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Professor of Mathematical Social Sciences

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Employment

Current: Chair and Professor of Mathematical Social Sciences.

Previous at Dartmouth College: Visiting Scholar, Sociology, 1970-1972; Assistant/Associate Professor, Math. Social Science, 1972-1978/1979-1984; Assistant/Associate Professor, Sociology, 1973-1978; 1979-1983; Director, Project IMPRESS, 1976-77; Director Social Science Consulting, 1979-1983. Adjunct Professor of Biology, 1999-2003.

Previous: Assistant Professor of Sociology, University of Michigan, 1967-1972.

Education

Harvard University, Ph.D., Social Relations, 1963-67. University of Chicago, Sociology, 1962-63. Antioch College, A.B., Mathematics, 1958-62. (Ph.D. Dissertation: *Measurement in the Study of Intergenerational Status Mobility*, Harvard, 1967.)

Books and Articles (Links are to electronic copies at my web site)

[“Extended Correlation: Not Necessarily Quadratic, Not Necessarily Quantitative,”](#)
Sociological Methods and Research, Aug 2005; 34: 31-75.

[“The p-Normal Curve: On the Prediction & Destruction of Networks,”](#) NAACSOS,
June, 2003.

[“Data Without Variables,”](#) *Journal of Mathematical Sociology*, Volume 23(3), 2001,
pp. 225-273, with Aaron Klein and James Mathews.

[“But What Have You Done for Us Lately,”](#) *Sociological Methods and Research.*,
Volume 21, Number 1, August 2000, pp. 34-40.

[“The Response Not Chosen: Estimation of Preference Structures from Pick/Any Data,”](#)
with Kerry M. McCloskey and Daniel R. Walker, manuscript submitted.

"We Can Count, but What do the Numbers Mean?" , Chapter 5 in *Sociology for the Twenty-First Century: Continuities and Cutting Edges*, Janet L. Abu-Lughod, Editor, International Sociological Association/American Sociological Association, University of Chicago Press, 1999.

Introduction to Data Analysis: The Rules of Evidence 1997, Preliminary Edition: www.dartmouth.edu/jlevine/rules.

Chapter Nine: Time Line Research With Up to Date Applications to the Stock Market, Worldnet, Inc., 1996-1997.

Exceptions are the Rule: Inquiries on Method in the Social Sciences: A critique of sociological methodology, with structuralist solutions, Westview Press, (Tilly and McNall, series editors), May, 1993. (<http://www.dartmouth.edu/~jlevine/>)

"Measuring Occupational Stratification using Log-Linear Distance Models," in *Social Mobility and Social Structure*, Ronald L. Breiger, (Ed.), Cambridge University Press, 1990.

"Occupational Mobility: A Structural Model of Intragenerational Mobility in Time Series," with John Spadaro, in *Structural Sociology*, Wellman and Berkowitz (Ed.), Cambridge University Press, 1985/1989.

"Friends and Relations: A Comparison of Positive and Negative Sociometric Forms", *Connections*, 1990.

Worldnet 1980: Worldwide Corporate Interlocks (Volumes I and II). Worldnet, Hanover, New Hampshire, 1980.

Levine's Atlas of Corporate Interlocks, International Edition, 1980, Worldnet, Inc., Hanover, New Hampshire, 1985.

.....*Second Edition: The English-Speaking Nations, 1986*, Worldnet, Inc., Hanover, New Hampshire, 1986.

.....*Third Edition: The English-Speaking Nations, 1990*, Worldnet, Inc., Hanover, New Hampshire, 1990.

"Structuralist Analysis of Data in Sociology," with Nicholas Mullins, *Connections*, 1979.

"Joint-Space Analysis of 'Pick/Any' Data: Analysis of Choices from an Unconstrained Set of Alternatives," *Psychometrika*, March, 1979.

"A Study of Interlocking Directorates: Vital Concepts of Organization," with William S. Roy, in *Perspectives on Social Network Research*, Leinhardt (ed.), Academic Press, 1979.

"Comparing Models of Mobility," *American Sociological Review*, February, 1978.

"Basic Archive for Research in Organizational Networks," *Review of Public Data Use*, July, 1978.

"Short-Term Labor Mobility" A Re-Analysis of the Blumen, Kogen, and McCarthy Data," *Journal of Interdisciplinary Modeling and Simulation*, 1978.

"Non-metric Scaling: A One-Dimensional Unfolding Technique for Very Large Networks," *Proceedings of the Internationalen Wissenschaftlichen Fackonferenz, Sozialwissenschaftliche Kooperative*, Duisberg, 1977.

"The Network of Corporate Interlocks in the United States: An Overview," presented to the session on social networks, September meeting of the American Sociological Association, 1977.

"The Theory of Bank Control," *Sociological Quarterly*, December, 1977.

"The Frequency Analysis of Friendship," presented to the meeting of the International Sociological Association, Toronto, 1974 (Related Research Note, *SIGSOC Bulletin*, Winter, 1973-4).

"A Two Parameter Model of Interaction in Father-Son Status Mobility," *Behavioral Science*, September, 1972.

"The Sphere of Influence: A Methodological Inquiry into U.S. Banking and Industrial Networks," *American Sociological Review*, February, 1972. (Reprinted in *Social Networks: A Developing Paradigm*, Leinhardt (Ed.), Academic Press, 1977.)

Software Implementations – Web/Browser Accessible

The U.S. Corporate Network, 2008, \Bi-Partite Networks, "The Goldfarb Variation", (Organizations/Members), levinux.kiewit.dartmouth.edu/dwv, March 2009.

Text Analysis by Network Mapping, "The Klein Variation", Text based on shared words and contexts., levinux.kiewit.dartmouth.edu/dwv, March, 2009.

Corporate Link Analysis, 2008 (2008 Data and Networks), <http://76.12.240.194/dev/ci/index.php>

Work in Progress

Publicly Accessible Implementations of Relational Statistics used in key papers.

Data Without Variables: A non-experimental/non-causal paradigm for the analysis of observational data.

Issue Domains of Large Networks: Sociometry, who does what to whom, among actors in contemporary world events including terrorist networksP.

Third Reich Testimony, network analysis of Nuremberg trial documents.

Professional

Editorial Board, *Sociological Methods and Research*.

Reviewer, *Sociological Methodology (American Sociological Association)* (Chicago)

Reviewer, *Journal of Mathematical Sociology*

Selected Presentations

Joint conference of the American and Japanese Mathematical Sociology Sections (American Sociological Association), Honolulu, 2000

INSNA, ("Structuralism: On With the Revolution"), with Kathleen Carley, San Diego, 1997.

International Network for Social Network Analysis, jointly with ASA Methodology Section, Charleston, 1996.

ISA Stratification Research Group, 1995.

Steering Committee, Workshop on Mathematical Sociology, ASA, 1994.

Times in Social Action, Conference at Center for the Social Sciences, Columbia University (1993).

Educational Quality of the Workforce, Roundtable, Department of Education, Washington (1991).

Nags Head : Networks, Groups, and Organizations, (1990, 99)

Sunbelt Conference on Social Networks, (1984, 1985, 1990).

New Directions in Structural Analysis, University of Toronto, (1978,1981).

Internationalen Wissenschaftlichen Fachkonferenz, Bad Homburg, (1977).

Western Association of Sociology and Anthropology (1976).

Dartmouth Conference on Social Networks (Leinhardt, 1975).

Harvard Conference on Social Networks (Granovetter, 1974).

University of Toronto Lecture in Methodology (1973).

University of North Carolina Conference on Social Networks (Heise, 1973).

Williams College, 12-College Conference on the Study of Elites (1972).

Harvard Math. Sociology Colloquium Series (1972, 1973).

Software Development (selected)

DwV - Data Cartography / Multi-Dimensional Scaling

BARON - (with William S. Roy). Data management system appropriate to large scale social networks. Currently the data archive includes 'interlock' data for an English-speaking-world "500" (1986), for a world "400" (1979-80), for the Fortune "800" (1969-70 Mariolis data), and historical data for 30 railroads for 1872, 1876, and 1885, (Kingsbury data).

SOCSCAL - Multidimensional metric scaling algorithm for very large (1,000-plus element) choice and network data. The program treats missing data that conform to Coombs' "pick/any" data classification.

IMPII - Elementary displays of data from the General Social Survey

Pre-Doctoral Employment

Social Relations, Harvard University, Frederick Mosteller, 1967, Harrison C. White, 1963-66, Philip J. Stone, 1964-67, SSRC-NSF Institute for Mathematical Training in Social Science, Stanford, Julian Blau and Anatol Rapoport, 1964; Sociology, University of Chicago, Harrison C. White, 1962; Math Models, Antioch College, Julian

Blau, 1961; Mathematics, Antioch College, Thomas Holyoke, 1961. Mathematical Psychology, Institute for Mathematical Studies in Social Science, Stanford, University, Patrick Suppes, 1961; Social Psychology, Fels Center for Study of Group Dynamics, University of Delaware, John T. Lanzetta, 1959; Autopilot Engineering, Convair , San Diego, 1960.