## **LEO A. GOODMAN**

# **Curriculum Vitae and Bibliography**

Born August 7, 1928, New York City, New York.

A.B. Summa Cum Laude (Mathematics and Sociology), Syracuse University, 1948,

Valedictorian.

M.A. (Mathematics: Mathematical Statistics), Princeton University, 1950.

Ph.D. (Mathematics: Mathematical Statistics), Princeton University, 1950.

Assistant Professor of Statistics and Sociology, University of Chicago, 1950-53.

Associate Professor of Statistics and Sociology, University of Chicago, 1953-55.

Professor of Statistics and Sociology, University of Chicago, 1955-70.

Visiting Professor of Mathematical Statistics and Sociology, Columbia University, 1960-61.

Research Associate at the Population Research Center, University of Chicago, 1967-86.

Charles L. Hutchinson Distinguished Service Professor of Statistics and Sociology, University of Chicago, 1970-86.

Class of 1938 Professor, Department of Sociology and Department of Statistics, University of California, Berkeley, 1986-.

# Honors, Awards, and Fellowships

D.Sc. Honorary Degree, Syracuse University, 1984.

D.Sc. Honorary Degree, University of Michigan, 2003.

Member of the National Academy of Sciences

Fellow of the American Academy of Arts and Sciences

Member of the American Philosophical Society

MacLaren Advertising Research Award for 1966, presented by the Canadian Advertising Research Foundation, for joint research (with I.M. Towers and H. Zeisel) on methods of measuring the effects of television through controlled field experiments.

R.A. Fisher Memorial Lecture for 1968, presented at the invitation of the Committee of Presidents of Statistical Societies, at the joint annual meeting of the American Statistical Association and the Biometric Society.

Samuel A. Stouffer Award for 1974, presented by the American Sociological Association, for work published during the past five years which has notably advanced the methodology of sociological research.

Outstanding Statistician of the Year Award for 1978-79, presented by the American Statistical Association Chicago Chapter.

George W. Snedecor Memorial Lecture, presented in 1980 at Iowa State University.

Keynote Lecture at the 1981 Symposium on the Analysis of Discrete Data, sponsored by the American Statistical Association, Northern New Jersey Chapter.

The American Lecture at the 1981 International Meeting on the Analysis of Multidimensional Contingency Tables, at the University of Rome, under the auspices of the Italian Statistical Society.

The Henry L. Rietz Lecture for 1983, presented at the invitation of the Institute of Mathematical Statistics, at the joint annual meeting of the Institute of Mathematical Statistics, the American Statistical Association, the Canadian Statistical Society, and the Biometric Society.

The Samuel S. Wilks Memorial Medal Award for 1985, presented by the American Statistical Association at the joint annual meeting of the American Statistical Association, the Institute of Mathematical Statistics, and the Biometric Society.

Keynote Lecture at the 1987 Conference on Modeling Discrete Data: Developments and Applications, sponsored by the American Statistical Association, Delaware Chapter.

Distinguished Lecture for 1987, presented at the invitation of the Washington Statistical Society.

Featured Speaker at the 1989 Conference on Statistics in Society, presented at the invitation of the American Statistical Association, Social Statistics Section.

Career of Distinguished Scholarship Award for 1995, presented by the American Sociological Association at the annual meeting of the association.

Keynote Address at the 1996 Conference on Social Science and Statistics, held in honor of the late Clifford C. Clogg, and sponsored by the American Statistical Association, Section on Government Statistics and Section on Social Statistics, and by the American Sociological Association, Section on Methodology. Inaugural Lecture inaugurating a series of annual lectures, the Clifford C. Clogg Lectures, supported by Pennsylvania State University.

The Clifford C. Clogg Memorial Lecture, presented at the Fourth International Conference on Logic and Social Science Methodology, held in 1996 and sponsored by the International Sociological Association, Research Committee on Logic and Methodology.

Invited Speaker and Round Table Forum Discussant at the Trends in Social Research Methodology program, organized on the occasion of the 30th anniversary of the Social Research Methodology (SRM)

Documentation Centre, Netherlands Institute for Scientific Information Services (NIWI) of the Royal Dutch Academy of Sciences, at the Fifth International Conference on Logic and Social Science Methodology, "Social Science Methodology in the New Millennium," held in 2000 and sponsored by the International Sociological Association, Research Committee on Logic and Methodology.

The Inaugural Otis Dudley Duncan Honorary Lecture, presented at the 2004 Winter/Spring Conference of the American Sociological Association Methodology Section. This lecture inaugurates a series of annual lectures in honor of Otis Dudley Duncan, sponsored by the American Sociological Association Methodology Section.

The American Sociological Association Methodology Section has established in 2005 a methodology award, named the "Leo A. Goodman Award", which recognizes contributions to sociological methodology, and/or innovative uses of sociological methodology, made by a scholar who is no more than fifteen years past the Ph.D. This award will be made biennually.

Keynote Lecture at the 2005 Conference on Latent Variable Models in the Social Sciences, sponsored by the Statistical and Applied Mathematical Sciences Institute (SAMSI), at the National Institute of Statistical Sciences (NISS).

An "ISI Highly Cited Researcher," according to the Institute for Scientific Information (ISI). This institute has identified "the world's most cited research authors." The particular group of ISI Highly Cited Researchers, considered here by the ISI, consists of the 250 most cited researchers in the last two decades, for their published articles in the Mathematics category. For the Mathematics category, citations for the researcher's articles published in mathematics journals are considered, with statistics journals included in this category.

Fellow of the Stanford University Center for the Study of Poverty and Inequality.

Research Training Fellow of the Social Science Research Council, Princeton University, 1949-50.

Advanced Research Scholar in receipt of a Fulbright Award, and Honorary Research Training Fellow of the Social Science Research Council, Cambridge University, 1953-54.

Senior Postdoctoral Fellow of the National Science Foundation, and Fellow of the John Simon Guggenheim Memorial Foundation, Cambridge University, 1959-60.

Fellow of the Center for Advanced Study in the Behavioral Sciences, Stanford, California, 1984-85.

Special Creativity Award, National Science Foundation, 1986-89.

Fellow of the Institute of Mathematical Statistics

Fellow of the American Statistical Association

Fellow of the Sociological Research Association

Fellow of the International Statistical Institute

Fellow of the International Union for the Scientific Study of Population

Fellow of the American Sociological Association

Fellow of the American Association for the Advancement of Science

Fellow of the Royal Statistical Society

Member of Phi Beta Kappa

Member of Sigma Xi

### Offices Held

Member of the Council of the Institute of Mathematical Statistics, 1955-57.

Chairman of the Committee on Statistics, Division of Mathematics, National Academy of Sciences - National Research Council, 1963-64. Member of the Committee, 1961-64.

Member of the Board of Directors of the Social Science Research Council, serving as Representative of the American Statistical Association, 1972-74. Secretary of the Board of Directors, 1973-74.

Chairman of the Methodology Section, American Sociological Association, 1974-75. Member of the Council of the Methodology Section, 1969-72, 1982-84, and 1989-92.

Chairman of the Committee on the Selection of the Paul F. Lazarsfeld Award, American Sociological Association, Methodology Section, 1985-86. Member of the Selection Committee, 1986-92.

### **Committee Activities**

Member of the Advisory Committee of the Family Study Center, University of Chicago, 1952-57.

Member of the Governing Committee of the Social Science Collegiate Division, University of Chicago, 1965-68.

Member of the American Statistical Association Committee on Committees, 1968-70.

Member of the Mathematical Social Science Board, Administered by the Center for Advanced Study in the Behavioral Sciences, 1971-75.

Member of the Committee on Honorary Degrees, University of Chicago, 1971-75.

Member of the Social Science Research Council Advisory and Planning Committee on Social Indicators, 1972-76.

Member of the American Statistical Association Advisory Committee to the Bureau of the Census, 1974-76.

Member of the Assembly of Behavioral and Social Sciences of the National Research Council, 1974-76.

Member of the National Research Council Committee on Social Sciences in the National Science Foundation, 1975-76.

Member of the Advisory Council of the Princeton University Department of Statistics, 1976-80.

Member of the Institute of Mathematical Statistics Committee on Future Directions, 1978-79.

Member of the Institute of Mathematical Statistics Committee for Statistics in Science, 1979-82.

Member of the Committee on University Awards and Prizes, University of Chicago, 1980-81.

Member of the American Statistical Association Committee on the Improvement of the Quality of Surveys, 1981-83.

Member of the Committee on the Selection of the Dean of the Division of Social Sciences, University of Chicago, 1983-84.

Member of the Selection Committee for the Nora and Edward Ryerson Lecture, University of Chicago, 1983-84.

Member of the Committee on Basic Research in the Behavioral and Social Sciences, National Research Council Commission on Behavioral and Social Sciences and Education, 1984-88.

Member of the American Statistical Association Editorial Search Committee, 1986-87.

Member of the American Statistical Association Selection Committee for the Samuel S. Wilks Memorial Medal Award, 1986-88.

Member of the Selection Committee for the R.A. Fisher Lecture and Award, Committee of Presidents of Statistical Societies, serving as Representative of the Institute of Mathematical Statistics, 1986-91.

Member of the Selection Committee for the Clifford C.Clogg Award, Population Association of America, 1996-99.

#### **Professional Societies**

Institute of Mathematical Statistics
American Statistical Association
Royal Statistical Society
American Sociological Association
International Statistical Institute
International Union for the Scientific Study of Population
Sociological Research Association
Population Association of America
Biometric Society
American Mathematical Society
Bernoulli Society for Mathematical Statistics and Probability
American Association for the Advancement of Science

## **Editorial Work**

Chairman of the Editorial Board of the Institute of Mathematical Statistics - University of Chicago Statistical Research Monographs, 1958-59.

Member of the Editorial Board of the American Journal of Sociology, 1953-87.

Editorial Consultant to Sociometry, 1955-57.

Member of the Editorial Board of Psychometrika, 1957-58.

Member of the Editorial Advisory Board of the <u>International Encyclopedia of the Social Sciences</u>, 1964-67.

Referee for the <u>Journal of the American Statistical Association</u>, the <u>Annals of Statistics</u>, the <u>American Sociological Review</u>, and many other journals.

# **Publications**

- (1) "On the estimation of the number of classes in a population," <u>Annals of Mathematical Statistics</u>, Vol. 20 (1949), p. 572.
- (2) <u>The Estimation of Population Size Using Sequential Sampling Tagging Methods</u>, Ann Arbor, Michigan: University Microfilms, 1950. Pub. No. 10, 908.
- "An application of sequential analysis to problems relative to the use of qualitative tests," <u>American Sociological Review</u>, Vol. 17 (1952), p. 223.
- (4) "On the Poisson-Gamma distribution problem," <u>Annals of the Institute of Statistical Mathematics</u> (Tokyo), Vol. 3 (1952), p. 123.
- (5) "Generalizing the problem of prediction," <u>American Sociological Review</u>, Vol. 17 (1952), p. 609, reprinted in <u>The Language of Social Research</u>, edited by Paul F. Lazarsfeld and Morris Rosenberg, Glencoe, Illinois:Free Press, 1955, and reprinted in part in <u>Criminal Law</u>, Richard C. Donnelly, Joseph Goldstein, and Richard D. Schwartz, Glencoe, Illinois:Free Press, 1962.
- (6) "A probabilistic approach to a system of integral equations," <u>Proceedings of the American Mathematical Society</u>, Vol. 3 (1952), p.505.
- "Social welfare functions based on individual rankings" (with Harry Markowitz), <u>American Journal of Sociology</u>, Vol. 58 (1952), p. 257, and reprinted in Cowles Commission Papers, New Series, No. 67.
- (8) "On optimal arrangements in some social learning situations," <u>Bulletin of Mathematical</u> Biophysics, Vol. 14 (1952), p. 307.
- "On the analysis of samples from K lists," <u>Annals of Mathematical Statistics</u>, Vol 23 (1952), p. 632.
- (10) "Impartial decision rules and sufficient statistics" (with Raghu Raj Bahadur), <u>Annals of Mathematical Statistics</u>, Vol. 23 (1952), p. 553.
- (11) "Serial number analysis," Journal of the American Statistical Association, Vol. 47 (1952), p. 622.
- (12) "Sequential sampling tagging for population size problems," <u>Annals of Mathematical Statistics</u>, Vol. 24 (1953), p. 56.
- (13) "A simple method for improving some estimators," <u>Annals of Mathematical Statistics</u>, Vol. 24 (1953), p. 114.
- (14) "On urbanization indices," Social Forces, Vol. 31 (1953), p. 360.
- (15) "Methods of measuring useful life of equipment under operational conditions," <u>Journal of the American Statistical Association</u>, Vol. 48 (1953), p. 503.

- (16) "Population growth of the sexes," <u>Biometrics</u>, Vol. 9 (1953), p. 212, and reprinted in part in <u>Mathematical Demography</u>: <u>Selected Papers</u>, edited by D. Smith and N. Keyfitz, Berlin:Springer-Verlag, 1977.
- (17) "A further note on 'Finite Markov Processes in Psychology'," <u>Psychometrika</u>, Vol. 18 (1953), p. 245.
- "The use and validity of a prediction instrument. I. A reformulation of the use of a prediction instrument," <u>American Journal of Sociology</u>, Vol. 58 (1953), p. 503.
- (19) "The use and validity of a prediction instrument. II. The validation of prediction," <u>American Journal</u> of Sociology, Vol. 58 (1953), p. 510.
- (20) "Ecological regressions and the behavior of individuals," <u>American Sociological Review</u>, Vol. 18 (1953), p. 663.
- (21) "Kolmogorov-Smirnov tests for psychological research," <u>Psychological Bulletin</u>, Vol. 51 (1954), p. 160.
- "Some practical techniques in serial number analysis," <u>Journal of the American Statistical Association</u>, Vol. 49 (1954), p. 97.
- "On methods of amalgamation," <u>Decision Processes</u>, edited by R.M. Thrall, C.H. Coombs, and R.L. Davis, New York, New York: John Wiley and Sons, Inc., 1954.
- "Measures of association for cross classifications" (with William H. Kruskal), <u>Journal of the American Statistical Association</u>, Vol. 49 (1954), p. 732, and reprinted in the Bobbs-Merrill Reprint Series in the Social Sciences, Sociology Section. This article is included in the book listed here as item (110). It is a Citation Classic, described in <u>Current Contents</u>, <u>Social and Behavioral Sciences</u>, No. 26 (1979), p. 14.
- "Statistical inference about Markov chains" (with T.W. Anderson), <u>Annals of Mathematical Statistics</u>, Vol. 28 (1957), p. 89, and reprinted in <u>Readings in Mathematical Psychology</u>, Vol. 1, R.D. Luce, R.R. Bush, and E. Galanter, New York, New York; John Wiley and Sons, Inc., 1963.
- "The precision of unbiased ratio-type estimators" (with H.O. Hartley), <u>Journal of the American Statistical Association</u>, Vol. 53 (1958), p. 491.
- "Simplified runs tests and likelihood ratio tests for Markov chains," <u>Biometrika</u>, Vol. 45 (1958), p. 181.
- (28) "Exact probabilities and asymptotic relationships for some statistics from m-th order Markov chains," <u>Annals of Mathematical Statistics</u>, Vol. 29 (1958), p. 476.
- (29) "Asymptotic distributions of 'psi squared' goodness of fit criteria for m-th order Markov chains," Annals of Mathematical Statistics, Vol. 29 (1958), p. 1123.
- (30) "Simple statistical methods for scalogram analysis," <u>Psychometrika</u>, Vol. 24 (1959), p. 29, and reprinted in the Bobbs-Merrill Reprint Series in the Social Sciences, Sociology Section.
- (31) "Measures of association for cross classifications. II: Further discussion and references" (with William H. Kruskal), <u>Journal of the American Statistical Association</u>, Vol. 54 (1959), p. 123, and reprinted in the Bobbs-Merrill Reprint Series in Social Sciences, Sociology Section. This article is

- also reprinted in <u>American Contribution to Mathematical Statistics in the Nineteenth Century</u>, edited by S.M. Stigler, New York, New York:Arno Press, 1980. It is included in the book listed here as item (110).
- "On some statistical tests for m-th order Markov chains," <u>Annals of Mathematical Statistics</u>, Vol. 30 (1959), p. 154.
- "A note on Stepanow's tests for Markov chains," <u>Teoriya Veroyatnostei i ee Primeneniya (The Theory of Probability and Its Applications)</u> (Moscow), Vol. 4 (1959), p. 93. (An English translation of the Soviet journal is prepared and published in the U.S. by the Society for Industrial and Applied Mathematics.)
- "Some alternatives to ecological correlation," <u>American Journal of Sociology</u>, Vol. 64 (1959), p. 610, and reprinted in <u>Spatial Analysis: A Reader in Statistical Geography</u>, edited by Brian J.L. Berry and Duane F. Marble, Englewood Cliffs, New Jersey:Prentice-Hall, Inc., 1968.
- (35) "Quantitative methods for the study of identifiability," <u>American Journal of Sociology</u>, Vol. 65 (1959), p. 246.
- (36) "Partial tests for partial taus," Biometrika, Vol. 46 (1959), p. 425.
- (37) "A note on the estimation of variance," Sankhya, Vol. 22 (1960), p. 221.
- (38) "On the exact variance of products," <u>Journal of the American Statistical Association</u>, Vol. 55 (1960), p. 708.
- (39) "Snowball sampling," Annals of Mathematical Statistics, Vol. 32 (1961), p. 148.
- (40) "Modifications of the Dorn-Stouffer-Tibbitts method of 'testing the significance of comparisons in sociological data'," <u>American Journal of Sociology</u>, Vol. 66 (1961), p. 355, and reprinted in the Bobbs-Merrill Reprint Series in the Social Sciences, Sociology Section.
- "Some nonparametric tests for comovements between time series" (with Yehuda Grunfeld), Journal of the American Statistical Association, Vol. 56 (1961), p. 11.
- "Some possible effects of birth control on the human sex ratio," <u>Annals of Human Genetics</u> (London), Vol. 25 (1961), p. 75, and reprinted in <u>Readings in Mathematical Social Science</u>, edited by Paul F. Lazarsfeld and Neil W. Henry, Chicago, Illinois: Science Research Associates, Inc., 1966.
- "Notes on the etymology of serendipity and some related philological observations," <u>Modern Language Notes</u>, Vol. 76 (1961), p. 454. (A condensed version of this article is included in "Discussion on Mr. Beale's paper," <u>Journal of the Royal Statistical Society, Series B</u> (Methodological), Vol. 22 (1960), p. 83.)
- "Statistical methods for the mover-stayer model," <u>Journal of the American Statistical Association</u>, Vol. 56 (1961), p. 841.
- (45) "Parameter-free and nonparametric tolerance limits: The exponential case" (with Albert Madansky), Technometrics, Vol. 4 (1962), p. 75.
- (46) "The variance of the product of K random variables," <u>Journal of the American Statistical</u> Association, Vol. 57 (1962), p. 54.

- (47) "Statistical methods for analyzing processes of change," <u>American Journal of Sociology</u>, Vol. 68 (1962), p. 57, and reprinted in <u>Quantitative Analysis of Political Data</u>, Samuel A. Kirkpatrick, Columbus, Ohio:Charles E, Merrill Publishing Co., 1974.
- (48) "A method of measuring the effects of television through controlled field experiments" (with Irwin M. Towers and Hans Zeisel), <u>Studies in Public Communication</u>, Number 4 (1962), p. 87, The University of Chicago Press. This article received the MacLaren Advertising Research Award for 1966, presented by the Canadian Advertising Research Foundation.
- (49) "Measures of association for cross classifications. III. Approximate sampling theory" (with William H. Kruskal), <u>Journal of the American Statistical Association</u>, Vol. 58 (1963), p. 310. This article is included in the book listed here as item (110).
- (50) "Statistical methods for the preliminary analysis of transaction flows," <u>Econometrica</u>, Vol. 31 (1963), p. 197, and reprinted as No. 18 in the Reprint Series of the Center for Mathematical Studies in Business and Economics, University of Chicago.
- "On methods for comparing contingency tables," <u>Journal of the Royal Statistical Society, Series A</u> (General), Vol. 126 (1963), p. 94.
- "Some possible effects of birth control on the incidence of disorders and on the influence of birth order," <u>Annals of Human Genetics</u> (London), Vol. 27 (1963), p. 41.
- "On Plackett's tests for contingency table interactions," <u>Journal of the Royal Statistical Society</u>, <u>Series B (Methodological)</u>, Vol. 25 (1963), p. 179.
- (54) "What could nonexposure tell the TV advertiser?" (with Irwin M. Towers and Hans Zeisel), <u>Journal of Marketing</u>, Vol. 27 (1963), p. 52.
- (55) "Tests based on the movements in and the comovements between m-dependent time series,"

  <u>Measurement in Economics: Studies in Mathematical Economics and Econometrics in Memory of Yehuda Grunfeld</u>, C. Christ et al., Stanford, California:Stanford University Press, 1963, p. 253, and reprinted as No. 19 in the Reprint Series of the Center for Mathematical Studies in Business and Economics, University of Chicago.
- (56) "A short computer program for the analysis of transaction flows," <u>Behavioral Science</u>, Vol. 9 (1964), p. 176, and reprinted as No. 33 in the Reprint Series of the Center for Mathematical Studies in Business and Economics, University of Chicago.
- (57) "Mathematical methods for the study of systems of groups," <u>American Journal of Sociology</u>, Vol. 70 (1964), p. 170.
- (58) "Simultaneous confidence limits for cross-product ratios in contingency tables," <u>Journal of the Royal Statistical Society, Series B (Methodological)</u>, Vol 26 (1964), p.86.
- (59) "Interactions in multidimensional contingency tables," <u>Annals of Mathematical Statistics</u>, Vol. 35 (1964), p. 86.
- (60) "The analysis of persistence in a chain of multiple events," Biometrika, Vol. 51 (1964), p. 405.
- (61) "Simultaneous confidence intervals for contrasts among multinomial populations," <u>Annals of Mathematical Statistics</u>, Vol. 35 (1964), p. 716.
- (62) "Simple methods for analyzing three-factor interaction in contingency tables," <u>Journal of the</u>

- American Statistical Association, Vol. 59 (1964), p. 405.
- "On the statistical analysis of mobility tables," <u>American Journal of Sociology</u>, Vol. 70 (1965), p. 564, and reprinted as No. 44 in the Reprint Series of the Center for Mathematical Studies in Business and Economics, University of Chicago.
- (64) "On simultaneous confidence intervals for multinomial proportions," <u>Technometrics</u>, Vol. 7 (1965), p. 247.
- (65) "On the multivariate analysis of three dichotomous variables," <u>American Journal of Sociology</u>, Vol 71 (1965), p. 290.
- "On the reconciliation of mathematical theories of population growth," <u>Journal of the Royal Statistical Society, Series A (General)</u>, Vol. 130 (1967), p. 541.
- (67) "The probabilities of extinction for birth-and-death processes that are age-dependent or phase-dependent," <u>Biometrika</u>, Vol. 54 (1967), p. 579.
- "On the age-sex composition of the population that would result from given fertility and mortality conditions," Demography, Vol. 4 (1967), p. 423.
- (69) "How to minimize or maximize the probabilities of extinction in Galton-Watson process and in some related multiplicative population processes," <u>Annals of Mathematical Statistics</u>, Vol. 39 (1968), p. 1700.
- (70) "Stochastic models for the population growth of the sexes," Biometrika, Vol 55 (1968), p. 469.
- (71) "An elementary approach to the population projection-matrix, to the population reproductive value, and to related topics in the mathematical theory of population growth," <u>Demography</u>, Vol. 5 (1968), p. 382.
- (72) "The analysis of cross-classified data: Independence, quasi-independence, and interactions in contingency tables with or without missing entries," <u>Journal of the American Statistical Association</u>, Vol. 63 (1968), p. 1091. This article was reprinted as No. 157 in the Reprint Series of the Center for Mathematical Studies in Business and Economics, University of Chicago, and it is included in the Bobbs-Merrill Reprint Series in the Social Sciences, Sociology Section. It is also included in the book listed here as item (121). The article is the printed version of the R.A. Fisher Memorial Lecture for 1968, presented at the invitation of the Committee of Presidents of Statistical Societies, at the joint annual meeting of the American Statistical Association and the Biometric Society.
- (73) "How to ransack social mobility tables and other kinds of cross-classification tables," <u>American Journal of Sociology</u>, Vol. 75 (1969), p. 1. This article was reprinted as No. 177 in the Reprint Series of the Center for Mathematical Studies in Business and Economics, University of Chicago, and it is included in the Reprint Series of Warner Modular Publications, and in the Bobbs-Merrill Reprint Series in the Social Sciences, Sociology Section. It is also included in the book listed here as item (121).
- (74) "On the measurement of social mobility: An index of status persistence," <u>American Sociological Review</u>, Vol 34 (1969), p. 831. This article was reprinted as No. 186 in the Reprint Series of the Center for Mathematical Studies in Business and Economics, University of Chicago, and it is included in the Xerox Individualized Publishing Program.
- (75) "The analysis of population growth when the birth and death rates depend upon several factors,"

- <u>Biometrics</u>, Vol. 25 (1969), p. 659, and reprinted in the Bobbs-Merrill Reprint Series in the Social Sciences, Sociology Section.
- "On partitioning X<sup>2</sup> and detecting partial association in three-way contingency tables," <u>Journal of</u> the Royal Statistical Society, Series B (Methodological), Vol. 31 (1969), p. 486.
- "The multivariate analysis of qualitative data: Interactions among multiple classifications," <u>Journal of the American Statistical Association</u>, Vol. 65 (1970), p. 226, and reprinted as No. 210 in the Reprint Series of the Center for Mathematical Studies in Business and Economics, University of Chicago. This article is included in the book listed here as item (100).
- (78) "The analysis of multidimensional contingency tables: Stepwise procedures and direct estimation methods for building models for multiple classifications," <u>Technometrics</u>, Vol. 13 (1971), p. 33, and reprinted as No. 232 in the Reprint Series of the Center for Mathematical Studies in Business and Economics, University of Chicago. This article is included in the book listed here as item (100).
- "On the sensitivity of the intrinsic growth rate to changes in the age-specific birth and death rates," <u>Theoretical Population Biology</u>, Vol. 2 (1971), p. 339.
- (80) "Partitioning of chi-square, analysis of marginal contingency tables, and estimation of expected frequencies in multidimensional contingency tables," <u>Journal of the American Statistical Association</u>, Vol. 66 (1971), p. 339.
- (81) "A simple simultaneous test procedure for quasi-independence in contingency tables," <u>Journal of the Royal Statistical Society, Series C (Applied Statistics)</u>, Vol. 20 (1971), p. 165, and reprinted as No. 280 in the Reprint Series of the Center for Mathematical Studies in Business and Economics, University of Chicago. This article was also reprinted in an Italian translation under the title "Un semplice procedimento di verifica simultanea per la quasi-indipendenza in tavole di contingenza," <u>Rivista di Statistica Applicata</u>, Vol. 7 (1974), p. 71.
- (82) "A modified multiple regression approach to the analysis of dichotomous variables," <u>American Sociological Review</u>, Vol. 37 (1972), p. 28, and reprinted as No. 287 in the Reprint Series of the Center for Mathematical Studies in Business and Economics, University of Chicago. This article is included in the book listed here as item (100). It is also included in the book listed here as item (106), translated into Hungarian by the Hungarian Academy of Sciences.
- (83) "Some multiplicative models for the analysis of cross-classified data," Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability, edited by Lucien M. LeCam, Jerzy Neyman, and Elizabeth L. Scott, Berkeley, California: University of California Press, Vol. 1 (1972), p. 649. This article is included in the book listed here as item (106), translated into Hungarian by the Hungarian Academy of Sciences. It is also included in the book listed here as item (121).
- (84) "A general model for the analysis of surveys," <u>American Journal of Sociology</u>, Vol. 77 (1972), p. 1035. This article is included in the Xerox Individualized Publishing Program. It is also included in the book listed here as item (100), and in the book listed here as item (106) translated into Hungarian by the Hungarian Academy of Sciences.
- (85) "Measures of association for cross-classifications, IV: Simplification of asymptotic variances" (with William H. Kruskal), <u>Journal of the American Statistical Association</u>, Vol. 67 (1972), p. 415. This article is included in the book listed here as item (110).
- (86) "The analysis of multidimensional contingency tables when some variables are posterior to others:

- A modified path analysis approach," <u>Biometrika</u>, Vol. 60 (1973), p. 179. This article is included in the book listed here as item (100).
- (87) "Causal analysis of data from panel studies and other kinds of surveys," <u>American Journal of Sociology</u>, Vol. 78 (1973), p. 1135. This article is included in the book listed here as item (100). It is also included in the book listed here as item (106), translated into Hungarian by the Hungarian Academy of Sciences.
- (88) "Guided and unguided methods for the selection of models for a set of T multidimensional contingency tables," <u>Journal of the American Statistical Association</u>, Vol. 68 (1973), p. 165. This article is included in the book listed here as item (100).
- (89) "Empirical evaluation of formal theory" (with William H. Kruskal), <u>Journal of Mathematical Sociology</u>, Vol. 3 (1974), p. 187. Also, "More about empirical evaluation of formal theory" (with William H. Kruskal), Journal of Mathematical Sociology, Vol. 3 (1974), p. 211.
- (90) "The analysis of systems of qualitative variables when some of the variables are unobservable: Part I A modified latent structure approach," <u>American Journal of Sociology</u>, Vol. 79 (1974), p. 1179. This article is included in the book listed here as item (100). It is also included in the book listed here as item (106), translated into Hungarian by the Hungarian Academy of Sciences.
- (91) "Exploratory latent structure analysis using both identifiable and unidentifiable models," <u>Biometrika</u>, Vol. 61 (1974), p. 215. This article is included in the book listed here as item (100).
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