

MEYER ABRAHAM GIRSHICK 1908–1955

BY DAVID BLACKWELL AND ALBERT H. BOWKER

Meyer Abraham Girshick, a Fellow of the Institute and its president in 1952, died in the Palo Alto Hospital on March 2, 1955 at the age of 46. He was born in a small Russian village and came to New York City at the age of 15 years in 1923. The principal of the elementary school he attended in New York was Angelo Patri who took a strong interest in the boy and helped him get into Columbia College in 1929. In 1932 he married Mary Knabel. In 1934 he entered graduate school at Columbia University to work with Professor Harold Hotelling who arranged a stipend from a Carnegie Foundation grant.

Girshick left Columbia in 1937 to begin a very distinguished career in government service. For the next ten years he held positions in several government and government sponsored agencies including the Bureau of Home Economics and the Bureau of Agricultural Economics in the Department of Agriculture, the Statistical Research Group at Columbia University, the Bureau of the Census, and the Rand Corporation in Santa Monica. He joined the staff of Stanford University as Professor of Statistics in 1948. He is survived by his wife Mary and their daughter Paula.

After he left Columbia in 1937, he undertook a pioneer study [3] of body measurements of 147,000 American children for the purpose of helping manufacturers of clothing develop an improved system of sizing garments. At the same time he began a series of evening courses at the Department of Agriculture graduate school. Through these courses he attracted many research workers to the field and played an important part in promoting the use of sound statistical methods in the federal government.

He moved from the Bureau of Home Economics, to become principal statistician in the Bureau of Agricultural Economics in 1939, a position which he left to join the Statistical Research Group at Columbia University. This period of activity at SRG had a decisive influence on his career. While there, he participated in the development of sequential analysis and wrote his two most important papers [10], [11] in this area. During this period he became acquainted with and immediately recognized the importance of the new and more sophisticated decision theory models for statistical problems being developed by Wald. From about 1946 most of his work was explicitly formulated in terms of loss functions and other decision theory concepts. This interest was reinforced by his work in games at the Rand Corporation, and a major portion of his time in recent years was spent in an effort to clarify and extend the basic results of decision theory [23]. Girshick soon found himself surrounded by students, junior colleagues, and others in the University who sought his advice, counsel, and encouragement in their work.

At the time of the Korean war, Girshick organized a military research group at Stanford with the sponsorship of the office of Naval Research. His leadership

of the applied statistics group at Stanford has long been considered a model of University participation in military research, and through his efforts many University scientists have been able to contribute directly to difficult problems in theoretical statistics of military interest. His intellectual leadership in both the Statistics Department and projects, and enthusiastic interest in scholarly work were major factors in the growth of Statistics at Stanford. Most of the work produced by the Statistics Department represents his ideas or his spirit.

At the time of his death, he was exploring the role of invariance in statistical problems, an interest reflected earlier in [18]. This work was continued actively at Stanford University and became one of the major themes of research in the growing Statistics Department.

Girshick was notable for his receptivity to new concepts (sequential analysis, decision theory, game theory, invariance), his tremendous energy and drive, the wealth of new ideas and conjectures he produced, and his persistent and usually successful efforts to get others to work in directions he considered fruitful. His influence in statistics was at least as much through the impact he had on all who came in contact with him as through his own writings and will be felt for a long time.

BIBLIOGRAPHY

- [1] "Principle Components." *J. Amer. Stat. Assn.*, Vol. 31. 1936.
- [2] "On the Sampling Theory of Roots and Determinantal Equations." *Ann. Math. Stat.*, Vol. 10. 1939.
- [3] *Body Measurements of American Boys and Girls* (co-author with Ruth O'Brien and Eleanor Hunt). U. S. Dept. of Agr. Misc. Pub. No. 366. 1941.
- [4] "The Distribution of the Ellipticity Statistic L_e when the Hypothesis is False." *Journal of Terrestrial Magnetism and Atmospheric Electricity*. 1941.
- [5] "Note on the Distribution of Roots of a Polynomial with Random Complex Coefficients." *Ann. Math. Stat.*, Vol. 8. 1942.
- [6] "The Application of the Theory of Linear Hypothesis to the Coefficient of Elasticity of Demand." *J. Amer. Stat. Assn.*, Vol. 37. 1942.
- [7] "Some Extensions of the Wishart Distribution" (co-author with T. W. Anderson). *Ann. Math. Stat.*, Vol. 15. 1944.
- [8] *Sequential Analysis of Statistical Data, Applications* (co-author). Columbia Univ. Press. 1945.
- [9] "Unbiased Estimates for Certain Binomial Sampling Plans with Applications" (co-author with F. Mosteller and L. J. Savage). *Ann. Math. Stat.*, Vol. 17. 1946.
- [10] "Contributions to the Theory of Sequential Analysis I." *Ann. Math. Stat.*, Vol. 17. 1946.
- [11] "Contributions to the Theory of Sequential Analysis II." *Ann. Math. Stat.*, Vol. 17. 1946.
- [12] "Functions of Sequences of Independent Chance Vectors with Applications to the Problem of the Random Walk in N Dimensions (co-author with D. Blackwell). *Ann. Math. Stat.*, Vol. 17. 1946.
- [13] "A Lower Bound for the Variance of Some Unbiased Sequential Estimates" (co-author with D. Blackwell). *Ann. Math. Stat.*, Vol. 17. 1947.
- [14] "Statistical Analysis of the Demand for Food," (co-author with Trygve Haavelmo). *Econometrica*. Vol. 15. 1947.
- [15] "Bayes and Minimax Solutions of Sequential Decision Problems" (with K. J. Arrow and David Blackwell). *Econometrica*, Vol. 17. 1949.

- [16] "The Prediction of Social and Technological Events" (with A. Kaplan and A. L. Skogstad). *Public Opinion Quarterly*, Vol. 14. 1950.
- [17] "Model Construction in the Social Sciences—an Expository Discussion of Measurement and Prediction (with Daniel Lerner). *Public Opinion Quarterly*, Vol. 14. 1950–51.
- [18] "Bayes and Minimax Estimates for Quadratic Loss Function" (with L. J. Savage). *Proceedings of the Second Berkeley Symposium on Mathematical Statistics and Probability*, University of California Press, 1951.
- [19] "A Bayes Approach to a Quality Control Model" (with Herman Rubin). *Ann. Math. Stat.*, Vol. 23. 1952.
- [20] "Estimates of Bounded Relative Error in Particle Counting" (co-author with Herman Rubin and Rosedith Sitgreaves). *Ann. Math. Stat.*, Vol. 26. 1952.
- [21] "Optimal Invariant Statistical Decision Procedures" (co-author with D. Blackwell and H. Rubin), to be published. 1953.
- [22] "Optimal Invariant Sequential Decision Procedures" (co-author with Herman Rubin), to be published. 1953.
- [23] *Theory of Games and Statistical Decisions* (co-author with D. Blackwell). John Wiley and Sons, Inc. 1954.
- [24] "An Elementary Survey of Statistical Decision Theory." *Review of Educational Research*. December 1954.