 27 agencies delivering services to the aged. Analysis is based on data collected via interviews with the top administrator in each agency and with 72 professionals in boundary spanning roles in these agencies. We construct a series of inter-organizational networks which vary in (1) the level in the organization which serves as the basis for the tie, i.e., organization-vs. administrator-vs. professional-level, and (2) the content of the tie, i.e., resource-exchange vs. service related organization-level ties and instrumental vs. social individual-level ties.

Analysis has two components. In the first, based on Freeman (1979), we compute and then correlate degree and betweenness centralities of the positions occupied by organizations, administrators and professionals in their respective networks. Correlating these measures across networks varying in the level in the organization and/or content of ties indicates the extent of consistency in structural positions held by an organization and its members. Second, we measure the extent of overlap of ties among actors representing specific dyads of organizations, thus describing how strongly reinforcing dyadic ties are across different organizational levels.

We find (1) greater consistency in structural positions when comparing degree (rather than betweenness) centralities, (2) greater consistency in structural positions when comparing networks existing at the same level (rather than different levels) in the organization, and (3) with the notable exception of professional-level social ties, generally reinforcing patterns of ties involving organization-level, administrator and professional-level IOR's. We discuss these findings as they relate to the conceptualization and measurement of IOR's, and to our understanding of organizational boundary spanning.

Keiko NAKAO & Oscar GRUSKY (UCLA). "A MULTIDIMENSIONAL SCALING ANALYSIS OF INTERORGANIZATIONAL RELATIONS IN FOUR COMMUNITY SUPPORT SITES".

Interorganizational contacts were examined to assess selected features of local mental health delivery systems, in particular, community support system (CSS) sites. Two hypotheses on organizational functions which bear on the goals of the NIMH Community Support Program, were examined: (1) CSS core agencies are the most centrally located organizations in the local system, and (2) institutional mental health and community service organizations form separate clusters in local delivery systems. Multidimensional scaling was applied as a method of distilling key system features and of producing visual representations of system structures based on inter-organizational contacts.

Pamela OLIVER (Wisconsin). "BRINGING THE CROWD BACK IN: THE NONORGANIZATIONAL ELEMENTS OF SOCIAL MOVEMENTS."

Organizations are very important in social movements, but they are not the whole story. Social movements are exceedingly complex phenomena encompassing the actions of organizations and their members, the actions of nonmembers in activities planned by organizations, and the actions of nonmembers in activities that organizations have nothing to do with, and may even oppose. It is well known that recent scholarship in the resource mobilization tradition has given heavy emphasis to organizations and organizational dynamics. The older "collective behaviour" tradition also tends explicitly or implicitly to equate social movements with the activities of particular movement organizations; crowd events are analyzed extensively, but one at a time, with little attention to the larger historical context which may or may not make them parts of social movements. This essay sketches an understanding of social movements which integrates organizational and nonorganizational elements of social movements, and the relations among them. Social movements are viewed as large, complex sets of collective events oriented toward some general social change goal. These events are seen not merely as common responses to the same external stimulus, but as affecting each other and accumulating into the dynamic event we call a social movement. Actions can affect the likelihood of other actions by altering material conditions or by creating new information. Communication networks and the mass media play a central role in the accumulation of actions into a movement. This perspective provides a vocabulary for discussing important historical phenomena such as the relation of the 1960s riots by poor urban blacks to Civil Rights and Black Power organizations, the relation between explicit feminist ideology and organizations and the widespread rise in women's "consciousness" in the 1970s, and the tendency for some historical periods to be marked by many social movements, while others are relatively quiescent.

Pamela OLIVER, Gerald MARWELL & Ralph PRAHL (Wisconsin). "ORGANIZER AND NETWORK CHARACTERISTICS AS PREDICTORS OF COLLECTIVE ACTION".

This is a formal theoretical investigation of the effects of organizer and network characteristics on the prospects for collective action through explicit or implicit all-or-none contracts. Such contracts, wherein individuals all agree that they will contribute to the collective good if everyone else who is party to the contract also contributes, are one resolution of the free rider problem in collective action. Individuals can find it rational to participate in such contracts even when they would not find it rational to make independent contributions. However, these contracts require organization: there must be communication linkages among all the parties, and someone must absorb the cost of employing those linkages and coordinating the contract. This paper assumes (as is very common empirically) that one individual organizes the contract and absorbs all the organizing costs, and that these costs are roughly linear with the number contacted. Obviously, groups and organizers with higher levels of interest and resources are more likely to be able to support successful contracts. Greater group heterogeneity and skew about a given central tendency have positive effects for an interest group taken as a whole because they mean that a smaller number of individuals can contribute enough to make the contract successful. However, when communication is imperfect, heterogeneity and skew in the interest group as a whole produce great variability in the subgroups actually connected to particular organizers: most will be connected to subgroups with homogeneously low interest and resources, while a few will be connected with the few very resourceful or interested individuals. The impact of this variability on predictions about the success of collective action depends upon assumptions made about the distribution of potential organizers. The effect of network density interacts with group heterogeneity and the organizer's resource level. Greater density of communication linkages increases the total pool of resources that could be mobilized for a contract, but this is helpful only if the organizer has sufficient resources to contact everyone. Organizers who have enough resources to contact many people often have enough resources to provide the collective good directly by themselves. The more common way in which greater density is helpful is that it increases the probability that the organizer is connected to the most interested and resourceful group members, allowing him to form a successful contract from relatively few members at relatively low organization cost.

Ted PERLMUTTER (Italy). "INTELLECTUALS AND URBAN PROTEST: TURIN 1968-1976".

Although Italian urban protest was the most protracted and class conscious of the wave that struck Western Europe and the United States in the late 1960s and early 1970s, little systematic analysis has been carried out on its development. This paper discusses the patterns in Turin, an automobile city where protest was among the most innovative and continuous in Italy. It will examine three different cases: housing occupations, anti-urban renewal activities, and campaigns to resist increases in electricity, telephone, and transport costs (the 'autoriduzione' campaigns). The paper will analyze the role that political parties, unions, neighborhood groups, architects, and revolutionary organizations played in developing these actions and in transforming them from isolated episodes into coherent, city-wide movements. The argument will be

made that there are two distinct phases of protest: the first characterized by more spontaneous and violent movements, the second by more articulate claims oriented to specific goals within the political system.

It will also analyze the changes in strategic vision that led these groups to reassess their tactics. In so doing, this paper will argue that the phases of urban protest in Italy are less determined by developments endogenous to the city and its particular patterns of economic development, than by the organizational concerns of the actors. Using local newspapers, extensive archival materials, and numerous interviews, the paper will show how the claims of the movements, and the patterns of cooperation between groups changed, and how their reading of national and workplace politics affected their involvement in urban protest.

The theoretical contributions of this paper will involve comparing the trajectories of community and factory protest and suggesting the implications of the Italian case for recent Marxist theories of urban protest.

Barbara RISMAN (Soc, North Carolina State). "A THEORETICAL NOTE ON GENDER: TOWARD A STRUCTURALIST PERSPECTIVE ON INTIMATE RELATIONSHIPS."

While individualist and structural paradigms may complement each other as explanations for the social organization of gender, structural explanations have thus far received short shrift even from sociologists. In this paper, I present a structural approach to clarify many aspects of gender that cannot be explained by the currently dominant individualist approaches alone.

Mark SELDEN (SUNY-Binghamton). "CLASS MARKET, STATE: CLASS IMPLICATIONS OF REFORM IN STATE SOCIALIST SOCIETIES".

What are the implications for class structure and transformation of the expanded market role in state socialist societies? While recent research has focused on patterns of equality and inequality in contemporary socialist societies, formulations of social class structure remain primitive. The present paper attempts to define the major class configurations during three major periods of Chinese socialism: State Capitalism, 1949-55; Centralized Collectivism, 1956-78; Planned Commodity Economy, 1979-. This paper analyzes ownership, production and exchange relations to assess the consequences of the expanded scope of the market on contemporary Chinese social structure and city-country relations.

Janet SEVERANCE (Minnesota). "FAMILY SUPPORT OF THE ELDERLY: A PROCESS OF INTEGRATION".

This paper provides a new model for conceptualizing the relationship between family support and public services in caring for frail elderly. The model is based on telephone interviews with the main family caregiver or friend of 375 elderly at risk of nursing home placement. The data are part of a longitudinal evaluation of Minnesota's Nursing Home Pre-Admission Screening Program. Information obtained through these interviews, and a review of the literature, indicate that social scientists and policy makers should view the relation of public services to family support as a process of integration, not a static division of caregiving. Use of this model could guide policy decisions which would relieve family caregivers as their needs increase, rather than waiting until they become exhausted and see nursing home placement as the only option.

Anne SHLAV & Robert GILOTH (Cornell). "THE SOCIAL ORGANIZATION OF A LAND BASED ELITE: PROMOTERS OF THE 1992 (CHICAGO) WORLD'S FAIR".

Urban sociologists are redirecting attention from the natural processes of urbanization to the politics and institutions which guide land use development patterns. This paper looks at the organizational structure which allows local elites to set public development agendas and to promote particular forms of urban growth. This research investigates the organization of a local land based elite by examining the networks behind the organization that promoted a major urban land development project -- Chicago's 1992 World's Fair. It suggests that the 1992 Corporation's ability to set a major development agenda came from member's connections to large and powerful institutions, from shared interests and a tight network, and not from a set of innovative ideas. It looks at the corporate, public and private organizational connections among members of the 1992 Corporation, the original planning body for the fair, and shows that behind promoters of the Chicago World's Fair was the formal consolidation of already organized corporate interests with mutual affiliations and concerns. The 1992 Corporation was dominated by representatives of manufacturing, publishing communications, advertising, energy, banking and insurance, and development. It was comprised of the already organized interests of major local organizations devoted to economic development, technology boosterism and downtown planning, and 1992 Corporation members belonged to the same elite clubs. This research shows that urban changes

are not automatic but represent the concerted activities of organized land based elites in setting public agendas which direct metropolitan development and promote urban growth.

David SMITH (UC - Irvine). "THE URBAN INFORMAL SECTOR AND THIRD WORLD "OVERURBANIZATION" ".

After many years of relative neglect the issue of "overurbanization" in Third World countries has recently received renewed attention in the social science literature. Adopting a political economy of the world-system perspective on urbanization and development, this paper critiques the theoretical adequacy of the overurbanization thesis. Conceptualizing a causal relationship between spatio-demographic imbalances, labeled "overurbanization," and relatively skewed and stagnant economic development is misleading. Both urban patterns and development trajectories are distorted by the international dependency of Third World nations in the world economy. This general argument is illustrated by discussing the role that the so-called "urban surplus labour" of the "informal sector" plays in surplus extraction under peripheral capitalism. While the existence of a large pool of non-wage workers in these cities appears to be a symptom of the inefficiency characteristic of "overurbanization", in fact this apparently "un-" "under" and "mis-employed" labour is shown to provide direct and indirect subsidies to local formal businesses. Ultimately, these underremunerated workers may play a key role in explaining a mechanism of global "unequal exchange". While this aspect of Third World urbanization may indeed impede genuine national economic development and have deleterious consequences for the urban masses, it appears to be congruent with the needs of both some local elites and their allies from international capital. A more useful analysis of the problems posed by rapid urbanization and distorted development must consider the political and economic ramifications of the subordinate roles Third World societies play in the modern world economy.

Claudia VON WERLHOF (Bielefeld). "WHY PEASANTS AND HOUSEWIVES DON'T DISAPPEAR IN THE CAPITALIST WORLD SYSTEM ".

Since the period of "primitive accumulation" the powerlessness and exploitability of women and peasants has become the pre-condition for their further existence. Paradoxically, women and peasants, who appear as "disappearing" producers since then, are permanently necessary as low or non-waged laborers in the cities and in industry and as low or non-remunerated producers of basic "raw materials" (human labour power and food). This production, which depends directly on nature, appears as "limiting" factor of capitalist production. Women and peasants (including the colonies) have therefore been identified as those responsible for these "limitations". Consequently they have been brought under the monopoly control of the state/capital. Politically this meant that they were not defined as full members of society. Socially it meant that they automated in small production units (peasant household, nuclear family). Economically it meant that they had to be "separated" from their means of production (soil, uterus) "artificially" throwing the peasant off their land and resettling them elsewhere under new conditions of production; methods of birth control, forms of marriage and divorce, transformation of women into "housewives", e.g. through a continuing process of "primitive accumulation". The fact that a "real" separation of these producers from their means of production was not possible, meant also that they could not become "free" wage labourers. Peasants and housewives could neither be fully proletarianized, nor could they be left "free" to "accumulate". This way they constitute a necessary social class (or classes) in the capitalist world economy (including "socialism"), which is held in conditions of unfreedom and coercion. This is mystified through ideologies about their "backwardness", "unproductivity", "conservatism", "economic inactivity" and "underdevelopment". As women and peasants form the majority of the world population, they are also defined as "overpopulation" which has to be controlled numerically and "eliminated" when becoming "dangerous". (Cf. the "population law" as the "general law of capitalist production").

Theorists of power or women and peasants have been broken through the modern sexual division of labour, which destroyed the possible solidarity between them. So, the "female" status of peasants vis-a-vis the proletarians has been "compensated" through the "masculinization" of male peasants vis-a-vis female peasants who have been transformed into peasant housewives (e.g. links between "class" and "sex").

Actually we are confronted with a new phase of an ongoing "primitive accumulation", in which agro-industrialization and "new reproductive technologies" are promoted in order to finally finish with the "dependency on nature", namely peasants and women. But, learning from the historical processes, one can suggest that there will be no "liberation" of women and peasants even then, but a new way to define them back into a new, "third" nature, which will have to be socially "created".

Barry WELLMAN, Paula GOLDMAN & Gail MOORE (Toronto). "GETTING SOCIAL SUPPORT".

Most social support research to date has looked at the relationship between (types of) support to health. Our work extends the analytic chain back one link by considering the social factors associated with the appearance of various types of social support in social networks. We deal with five types of support: companionship, emotional aid, services, information and financial aid. We consider the relationships of these types of support to tie factors (e.g., kinship, frequency of contact, network factors (e.g. density, clustering), and network members' attributes (e.g., gender, social class).

Abstracts from URBAN CHANGE AND CONFLICT CONFERENCE, University of Sussex, April 15-19, 1985.

John WALTON (Soc, Cal-Davis). "Community Revolt: Class & Culture in the struggle over urbanization."

An account of the Owens Valley resistance to Los Angeles imperialism in taking their water supply. Communities act when exploitation encounters democratic institutions playing a strategic local role, isolation and uncertainty, class alliances, a legitimizing state caught in its own contradictions, and a culture of protest concocted of all this.

Bob JESSUP. "The State and Political Strategy."

There are two broad Marxian schools: capital theoretical and class theoretical. The 1st focus on links between the state and capitalist modes of production, seeing the state as the political support of the imperatives of capital accumulation. The 2nd discusses issues ranging from the nature of the capitalist labour process to the preconditions of national popular hegemony. But there's a big, irreducible gap between studies of the logic of capitalism and of class struggles.

Looking at the French 'regulation school' can help. It's concerned with successive forms of the labour process and its integration into the circuit of capital both nationally and internationally. We need a 'strategic-theoretical' approach to bridge the capital/class gap. This provides the means to examine alternative logics of capital, to understand why the interplay among particular class struggles doesn't produce a collapse into barbarism, to look at competing hegemonic projects and accumulation strategies. The chief implications of the strategic-theoretical approach are: 1. the state is a specific institutional ensemble with multiple boundaries, no institutional fixity and no pre-given formal or substantive unity; 2. While the formal unity of the capitalist state is established around such abstract norms as law, money, time and space, these cannot constitute unambiguous boundaries as forms do not have determinate content; 3 & 4. Thus the formal unity of the state must be related to its substantive unity, derived from specific political projects and struggles to impose coherence on that system. etc.

Ray PAHL (Soc, Kent). "Divisions of Labour."

The way all forms of work gets done is changing: employment is shifting from manufacturing to services, part-time work (mainly for females in the service sector) is growing more rapidly than full-time work (for both males and females) and members of households are doing more work for themselves (self-provisioning). These shifts between sectors of the economy, between men and women, between full-time work (typically providing 'family wages') and part-time work (typically providing 'component wages') and between employment and other forms of work are producing new divisions of labour in and outside the home and between men and women.

These divisions will be illustrated with data relating to Britain and detailed documentation of household work strategies will also be provided by drawing on an in-depth survey of the Isle of Sheppey in Kent. A 1 in 9 random sample yielded 730 households with a 79 per cent response rate. Evidence is presented to show the overwhelming importance of work done by members of households for themselves in the sphere of home maintenance, house improvement and renovation, car maintenance and domestic production. Households using informal sources of labour - whether paid or unpaid - were in a very small minority. Only in the case of window cleaning was there any substantial use of informal labour (in this case it was paid).

It is sometimes asserted that unemployed people are more likely to engage in forms of self-provisioning for their own households and to be more readily available as an informal source of labour for others. The Sheppey data provides unequivocal evidence to show that this is not the case and studies in other European countries (e.g., University of Lille research) support this conclusion. There are a number of reasons for the lack of informal work amongst the unemployed and for the decline of informal work outside the household amongst working class people. Access to informal work is easier if one is already in employment and there is time and opportunity to exchange information and take on extra tasks (firemen syndrome).

Those without tools, transport or money are severely handicapped in seeking or in carrying out informal work. Newly redundant men do not have the contacts or the appropriate mentality to take up the style of work of the "professionally committed unemployed". These latter are anxious to keep their own informal activities to themselves and resent the intrusion of outsiders. Further, there is a limit to the expansion of many forms of informal work and newcomers may be inhibited both by the informal closed shop of existing practitioners and the fear of being informed on by neighbours to the DHSS or Inland Revenue.

If the unemployed lack the resources to do much self-provisioning then, given the large amount done, it is clearly those with greater financial resources who are able to do more work for themselves. However, skills are also necessary, so skilled manual workers may have an advantage over non-manual workers. It is shown that high income households do more self-provisioning than low income households and that such high income households typically have multiple earners, particularly when the chief male earner is a manual worker. Other earners in the household may include unmarried sons or daughters in short-term and low-paid employment and the chief earner's wife in low paid part-time employment. These other members of the household could not, on their own, support the household with their individual wages, which have real significance only as components of the total household wage. Households with both husbands and wives in full-time employment are in a particularly privileged position. The 1981 census for England and Wales provides details of the number of economically active persons in households of different sizes. Overall, 40 per cent of all households had two or more economically active members, 33 per cent had one and 26 per cent had none.

Those who consume informal sources of labour, whether paid or unpaid, are most likely to be the elderly and retired and the lone-parent households. In households where the male chief earner is unemployed there is much less chance that his wife will also be in employment, compared with those households where the chief earner is in employment - 30 per cent compared with 58 per cent. There are, therefore, a number of interrelated social and economic processes which produce, at one extreme, busy, multiple-earner households engaging in all forms of work inside and outside the household, for themselves and others. At the other extreme are households with no earners, unable to engage in either self-provisioning or informal work for others and who are increasingly both socially and economically isolated. This overall process of social polarisation divides the nation geographically and socially and splits up communities and social networks. It undermines the potential basis for local community mutual support and solidarity. It may also account for what may seem to be remarkable quiescence in the face of the substantial increase in long-term unemployment.

The policies of the present British government and the employment strategies of employers combine to encourage the growth of part-time work for women and low-paid, often transitory, work for young people between the ages of 16 and 22 or older. Such people are obliged to pool their resources in a household income so that there is a tendency for multiple earner households to expand. The operation of the taxation and benefit system combines to discourage component wage earners in households where the chief earner is unemployed.

The self-provisioning work of households has expanded very substantially in recent years, particularly amongst those households who are buying their own dwellings. The more employment households have collectively, the more of all other forms of work such households do. In order to get the less busy households more busy they need more money, not less and they need to have their own dwellings and cars to work on. Unhappily there is still confusion about the forms and nature of informal work and of the new divisions of labour flowing from the interaction of employment practices in the labour market and household work practices in the dwelling and the community.

Conference on COMPUTERS AND SOCIETY - U of Rochester, June 21-22, 1985.

This conference, with 75 attendees, reviewing recent empirical research, with special attention being paid to the impact of new computer developments on the social organization of work. Selected abstracts compiled by Barry Wellman:

Michael RAHAV (Min. of Mental Health, Jerusalem, Israel). "Computers & Society: The Case of Israel's Psychiatric Case Register."

Israel has now computerized its psychiatric in-patient files. An unintended consequence of the greater ease of database access is that other government ministries--such as the police, army, firearms permits--are now using this crudely as a screening device.

Michael GURSTEIN & Fernande FAULKNER (Socioscope, Ottawa). "Office Automation and Organizational Culture."

A Canadian ministry introduced a computerized call distributor system into its Toronto and Montreal offices. The two offices had been organized differently. Toronto: industrial, high division of labour, hierarchical authority. Montreal: collegial, one person responsible for an entire case, more egalitarian division of labour. The new technology allowed for more supervisory monitoring of workers. The already-industrialized Toronto office was not nearly as threatened by this as the Montreal office. However, the Montreal office organized through their existing supportive ties to protect their way of doing things and devised ways of using the new system to do better forward planning.

Paul ATTEWELL (Soc, SUNY--Stony Brook). "The Impact of Computers on Organizations."

Reviews four controversies--deskilling, surveillance, loss of middle management, telecommuting--and finds that the impact of new computer technologies will be less than many had feared anticipated.

Jeffrey SALLOWAY (Soc Sci, Rush Medical Col, Chicago). "Information Technology and Interaction on the Job."

Technological innovation is often based on cost-benefit expectations. Adaptation to a new technology, however, raises issues far removed from cost. A current area of technological innovation in medical centers is the installation of electronic information systems. Previous research has demonstrated conclusively that changes in attitudes and work behaviors result from such systems. This study examines whether implementation of an electronic information system changes the structure of social interaction within a hospital. Using a cross-lagged longitudinal methodology a large Midwestern medical center was surveyed prior to installation of a medical information system, shortly after installation, and six months later. The respondents were primarily clerks in various departments. While positive attitude toward the electronic information system declined among those who worked with it, job satisfaction increased. This seeming contradiction led to an examination of changes in patterns of interaction on the job. The resulting analysis of variance showed increases in both telephone interaction and in-person interaction of clerks with higher status members of the hospital staff. The conclusion is that the change in job satisfaction is a function of altered patterns of association: clerks now interact more with nurses and physicians and less with other clerks. This finding is unusual in that job satisfaction has not previously been linked empirically to patterns of interaction.

Laurel HALLERSTEIN (Communic, Massachusetts). "The Social Use of Electronic Communication at a Major University."

The results of this study of a university-wide electronic mail system indicate that many use it as a way to meet new people and make new friends. There is a fairly large, socially active computing sub-culture whose members are the heavier users of the system.

(Network Notebook continued from page 98)

For Classification Mavens

The JOURNAL OF CLASSIFICATION is preparing a special issue about comparison & consensus problems in numerical taxonomy. Such papers might address, for example,

- methodological issues involving the comparison or consensus of partitions, dendrograms, or other discrete structures;
- theoretical issues involving the modeling, characterization or investigation of comparison or consensus techniques;
- evaluative issues concerning the relevance, practicality or validity of such techniques.

Ms. to William Day, Centre de Recherches Mathematiques, Univ. de Montreal, C.P. 6128, Succ. "A", Montreal, Que, Canada, H3C 3J7--by 1 Feb 86.

Winter Reading

Samuel DELANEY. 1984. STARS IN MY POCKET LIKE GRAINS OF SAND. NY: Bantam. 375p. \$3.95.

A truly network-ish science-fiction novel. The two contending forces are the FAMILY (believing the Community Lost argument) and the SYGN (believing the Community Liberated argument). The universe is held together by the Web, "a shadowy organization that controls the flow of information between the worlds." In a few worlds, "Focus Families" have lots of visibility and influence; otherwise, world governments tend to be "bureaucratic anarchism."

(Warning: the book falls apart towards the end but a sequel is promised real soon now.)

(continued on page 167)

ABSTRACTS

Philip ABRAMS (Soc, Durham, deceased). 1984. "Evaluating Soft Findings: Some problems of Measuring Informal Care". RESEARCH, POLICY AND PLANNING 2(2):1-8.

This paper discusses the value of non-experimental methods of a qualitative kind for the study of informal care. Drawing on research on neighbouring conducted at Durham, various strategies are suggested for obtaining confirmation of data gathered by observation, which would make the results more rigorous & 'hard'.

Philip ABRAMS (Soc, Durham, deceased). 1984. "Realities of Neighbourhood Care: The Interactions between Statutory, Voluntary & Informal Social Care". POLICY & POLITICS 12(4): 413-29.

The relationships between forms of care & other structures of society, may well best be grasped if we abandon the 'problem' of neighbourhood & redefine our concerns in terms of the (Wolfenden Committee) distinction between formal & informal systems of care. We should now ask in what ways within an overall system of social care the formal & informal sectors could be drawn together in highly localized sites (neighbourhoods) in complementary, mutually supportive relationships. Some 'Good Neighbours' schemes are discussed as case studies. Among the possible forms of relationships linked formal & informal care are colonization (itself divided into domination, appropriation & incorporation), integration, conflict & confusion.

Rebecca ADAMS (Soc, North Carolina, Greensboro). "People would talk: Normative Barriers to Cross-Sex Friendships for Elderly Women". GERONTOLOGIST. 1984.

A normative explanation for elderly women's lack of male friends is developed by showing that cross-sex friendship is defined as romance, that there are norms inhibiting romance during old age, and that other norms encourage them to reject potential mates who can no longer meet traditional sex role demands. The data were derived from in-depth interviews and observations of 70 non-married, white, elderly women who lived in a middle-class Chicago suburb. It can be expected that future cohorts of elderly women who will have been exposed to models of non-romantic cross-sex friendships early in their lives will have more of these friendships during old age.

George AKERLOF (Econ, Cal-Berkeley). 1984. "Gift Exchange & Efficiency-Wage Theory: 4 Views". AMERICAN ECONOMICS REVIEW 74 (May):79-83.

This paper gives further commentary on 'partial gift exchange': the willingness of some firms to pay workers in excess of the market-clearing wage; in return, they expect workers to supply more effort than they would if equivalent jobs could be readily obtained. Standard economics treats this as counterintuitive, but this paper presents 4 other paradigms of the labor market which treat such wage-setting behaviour as natural: dual labor markets, the theory of bureaucracy, the theory of work groups, equity theory.

Howard ALDRICH (Soc, North Carolina), John CATES (Edge Hill C, Ormskirk), Trevor JONES (Liverpool Poly), David McEVOY (Liverpool Poly) & Paul VELLEMAN (Indus Rel, Cornell). 1985. "Ethnic Residential Concentration & the Protected Market Hypothesis". SOCIAL FORCES 63 (June):996-1009.

The concept of protected consumer market has been used to refer to the special, culturally based tastes of ethnic minorities that can only be served by co-ethnic businesses. We argue that residentially segregated ethnic enclaves are another form of protected market which arises under historically determined conjunctures of immigration patterns and urban economic development. Using 571 survey interviews with Asian and white shopkeepers and population data from three British cities, we test six hypotheses regarding the determi-

nants of a shopkeeper's proportion of Asian customers. Taken together, residential concentration and social distance factors account for 53 percent of the variation in customer composition, as the proportion of Asians residing in an area and the ethnicity of a shopkeeper are found to have strong and independent effects on customer mix.

Phyllis ASHINGER (Family & Consumer Resources, Wayne St.). 1985. "Using Social Networks in Counselling". JOURNAL OF COUNSELLING AND DEVELOPMENT 63(8):519-21.

Social networks may be the key for counselors in making their services more effective. Using social network inventories could lead to problem resolution and ongoing support for clients after formal interventions have terminated.

Kenneth BAILEY (UCLA). 1985. "Systems as Clusters". BEHAVIORAL SCIENCE 30(2):98-107.

General systems theory (GST) is a relatively young interdisciplinary approach which studies interrelationships among relatively homogeneous groups of components. Numerical taxonomy (NT) is very similar in these respects. Ironically, discourse between these complementary approaches is virtually nonexistent. The purpose of this article is to help rectify this lack of intercourse by discussing continuities and discontinuities between the two approaches. The major thrust of this article is to examine the contribution that NT can make to GST. To this end we discuss five distinctions that are emphasized by numerical taxonomists and which can also be applied to systems. These are: (1) Q-versus R-analysis; (2) form of linkage among components; (3) strength of intrasystem relationships; (4) monothetic versus polythetic groups; and (5) agglomerative versus divisive methods of group formation. All of these have been emphasized more in NT than GST, and practitioners of GST could profit by becoming familiar with them. On the other hand, GST is ahead of NT in emphasizing boundary analysis and space-time analysis, among others. In addition to these discontinuities, continuities exist in the form of common concerns emphasized by both fields. These include synchronic versus diachronic analysis, naturally occurring versus artificially constructed groups, and levels of hierarchies. These two latter factors are very important for both GST and NT. Living systems are clearly natural (as opposed to artificial) systems, and are studied at various levels (e.g., organism, group, organization, society) in GST. The concepts of natural group and group hierarchies are also stressed in NT. All of the distinctions discussed can be applied to the total system at all levels. The contributions that GST can make to NT remain to be discussed in another article.

John BILLY (Soc, Battelle Memorial Inst., Washington), J. Richard UDRY (Population Ctr., North Carolina). 1985. "Patterns of Adolescent Friendship and Effects on Sexual Behavior". SOCIAL PSYCHOLOGY QUARTERLY 48(1):27-41.

Using panel data from a junior high school system in an urban area of Florida we investigate adolescent friendship structure along the dimension of sexual behavior. White females and white males tend to name same-sex friends whose sexual intercourse behavior is like their own. Sexual intercourse is not a significant factor in accounting for adolescent friendship structure among blacks, male or female. We then specify models which permit us to answer whether observed homogeneity bias in sexual behavior is due to a process of influence, deselection, and/or acquisition. The sexual behavior of white females is influenced by their same-sex friends' sexual behavior. There is no evidence that adolescents deselect friends on the basis of dissimilarity in sexual behavior. Both white males and white females acquire friends whose sexual behavior is like their own. We suggest that race-sex differences with respect to degree of adolescent-friend similarity in sexual behavior and the sources of this similarity may center around differences in group relevance or salience of the sexual act and race-sex differences in the nature of friendships.

David BINNS & Gerald MARS. 1984. "Family, community and unemployment: a study in change". THE SOCIOLOGICAL REVIEW 32(4):663-95.

This paper provides the first report of an intensive empirical study of social relations of unemployment on a Glasgow housing estate. Its sample is divided into two equal, age-based categories corresponding to families where the male 'head of household' is over 25 and has a previous record of regular work, and those under 25 where such experience is absent. The paper identifies and examines a domestic and work-linked cycle which has been disrupted by unemployment. On this basis we then consider the differential adaption to unemployment of the two groups; differences in their gender relations and differences in the forms and degrees of their reliance on kin and other support. We finally and tentatively propose some connections between unemployment and domestic conflict.

Phillip BONACICH, Oscar GRUSKY (Soc, UCLA) & Mark PEYROT (Kentucky). 1985. "Family Coalitions: A New Approach and Method". SOCIAL PSYCHOLOGY QUARTERLY 48(1):42-50.

This study formulates and tests a theory of family coalitions based on the hypothesis that coalitions form to maintain the existing status system. A new measure of coalitions based on family arguments is developed. Forty-eight four-person families of middle or upper-middle socioeconomic status, each with two parents and two children, were studied (younger children age 8-12 and older children age 12-16) Sex was balanced, with half the older children and half the younger children being male. Three-to four-hour interviews were conducted in the home using a variety of interviewing and observational techniques. Based on analysis of independent reports by all family members on patterns of support in arguments between family members, the coalition theories of Caplow and Gamson each receive little support. Status maintenance theory, created to describe coalitional behavior in legitimate power hierarchies is explicated and twelve specific hypotheses are derived. The data provided moderate support for the presupposition that family coalitions function to maintain the existing status order, especially parental superiority, and that family members of higher power and ranking are more conservative in their patterns of support than are those of lower power and ranking.

Martin BULMER (Soc Studies, LSE). In press. "The Rejuvenation of Community Studies? Neighbours, Networks & Policy". SOCIOLOGICAL REVIEW.

Why have community studies in Britain undergone such a decline and is there any prospect of resurgence? For resurgence, the definition of the field has to change to a return to the sociology of the primary groups-- ties between kin, friends, neighbours and informal relations in formal settings. An effective methodology strategy is to study social networks and so avoid hypostatizing geographical space. To develop theory, one must look at the social contexts of the networks as well as the caring and supportive relationships within them. Also promising is the study of local-level political processes, neighbourhood action, and the role which such activities play in linking the personal sphere to the broader political and bureaucratic structures of society.

Neena CHAPPELL (Aging, Manitoba). 1985. "Social Support and the Receipt of Home Care Services" GERONTOLOGIST 25(1):47-54.

Differences between the elderly in Manitoba who use formal home care services and those who do not are explored here through comparisons of these two groups. Data was collected using structured interviews. Analyses confirmed existing research reporting users as less healthy and less active. Only specific types of users, however, showed smaller informal social networks. Nevertheless, users interacted just as much as did non-users with the informal networks available to them. Users received more assistance from both formal and informal sources, suggesting that the two sources complement rather than substitute for one another.

Carl COHEN (Psych, SUNY-Brooklyn), Jeanne TERESI & Douglas HOLMES (Community Res. Applications, Bronx). 1985. "Social Networks and Adaptation¹". GERONTOLOGIST 25(3): 297-304.

Previous research examining the relationship between social networks and adaption has been limited by rudimentary measures of social interaction and a lack of longitudinal data. Utilizing 19 network variables, the authors followed 133 elderly residents of mid-Manhattan hotels for one year. The findings confirmed the direct and buffering effects of social networks. Of clinical relevance was the non-linearity of the network effect - depending on a person's stress level, different network dimensions must be emphasized and strengthened.

Leslie CURRY (Geog, Toronto). 1985. "The Village Economy as a Hypercycle". GEOGRAPHICAL ANALYSIS 17(2):156-66.

Nadel's emphasis on the importance of recruitment in the development of occupational structures stimulated exploration of the matrices of interactions of occupations that resulted when the Lotka-Volterra predator-prey theory was applied to the problem. It is clear that the first requirement of the existence of a structure is that it be reproducible. Unfortunately nonlinearity of the equations limited results to statements about their stability, which was taken to mean the ability of such structures to exist. Using this approach little or nothing could be said about the dynamics of such structures, although temporal viability of systems and their organization from individuals is a basic topic in geographical evolution.

Further explorations will be made here, following the topic of commercial relations, in a simple version that has interactions occurring between persons having different occupations. When the network is composed of only two persons, they would need to be highly complementary

for it to exist. Perhaps this is the family. In economic life, however, there would need to be a minimum threshold of persons before the network could occur. When trade is bilateral, it is highly constrained by the exact supply of or demand for the product of the partner. It is highly improbable that each partner would be willing to take all of the product that the other wishes to supply. However, when multilateralism is possible, trade can be increased. The simplest case occurs where no trade would be possible at all between pairs, but one-way flows allow the circuit to be closed and trade can occur. A more likely set is where there are many flows and the amounts adjust to produce an exact balance of imports and exports for each partner and for the area as a whole. Each individual in the network has to have at least one arrow directed towards and another away from him. It is unlikely that any pair of individuals would show an exact balance in the trade between them. It is clear too that the overall amount of trade will always be limited by some bottleneck in the system so that there will always be a stimulus to expand the system. When partners in trade balance their accounts, then barter is a natural practice. Even with multilateralism, so long as the number of partners is small and exchange is easy, such as among neighbours, then barter is possible. But the use of some medium of exchange would be more convenient and would be essential for larger and less local networks.

Mary Lou DAVIS-SACKS, Srinika JAYARATNE & Wayne CHESS. 1985. "A Comparison of the Effects of Social Support on the Incidence of Burnout". *SOCIAL WORK* 30(3):240-44.

The effective design and implementation of programs aimed at reducing burnout by increasing social support requires information about the relative effects of support from supervisors, from co-workers, and from spouses. The results of this study, a survey of female child welfare workers employed in a state department of social services, suggest that social support, particularly from supervisors and spouses, is associated with low levels of burnout and mental health problems resulting from job stress. Implications of these findings are discussed.

Brian ELLIOTT & David McCURNE (Soc, Edinburgh). "Austerity and the Politics of Resistance". pp 192-216 in *CITIES IN RECESSION CRITICAL RESPONSES TO THE URBAN POLICIES OF THE NEW RIGHT*, edited by Ivan Szelenyi - 7 London: Sage.

Local politics, then, and especially urban politics, have been changing in the last few years. The relations between central and local levels of government have become more bitter and contestatory, and the ideological differences between 'Left' and 'Right' have widened, or at least become more evident, as local politics have become more and more incorporated in the battles between the major national parties. And increasingly, the anger and resistance on both the Left and the Right has broken out of the formal party structure and spilled on to the streets in marches and demonstrations.

So how should we make sense of this? Few of the existing accounts do much to advance our understanding of why the most dramatic and profound struggles developed where they did (in Scotland). Yet that is surely worth exploring. As social scientists we need to know more about the processes that earned for some cities and regions the reputation for 'militancy', and to do that we had better pay greater attention to factors that gave the greatest potential for resistance.

Let us begin by outlining some of the approaches to the study of central-local relations. These seem to fall into two main categories: those that rest on the analysis of economic relations between levels of government, and those that look mainly at what we might call institutional politics - the study of political parties and political relations of centre and locality.

Ron EVANS, et al. (Psych, Washington). 1985. "Family Resource Questionnaire: Reliability and Validity of a Social Support Measure for Families of Stroke Patients¹". *PSYCHOLOGICAL REPORTS* 56(2):411-14.

This article describes the development of an instrument, the Family Resource Questionnaire, designed to measure dimensions of social support after stroke. Interrater reliability and concurrent validity was established with 48 consecutive stroke admissions onto a rehabilitation service. Effects of socially desirable responses were minimized with an interview protocol. Moderate validity and high reliability were found.

Terence FAY (Hist, Manitoba). 1985. "Winnipeg & Minneapolis Bank Resources Compared, 1876-1926". *URBAN HISTORY REVIEW* 14 (June):23-36.

By 1926 Manitoba had a population one-third that of Minnesota, and yet the bank resources it accumulated to that year represented only one-tenth that of Minnesota banks. What can explain the much higher generation of banking resources in Minnesota and Minneapolis as

compared with a much lower generation of resources in Manitoba and Winnipeg? A study of the number of branches in Manitoba and the level of cheque clearances in Winnipeg reveals that these branches were as vigorous as the number of unit banks and cheque clearances in Minnesota. However, by comparing the growth of Minneapolis industries with those in Winnipeg, it becomes apparent that Winnipeggers did not, as Minneapolis entrepreneurs did, develop the specialized manufacturing for export, the consequent company head offices, and the transportation services necessary to generate endogenous capital resources. Rather Winnipeg branches were the result of a banking system transported from Montreal and Toronto which, at the same time, it supplied financial resources for Manitobans, also served the goals of its Central Canadian directors and shareholders, and therefore, proceeded to integrate Winnipeg commercial resources into this central urban network. The Minneapolis industrial entrepreneurs, by contrast, established banks which generated their own financial resources and banking procedures. This meant that the Minneapolis bank owners were determined to shape the investment and growth of their metropolitan region. In Winnipeg, however, the branches served their Montreal and Toronto owners who were determined to encase Winnipeg businesses firmly within that Central Canadian urban system.

Joe FEAGIN (Soc, Texas). 1985. "The Global Context of Metropolitan Growth: Houston and the Oil Industry¹". AMERICAN JOURNAL OF SOCIOLOGY 90(6):1204-30.

This paper examines in empirical detail the growth and development of Houston, the 'capital of the Sunbelt', against the background of the changes in its economic and social base since the late 1800s. Houston's century-long sustained growth, unique centrality in Sunbelt expansion and in the world oil market, and commitment to an accentuated free enterprise philosophy make it an important urban case study in assessing the explanatory utility of mainstream and power-conflict theories of urban development, particularly those theories aimed at explaining the rise of Sunbelt cities. The global context of urban growth is accented in this analysis.

Meir FERSHTMAN (Educ, Tel-Aviv). 1985. "Transitivity and the Path Census in Sociometry". JOURNAL OF MATHEMATICAL SOCIOLOGY 11:159-89.

This paper develops a method for calculating the tendency towards transitivity while keeping constant the number of choices which are made by each member of the group ($U_N(X_{I+})$ distribution) or the number of times each member is chosen ($U_N(X_{+J})$ distribution). Such a calculation was suggested by Wasserman, who used the triad census developed by Holland and Leinhardt. This work presents a simpler way. This is accomplished by developing a path census and two supplementary functions. Our technique can be used to calculate the mean and variance of other quantities, such as mutuality and intransitivity. In order to enable researchers to use this technique, we present explicitly the mean and variance of the path census.

Ove FRANK (Stats, Stockholm), Maureen HALLINAN (Soc, Notre Dame) & Krzysztof NOWICKI (Stats, Lund). 1985. "Clustering of Dyad Distributions as a Tool in Network Modeling" JOURNAL OF MATHEMATICAL SOCIOLOGY 11:47-64.

A general approach to exploratory analysis and modeling of network data is to investigate dyad distributions. We discuss clustering of dyad distributions when there are several variables defined on the vertices, and these variables interact with the arc values of the network. As an illustration we use data on achievement, race, sex and friendship for children in 48 different school classes. A clustering of the dyad distributions leads to the formulation of a log-linear model for friendship structure explained by achievement, race, and sex parameters. In particular, the example illustrates a way to find and display interaction structures in network data. We comment on how this approach is related to standard use of log-linear network models.

Linton C. FREEMAN (Soc, Sci-Irvine). 1984. "Turning a Profit from Mathematics: The Case of Social Networks". JOURNAL OF MATHEMATICAL SOCIOLOGY 10:343-60.

While there is agreement that social networks analysis is significant as an area of mathematical application, there is no consensus on the consequences of that application. Some, like Wolfe, conclude that the use of mathematics contributes to productivity in the field. Others, like Boissevain, Rogers and Kincaid, feel that it inhibits productivity.

This essay will examine the use of mathematics in social networks analysis with an eye toward clarifying this issue. It will begin with an exploration of the problem of the conditions under which mathematics 'works' in a science and those under which it doesn't. Then, in succeeding sections, we'll see how mathematical applications in social networks analysis stack up.

Shahin GERAMI (SW, Missouri). "Export Alliances as a Device of Dependence Control: A Comparative Analysis ". SOCIAL SCIENCE QUARTERLY 66(1):105-19.

International division of labor promotes raw material specialization among less developed countries. Dependency studies have, traditionally, explored the economic impacts of this specialization for peripheral societies. Peripheral resistance, however, has received less attention. This paper suggests that less developed countries' reactions to external dependency constitutes an important aspect of core-periphery dialectics in the world system. One form of peripheral response to resource specialization is organization of export alliances among the producers of a single commodity to safeguard their political and economic rights over their natural resources. A comparative analysis of four export alliances illustrates the dynamic of core-periphery dialectics in the world system.

Thomas GREIDER & Richard KRANNICH (Soc, Utah). 1985. "Neighbouring Patterns, Social Support, and Rapid Growth: A Comparison Analysis from Three Western Communities". SOCIOLOGICAL PERSPECTIVES 28(1):51-70.

Recently sociologists have devoted considerable attention to the consequences of rapid community growth and change on social relations and social integration, adding to a long tradition of scholarly concern with the social effects of urbanism and modernization. As was characteristic of much of the traditional literature on urbanization, the recent discussions of rapid community growth have tended overwhelmingly to assert various 'social disruption' consequences, including a deterioration of the importance of neighbouring as a source of both primary interaction and localized informal social support. In this study we examine data on neighbouring phenomena from three small towns in the western United States that in recent years have experienced substantially different rates of population growth. Although the results suggest that rapid population growth in small towns is indeed accompanied by an apparent decline in reliance on neighbours as sources of social support, the data indicate no support for the hypothesized deterioration of neighbouring as a form of primary interaction in rapidly growing small communities. We conclude by noting the consistency of these findings with alternative interpretations of the effects of urbanization on localized social interaction and social support.

John HAGAN (Law, Toronto), A.R. GILLIS & John SIMPSON (Soc, Toronto). 1985. "The Class Structure of Gender and Delinquency: Toward a Power-Control Theory of Common Delinquent Behavior ". AMERICAN JOURNAL OF SOCIOLOGY 90(6):1151-71.

Though seldom considered together, class and gender are among the most frequently analyzed correlates of delinquency today. This paper formulates and tests a neo-Marxian, class-based, power-control theory of gender and delinquency. Using this theory and a prediction made by Bonger more than a half-century ago, the article demonstrates that the relationship between gender and common forms of delinquency declines with each step down the class structure. Furthermore, where this relationship is strongest, it can be statistically removed by taking theoretically predicted variables into account. A power-control theory does much to specify and explain the class structure of gender and delinquency, and in doing so it demonstrates the social bases of this relationship.

Maureen HALLINAN & Steven SMITH (Soc, Wisconsin). 1985. "The effects of Classroom Racial Composition on Students' Interracial Friendliness". SOCIAL PSYCHOLOGY QUARTERLY 48(1):3-16.

This study examines the effects of the racial composition of a classroom on students' cross-race and same-race friendships. Two 'theories' of interracial sociability are discussed. The first argues that interracial friendliness is affected primarily by the number of opportunities students have for cross-race interaction relative to same-race interaction. It predicts that students in the numerical minority are likely to make more cross-race friendship choices than those in the majority. The second theory claims that the racial minority is socially threatened by the majority and tends to isolate itself from the more dominant and powerful other race. These predictions are examined over a school year in a longitudinal data set of 473 elementary school students in 18 desegregated classes. The results provide strong support for the opportunity hypothesis and show little evidence that being in the racial minority diminishes interracial friendliness.

Stephen HANSELL (Soc, Rutgers). 1984. "Cooperative Groups, Weak Ties, and the Integration of Peer Friendships". SOCIAL PSYCHOLOGY QUARTERLY 47(4):316-28.

This study investigated the strength of ties between students of different races and sexes, and tested a cooperative-group intervention designed to increase weak ties between naturally occurring peer groups. The results supported several hypotheses derived from

the theory of the strength of weak ties. Friendships between races and sexes tended to be weak rather than strong, and ties between peer groups also tended to be weak. The cooperative group intervention stimulated new weak ties between students of different race and sex. However, these did not form a bridge between groups, but instead were concentrated within existing peer groups. These results confirm that cooperative groups stimulate new weak ties between individuals of different race and sex, but raise doubts whether this intervention directly improves intergroup relations among pre-existing peer groups.

Monika HENDERSON (Psych, Oxford) & Michael ARGYLE (Psych, Oxford). 1986. "Source and Nature of Social Support given to Women at Divorce/Separation." BRITISH JOURNAL OF SOCIAL WORK 15(1): 57-65.

Thirty divorced or permanently separated women rated 12 different sources of social support (including family and friends as well as professional and religious bodies) for their importance in providing 17 different types of help or support during the first six months of the separation/divorce. Friends proved to be the single overall important source of support, but the differential importance of social support as a function of type of help given, points to the multidimensional aspect of social support.

Ann Maxwell HILL (Hist & Pol Sci, Scranton). 1985. "A Preliminary Perspective on Kinship & Ethnicity among Chinese in Thailand." JOURNAL OF COMPARATIVE FAMILY STUDIES 16(2): 143-59.

Kinship has long been recognized as the source of some structural principles for the organization of Chinese communities overseas. The existence of social groups based wholly or partially on kinship principles—for example, Chinese surname associations, businesses and households—are important corporate manifestations of Chinese ethnicity in plural societies. The persistence and visibility of these groups in overseas Chinese communities, particularly in Thailand, tend to obscure the facts of individual, situational ethnicity and, consequently, some critical aspects of the relationship of Chinese kinship to Chinese ethnicity. We must ask not only how kinship organizes ethnic Chinese communities, but also how it affects individual choices of ethnic identity.

The latter question directs our attention, in the first place, to the relevance of kinship to the acquisition of the social skills and cultural knowledge which make such choices possible. It also compels us to look at kin relations, not as biological "givens", but as cultural resources which can be selectively utilized. To ally with or to deny one's Chinese kinsmen is an individual choice. From this perspective, perhaps it is possible to justify, anthropologically, our intuitive notion that kinship has much to do with the persistence of Chinese ethnicity in communities overseas.

James HOUSE (Soc, Michigan). 1983. "Social Support, and the Quality and Quantity of Life." Paper presented to ISR Founders Symposium.

This paper addresses four major questions or issues: What is social support? How and why do we expect that social support should be related to the quality and quantity of life? What evidence do we have for the impact of social support on the quality and quantity of life? And what are some of the major issues for future work?

Arthur IMHOF (Hist, Freie U, Berlin). 1985. "From the Old Mortality Pattern to the New: Implications of a Radical Change from the Sixteenth to the Twentieth Century." BULLETIN OF THE HISTORY OF MEDICINE 59: 1-29.

In analyzing social networks of traditional peasant societies, we will no longer be surprised to find that, even after marriage, men and women were still primarily members of two distinct "societies"—the male and the female—and stayed in close contact with their old friends and neighbors who were of the same sex and about the same age and with whom they had been brought up. The solidly established connecting lines between them were stronger and more reliable for coping with everyday problems of life than were the new and rather fragile ones between spouses.

Arthur IMHOF (Hist, Freie U, Berlin). 1985. "Nos Ancêtres à la Recherche de Stabilité." In LA FRANCE D' ANCIEN REGIME. Etudes réunies en l'honneur de Pierre Goubert. Paris: Société de Démographie Historique, et Toulouse (ed.). 1984. Pp. 301-15.

J'ai choisi, en Allemagne, comme point de départ, une population et une période pour lesquelles ces dévastations sont relativement bien établies et attestées, c'est-à-dire située dans une région stratégiquement exposée et donc ravagée par chacune des grandes guerres européennes entre le XVII^e et le XIX^e siècle. Ce qui m'intéresse, c'est d'observer comment cette population, traumatisée, affligée génération après génération, se comportait pour survivre. Cela non pas au jour le jour, non pas à court terme et au seul sens matériel: en construisant des fortifications et des remparts pour mieux se protéger, en élargissant le terre cultivée et en bâtissant des entrepôts de provisions pour pouvoir se nourrir suffisamment même pendant des années maigres, ou en pratiquant des mesures de quarantaine pour se mettre à l'abri d'une épidémie déjà éclatée dans les alentours.

Si mon hypothèse est juste que jamais et nulle part dans l'histoire et dans le monde, les hommes ne se soumettaient, à la longue, sans résistance, sans contremesures à des menaces répétées, voire plus ou moins permanentes sur leurs vies, une telle population devait être apte à me servir, en quelque sorte, de laboratoire dans mes recherches. En ce qui concerne les résultats, par contre, il est probablement superflu de souligner, pour des lecteurs du pays de Pierre Goubert, qu'ils ne peuvent réclamer de représentativité, ne pour la période étudiée, ni pour "nos ancêtres" dans ces temps-là, car le dicton goubertien - modifié - vaut autant pour l'histoire allemande: "L'ancêtre allemand? - L'ancêtre allemand n'a jamais existé."

Arthur IMHOF (Hist, Freie U, Berlin). 1984. "The Amazing Simultaneousness of the Big Differences and the Boom in the 19th Century: Some Facts and Hypotheses about Infant and Maternal Mortality in Germany, 18th to 29th Century." In PRE-INDUSTRIAL POPULATION CHANGE: THE MORTALITY DECLINE AND SHORT-TERM POPULATION MOVEMENTS, Tommy Bengtsson (ed.). Pp. 191-222.

The boom in maternal and infant mortality as well as in the rates of stillbirths during the 19th century was explained as primarily due to an increasing work load of wives and mothers (in addition to the traditional tasks in family and household) during the intensive phase of industrialization as well as in the framework of an increasing incorporation of particular agrarian regions into expanding market areas. This development was discussed on the example of farmer's wives in two communities in Wurttemberg with differing orientations towards the market, as well as on the basis of urban infant mortality during the summer months (as an indicator for breastfeeding patterns and nourishment conditions). The boom in mortality of both sorts was halted and a reduction initiated only when the overburdening of wives and mothers in town and country had gradually been reduced, and the (nourishment and other living) conditions for infants had begun to improve.

William JARRETT (Soc, Canisius, Buffalo). 1985. "Caregiving within Kinship Systems: Is Affection Really Necessary?" GERONTOLOGIST 25(1): 5-10.

Contemporary thinking on family supports and intergenerational relations is seen as idealistic. Research suggests that filial affection for aged dependents is not always sufficient to enable caregivers to cope with the strains of caregiving. A relabeling strategy (cognitive therapy) is suggested to help caregivers redefine their situations so that caregiving is done from motives of kinship obligations which, historically, have formed the basis for family aid.

Leonard JASON (DePaul, Chicago), et al. "Facilitating Social Support Among Community Psychologists." JOURNAL OF COMMUNITY PSYCHOLOGY 13(1): 83-89.

Over the past few years, a network of regional coordinators has promoted a variety of community psychology activities in the United States and other countries, creating a base of social support for community psychologists in academic and field settings. This paper describes key organizing principles for creating viable support networks such as this one and presents specific examples of their use by the regional coordinators. The grassroots efforts of regional coordinators in stimulating social support, educational opportunities, resource exchanges, and a variety of other activities represent one of the more crucial and important functions undertaken by community psychologists and their organizations.

Colleen Leahy JOHNSON (UC--San Francisco). 1982. "Sibling Solidarity: Its Origin and Functioning in Italian-American Families." JOURNAL OF MARRIAGE AND THE FAMILY 44: 155-67.

This paper reports on kinship in Italian-American families with a special emphasis on the sibling relationship. Focused interviews were conducted with 74 Italian-American families with homogeneous marriages, 98 families where inter-marriage had occurred, and 56 Protestants of European background. The unmarried families were significantly more involved in kinship activities, with the greatest differences between groups found in the contact between siblings. The analysis describes a collateral principle of kinship organization where the kinship solidarity is expansive and envelops more individuals. Sources of sibling solidarity are traced to the hierarchical structure of the immigrant family which has facilitated the formation of coalitions among siblings.

Patricia KELLEY (Soc Work, Iowa) & Verne KELLEY (Mid-Eastern Iowa Community Health Ctr). 1984. "Supporting Natural Helpers: A Cross-Cultural Study." SOCIAL CASEWORK 66(6): 358-66.

The relationship between professional and natural helpers was the subject of similar studies in Iowa and in Ireland and the United Kingdom. As a result, several clusters of natural helpers were identified and a model for professional-natural helper cooperation was developed.

Young KIM. "Understanding the Social Context of Intergroup Communication: A Personal Network Approach." In William B. Gudykunst (ed.), INTERGROUP COMMUNICATION. London: Edward Arnold (Forthcoming).

The personal network approach is proposed in this paper to conceptualize and assess communication patterns between members of differing social/cultural groups. This approach is viewed as a way to extend the current social-psychological emphasis beyond an individual's cognitive and affective attributes. Focusing on the immediate social context of individuals, the paper articulates the interrelatedness of the person and his/her relational network vis-a-vis in-group and out-group communication. Three theorems are proposed, linking some of the specific aspects of a personal network (i.e., network heterogeneity, centrality of outgroup ties, and outgroup tie strength) to the ego's outgroup communication competence.

Michael LOMBARDO (Rutgers). 1985? "Nonkin Cooperation in Tree Swallows" (paraphrase). SCIENCE.

Under what conditions do animals advance their fitness by helping nonkin? Tree swallows appear to behave according to Prisoner's Dilemma. Because nonbreeding swallows were in search of nest sites, they had a potential conflict of interest with breeders. According to the P.D. tit-for-tat model, a pair of breeders would show cooperative behaviour by allowing their nest to be visited by nonbreeders; vigorous nest defense would be an act of defection. Nonbreeders would show cooperative behaviour by making a benign visit or helping to drive off a predator; an attack on a nest or nestlings would constitute defection. 12/17 pairs of parents behaved in a way consistent with the model. (Source: SCIENTIFIC AMERICAN, 7/85).

David MANGEN (Manges & Namakkal, Minneapolis) & Kay Young McCHESNEY (USC). 1985. "Intergenerational Cohesion: A Comparison of Linear and Nonlinear Analytical Approaches." RESEARCH ON AGING 7(1): 121-36.

This article compares the information provided by linear correlational techniques with that provided by hierarchical clustering models. These techniques are applied to a sample of 254 older parent-adult child dyads, with analysis focusing on the nature of the intergenerational relationship. Linear correlation results indicate a substantial degree of relationship among the intergenerational measures. Hierarchical clustering reveals, however, that less than half of the sample is accurately represented by the linear model. This suggests that a better explanation of the intergenerational relationship may be obtained by examining the pattern of scores across the different measures of cohesion.

Peter MARIOLIS (Soc Sci, Spelman). 1985. "Coherence in Social Networks: Conceptualization, Measurement, Applications." Unpublished Paper.

Coherence--the propensity of subsets of actors in a social network to form ties within those subsets--is an important concept in many structural and social network analyses. Applying the concepts of "region" and "subgroup" to social networks modeled by mathematical graphs, networks, hypergraphs, and hypernetworks, this paper defines two sets of degree-based coherence measures suitable for comparisons both within and between social networks. One set of measures treats characteristics of subgroup ties as variables, with Region (categorized as A or B) as the independent variable and the value of ties, coded as zero-one or as any nonnegative, finite value, as the dependent variable. This imagery results in 4 measures of coherence based on ordinal measures of association and one measure based on the point-biserial correlation coefficient. The second set of measures is based on the difference between the observed proportion of values involving subgroup members which remain within a subgroup and the expected proportion remaining within the subgroup based on a random distribution of values. The difference in these proportions is then standardized by its maximum possible value. All but a measure based on the odds ratio vary from -1 to +1, with a value of 0 when ties are randomly distributed. The characteristics of the new measures are compared among themselves and to previous measures of coherence; criteria for choice among the measures are presented. Finally, the paper discussed applications of these measures to substantive concerns in structural and social networks analyses and lays out directions for further work.

John MARKOFF & Gilbert SHAPIRO (Soc, Pitt). 1985. "Consensus and Conflict at the Onset of Revolution: A Quantitative Study of France in 1789." AMERICAN JOURNAL OF SOCIOLOGY 91(1): 28-53.

Although the literature includes considerable abstract discussion of the roles of consensus and conflict in social life, there have been few attempts to measure them in concrete historical situations. This article examines consensus, both in general and on various subjects, within and between important social groups at the beginning of the French Revolution of 1789. On agenda, the subjects that a group chooses to discuss, there is evidence of national consensus. On program, the proposals of each group for action, the nobility and the Third Estate show significantly greater local than national consensus. The evidence also suggest that the country people, unlike the more elite groups, did not participate in a national consensus-creating dialogue. Not surprisingly, the Third Estate's coming political triumph is anticipated by a higher level of coherence than is shown by the nobility, but the difference is not nearly as great as one might expect.

Suzanne MICHAEL, Ellen LURIE, Noreen RUSSELL & Larry UNGER. 1985. "Rapid Response Mutual Aid Groups: A New Response to Social Crises and Natural Disasters." SOCIAL WORK 30(3): 245-52.

The authors describe a newly developed model of intervention that responds rapidly to "events"--natural disasters or political and social crises. The model focuses on community response to the event to identify a previously undefined population as constituting a community of sufferers. It also highlights the efficacy of service delivery wherein the relationships among social workers are egalitarian and cooperative.

Joseph MORRISSEY (NY St. Office of Mental Health), Mark TAUSIG (Akron) & Michael LINDSEY (NY St. Office of Mental Health). 1985. "Community Mental Health Delivery Systems: A Network Perspective." *AMERICAN BEHAVIORAL SCIENTIST* 28(5): 704-20.

In this article we present a research framework and findings from a pilot study of the use of interorganizational theory and network analysis techniques as a basis for assessing the inter-agency coordination and system development goals of the Community Support Program initiative recently launched by the National Institute of Mental Health on behalf of the chronically mentally ill. The results of our work will be considered with regard to their implications for the CSP initiative and for further research on interorganizational networks in mental health systems.

Shirley O'BRYANT (Family Relations & Human Dev't, Ohio). 1985. "Neighbors' Support of Older Widows Who Live Alone in Their Own Homes." *GERONTOLOGIST* 25(3): 305-10.

Recent older widows who live alone are a vulnerable group that needs both social and instrumental support. This study compared the neighbor support given to 226 widows who were categorized into three groups--those who had one or more children in the same city, those who had children who resided elsewhere, and those who were childless. Multivariate analyses revealed differences among these groups on various measures of neighbor support. Results are discussed in terms of the hierarchical-compensatory and task-specific models of informal support along with widows' social activity patterns, work histories, and neighbor attitudes.

Melvin OLIVER (Soc, UCLA). 1985. "Networks and Well-Being Among Urban Black Women: The Empowering and Depowering Role of Social Networks." Unpublished Paper.

Using data on the detailed personal networks of a sample of urban black women (N=230) this paper examines the direct and mediating role that this form of social support has on psychological well-being. The effects are differentiated, showing that some network ties "empower" their holder to positive mental health while other network ties "depower" individuals in their confrontation with stress. However, these effects are small, especially when compared to the stressful life events that an individual experiences. The findings are discussed in terms of their theoretical relevance and their importance for the future of mental health related research.

Ina ROSENTHAL-UREY (Wheaton C). 1985. "Church Records as a Source of Data on Mexican Migrant Networks: A Methodological Note." *INTERNATIONAL MIGRATION REVIEW* 18(3): 767-81.

This article discusses the methodological issues in the study of Mexican migration initiated by Cornelius and others in a recent issue of this journal (1982). It addresses two problems: the need to locate strategic regions in Mexico before field-work is begun; and the need to develop techniques for longitudinal studies of migration networks.

Richard SCHULZ (Psych & Soc & Urb Research, Pitt) & Susan DECKER (Nursing, Portland). 1985. "Long-Term Adjustment of Physical Disability: The Role of Social Support, Perceived Control, and Self-Blame." *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY* 48(5): 1162-72.

One hundred middle-aged and elderly spinal-cord-injured persons were interviewed an average of 20 years after the disability occurred. Respondents answered questions concerning perceived control, attributions of blame, and the nature of the social comparisons they made. Three existing standardized instruments were used to measure adjustment: Index of Psychological Well-Being, Life Satisfaction Index, and the Center for Epidemiologic Studies Depression Scale. For all three outcome measures, respondents reported levels of well-being only slightly lower than population means of nondisabled persons of similar age. Controlling for health status and current income, we found that persons who have high levels of social support, who are satisfied with their social contacts, and who feel they have high levels of perceived control report high levels of well-being. Self-blame and the perceived avoidability of the cause of the disability correlated only moderately with the three measures of adjustment, suggesting that there are important differences between coping successfully immediately after a traumatic event has occurred and coping successfully many years later.

Marine SEGALAN (CNRS--Centre d'Ethnologie Francaise, Paris). 1985. "Family Change & Social Uses of Kinship Networks in France." *HISTORICAL SOCIAL RESEARCH* 34(April): 22-29.

The importance of kinship networks has been ignored by social & demographic historians at their peril. Thru case studies of rural Brittany & urban Nanterre, the paper traces the development of kin relationships in 3 periods: the traditional wider family, the hi-industrial restricted family & the reactivation of kinship networks in recent years. Its anthropological methodology demonstrates how one can build upon quantitative foundations & gain qualitative insights into the societal meanings of population patterns.

Ronald SIMONS & Gale WEST (Soc, Iowa). 1985. "Life Changes, Coping Resources, and Health Among the Elderly." *INTERNATIONAL JOURNAL OF AGING & HUMAN DEVELOPMENT* 20(3): 173-89.

In the last several years, a host of studies have shown a relationship between life change and deterioration in health status. This relationship, however, appears to be modest, and investigators have recently become interested in the coping resources, or buffers, that enable some individuals to encounter significant life change with little or no apparent negative changes in their health. Using samples consisting largely of young and middle-aged persons, studies have shown that the presence of a confidant, social network involvement, marital status, feelings of esteem and confidence, occupational status, and income can act as buffers against the potentially stressful effects of life changes. The present study examines the extent to which these factors serve as coping resources for a sample of elderly individuals. With the exception of income, the results suggest that not only do these variables fail to serve as buffers against life change for the aged, but some of them appear to function as coping inhibitors, operating to exacerbate the deleterious consequences of life change.

Eric SINGLE (Addiction Res. Fdn, Toronto). 1982. "Intercorporate Connections of the Alcohol Industry in Canada." *CONTEMPORARY DRUG PROBLEMS*, Winter issue: 545-67.

The owners of the alcohol industry are best represented as a highly complex set of corporate interests which transcend national boundaries & are highly diversified in their investments. The alcohol industry has been transformed from a set of small firms owned by entrepreneurs into a smaller set of large international corporations with extensive & complex intercorporate connections.

Harry SPECHT. 1985. "Managing Professional Interpersonal Interactions." *SOCIAL WORK* 30(3): 225-30.

The author presents a theoretical framework for understanding the interpersonal interactions social workers have in their professional capacity. The major elements of the framework are a typology of others with whom professionals interact, the qualities of interpersonal interactions, the professional's needs, and the resources exchanged. Implications of the framework for the development of knowledge about practice are discussed.

Eleanor Palo STOLLER (Soc, SUNY--Plattsburgh). 1985. "Elder-Caregiver Relationships in Shared Households." *RESEARCH ON AGING* 7(2): 175-93.

A model exploring the relationship between older helpers and their caregivers in shared households is developed by using hierarchical multiple regression techniques in a path analytic framework. Data were obtained through personal interviews with a probability sample of 753 older persons and their informal helpers. The results suggest that the impact of demands on the caregiver on the dyadic relationship are mediated by the impact of elder's presence on household functioning, elder's contribution to household tasks, and the availability of alternative caregivers.

Eleanor Palo STOLLER (Soc, SUNY--Plattsburgh). 1985. "Exchange Patterns in the Informal Support Networks of the Elderly: The Impact of Reciprocity on Morale." *JOURNAL OF MARRIAGE AND THE FAMILY* 47(2): 335-42.

Patterns of exchange of assistance within the informal helping networks of the elderly are examined through analysis of interviews with a probability sample of 753 noninstitutionalized older persons. Most elders are involved in some type of exchange, although the proportion reporting no exchange increases as one moves from children to other relatives to friends or neighbors. Older persons who receive help usually reciprocate in some way, with the prevalence of unreciprocated assistance higher in relationships with family members than with friends or neighbours. Multiple discriminant analysis of exchange patterns produced two significant functions, the first differentiating receivers from nonreceivers and the second providers from nonproviders of help. Consistent with an exchange theory perspective, the analyses suggested that the inability to reciprocate rather than the need for assistance had a greater negative effect on morale. The data also showed a negative relationship between scope of formal service use and reliance on the informal network, a result consistent with both a possible substitution effect and/or appropriate targeting of formal services.

Marilyn STRATHERN (Anthro, Cambridge). 1985. "Kinship and Economy: Constitutive Orders of a Provisional Kind." *AMERICAN ETHNOLOGIST* 12(2): 191-209.

The contexts in which kinship seems theoretically distinguishable or indistinguishable from economic relations can be subjected to empirical sorting of a kind. Drawing on a debate over the nature of sexual inequality, this paper addresses the manner in which items produced by or transacted between people stand or do not stand for aspects of social relations. Traditional

anthropological interest in "rights" or "roles" was perhaps developed in the ethnographic context of certain cultural equations between "things" and "persons." In other contexts things fail to carry such reference to persons; western commodity logic, on the other hand, abstracts labor as simultaneously a part of the person and a thing. We run the danger of preempting our subject matter to assume we know what is transactable between persons.

Deborah SULLIVAN (Arizona). 1985. "The Ties that Bind: Differentials Between Seasonal and Permanent Migrants to Retirement Communities." RESEARCH ON AGING 7(2): 235-50.

This article proposes a typology of migration based on duration of annual residence in planned retirement communities. The categories of the typology--seasonal in-migrant, seasonal out-migrant, seasonal traveler, and year-round resident--are used to classify a sample of households in a southwestern retirement community. The findings suggest that out-of-state children and ties to small towns are inhibiting influences on permanent relocation after retirement. Facilitating factors associated with seasonal migration include: a spouse in the household, higher socioeconomic status, and the absence of health restrictions on activities.

Charles TARDY (Speech Commnic, S. Mississippi). 1985. "Social Support Measurement." AMERICAN JOURNAL OF COMMUNITY PSYCHOLOGY 13(2): 187-202.

Instruments designed to measure social support are evaluated. Five aspects of social support are identified and instruments capable of assessing these components are described. Reliability and validity evidence associated with the measures are reviewed. The purpose of this discussion is to facilitate the study of social support by clarifying the decisions faced by researchers and increasing awareness of the capabilities and limitations of currently available instruments.

Paula THOMAS (Pathology), Philip GARRY (Psych), Jean GOODWIN (Med) & James GOODWIN (Med), (New Mexico Schl of Med). 1985. "Social Bonds in a Healthy Elderly Sample: Characteristics and Associated Variables." SOCIAL SCIENCE & MEDICINE 20(4): 365-69.

Social bonds were examined in 256 healthy, independent-living elderly men and women using the Interview Schedule for Social Interaction. Multivariate techniques were used to test for relationships between six dimensions of social bonds, as measured by the ISSI, and demographic characteristics as well as scores from the Kellner Sheffield Symptom Questionnaire, the Jacobs Cognitive Screening Exam, the Halstead Category Test and the Wechslet Memory Scale. The study participants reported involvement in a range of satisfying, supportive, interpersonal relationships. Significant associations were found between social bonds and income, marital status, work status, and health status. Emotional status, cognitive functioning and memory were found to be independent of social bonds in our statistical model.

Ronald TOSELAND & Lynda HACKER. 1985. "Social Workers' Use of Self-Help Groups as a Resource for Clients." SOCIAL WORK 30(3): 232-37.

Self-help groups are an important part of the network of community resources that are available for social workers to use in working with clients. This article describes the results of a survey conducted by the authors to identify the factors that influence such use. Implications of the findings are discussed in terms of the impact on social work practitioners and their clients, and recommendations are offered for improving the relationship between social workers and self-help groups.

Donald UNGER & Abraham WANDERSMAN (Psych, S. Carolina). 1985. "The Importance of Neighbors: The Social, Cognitive, and Affective Components of Neighboring." AMERICAN JOURNAL OF COMMUNITY PSYCHOLOGY 13(2): 139-69.

This article provides a review and expansion of the concept of neighboring. We broaden the concept of neighboring to involve the social interaction, symbolic interaction, and the attachment of individuals with the people living around them and the place in which they live. Literature from several areas including social psychology, environmental psychology and community psychology, and sociology is brought together to discuss three components of neighboring: (a) the social component (e.g., emotional, instrumental, informational support, and social network linkages); (b) the cognitive component (e.g., cognitive mapping, and the physical environment and symbolic communication); and (c) the affective component (e.g., sense of community and attachment to place). The implications of knowledge about these components of neighboring are explored through a discussion of the relationship of neighboring to participation in neighborhood organizations.

Gordon WALKER. 1985. "Network Position and Cognition in a Computer Software Firm." ADMINISTRATIVE SCIENCE QUARTERLY 30(1): 103-30.

The present study examined the relationship between differences in cognition among the members of a software firm and the position a member occupied in the network of task relationships in the organization. Cognition was measured through judgements about means-ends associations relevant to software product success. The network was analyzed as a blockmodel, and positions in the network were defined as blocks of structurally equivalent individuals. Network position was found to be a stronger and more stable predictor of differences in cognition than the type of function an individual had and the type of product worked on. Both tenure in the industry and tenure in the firm also were found to have strong and stable effects. The generalizability of the findings is discussed in terms of the type of cognition studied and the firm's size, technology, and level of market uncertainty.

Russell WARD (Soc, SUNY--Albany). 1985. "Informal Networks and Well-Being in Later Life: A Research Agenda." GERONTOLOGIST 25(1): 55-61.

Informal support networks of older people are generally extensive, but their contributions to subjective well-being are not clear. This reflects inadequate conceptualization and operationalization of social support. A conceptual model is suggested for investigating the contributions of informal networks to well-being, and suggestions are offered for operationalizing this model.

Bernard WONG (Wisconsin--Janesville). 1985. "Family, Kinship, and Ethnic Identity of the Chinese in New York City, with Comparative Remarks on the Chinese in Lima, Peru and Manila, Philippines." JOURNAL OF COMPARATIVE FAMILY STUDIES 16(2): 231-54.

This paper is devoted to an examination of the adaptive patterns of the Chinese family in New York City life. I will demonstrate that the types of Chinese families developed in America and New York in particular are principally the result of patterns of immigration as well as the economic adaptive activities of the Chinese. The various types of Chinese family developed in America differ not only in size, but also in value orientation, intrafamilial relationships, adjustment problems; and cultural identities. Chinese-American families differ from those in China and from American families. While the Chinese family in China was characterized by the strong bond between father-son, Chinese families in America follow a variety of dominant dyads ranging from mother-child, father-son, to husband-wife. Residential extended families are practically nonexistent among Chinese American families. However, Chinese American families are not uniformly Americanized. While the neolocal-nuclear family is the rule among Americans, the Chinese developed a variety of family systems. Further, not all Chinese families are oriented to China; some are assimilated. Despite changes in Chinese American families, certain cultural continuities obtain. This paper will discuss the evolution of various Chinese families in New York City as well as the continuity and change of the Chinese family in the context of immigration and economic adaptation.

Siu-lun WONG (Soc, Hong Kong). 1985. "The Chinese Family Firm: a Model." BRITISH JOURNAL OF SOCIOLOGY 36(1): 58-72.

Three aspects of Chinese economic familism are distinguished--nepotism, paternalism, and family ownership. This essay is mainly concerned with the last aspects and the resultant phenomenon of the prevalence of family firms among privately-owned Chinese commercial and industrial enterprises. It is argued that such firms are not necessarily small, impermanent and conservative because they tend to behave differently at various stages of their developmental cycle. Four phases of development--emergent, centralized, segmented, and disintegrative--are identified and discussed. This Chinese pattern is then compared with its Filipino and Japanese counterparts.

GOLDEN OLDIES

The following abstracts have come our way by various means. While mature in years, they are still worth a fling.

BOHLAND, James (VPI). 1982. "Indian Residential Segregation in the Urban Southwest: 1970 and 1980." *SOCIAL SCIENCE QUARTERLY* 63(4) (December, 1982): pp 749-61.

The study analyzes Indian segregation in 11 cities in the Southwest in 1970 and 1980. Indian segregation was less than the segregation of either blacks or Spanish Americans, but comparable to the levels reported for other ethnic minorities in the United States. Indian segregation declined between 1970 and 1980, but the decline was least in cities experiencing the greatest growth in Indian population. The prevalence of spatially-dispersed social networks is discussed.

DARROCH, Gordon (York). 1981. "Migrants in the Nineteenth Century: Fugitives or Families in Motion?" *JOURNAL OF FAMILY HISTORY*, Fall (1981): pp 257-77.

In this article I reconsider some aspects of that rhythm of geographic mobility. A common interpretation implies that nineteenth-century mobility was largely rootless, individualistic wandering. Reexamining a variety of studies, I offer another interpretation of migration. I argue that migration was very often undertaken within family and kinship networks, or by whole families. The effects of widespread migration were not merely modified or deflected by the bonds of family and kin, but migration itself was often undertaken within family-centred networks and as an integral part of a familial economic and moral order. I suggest several specific historical circumstances in which migration under family sponsorship was especially likely.

DUNCAN, George (Carnegie-Mellon) & Randolph SIVERSON (Cal-Davis). 1982. "Flexibility of Alliance Partner Choice in a Multipolar System: Models and Tests." *INTERNATIONAL STUDIES QUARTERLY* 26(4) (December 1982): pp 511-38.

International system theorists usually hypothesize great flexibility of alliance partner choice among the major powers in a multipolar system. To test for the existence of such flexibility, three statistically testable hypotheses of alliance partner choice in a multipolar system are derived. Log-linear model procedures are developed for testing hypotheses of dyadic independence and homogeneity in alliance partner choice. A Markov chain model provides the framework to test the hypothesis of random temporal sequencing of alliance choice. Two data sets giving international alliance choices of the major powers are used to test these models. One data set contains only formal, i.e., written, alliances entered into between 1815 and 1913, and each of the three models is found to be consistent with these data. In the case of the second data set (containing formal and informal alliances entered into between 1814 and 1913), the dyadic independence and homogeneity models are rejected, but a random sequential choice model is accepted. Differences among data sets are discussed, and it is concluded that the formal alliances more accurately reflect the structure of the major-power international system, and thus all three hypotheses are acceptable for the system.

EKLAND-OLSON, Sheldon. "Deviance, Social Control and Social Networks." *RESEARCH IN LAW, DEVIANCE AND SOCIAL CONTROL* 4(1982): pp 271-99. S. Spitzer & R. Simon (eds.).

A general paradigm centering on the strength and structure of interpersonal networks is formulated to integrate the study of deviance and the study of social control. Three issues are addressed: What are the microstructural influences on deviant behavior and involvement in a deviant life style? Are there parallel network properties that influence the character of the social control process? How useful is a microstructural approach to the impact of social control efforts?

FERREE, Myra Marx (Connecticut). 1980. "Working Class Feminism: A Consideration of the Consequences of Employment." *THE SOCIOLOGICAL QUARTERLY* 21 (Spring): pp 173-84.

The perception of working class women as especially traditional and domestic has tended to obscure the real currents of change within the working class. Their support for feminism has been underestimated because it has been assumed that they lack the personal discontent with traditional roles on which the movement is based. Working class women were surveyed to identify the factors conducive to the adoption of feminist attitudes. Employed women appear to be more feminist than full-time housewives, even when they are working for reasons of financial exigency rather than personal interest. Some of this effect of employment may be due directly to the different social networks in which the employed women and the housewives participate; some of the effect of employment may also be indirect in that it provides a context in which dissatisfactions may be interpreted politically.

GALLO, Frank (Gallo Assoc, Mass.). 1982. "The Effects of Social Support Networks on the Health of the Elderly." *SOCIAL WORK IN HEALTH CARE* 8(2), Winter: pp 65-.

This is a study of the relationship between social support networks and health of the elderly. The aim was to identify and measure the specific dimensions (characteristics) of a social support network and determine which have the greatest effect on an older person's health status. Also, the study examined the collective effect of all measurable dimensions of the network on health status. The major finding was that there was a high statistical correlation between the social support network and health. This provides objective research evidence to what has been suspected intuitively by social workers. That is, knowledge about the social support network is important in assessing health.

HAMMER, Muriel & Linda GUTWIRTH (N.Y. State Psychiatric Inst.) & Susan L. Phillips (Calif, Berkeley). 1982. "Parenthood and Social Networks." *SOC. SCI. MED.* 16, pp 2091-2100.

Data from several samples in the United States and England are drawn upon to examine how and to what extent the social networks of parents differ from those of men and women without children. The social contact patterns found to be associated with parenthood involve (1) a shift in the composition of the networks, and especially an increased emphasis on kin connections; (2) a shift in the frequency with which people are seen; and (3) an absolute reduction in network size for non-working mothers in the lowest social class. The paper briefly considers the health-related implications of these network differences, with special reference to several recent studies that have found exceptionally high rates of depression among women with young children.

HAUSER, Robert (Soc, Wisconsin). 1981. "The Structure of Social Relationships: Cross-Classifications of Mobility, Kinsip, and Friendship." *IHS JOURNAL* 5(1981): pp 1-51.

The paper describes a multiplicative (loglinear) model for square tables (or other cross-classifications) which is helpful in locating cells where counts are relatively dense or sparse. This specification eliminates the confounding of prevalence and interaction effects, which has plagued other schemes for interpreting such tables. The model yields a parsimonious set of parameters which describe the table, and goodness of fit can be assessed with standard inferential procedures. A multiplicative specification which fits a particular cross-classification may be obtained in any of several ways. For example, one may begin with a complete or partial theory about the cross-classification, or one may begin without a theory. By examining residuals from fit under a given model, it is possible to improve the specification in successive rounds of estimation. The counts may be smoothed or aggregated to minimize the changes of fitting and interpreting trivial or unreliable fluctuations in them. Maximum-likelihood estimation is emphasized, but diagnostic information may be obtained using computationally simpler algorithms. The model (and associated inferential methods) can also be used in the comparison of two or more classifications. The exposition is illustrated using data on the occupational mobility of American men, on the educational attainments of Wisconsin sibling-pairs, and on the occupations of male Detroit friendship-pairs.

The general problem may be stated as follows: Having given the number of instances respectively in which things are both thus and so, in which they are thus but no so, in which they are so but not thus, and in which they are neither thus nor so, it is required to eliminate the general quantitative relativity inhering in the mere thingness of the things, and to determine the special quantitative relativity subsisting between the thusness and the so-ness of the things.

KORNFELD, William & Carl HEWITT (Comp. Sci, MIT). 1981. "The Scientific Community Metaphor." IEEE, 11(1): p 24.

Scientific communities have proven to be extremely successful at solving problems. They are inherently parallel systems and their macroscopic nature makes them amenable to careful study. In this paper the character of scientific research is examined drawing on sources in the philosophy and history of science. We maintain that the success of scientific research depends critically on its concurrency and pluralism. A variant of the language Ether is developed that embodies notions of concurrency necessary to emulate some of the problem solving behavior of scientific communities. Capabilities of scientific communities are discussed in parallel with simplified models of these capabilities in this language.

KRAHN, Harvey & John GARTRELL (Alberta). 1982. "Labour Market Segmentation and Social Mobility in a Canadian Single-Industry Community." CANAD. REV. SOC. & ANTH 20(3) 1982: pp 322-45.

The occupational mobility opportunities in a Canadian resource development community were analyzed by examining the status attainment of a 1979 sample of male residents of Fort McMurray, Alberta. While the labour force of this single-industry town appears to have experienced only marginally greater mobility than the Canadian labour force as a whole, frequent and large socioeconomic status changes accompanied the move to the community. This migration involved substantial mobility from periphery into core sector firms. Furthermore, there were differences in the mobility experience of those employed in the core sector (oil) and those working in the peripheral sector firms.

LOFLAND, Lyn (Soc, Cal-Davis). 1982. "Loss and Human Connection: An Exploration into the Nature of the Social Bond." William Ickles & Eric Knowles (eds.) PERSONALITY, ROLES AND SOCIAL BEHAVIOR. New York, Springer-Verlag. pp 219-41.

In Western culture, the involuntary severance (through death, desertion, or geographical separation, for example) of a relationship defined by actor as "significant" or "meaningful" is generally conceived of as a "loss" experience. In this essay, I want to pursue the question: What is lost? Stated more positively, I want to ask what it is that humans do for one another? What links self to other, personality to society? I want to make, that is, a modest foray into those matters that psychologists typically pursue with such concepts as "attachment," "affect," and "separation anxiety," and that sociologists pursue in their inquiries into the nature of the social bond.

To place the question of concern here - what is lost? - in its appropriate context, it will be useful, in the first section of this chapter, briefly to review the literature from sociology and psychology dealing with the closely related matters of attachment and grief. Having thus, hopefully, posed the question more fully, the second section will attempt a provisional answer to it by describing seven "threads of connectedness" between humans, seven "ways" in which self and other are linked. Finally, I will suggest some hypothetical and empirical "patterns" of connection and the possible utility of these patterns for our continuing attempts to understand more deeply the meaning and variability of both attachment and grief and the insight they provide us into the social animal that is ourself.

LONGINO, Charles Jr. & Aaron LIPMAN (Miami). 1982. "The Married, the Formerly Married and the Never Married: Support System Differentials of Older Women in Planned Retirement Communities." INT'L. J. AGING AND HUMAN DEVELOPMENT 15(4): 285-97.

This paper explores the nature of informal support given to older women, depending upon their marital status and the presence of living children. To control for differential availability of formal resources and for background characteristics, random samples of 371 noninstitutionalized female residents of two midwestern life care communities were interviewed. We found, unsurprisingly, that women who were presently, or who had been married, received more emotional, social, and instrumental support from their family members. But in further analysis it became clear, much to our surprise, that the presence of a husband only assured the married women of significantly more instrumental (task-oriented) support. It was the existence of living children - even just one child - that generated greater emotional, social, and instrumental support from her family. The greatest informal support deficits are among the never married, as expected, but are a result of the lack of children rather than the absence of a husband.

MILARDO, Robert (Child Dev, Maine). 1982. "Friendship Networks in Developing Relationships: Converging and Diverging Social Environments." *SOCIAL PSYCHOLOGY QUARTERLY* 45(3): 162-72.

Changes in the structure of friendship networks are thought to complement change in a couple's level of involvement in a close relationship. As a pair become close, their network of mutual friends should increase in size, and with declining involvement a concurrent reduction in the number of mutual friends should occur. A measure of network overlap was derived from daily reports of social activity provided by participants. The hypothesized variations of stage and overlap are consistently supported in both cross-sectional and longitudinal tests. Network overlap covaries with stage of relationship, and this covariation cannot be accounted for by a couple's familiarity or length of dating. Underlying variations in overlap are compositional changes in the stability of the network membership, involving either the reclassification of friends or actual changes in network membership. The findings are discussed in terms of the importance of considering the social context of developing relationships, since that context can serve both facilitative and disruptive functions.

OSBORNE, Brian (Geog, Queen's) & Robert PIKE (Soc, Queen's). 1982. "Lowering 'The Walls of Oblivion': The Revolution in Postal Communications in Central Canada, 1851-1911." Paper presented to ANNUAL MEETING OF CANADIAN COMMUNICATIONS ASSOCIATION, June 5th.

We highlight certain features of this early revolution in communications, especially as it manifests itself in Ontario and Quebec during the 1851-1911 period. An historical overview of the main indicators of the expansion and increased diversity of the postal system in Ontario and Quebec will be presented using data gathered from the annual reports of the Post Master General. The reception and impact of the establishment and development of the system at the more local level of the community will be attempted using the petitions for the establishment of postal and other services and the Post Office Inspectors' reports on such petitions. Through such records, it is hoped that it will be possible to achieve a more sensitive appreciation of the public perception of the social and economic importance of mails at a time when they constituted an innovation in non face-to-face communications for the general public.

It will be argued here that the development of the mass postal system constituted a revolution in communications. First and foremost, it facilitated private interpersonal communications as well as making individuals potentially more accessible to messages from a greater variety of organisational sources. Easily accessible postal communications were thus widely perceived by more and more individuals and organisations to be a necessary public "amenity of everyday life" both in newly settled areas and in the more established rural and urban communities. There were, however, substantial regional differences in the degree of development of postal communications which may be related to regional differences in social organisation, public demand, urbanisation and economic growth.

PEAT, David (Nat'l. Research Council of Canada). 1974. "The Emergence of Structure and Organization from Physical Systems." *INT. J. QUANTUM CHEM.: QUANTUM BIOLOGY SYMP.* No. 1: pp 213-19.

It is indicated that quantum mechanics contains provision for treatment of "organization" and dynamical structure which is more appropriate than that normally employed. This description makes use of observables, to superselection operators, which are stable to fluctuations and perturbations of the system. It is suggested that they may account for structure in a biological system, produced by the "pumping" of collective modes by the environment. It is noted that certain forms of structure may be incompatible, within the same system.

PERRUCCI, Robert & Dena TARG (Purdue). 1982. "Network Structure and Reactions to Primary Deviance of Mental Patients." *JOURNAL OF HEALTH AND SOCIAL BEHAVIOR* 23 (March): pp 2-17.

A network approach to understanding mental illness is offered as an alternative to the psychiatric model and to societal reaction theory. Forty-seven social networks which had recently committed members to a mental hospital are examined by interviews with 199 network members. Patients are classified according to their status resources and the type of symptoms for which they were committed. Network properties include density, openness, ties among members, and instrumental role structure. Network differences are found to be associated with how patients' initial unusual behaviors are defined, and the speed with which hospitalization occurs. Properties of social networks, rather than status resources or symptoms, provide better understanding of response to initial acts of deviance and actions leading to hospitalization.

STRAUSS, David & Kimball ROMNEY (Soc. Sci, Irvine). 1982. "Log-Linear Multiplicative Models for the Analysis of Endogamy." ETHNOLOGY 2(1): pp 79-99.

It has become increasingly clear that the log-linear methods can offer an elegant solution to the endogamy problem and that we can now specify various relevant models in very much more precise terms than previously. The new developments allow us to fit whole hierarchies of models and compare their adequacy with significance tests.

In this paper our major goal is to describe and illustrate the application of multiplicative or log-linear models to the problem of endogamy. The use of these models is becoming increasingly widespread in social sciences. In anthropology, for instance, Burns (1979) has used the method in cross-cultural study to analyze the occurrence of dental caries in skeletal series; Burton and Reitz (1981), in their cross-cultural study of the plow, female contribution to subsistence and polygyny, also rely heavily on the method. We hope that to some extent our treatment here will serve as an introduction to the idea and possibilities of such modelling. As we shall see, however, endogamy data has a special form, the main diagonal of the table playing a prominent role, and we shall need some rather special log-linear models to capture ideas about the pattern of endogamy.

One extra benefit of the modelling is that we are forced to be precise about our terms: some notions that may at first sight seem well defined are in fact quite ambiguous. Thus, for example, Leonard and Weller (1980), in their study of the declining endogamy of the Hyderabad Kayasths, use various measures of endogamy but do not explicitly state what is meant by an unchanged marriage pattern. We shall see later that "no change in the pattern of endogamy" can be plausibly interpreted in at least two different ways. Each has a simple formulation as a log-linear model, and each can straightforwardly be fitted and tested.

ZAMAN, M.Q. (Athro, Manitoba). 1982. "Change and Continuity in the Patron-Client Relations among Peasants of Bangladesh." EASTERN ANTHROPOLOGIST 35(4): pp 271-84.

This paper deals with the nature of patron-clients relations as the result of vertical ties among different strata of peasants, and the factors responsible for change and continuity in such relationships. I shall also try briefly to discuss the prospects of transforming village factionalism into class-based independent factions by poor peasants' leadership at the local level. My own case study of a Bangladesh village (Zanman 1977) will briefly be presented to examine the nature of patron-client relations and the factors that influence changes in such relationship. I shall try to suggest new perspectives of factional politics within the same general area of social conflict based on my empirical data which, I suggest, has broader theoretical implications for peasant studies.

(NETWORK NOTEBOOK continued from page 149)

Put This Into a Life-Cycle Code

"It was the usual non-divorce from a non-marriage." - anonymous Berkeley sociologist.

Levels of Analysis Problem

"If we can have a successful marriage, we can change countries." 'Judi', a suburban northern California anti-war campaigner (as quoted by Alice Kahn, EAST BY EXPRESS, 6 July 84).

Snakes and Crackers

"Eric Halsey (U. Wash.) described a longest-path gadget made out of 'snakes.' Each edge of the graph is represented by an elastic string threaded through an integer number of beads. Does the longest path stand out when the gadget is stretched & then released? Another of his gadget measures the length of the shortest path between two vertices in a graph. Make each edge a piece of fuse & put a firecracker at the second vertex. Now light the fuses at the first vertex & stand back: the time until the firecracker explodes is proportional to the length of the shortest path." (from A.K. Dewdney, "Computer Recreations," SCIENTIFIC AMERICAN, 9/84).

(continued on page 174)

NEW BOOKS

Robert BELLAH, Richard MADSEN, William SULLIVAN, Ann SWIDLER & Steven TIPTON. 1985. HABITS OF THE HEART: INDIVIDUALISM & COMMITMENT IN AMERICAN LIFE. Berkeley: U of Cal. Pr. 355p. \$16.95

Chap 7 is a study of Tocquevillian concerns re the usefulness of voluntary organizations (& other intermediate structures) linking individuals to larger social systems.

David BIEGEL, Ellen McCARDLE & Susan MENDELSON (Pitt). 1985. SOCIAL NETWORKS AND MENTAL HEALTH: AN ANNOTATED BIBLIOGRAPHY. London: Sage. 392p. £27.50

Contains 1,340 annotated citations covering 1982. Approximately half of the citations resulted from a computerized literature search of four major data bases. The remaining citations were developed through examination of the bibliographies of books, chapters, and special issues of journals, two unpublished bibliographies, and the senior author's personal collection.

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

Timothy BRUBAKER. 1985. LATER LIFE FAMILIES. Sage. 144p. £7.95

Focuses on family relationships during the later stages of the family life cycle, and reviews research studies on later life family patterns. The author concludes that the later life family is alive and well, but that it reflects the changes and problems associated with ageing.

CONTENTS: I. Later Life Families. II. The Married Couple. III. Generational Relationships: Mutual Support. IV. Grandparents, Siblings and Other Relatives. V. Widowhood. VI. The Divorced and Never Marrieds. VII. Later Life Families in the Future.

Martin BULMER (Soc Admin, LSE). THE CHICAGO SCHOOL OF SOCIOLOGY: INSTITUTIONALIZATION, DIVERSITY, AND THE RISE OF SOCIOLOGICAL RESEARCH. Chicago: U of Chicago Pr. 285p. \$28.00

Bulmer explores the sources of the creative drive that produced not only the distinctive school of sociology under W.I. Thomas, Robert E. Park, Ernest W. Burgess, William F. Ogburn, and others, but also an influential school of political science under Charles E. Merriam and a later school of economics under Frank Knight and Jacob Viner. The lively interaction of faculty in sociology, political science, anthropology, statistics, economics, and philosophy promoted a remarkable diversity and strength. Bulmer notes, however, that the influence of George Herbert Mead upon sociologists at the time has been overemphasized at the expense of John Dewey and William James.

The book also discusses the important influence of philanthropic foundations, which funded large-scale projects, and of university institutions, such as the Society for Social Research and the Local Community Research Committee. (Publisher's blurb)

CONTENTS: 1. The Significance of the Chicago School of Sociology. 2. Chicago: The City and Its University. 3. The Establishment of the Social Sciences. 4. "The Polish Peasant in Europe and America": A Landmark of Empirical Sociology. 5. Sociology, the Social Survey Movement, and "The Negro in Chicago". 6. The Development of Field Research Methods. 7. The Organization of Sociology by Park and Burgess. 8. The Local Community Research Committee, 1923-30. 9. The Development of Quantitative Methods in the Early 1920s. 10. Quantitative Methods in the Later 1920s. 11. The Chicago Manifesto. 12. The Conditions of Creativity.

Michael BURAWOY (Soc, Cal-Berkeley). 1985. THE POLITICS OF PRODUCTION. NY: Schocken (Verso). 240p. \$8.95.

Drawing on 1st-hand fieldwork, argues that politics and economics are inseparably combined in the production process.

Donald DAVIDSON (Phil, OXON). 1984. INQUIRIES INTO TRUTH AND INTERPRETATION. NY: Oxford U Pr. 292p. \$10.95.

He discourages an atomistic, building-block picture of language...Davidson takes it for granted that the smallest unit of understanding is the whole sentence. More than that...understanding cannot limp along, sentence by sentence. I can understand you only by having an implicit theory about how to understand a network of your possible utterances, & this theory...must be accommodated to a larger view of your desires & beliefs. Philosophers call such a theory of language holistic..." (From Ian Hacking's NEW YORK REVIEW OF BOOKS review, 20 Dec 84).

G. William DOMHOFF (Psych, Cal-Santa Cruz). 1983. WHO RULES AMERICA NOW? Englewood Cliffs, NJ: Prentice-Hall. 230p. \$7.95

In this sequel to his 1960s book, Domhoff examines the American power structure as it has developed in the 1980s. He presents systemic empirical evidence for his belief that a fixed group of privileged people dominates the American economy & government. The book (presents) a detailed demonstration that there exists an upper social class that comprises only 0.5% of the population & yet dominates key positions within the corporate community. It shows how leaders within this upper class & the corporate community reach government and dominate it thru a variety of processes: the special-interest process, the policy-planning process, & the candidate-selection process.

Steve DUCK (Communic, Iowa) and Daniel PERLMAN (Fam St, Brit Col) (eds). 1986. INTIMATE RELATIONSHIPS. Beverly Hills, CA: Sage.

CONTENTS: Daniel Perlman and Beverley Fehr, "The Development of Intimate Relationships". I. THE DEVELOPMENT OF RELATIONSHIPS. Mark Snyder and Jeffrey Simpson, "Orientations Toward Romantic Relationships". Kathryn Kelley and Beverley Rolker-Dolinsky, "The Psychosexology of Female Initiation and Dominance". Ted Huston and Catherine Surra, "Marriage as a Social Transition". II. THE DYNAMICS OF RELATIONSHIPS. Bram Buunk and Robert Bringle, "Jealousy in Love Relationships". Patricia Noller, "Nonverbal Communication in Marriage". Donald Baucom, "Attributions in Distressed Relations: How Can We Explain Them?" III. THE DETERIORATION AND REORGANIZATION OF RELATIONSHIPS. Caryl Rusbult, "Responses to Dissatisfaction in Close Relationships: The Exit-Voice-Loyalty-Neglect Model". Roy Rodgers, "Post-Marital Reorganization of Family Relationships". Constance Ahrons & Lynn Wallisch, "The Relationship Between Former Spouses". Linda Acitelle & Steve Duck, "Intimacy as the Proverbial Elephant".

Steve DUCK & Daniel PERLMAN (eds). 1985. UNDERSTANDING PERSONAL RELATIONSHIPS. Beverly Hills, CA: Sage. 312p. \$30.00

Introduces readers to the new interdisciplinary field of personal relationships, integrating themes from the fields of social psychology, sociology, clinical psychology and family studies.

CONTENTS: Steve Duck and Daniel Perlman, "The Thousand Islands of Personal Relationships: A Prescriptive Analysis for Future Explorations." Keith Davis and Michael Todd, "Assessing Friendship: Prototypes, Paradigm Cases and Relationship Description". Paul Wright, "The Acquaintance Description Form". Michael Argyle & Monika Henderson, "The Rules of Relationships". Dan McAdams, "Motivation and Friendship". Jennifer Campbell and Abraham Tesser, "Self-Evaluation Maintenance Processes in Relationships". Kathryn Dindia and Mary Anne Fitzpatrick, "Marital Communication: Three Approaches Compared". Barry Wellman, "Domestic Work, Paid Work and Net Work". Philip Shaver, Wyndol Furman, and Duane Buhrmester, "Transition to College: Network Changes, Social Skills, and Loneliness". Leslie Baxter, "Accomplishing Relationship Disengagement".

Peter EVANS, Dietrich RUESCHEMEYER (Soc, Brown) & Theda SKOCPOL (Soc, Chicago). 1984. BRINGING THE STATE BACK IN. Cambridge: Cambridge U Pr. 384p. \$14.95

Current work increasingly views the state as an agent which, although influenced by the society that surrounds it, also shapes social and political processes. This volume includes scholarship on states in relation to social structures. The contributors use theoretically engaged comparative and historical investigations to provide improved conceptualizations of states and how they operate.

CONTRIBUTORS: Theda Skocpol, Dietrich Rueschemeyer, Peter B. Evans, Alice Amsden, Margaret Weir, Charles Tilly, Peter Katzenstein, Ira Katznelson, David Laitin, Alfred Stepan.

Andre Gunder FRANK (Amsterdam). 1984. CRITIQUE & ANTI-CRITIQUE: ESSAYS ON DEPENDENCE & REFORMISM. NY: Praeger. 336p. \$34.95.

A collection of essays written in the past 15 years. "A long dialogue with friendly and unfriendly critics -- that is, primarily with himself -- in which he poses more conundrums than he solves." (Immanuel Wallerstein in CONTEMPORARY SOCIOLOGY, 3/85).

Dean GENGLE (CommuniTree Group, San Francisco). 1984. THE NETWEAVER'S SOURCEBOOK: A GUIDE TO MICRO NETWORKING AND COMMUNICATIONS. Reading, Mass: Addison-Wesley. 326p.

This sourcebook addresses the telecommunications transformation from the point of view of a designer. I have chosen to call this hypothetical designer a "netweaver". You won't find extensive listings of commands and sample sessions from existing mass information utilities here. Instead you will find a helpful companion in the journey toward creating and using your own information system, which, eventually, you can expand to include some pretty wonderful global resources. Through this sourcebook you can begin the process of understanding and gaining command of the dynamics of telecommunications. These dynamics include hardware, software, switches, connections, legal help, organizations, day-to-day maintenance of your network, databases, directories, local area networks, global networks, telephones, videodisks, downlink satellites, microwaves, protocols, and, most important, how to find out more about and keep up with changes as they occur in these diverse and interesting matters.

Gerald GOLD (Anthro, York, Canada) (ed). 1985 MINORITIES & MOTHER COUNTRY IMAGERY. St John's Newfoundland A1C 5S7: Inst of Soc & Econ Research, Memorial U. \$15.00

Considers the meaning of 'mother country' for national, immigrant & aboriginal minorities. Case studies of European communities in North America and MesoAmerica, & Indians in Canada & Saami in Norway.

Gail HENDERSON & Myron COHEN. 1984. THE CHINESE HOSPITAL. New Haven, CT: Yale U Pr. 183p. \$22.50

A description of the danwei, the basic work-group in Chinese society -- how it organizes the activities of workers and their families, both on and off the job. (taken from James Greeley's review, CONTEMPORARY SOCIOLOGY, 3/85).

Ruth HOROWITZ. (Soc, Delaware). HONOR & THE AMERICAN DREAM: CULTURE & IDENTITY IN A CHICANO COMMUNITY. New Brunswick, NJ: Rutgers U Pr. 278p. \$12.95

When studying a Mexican American community in Chicago, Horowitz "concludes that the core members of (adolescent) gangs are not psychopathic or unstable, they are not marked by social disability, & their relationships to one another are not precarious but warm, strong, intimate and enduring" (from Albert K. Cohen's AJS review, 3/85).

William HUNT. 1983. THE PURITAN MOMENT: THE COMING OF REVOLUTION IN AN ENGLISH COUNTY. Cambridge, MA: Harvard U Pr. 384p. \$36.00

"Hunt makes it clear that there was nothing inherently revolutionary in Puritan theology, & that Puritanism was never more than a minority faith. What then made it possible for this faith to lead a revolution. The combination of economic depression, plus increasing royal demands for taxation & Church conformity, provoked broad opposition. Yet effective opposition was only possible with organization & leadership. The network of Puritans, justified by their faith & organized thru ties of kinship, education & travelling preachers, provided the vanguard for a more diffuse opposition. Moreover, the Puritans were willing to play on the hopes and grievances of the 'middling classes' of artisans, traders, yeomen & husbandmen." (from Jack Goldstone's CONTEMPORARY SOCIOLOGY review, 3/85).

Dale JOHNSON (Rutgers (ed). 1985. MIDDLE CLASSES IN DEPENDENT COUNTRIES. London: Sage. 293p. 25.00.

These studies illuminate the important role of the middle classes in dependent countries. The marked differences among intermediate class formations in Latin America and the Caribbean, Asia, and the Middle East -- divergencies both from Western experience and among the Third World regions -- are examined. Certain worldwide similarities, such as the bipolarizing effects of capitalistic expansion, the historic shifts in the composition of mediating groups, and the critical importance of these groups to state structure, in particular, military dictatorships, are also presented.

CONTENTS: I. HISTORICAL STUDIES OF CLASS FORMATION. Dale Johnson, "Class and Social Development: Toward a Comparative and Historical Social Science". Aijaz Ahman, "Class, Nation, and State: Intermediate Classes in Peripheral Societies". Novella Zett Keith & Nelson Keith, "The Rise of the Middle Class in Jamaica". Cecilia Karch, "Class Formation and Class and Race Relations in the West Indies". Muhammad Shahidullah, "Class Formation and Class Relations in Bangladesh". II. CLASS AND STATE. Dale Johnson, "The State as an Expression of Class Relations". Dale Johnson, "Class Roots of Dictatorship in South America: Local Bourgeoisies and Transitional Capital". Dale Johnson, "Local Bourgeoisies, Intermediate Strata, and Hegemony in South America". III. CLASSES IN THE SOCIALIST TRANSITION. Thomas Bamat, "Peru's Plan Inca: The Rise and Fall of a Populist Project." Alan Stoleroff, "State Capitalism and Class Formation in the Soviet Union".

Allen KELLEY (Econ) & Jeffrey WILLIAMSON (Econ). 1984. WHAT DRIVES THIRD WORLD GROWTH? A DYNAMIC EQUILIBRIUM APPROACH.

"The 2 most important 'motors' have been, 1st, that manufactured goods have better terms of trade than primary products in the international marketplace, and 2nd, that technological advances in productivity occur at a higher rate in urban-based manufacturing than in rural-based farming. While the authors are mainline economists who cite absolutely no literature from the radical critics, their most powerful predictor is one from the world system. Similarly, their technological variable (suggests) that the import of capital-intensive technologies in manufacturing, via multinational corporations or the the advice of technical assistance experts, leads to an unbalanced development that pauperized the countryside vis-a-vis the cities and thus swells urban centers." (edited from Janet Abu-Lughod's CONTEMPORARY SOCIOLOGY review, 7/85).

Stanley LIEBERSON (Soc, Cal-Berkeley). 1985. MAKING IT COUNT: THE IMPROVEMENT OF SOCIAL RESEARCH & THEORY. Berkeley:U of Cal Pr. \$19.95

Some of the fundamental procedures underlying contemporary social research are so common that social scientists usually take them for granted and apply them as part of the normal way of doing social research. Lieberson questions these procedures and provides a different view of the logic underlying such standard features of social research as: control variables, reversible causal models, variation, triangulation, counter-factual conditions, causal variables, comparative methods, and the simulation of the natural science experimental model in social science with quasi-experimental methods. (Publisher's blurb)

Robert McPHEE (Wisconsin) & Phillip TOMPKINS (Purdue) (eds). 1985. ORGANIZATIONAL COMMUNICATION: TRADITIONAL THEMES AND NEW DIRECTIONS. Sage. 320p. \$14.00

In contrast to much of the previous research on this topic, these authors share a 'field view' of communication, moving away from the traditional focus on observable behaviour of systems of behaviours and events. The result is a general theoretical shift away from a collection of empirical propositions to studies that help describe the field in new and ingenious ways.

CONTENTS: Phillip Tompkins & Robert McPhee, "Introduction and Afterword". W. Charles Redding, "The History of Organizational Communication: Study and Practice". Rebecca Blair, Karlene Roberts & Pamela McKechnie, "Vertical and Network Communication in Organizations: The Present and the Future". Marshall Scott Poole, "Communication and Organizational Climates: Review, Critique, and a New Perspective". William Richards Jr., "Data, Models and Assumptions in Network Analysis". Linda Putnam, "Bargaining as Organizational Communication". Robert McPhee, "Formal Structure and Organizational Communication". Phillip Tompkins and George Cheney, "Communication and Unobtrusive Control in Contemporary Organizations". Joseph Turow, "Learning to Portray Institutional Power: The Socialization of Creators in Mass Media Organizations". Charles Conrad and Mary Ryan, "Power, Praxis, and Self in Organizational Communication Theory".

Steven NAIFEH & Gregory White SMITH (Psych). WHY CAN'T MEN OPEN UP. NY: Crown for Clarkson N. Potter. 193p. \$12.95

In Part One, Naifeh and Smith explain why men fear the expression of feelings. Drawing on real-life stories, studies by noted psychiatrists, and their own experiences, they discuss how our culture works against intimacy and promotes men's deep fear of dependence and self-disclosure. They also point out that many women are sending men mixed signals, claiming to want a man who is emotionally responsive, yet responding to the mysterious, unknowable stranger.

Part Two, Overcoming Men's Fear of Intimacy, tells women how they can break through to a man and how a man can gain understanding and can change.

Warren PETERSON (Ctr for Aging, Kansas City) & Jill GUADAGNO (Soc, Kansas). 1985. SOCIAL BONDS IN LATER LIFE: AGING AND INTERDEPENDENCE. London: Sage. 448p. 16.50

This collection presents recent research on the support systems that involve older people. Part 1 discusses the primary relationships in later life, the ties between members of the immediate family. Part 2 examines a wider range of networks that make up the support system of the elderly. Part 3 explores how senior citizens use health and social services through their social networks. The conclusion reached is that 'older people do not engage in relationships on the basis of a one-sided dependency; rather relationships tend to be reciprocal or interdependent'.

CONTENTS: I. INTERDEPENDENCE IN INTIMATE RELATIONSHIPS. Timothy Brubaker, "Responsibility for Household Tasks: A Look at Golden Anniversary Couples Aged 75 Years and Older". Pat Keith and Robert Schafer, "Equity, Role Strains, and Depressions Among Middle-Aged and Older Men and Women". Karen Altergott, "Marriage, Gender, and Social Relations in Later Life". Nancy Mouser et al, "Marital Status and Life Satisfaction: A Study of Older Men". Jeanne Gibbs, "Family Relations of the Older Widow: Their Location and Importance for Her Social Life". Lucy Fischer, "Elderly Parents and the Caregiving Role: An Asymmetrical Transition". Kris Bulcroft & Richard Bulcroft, "Dating and Courtship in Late Life: An Exploratory Study". II. INTERDEPENDENCE IN SOCIAL SUPPORT SYSTEMS. James Creech & Nicholas Babchuk, "Affectivity and the Interweave of Social Circles: Life Course Transitions.". John O'Brien, "Network Analysis of Mid-Life Transitions: A Hypothesis on Phases of Change in Microstructures". Gloria Heinemann, "Interdependence in Informal Support Systems: The Case of Elderly, Urban Widows". Adrian Walter, "The Mediating Role of Social Networks in the Housing Decisions of the Elderly". Neena Chappell & Betty Havens, "Who Helps the Elderly Person: A Discussion of Informal and Formal Care". Robert John, "Service Needs and Support Networks of Elderly Native Americans: Family, Friends, and Social Service Agencies. III. INTERDEPENDENCE IN HEALTH AND SOCIAL SERVICES. Barbara Payne & Neill Bull, "The Older Volunteer: The Case for Interdependence". Linda Breytspraak, Burton Halpert, & Philip Olson, "The Voluntary Organization as Support System in the Aging Process. Marshall Graney, "Interpersonal Support and Health of Older People". Sidney Stahl and Marilyn Potts, "Social Support and Chronic Disease: A Propositional Inventory". Rachel Filinson, "Chronic Illness and Care Provision: A Study of Alzheimer's Disease". Jaber Gubrium & Robert Lynott, "Alzheimer's Disease as Biographical Work". Harry Shanis, "Hospice: Interdependence of the Dying with Their Community". Eva Kahana, Boaz Kahana, & Rosalie Young, "Social Factors in Institutional Living".

David ROGERS & Norman CHUNG . 1983. 110 LIVINGSTON STREET REVISITED: DECENTRALIZATION IN ACTION. NY: New York U Press. 241p. \$20.

"It is the bent of divisional bureaucracies to decentralize authority & to give their constituent units a great deal of freedom in responding to the specialized product markets that each division oversees. NYC's neighborhood units are specialized service markets, & their heterogeneous needs and circumstances defy the homogenizing imperatives of a centralized bureaucracy. A loosely coupled educational system allows district superintendents to tailor strategy & policy to the unique class & racial mix of their jurisdictions. Decentralization emerges from this account as less a utopian political vision than a functional adaptation to a highly differentiated environment." (edited from Johnathan Reider's AJS review, 7/85)

Irwin SARASON & Barbara SARASON (Psych, U of Wash). 1985. SOCIAL SUPPORT: THEORY, RESEARCH AND APPLICATIONS. Dodrecht, Netherlands: Martinus Nijhoff. 519p.

Evidence is increasing that maladaptive ways of thinking and behaving occur disproportionately among people with few social supports. Rather than sapping self-reliance, strong ties with others - particularly family members - seem to encourage it. Reliance on others and self-reliance are not only compatible but complementary to one another. While the mechanism by which an intimate relationship is protective has yet to be worked out, the following factors seem to be involved: intimacy, social integration through shared concerns, reassurance of worth, the opportunity to be nurtured by others, a sense of reliable alliance, and guidance.

The major advance that is taking place in the literature on social support is that reliance is being placed less on anecdotal and clinical evidence and more on empirical inquiry. The chapters of this book reflect this important development and identify the frontiers that are currently being explored.

The book has five parts. Part I is concerned with several theoretical and methodological issues. What is the relationship between actual and perceived support? How can social support be assessed? Can it be investigated from an experimental standpoint?

The papers in Part II look at social support in a developmental context and consider some of the individual difference variables, such as personality and sex, that may be related to social support. In addition, they consider the role of network variables that bear upon the quality and quantity of social support and may also be correlated with personality and developmental experiences.

Part III deals with what happens when there are deficiencies in either the quality or quantity of support or when there are deficiencies in both. The topic of loneliness is an example of many human experiences (social support is another example) which are neglected or ignored by researchers for a long time and then suddenly become exciting fields of inquiry. It is encouraging to see the increasing theoretical and methodological sophistication being brought to bear in the study of loneliness. The chapters of Part III are especially valuable because of their attempts to link the social support and loneliness concepts and their analysis of social relationships from the perspective the individual's social perceptions.

Part IV considers the interrelationship between stress and social support in personal maladaptation. Why is it that some people are able to resist being overwhelmed by untoward events, while others succumb to them? In what ways are social support deficiencies related to coping failures that result in unhappiness, and disorder? The chapters of Part IV delineate a number of interpersonal factors (for example, loss and other blows received in the course of living) that play important roles in human disorder.

The chapters of Part V reflect the complexity that almost always becomes apparent when a phenomenon receives careful study. While the idea that interventions might be designed to make up for deficiencies in social support makes perfectly good sense, the chapters of Part V make clear that the ways to implement such interventions are by no means obvious. One impediment to easy implementation is the fact that there are limits to how much support a person can give. One reason for these limits is that there are costs attached to caring about and for other people. Social support can provide a powerful buffer against stress but the communication of support in a way that does not unduly tax the communicator and nurturer needs to be better understood.

CONTENTS: I. THEORETICAL AND METHODOLOGICAL ISSUES. Brian Wilcox & Eric Vernberg, "Conceptual and Theoretical Dilemmas Facing Social Support". Toni Antonucci, "Social Support: Theoretical Advances, Recent Findings and Pressing Issues." Irwin Sarason & Barbara Sarason, "Social Support - Insights From Assessment and Experimentation". Peggy Thoits, "Social Support and Psychological Well-being: Theoretical Possibilities". Sheldon Cohen, Robin Mermelstein, Tom Kamarck & Harry Hoberman, "Measuring the Functional Components of Social Support". Robert Kaplan, "Social Support and Social Health". II. HUMAN DEVELOPMENT, PERSONALITY AND SOCIAL NETWORKS. Barton Hirsch, "Social Networks and the Ecology of Human Development: Theory, Research and Application". Paul Costa, Jr., Alan Zonderman, & Robert McCrae, "Longitudinal Course of Social Support Among Men in the Baltimore Longitudinal Study of Aging". Herbert Lefcourt, "Intimacy, Social Support, and Locus of Control as Moderators of Stress". P.B. Defares, M. Brandon, C.H. Nass, & J.D. van der Ploeg, "Coping Styles, Social Support and Sex-Differences". Jeanne Plas, Kathleen Hoover-Dempsey & Barbara Strudler Wallston, "A Conceptualization of Professional Women's Interpersonal Fields: Social Support, Reference Groups, and Persons-to-be reckoned-with". Barry Wellman, with the assistance of Robert Hiscott, "From Social Support to Social Network". III. LONELINESS AND PERCEIVED SUPPORT. Warren Jones, "The Psychology of Loneliness: Some Personality Issues in the Study of Social Support". Karen Rook, "The Functions of Social Bonds: Perspectives From Research on Social Support, Loneliness and Social Isolation". Letitia Peplau, "Loneliness Research: Basic Concepts and Findings". Kenneth Heller & Brian Lakey, "Perceived Support and Social Interaction Among Friends and Confidants". IV. STRESS, COPING AND MALADAPTATION. Richard Depue & Scott Monroe, "Life Stress and Human Disorder: Conceptualization and Measurement of the Disordered Group". E.S. Paykel, "Life Events, Social Support and Clinical Psychiatric Disorder". George Brown & Antonia Bifulco, "Social Support, Life Events and Depression". Irwin Sandler, Sharlene Wolchik & Sandy Braver, "Social Support and Children of Divorce". Steven Hobfoll, "Limitations of Social Support in the Stress Process". V. HELPING AND THE COSTS OF CARING. Benjamin Gottlieb, "Theory into Practice: Issues that Surface in Planning Interventions Which Mobilize Support". Margaret Stroebe & Wolfgang Stroebe, "Social Support and the Alleviation of Loss". Camille Wortman & Darrin Lehman, "Reactions to Victims of Life Crisis: Support Attempts That Fail". Ronald Kessler, Jane McLeod, & Elaine Wethington, "The Costs of Caring: A Perspective on the Relationship Between Sex and Psychological Distress".

Stuart SCHWARTZ (Hist, Minnesota). 1984. SUGAR PLANTATIONS IN THE FORMATION OF BRAZILIAN SOCIETY: BAHIA, 1550-1835. Cambridge:Cambridge U Pr. 608p. \$19.95.

This study examines the history of the sugar economy and the peculiar development of plantation society over a three hundred year period in Bahia, a major sugar plantation zone and an important terminus of the Atlantic slave trade. Drawing on little-used archival sources, plantation accounts, and notarial records, it examines through both quantitative and qualitative methods, the various groups that made up plantation society. While Schwartz devotes much attention to masters and slaves, he views slavery ultimately as part of a larger structure of social economic relations. The peculiarities of sugar-making and the nature of plantation labor are used throughout the book as keys to an understanding of roles and relationships in plantation society.

Peter SINCLAIR. 1985. FROM TRAPS TO DRAGGERS: DOMESTIC COMMODITY PRODUCTION IN NORTHWEST NEWFOUNDLAND, 1850-1982. St John's Nfld AIC 5S7: Inst. of Soc & Econ Research, Memorial U. \$9.00

Anchored in a critical discussion of domestic commodity production, this book examines the transformation of small-scale fisheries & concomitant adjustments in social organization, both local & regional.

Sharon STICHTER (Soc, Mass). 1984. MIGRANT LABORERS. Cambridge:Cambridge U Pr. 160p. \$7.95

Under what conditions are the labor market divisions between migrant and non-migrant workers overcome? When do migrants move beyond strategies of desertion and labor mobility to collective on-site

work actions such as strikes and unionism? In this book, labor protest among dockers, miners and domestic workers in east, west, and southern Africa is examined with respect to these questions. It surveys the literature on labor migration in Africa and interprets it from a political and economic perspective. It addresses the controversies over the origins of migrancy and its effects on the rural economy, emphasizing the variation in response of African precapitalist societies to wage labor and the division of labor within the rural household.

William THOMPSON (ed) 1983. *CONTENDING APPROACHES TO WORLD SYSTEM ANALYSIS*. Beverly Hills, CA: Sage. 312p. \$14.

"A major theme is the distinction between world system perspectives that emphasize the economic or material basis of change (e.g., Wallerstein) vs other world system analyses that focus on the political or noneconomic sources. Part I has pieces by Frank, Bergesen, Chase-Dunn & Sylvan that emphasize the economic component. Part II has papers by Modelski, Thompson, Doran, Levy & Falk that accentuate the political aspects. A major component is the discussion of cycles in the power of nations. Finally, Rapkin, Zolberg, Modelski & Wallerstein have discussion & debate papers." (From Kenneth Bollen's review in *CONTEMPORARY SOCIOLOGY*, 3/85).

Kees VAN DER PIJL. 1985. *THE MAKING OF AN ATLANTIC RULING CLASS*. NY: Schocken (Verso). 360p. \$9.95.

Penetrates the inner sanctum of the Bilderberg group & the Trilateral Commission to reveal the usually secret anatomy of the Atlantic alliance of capital since the 2nd world war.

Diane VAUGHAN. 1983. *UNLAWFUL ORGANIZATIONAL BEHAVIOUR: SOCIAL STRUCTURE & CORPORATE MISCONDUCT*. Chicago: U of Chicago Pr. 174p. \$18.00

"The 1st 2 chapters present the case of the Revco retail drug chain submitting bogus bills to Medicaid in Ohio. These chapters focus on the creation and operation of an interorganizational network of 7 state government units after Revco's actions were accidentally discovered. Vaughan analyzes the unusual amount of interorganizational cooperation these units exhibited in successfully pursuing the case, concluding that they could become a 'focused network' because they had compatible ideologies, territorial trust, previous interactions, & interdependence." (from David Ermann's review in *CONTEMPORARY SOCIOLOGY*, 3/85).

Erik Olin WRIGHT (Soc, Wisc). 1985. *CLASSES*. NY: Schocken (Verso). 352p. \$10.95

Bridges the gap between abstract & structural accounts of class & the concrete descriptions of class sectors in specific historical situations. (publisher's blurb)

(NETWORK NOTEBOOK continued from page 167)

Not a Sign of the Times

Network, Inc. - a consortium of 38 US West Coast publishers - has gone bankrupt. (NY Times, 7 Dec 84).

A Useful Role Model

"A newspaper man asked him if he could explain for the readers of a popular journal how he arrived at the idea of antimatter. He thought for a moment and simply said "No". (Physics Nobel Prize winner Paul Dirac, as reported by J.G. Crowther in the *MANCHESTER GUARDIAN WEEKLY*, 4 Nov 84).

Confucius Was Not a Networker

Our correspondent in Taiwan writes: "The job search situation here is quite complex. Personal relations are often not present at all in getting a job. Lots of taking of tests instead."

Big \$\$s

Jerry Rubin reports that his Business Networking Salon is healthy, hardy and growing. Every Wednesday night in Studio 54, New York City. "The 80s are all about succeeding, and networking is all about succeeding too", says Rubin. (Source: *NEW YORKER* 21 March 83 via *NETWORKING NEWSLETTER*).

(NETWORK NOTEBOOK concluded)

COMPUTER STUFF

BUNDLES FROM BRITAIN

FORTRAN Programs for Network Analysis Available From J. Clyde Mitchell (Nuffield College, Oxford)

1. PGABBWT (Arabie, Breiger, Boorman, White program). This program blocks up to six 99*99 sociomatrices using the CONCOR procedures developed by the people after which it is named. Facilities exist to select row, column, separate row and column (as in rectangular matrices) or joint row and column solutions. Options exist to display the block densities at each partition and if required the calculation of a number of trial blocking measures. Facilities exist to produce the material to plot a dendrogram using CLUSTAN.

2. PGNDIS (Network distance). This is a general purpose program for the analysis of networks on the basis of graph theoretical distances between elements. If the values in the network are other than zero-one the user may select a value as a cut-off. Some measures of centrality are calculated at different steps from ego. The information for a hierarchical linkage diagram of the clustering of the elements is produced. Finally the distance matrix is rearranged in terms of order produced by the hierarchical linkage.

3. PGHUBB (Clustering by Hubbell Procedures). This program provides a hierarchical arrangement of elements in a network using an estimate of the total 'effect' of i upon j through all the paths of whatever length from i to j . The procedure assumes the 'effect' of i upon j will be 'attenuated' at each step traversed and the user must provide a value less than 1.0 to represent this value. The output is in the form of a hierarchical arrangement of elements at each level of linkage with a final print-out of the rearrangement of the matrix. The program requires access to a NAG routine for the inversion of an asymmetric matrix.

4. PGCLIQS (Simple clique detection program). This program lists all the distinct sets of elements in a network in which each element is linked to every other element in the set.

5. PGFRMS (Freeman's centrality measures). This program provides centrality and 'betweenness' measures of all elements in a network.

6. PGNTVA (Network variables). This program counts the number of links in a network associated with given patterns of dichotomized attributes. The purpose of the program is to produce the basic data needed to answer the question using say log-linear models: which attributes or what combination of attributes are associated with the presence or absence of a link in a network? The user provides the network data and a coding of the attributes (not necessarily in zero-one form) from which the user selects those required to form the basis of analysis.

7. PGEVNT (Network events). This program is intended to allow users to scan through a series of events or interactions assembled, say, from fieldwork notes to extract data for network analysis. The program allows the user to select particular types of interactions from the record between specified points in time. The data are recoded in a form suitable for inclusion in any of the programs listed here.

8. SOCPAT (Sociometry patterns). This is a version of the Holland/Leinhardt program for counting triads and for displaying the analysis of them.

9. PGEVBL (Everett's cycle-tracing program). This is a copy of Martin Everett's program for determining the blocks in a network (or set of networks) using a cycle tracing technique.

10. PGCLIQ (Simple Clique Detection). This program extracts all first order complete subsets of three or more elements and lists them from the largest to the smallest.

Programs Available through ECPSR, University of Essex. Written by A.P.M. Coxon (Soc, Wales-Cardiff)

11. SOCNET. Implementation of the Rapoport Large Sociogram models, as interpreted by Fararo, T.J. and Sunshine, M.H. A STUDY OF BIASED FRIENDSHIP NETS (Syracuse N.Y. Syracuse University Youth Development Center, 1964).

**USING SAS SOFTWARE TO LINK PERSONAL NETWORK, TIE AND
INDIVIDUAL DATA: A NOVICE'S GUIDE**

Barry Wellman (Sociology, University of Toronto)
Susan Gonzalez Baker (Sociology, University of Texas)

ABSTRACT

SAS's data-handling facilities make it quite useful for studying personal (egocentric) networks. We show how to construct two linked data sets--focal individuals/networks and network members/ties-- calculate summary statistics for each network, and associate network and tie data for analysis.

THE NATURE OF PERSONAL NETWORK DATA

Many network analysts study personal (or egocentric) networks: i.e., networks defined from the standpoints of focal individuals. Even when they look only at the first-order ties of these focal individuals--network members directly linked with focal individuals--analysts still must keep track of several different types of information. These types of data include:

1. characteristics of network members (e.g., gender, ethnicity, age);
2. characteristics of the dyadic ties between network members and focal individuals (e.g., strength of the tie, frequency of contact, kinds of resources--such as emotional aid conveyed, basis of the relationship--such as kinship or coworker);
3. characteristics of focal individuals (e.g., gender, ethnicity, age);
4. compositional characteristics of the networks (e.g., median frequency of contact, proportion of network members conveying emotional aid);
5. structural characteristics of the network (e.g., size, density, number of clusters).

Hence, computer-based statistical analysis of personal network data is more complicated than standard sociological analyses which treat individuals (e.g., survey respondents) as individual units of analysis. One fundamental set of problems is storing the various kinds of network, tie and individual level data efficiently and linking these types of data in handy, useful ways.

This paper presents some simple ways of using the SAS statistical package to work with personal network data sets. It shows how analysts can study personal networks through linking two associated data sets: a set of focal individual/network data and a set of network members/ties with focal individuals data. We assume that the reader has a basic knowledge of SAS (see SAS Institute, 1982) and of personal network analysis (see Barnes, 1972; Berkowitz, 1982; Knoke and Kuklinski, 1983). However, we do not assume that the reader is an experienced computer programmer or an experienced user of hierarchical or relational databases.

Our approach is useful for the sorts of personal network studies, common in community and social support analyses, in which a sample of focal individuals 'possesses' a set of network members and ties (e.g., Laumann, 1973; Fischer, 1982; Wellman, 1979, Wellman, 1982; Gottlieb, 1981; Lin, Dean, and Ensel, forthcoming). Because our approach does not currently handle detailed information about ties between network members - as distinction from ties between network members and focal individuals which our approach can handle - it is not applicable to whole network studies in which the distinction between 'focal individual' and 'network member' is not made. For ways of using SAS to work with these more complicated situations, we refer readers to a series of papers by John Sonquist and associates (Mulherin, Kawabata and Sonquist, 1981; Sonquist, 1980, 1982, 1984; see also Payne, 1982 for extensions of this approach to the PSTAT package).

TIEWISE AND NETWISE DATASETS

There is no reason to store each type of personal network data in a separate data set. Store network member and tie data in one tiewise data set; store focal individual and network data (compositional and structural) in one netwise data set.

Tiewise: Analysts can combine information about the characteristics of network members and ties by the simple device of treating tie characteristics as characteristics of the network members themselves. In the tiewise data set, network member's characteristics include not only personal attributes such as age and gender, they also include attributes of a network member's relationship with a focal individual such as intensity or frequency of contact. Because, by definition, there is exactly one tie between a focal individual and a network member (see Figure 1), it is feasible to store all this information as variables in one tiewise data set. Thus the second East York study contains information about 412 network members--each of whom has a tie with one of 33 focal East Yorkers (Wellman, Carrington and Hall, forthcoming; Wellman, 1982).

FIGURE 1--PARTS OF A PERSONAL NETWORK

Each network member's record contains information about his/her personal attributes and relationship with a focal East Yorker (see Table 1).

TABLE 1. TIEWISE DATASET

(EAST YORK EXAMPLE N=412)

Variable Name: Variable Description:	<u>NETID</u> Focal Individual/ Network ID#	<u>TIEID</u> Network Mem- ber/Tie ID#	<u>AGE</u> Network Member's Age (years)	<u>EMAID</u> Does Network Give Focal Indiv. Emotional Aid?*
	1	1	21	1
	1	2	31	0
	1	3	33	0
	1	4	61	1
	2	1	72	1
	2	2	32	0
	2	3	36	1
	3	1	22	0
	3	2	41	0
	3	3	31	1

	n	n	n	n

*1=Yes; 0=No.

Netwise: By definition, focal individuals are at the centres of their personal networks (see Figure 1). Hence analysts can associate network compositional and structural characteristics with focal individuals. Thus focal individuals not only have as characteristics such personal attributes as gender and ethnicity, they "possess" networks with varying numbers of network members, median frequencies of contact, percentages of network members conveying emotional densities, etc. Because, by definition, there is exactly one focal individual for every network, it is feasible to store this information in one netwise data set. (Some networks are empty--the focal individuals have no ties; this information is meaningful and should still be recorded.) For example, the second East York study contains information about 33 focal individuals at the centre of 33 personal networks (see Table 2).

TABLE 2: NETWISE DATASET

(EAST YORK STUDY N=33)

<u>NETID*</u> Network/focal Individual ID Number	<u>SEX</u> Gender of Focal Individual	<u>NUMTIES</u> # of Network Members in Focal Individual's Network
1	1	4
2	1	3
3	1	3
4	2	3
5	1	9
6	2	11
7	2	1
.	.	.
.	.	.
n	n	n

*corresponds to net ID variable in tiewise dataset.

Linkwise: We call the relations between network members 'links' in order to distinguish them from the 'ties' between network members and focal individuals. Analysts have several choices in storing information about these links. Perhaps the best choice is to store them in a separate linkwise data set which contains information about each link's characteristics, the two network member's TIEID and the network's NETID. Another choice is to store link information as part of the netwise data (e.g., variables indicating the presence and characteristics of a link between network members #1 and #2). However, this makes separate linkwise analysis cumbersome and forces analysts to store information about all possible links and not just all actual links. SAS procedures for working with link data are a simple extension of those for working with the tie and network data; for the sake of brevity, we omit further discussion of linkwise data in this paper.

Problems in Working Separately with Tiewise and Netwise Datasets.

Tiewise and netwise data are hierarchially related in the kinds of personal network studies we are discussing here. Each network (and focal individual) has associated with it zero or more network members and ties. Yet the first widely-used statistical analysis computer packages, Datatext and SPSS, were not comfortable with hierarchially-related data. These packages were developed for taking a standard survey data set and ploughing through it from beginning to end, treating each respondent (and his/her characteristics) as a separate unit of analysis. They were not well-suited for working with units of analysis different from individual respondents much less in linking data sets containing information for different levels of analysis: focal individual, network member, tie and network.

Hence the early statistical studies of personal networks, using SPSS (or similar programs), often had to analyze tiewise and netwise data separately, using procedures which treated each tie or network as an independent unit of analysis. Thus Wellman (1979) analyzed only ties in showing that social closeness, frequency of contact and parent/adult child relationships predict to the provision of social support, and Fischer (1982) compared the network composition and structure of northern California urbanites, suburbanites and small town such were severely affected by the ways in which the data-handling procedures of SPSS-like programs limited the analytic integration of tiewise and netwise data:

1. Such programs made it difficult to link information about focal individuals and networks with information about network members and tie characteristics. While analysts were able to get around these problems to some extent through a priori creation of sub-files -- e.g., doing separate tiewise analyses of urbanites, suburbanites, etc.--the cumbersomeness and inflexibility of such devices severely limited analytic power.

2. The programs were limited in the extent to which they would calculate summary data (e.g., median frequency of contact) for each network and then use them easily for further analysis. For example, SPSS could only print such summary statistics in cumbersome subfiles; it could not easily put summary data for further analysis in the same run.

3. Analysts restricted to tiewise data--not aggregated into summary statistics--had to be aware of potentially misleading results when two conditions were met: (a) the networks varied markedly in size; (b) network size was substantially associated with the characteristics of network members and ties. This is because networks of different sizes have different analytic weight in tiewise data sets which treat all ties as having equal analytic weight. Suppose, for instance, that ties in small networks are more likely to provide social support than ties in large networks. In this situation, the tiewise data set would underestimate the proportion of ties in small networks providing social support. (However, we suspect that these biasing conditions are rarely significant in practice. Indeed, Fischer reports (personal communication) that weighting only has a trivial effect on the results reported in Fischer (1982).)

4. Analysts have wondered about the correct statistical approach to take with tiewise data. While each tie in such a data set is stored as a separate record, in fact they come from a smaller number of personal networks. Thus the 3930 ties in the first East York study come from 845 networks (Wellman, 1979). Wellman treated the entire set of ties as a sample of some unknown larger population and used straightforward significance tests. Fischer, in his (1982) California study, considered treating the ties as a clustered random sample but abandoned this more complicated approach when he found it did not produce statistically different results for large data sets (personal communication). (Both Wellman and Fischer had large numbers of small networks; clustering may make a difference when analysts have small numbers of large networks.) Sonquist (personal communication) argues that concerns about biases in estimation from clustering are misplaced. He considers the ties to be a population--all the relevant ties--of a sample of networks.

Faced with these dilemmas and difficulties, personal network analysts have usually decided at the time of data entry, once and for all, which summary measures of network composition and structure they need, calculated these summary measures separately, and then entered the result by hand into their netwise data sets. These laborious, difficult and boring procedures have led analysts to stick with the measures they have calculated at the beginning of their study, as they lack the flexibility to create new measures of composition and structure at will when they are needed in the course of the study.

Problems in working with tiewise and netwise data come together when analysts want to link the two. One major difficulty is in studying the ties of only certain sorts of focal individuals or networks. For example, we might want to know if upwardly mobile focal individuals have many information-gathering ties (as Nan Lin's work would suggest, e.g., 1983) or if members of densely-knit networks give more social support. This is difficult if there are separate tiewise and netwise data sets which we cannot integrate. The only thing that can be done is to store the characteristics of the focal individuals and networks as characteristics of the ties, repeating the same information for every tie in the same network (e.g., the records for the six ties in Person A's network would each repeat the same information that Person A has an SES score 20 points higher than her father and is in a network with a density of 0.67). Not only is this duplicate record-keeping cumbersome--repeating everything for each tie in a network--it is rigid. It essentially assumes that all relevant information on focal individuals and networks will be defined and calculated at the beginning of the study and entered as raw data into the tiewise data set. (Or else, the analyst can take on the continuing burden of updating the data set.)

WORKING WITH SAS TO STUDY PERSONAL NETWORKS

Overview

Fortunately at least two statistical packages developed recently--SAS and SPSS-X--can handle several of the problems analysts have had in working with personal network data. Both have features that facilitate the storage and handling of hierarchically-related data (see SAS Institute, 1980, 1982a). We report here on SAS, a package with which we have had much experience in recent years. It provides three principal advantages over older statistical packages:

1. Instead of going through one file from beginning to end, SAS is forever outputting and reading from interim storage intermediate, modifiable data sets.

2. The BY statement of SAS's UNIVARIATE procedure allows analysts to create and use summary statistics from tiewise data for each personal network (SAS Institute, 1982a). While computer time is saved if the tiewise data are initially grouped by personal networks

(i.e., ties of the same network are adjoining records in the tie-wise data set), this is not a requirement as it is always possible to do such a sort as part of the same run.

3. SAS's MERGE statement easily facilitates the linking of these summary statistics (created for each network from tie-wise data) with net-wise data in the same run in which substantive analysis is to be performed. There is no need for special JCL to create temporary storage space.

In short, SAS creates network compositional data and some network structural data from tie-wise information about the characteristics of characteristics of network members and their ties with focal individuals and creates a unified data set linking all of this information with net-wise information about the characteristics of focal individuals and already-recorded information about network composition and structure.

Basics

Data Entry: We assume that the analyst starts with separate tie-wise and net-wise data sets (stores either on tape or disk), as is the common procedure now. One special data entry condition must be met. Both the tie-wise and net-wise data sets must contain the ID variable. This ID variable in the tie-wise data set identifies the network to which each tie belongs. In the net-wise data set, the same ID variable identifies the individual network of which the focal individual is the centre (see Table 1 and 2 above). For example, in the tie-wise data set (Table 1), each of the three network members reported by focal individual #2 have a NETID of two and one of three different TIEID numbers. (The combination of NETID and TIEID numbers uniquely identifies each tie, a useful thing to have when printing out information about ties.) The common NETID values in the tie-wise and net-wise data sets are used for producing summary information about each network from the tie-wise data set and for joining this summary information with the information already residing in the net-wise data set.

The UNIVARIATE Procedure: The UNIVARIATE procedure computes descriptive statistics and provides detailed information on the distribution of numeric variables (mean, median, box plots, normal curves, etc.). Most useful for our purposes, UNIVARIATE also creates new data sets containing these statistics which can be used for further analysis. These features allow UNIVARIATE to link tie-wise and net-wise data with only one surge of data-entry effort. After the initial data sets are produced, analysts can create and modify variables with minimal effort.

The BY statement in UNIVARIATE specifies the variable by which cases will be grouped when computing statistics. The BY statement assumes that the raw input data are already sorted in ascending order by the desired reference variable. If the data are not sorted in this way, SAS's SORT procedure will do this quickly and can be saved for subsequent runs, or the options NOTSORTED or DESCENDING can be added to the BY statement to do the job (with increased computer cost; see SAS Institute, 1982a, Chap. 8 and p.771).

The VAR statement in UNIVARIATE specifies the variables to be analyzed. The OUTPUT statement defines and creates a new summary data set from the statistics computed on variables named in the VAR statement (see Table 3 and Figure 2). In the OUTPUT statement, the researcher specifies which statistics (mean, etc.) are to be used to create the new variables in the OUTPUT data set (see SAS Institute, 1982a, p. 578).

TABLE 3

**NEW NETWORK SUMMARY DATA SET CREATED WITH SAS UNIVARIATE
PROCEDURE FROM TIEWISE DATA SET**

<u>NETID</u> Focal Individual Network ID Number	<u>MCTAGE</u> Summary VAR1 (Mean Age of All Network Members)	<u>PEMAID</u> Summary VAR2 (Percent of Emotional Aid Stands in Network)
1	36.5	0.50
2	46.6	0.66
3	31.3	0.33
.	.	.
.	.	.
.	.	.
n	n	n

FIGURE 2: SCHEMATIC OF NEW SUMMARY DATA SETFOCAL INDIVIDUAL I: (From Table 1)

```

TIE 1
  AGE=21
  EMOTIONAL AID=1

TIE 2
  AGE=31
  EMOTIONAL AID=0

TIE 3
  AGE=33
  EMOTIONAL AID=0

TIE 4
  AGE=61
  EMOTIONAL AID=1

```

NEW SUMMARY
STATISTICS --
(1) MEAN AGE OF NETWORK
(2) PERCENT OF EMOTIONAL
AID STRANDS PRESENT
IN NETWORK
FOR FOCAL INDIVIDUAL:1
MEAN AGE=36.5
PERCENT EMOTIONAL
AID=.50

Creating a Network-Level Data Set from Member-Level Data

Data on 412 network members of focal individuals in the second East York study are stored in the SAS file TIES.SASDATA. Data on the 33 focal individuals are stored in the SAS file RSPDNT.SASDATA. We will call the new file of summarized tie data for each focal individual NETS.SASDATA.

The following SAS program creates the new data set NETS.SASDATA. (Numbers at the beginning of each line are for the reader's convenience and are not part of the SAS program.)

1. PROC UNIVARIATE DATA=TIES.SASDATA;
2. VAR RESDIST EMAID CTAGE;
3. BY NETID;
4. OUTPUT OUT=NETS.SASDATA MEDIAN=MDRESD MDEMAID MDCTAGE
MEAN=MRESD PEMAID MCTAGE SUM=SRESD SEMAID SCTAGE;

Table 4 defines the variables to be used in creating the new data set, NETS.SASDATA. The SAS program commands are based on these sample variables.

TABLE 4--SAMPLE DEFINITIONS OF TIEWISE AND NETWISE SUMMARY
VARIABLES IN EAST YORK DATASETS

TIEWISE VARIABLE (N=412)	DEFINITION OF TIEWISE VARIABLE	NETWISE SUMMARY (N=33)	DEFINITION OF NETWISE SUMMARY VARIABLE
RESDIST	Residential distance between focal individual and network member (in miles)	MRESD	Mean distance of all network members to their focal individual's residence (in miles)
		MDRESD	Median distance of all network members to their focal individual's residence (in miles)

		SRES	Total mileage from all network members' residences to their focal individual's residence
EMAID	Does network give focal individual emotional aid? (0=no/1=yes)	PEMAID	Percentage of network members giving focal individual emotional aid
		MDEMAID	Meaningless but has to be calculated if any Medians are calculated for any variables in the run
		SEMAID	Number of network members giving focal individual emotional aid
CTAGE	Age of network member (in years)	MCTAGE	Mean age of network members in a focal individual's network

1. The procedure invokes the UNIVARIATE procedure on the tiewise data set. (In the East York example, N=412 ties.)

2. The VAR statement includes selected variables from the tiewise data set (see Table 4; e.g., RESDIST=residential distance of the network member from the focal individual). In this example, tiewise 'support' variables such as emotional aid are coded '0' or '1'. The '0' code indicates the absence of the particular type of support between the focal individual and the network member, and the '1' code indicates the presence of the support. This procedure is necessary for calculating the proportion of network members (or ties) possessing a given attribute such as companionship (see also #4, OUTPUT, below).

3. The BY statement specifies that statistics are to be computed separately for each value of the variable NETID. This is the crucial step. Since each of 412 network members corresponds to one of 33 NETID values, summary statistics on the variables in the VAR statement will be computed for each of the 33 sets of network members. Thus we have collapsed the tie information into a network-level summary.

4. The OUTPUT statement directs SAS to create and store a new data set called the NETS.SASDATA. This data set will contain the summary statistics requested in the UNIVARIATE procedure for each value of NETID (i.e., each network). The keys MEAN=, MEDIAN=, and SUM=, assigned variable names to the variables contained in the NETS.SASDATA data set. For example, the keyword MEAN= is followed by the variable names which will be assigned to the mean values of the original variables in the tiewise data set. Note that the names remain the same except for the fact that they are preceded by an 'M' (mean) or 'P' (percent). (We suggest this convention in order to distinguish the original tiewise variables from their newly-created netwise summaries in future analyses.)

These new variables are netwise summaries for each focal individual of the tiewise information: e.g., MRESD equals the mean residential distance between the focal individual and all his/her network members. Since the support variables are coded '0' or '1', the MEAN= keyword computes the proportion of ties containing particular types of support in each network (e.g., PEMAID is the proportion of emotional aid exchanged in each focal individual's network--ranging from 0 to 1.0). The MEDIAN= keyword for the RESDIST variable indicates that the new variable MDRESD will be the median residential distance between the focal individual and all of his/her network members. The SUM= keyword indicates that the new variable SRESD will equal the sum of the residential distance between each focal individual and all of the members in his/her network.

Some other constraints on the OUTPUT statement:

(1) SAS requires that the variables in the OUTPUT statement must be entered in the same order as their tiewise counterparts in the preceding VAR statement. If EMAID is second in the VAR statement, then MDEMAID (or whatever the researcher wishes the EMAID variable to be in the new data set) must be the second variable in the OUTPUT statement.

(2) Note in the example that the same output statistics are requested for each of the three variables. The researcher cannot choose particular statistics to be computed for only some variables. For example, if only MDRES and SEMAID are needed, the OUTPUT statement must nevertheless also include SRES and MDEMAID. As shown in Table 4, MDEMAID is meaningless in itself, but must be included in order to get medians for other input variables. In other words, if any output summary statistic is requested for any input variable, then that output statistic must be requested (and defined as an output variable) for all the input variables. These summary statistics must be requested in exactly the same order for all the input variables-- in our example, first the median and then the sum.

USING THE DATA SETS

1. TIES.SASDATA--the tiewise data set (N=412) containing information on each network member and each tie to a focal individual;
2. RSPDNT.SASDATA-- the netwise data set (N=33) containing information on each focal individual (e.g., gender, ethnicity) and some structural information on the network (e.g., size, density);
3. NETS.SASDATA--the new netwise data set (N=33) containing summary information on each focal individual's network members as a group. It contains only those (summary statistic) variables specified on the output statement plus the network ID number (indicated on the UNIVARIATE by the BY statement).

Analysis Within the New Data Set--NETS.SASDATA

Without any need to merge, weigh, copy, or recode network member data, we can now perform comparisons of our focal individuals along new dimensions. We can, for example, correlate the proportion of female members in a focal individual's network with proportion of emotional aid or service aid in the network. We use the CORR procedure (SAS Institute, 1982a) for this analysis.

```
PROC CORR DATA=NETS.SASDATA;
VAR MRES PEMAID;
WITH MCTAGE;
```

Netwise Analysis

1. With a simple MERGE statement, we can combine our newly-created summary variables (NETS.SASDATA) with any variables in the original focal individual/network data set (RSPDNT.SASDATA). MERGE, SAS "match merges" two or more data sets, using as a matching indicator the same value on a variable which all relevant data sets have in common. The obvious choice is the network/focal individual ID number (NETID in our example) which NETS.SASDATA and RSPDNT.SASDATA both contain. (NETID is also in the TIES.SASDATA tiewise data set. When we used it in the BY option of UNIVARIATE above to create NETS.SASDATA, NETID was automatically carried over to NETS.SASDATA. We caution that the two data sets should not have any variable names in common other than the ID's by which they are to be merged; otherwise SAS will have problems deciding which of the two identically-named variables to analyze.)

```
DATA SUPPORT;
MERGE RSPDNT.SASDATA NETS.SASDATA;
BY NETID;
```

We have now created a new netwise dataset called SUPPORT, formed by the merger of new netwise summary NETS.SASDATA with the original netwise RSPDNT.SASDATA (see Figure 3). Now we can examine such matters as the relationship between the focal individual's number of network members (from RSPDNT.SASDATA) and the percent of emotional aid in that individual's network (from NETS.SASDATA):

```
PROC CORR DATA=SUPPORT;
VAR PEMAID NUMTIES;
```

Both operations can be accomplished in one run:

```
DATA SUPPORT;
MERGE RSPDNT.SASDATA NETS.SASDATA;
BY NETID;
PROC CORR DATA=SUPPORT;
VAR PEMAID NUMTIES;
```

Indeed, everything we discuss in this paper can--and should--be done in one run. This is the virtue of SAS. No need to pause for intermediate steps or fuss with temporary JCL or disk storage allocation problems.

2. We can also use information in the focal individual/network data set (RSPDNT.SASDATA) to subset information in the knew network summary data set (NETS.SASDATA). For

FIGURE 3. MERGING NEW DATA SET WITH NETWISE DATA SET

EXAMPLE - FOCAL INDIVIDUALS 1, 2, 3

I. Pre-Merger Data Sets

	<u>NETS.SASDATA</u>		<u>RSPDNT.SASDATA</u>
(F.I. 1)	NETID = 1 PEMAID = 0.50 MCTAGE = 36.5	(F.I.1)	NETID = 1 NUMTIES = 4
(F.I. 2)	NETID = 2 PEMAID = 0.66 MCTAGE = 46.6	(F.I. 2)	NETID = 2 NUMTIES = 3
(F.I. 3)	NETID = 3 PEMAID = 0.33 MCTAGE = 31.3	(F.I. 3)	NETID = 3 NUMTIES = 3

II. MERGE matches datasets by NETID;

II. New Merged Data Set: SUPPORT

(F.I. 1)	NETID = 1 PEMAID = 0.50 MCTAGE = 36.5 NUMTIES = 4	(F.I. 3)	NETID = 3 PEMAID = 0.33 MCTAGE = 31.3 NUMTIES = 3
(F.I. 2)	NETID = 2 PEMAID = 0.66 MCTAGE = 46.6 NUMTIES = 3		

example, we may want to examine the nature of support in the networks of women respondents. The network member summary data set (NETS.SASDATA) can be manipulated on the basis of focal individual characteristics:

```
DATA WOMEN;
MERGE RSPDNT.SASDATA NETS.SASDATA;
BY NETID;
IF SEX=2;
PROC CORR DATA=WOMEN;
VAR PEMAID;
WITH TOTALKID;
```

This program will extract network summaries for networks in which the focal individual is a woman and will correlate various types of support in the network with the focal individual's total number of children. The same procedure can be done for men (replacing the line IF SEX=2 with IF SEX=1) and comparisons can be drawn with a minimum of data manipulation.

CAPABILITIES AND LIMITATIONS

To summarize, SAS has a variety of features to aid personal network analysis:

--It is easy to calculate summary statistics--means, medians, etc.-- for each network. For starters, this avoids the differential weighting problem discussed above when ties from different size networks are thrown into the same statistical pot.

--It is easy to link this summary data to information about focal individual's characteristics. Moreover, linkage decisions do not have to be made ahead of time. Analysts can decide at any time which summary characteristics of network and which focal individual characteristics they want to link together.

--By the same token, it is easy at any time to look at the tie characteristics of subsets of focal individuals. Thus, well after the data were collected, Wellman (1985) analyzed the characteristics of working women's and housewives' networks.

--The ID option of univariate offers a nice bonus, identifying focal individuals or network members who have extreme values for network or tie characteristics. For example, Wellman, Carrington and Hall (forthcoming) used this option to identify those focal individuals with especially localistic networks.

--Keeping two data sets is a more efficient use of computer resources than storing both tie and network information in one data set, since SAS examines an entire data set each time a procedure is executed. Moreover, the separation of tie and network data sets facilitates running less-costly analyses when only the tie or network level of analysis is being used.

SAS is not a panacea. Most social scientists we know find its recoding and value label procedures to be inferior to SPSS and DATATEXT. (We point out that SAS was originally created for agricultural experimenters, not social scientists.) Network analysts will find that they can calculate most structural measures more easily outside of SAS. Network size is easily calculated with SAS, and the calculation of network density is possible, providing that the netwise data set contains a set of variables indicating whether or not there are ties between each network member. However, it is difficult-to-impossible to calculate other structural measures with SAS, such as clusters or blocks. While such things apparently are possible using SAS's MATRIX procedure (SAS Institute, 1982b), this is essentially an APL-like language within SAS and its use would be quite difficult for most social scientists. Perhaps some of the network analytic packages now floating around could be made to work with SAS

ACKNOWLEDGEMENTS

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REFERENCES

- Barnes, J.A. 1972. Social Networks. Reading, MA: Addison-Wesley.
- Berkowitz, S.D. 1982. An Introduction to Structural Analysis. Toronto: Butterworths.
- Fischer, Claude. 1982. To Dwell Among Friends. Chicago: University of Chicago Press.
- Gottlieb, Benjamin, ed. 1981. Social Networks and Social Support. Beverly Hills, SA: Sage.
- Knoke, David and James Kuklinski. 1983. Network Analysis. Beverly Hills, CA: Sage.
- Laumann, Edward. 1973. Bonds of Pluralism. New York: Wiley.

- Lin, Nan, "Social resources and social actions." Connections 6 (Summer): 10-16.
- Lin, Nan, Alan Dean and Walter Ensel. Forthcoming. Social Support, Life Events, and Depression. New York: Academic.
- Mulherin, James, Hugh Kawabata and John Sonquist. 1981. "Relational databases for combined network and attribute data files: a SAS implementation." Connections 4 (Spring): 22-31.
- Payne, Clive. 1982. "Relational database for network data: a PSTAT implementation." Connections 5 (Winter): 48-54.
- SAS Institute. 1980. SAS Applications Guide. Cary, NC: SAS Institute.
- , 1982a. SAS User's Guide: Basics. Cary, NC: SAS Institute.
- , 1982b. SAS User's Guide: Statistics. Cary, NC: SAS Institute.
- Sonquist, John. 1980. "Concepts and tactics in analyzing social network data." Connections 3 (Spring): 33-56.
- , 1982. "Relational database theory and social science data." Paper given at annual meeting of the American Sociological Association. San Francisco. September.
- , 1984. "Select, project, and join operations using SAS." Connections 7 (Winter): 113-21.
- Wellman, Barry. 1979. "The community question." American Journal of Sociology 84 (March): 1201-1231.
- , 1982. "Studying personal communities." Pp. 61-80 in Social Structure and Network Analysis, edited kby Peter Marsden and Nan Lin. Beverly Hills, CA: Sage.
- , 1985. "Domestic work, paid work and net work." Pp. 159-91 in Understanding Personal Relationships, edited by Steve Duck and Daniel Perlman. London: Sage.
- , Peter Carrington and Alan Hall. Forthcoming. "Networks as personal communities." In Structural Sociology, edited by S.D. Berkowitz and Barry Wellman. Cambridge University Press.

MIST+

PC WORLD (11/84) has a feature article on Peter & Trudy JOHNSON-LENZ's MIST+ program for the IBM PC. They report that it's the first program to combine social networking ("people connecting with people, linking ideas and resources") with technological networking ("the electronic transmission of information, usually via telecommunications"). MIST+ combines electronic mail communications features, text processing & a data base maangement system in a customizable package designed to retrieve, organize, and transmit information....The combination of communciations with DB management features creates a unique software category that will no doubt become more popular as the complexities of electronic relationships increase." The program can be used to run private electronic mail systems, more publically accessible electronic bulletin boards, links to international E-mail systems (such as The Source and EIES) or the users' own E-Mail systems linking several micros. The DBMS/E-mail integration allows different users to send/receive/ share text or data files. The program itself contains basic word-processing; in addition, it can easily send/receive text from standard word-processing packages. The communications & edit components of MIST+ list for \$295; bundled with the DBMS, \$495. Some optional extras enable it to a lot of additional tricks with The Source and EIES. Sold by New Era Technologies, 2025 I St. NW #924; Washington DC 20006. Tel: 800-368-5787. (Requires IBM micro, 256K, 2 disk drives (hard disk recommended).

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Editor's note (1985): The above instructions were prepared in prehistoric days. As of now, we will also accept computer-generated copy, as long as it is of near letter quality (no cheating!).

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