Arthur Linder

1904 – 1993

Arthur Linder was born on 26 October 1904 in Bern, Switzerland. After earning his diploma in education from the University of Bern in 1928, he served as an assistant at the Statistical Office of the city of Bern. In 1934 he obtained his Ph. D. in mathematics from the university of Bern, his thesis dealing with life tables.

In 1938 he became an instructor at the same university, and , in 1945, he was given an extraordinary professorship for mathematical statistics at the university of Geneva. He held the same position since 1948 at the Swiss Federal Institute of Technology (FTH) in Zürich. From 1956 on, he occupied the chair for mathematical statistics at the University of Geneva, and from 1969 on at the ETH in Zürich. In addition, he became associate professor for mathematical statistics at the medical school of the University of Lausanne in 1966. In his more than 100 published papers, Linder covered many aspects of probability theory and mathematical statistics, particularly their application in areas such as biology, agriculture, medicine, ecology, economy, and industrial quality control, just to name the most important ones. Professor Linder was among the first who introduced modern applied mathematical statistics in the German-speaking countries. His main emphasis was on the planning of experiments and of data collections, based on small-sample theory, and here he followed the work done by his mentor and friend, R. A. Fisher. He wrote *Statistische Methoden für Naturwissenschafter, Mediziner und Ingenieure* (Statistical Methods for Natural Scientists, Physicians and Engineer), first published in 1945, with the fourth and last edition appearing in 1964, later continued together with W. Berchtold, and *planen und Auswerten von Versuchen* (Designing and Analyzing Experiments), first published in 1953, and third and last edition in 1969. These books were the introductory literature for many German-speaking scientists to implement statistical thinking in their work. Being directed at a broad, and predominantly nonmathematical readership, the books had the advantage that they contained all mathematical derivations in understandable form, based on the most intuitive n-dimensional geometry. The style of Linder's writing is such that the books still today are widely used by research workers.

As an early promoter of applied statistics in all areas of research and technology, Arthur Linder became acquainted and was friends with other pioneers of statistics. He had a special relationship with Sir Ronald Aylmer Fisher and belonged, together with him and W. G. Cochran, C. I. Bliss, John von Neumann, J. W. Tukey, and others, to the group of founders of the Biometric Society. Founding the Biometric Society took place at Woods Hole, Massachusetts, in September 1947, when the Biometrics Section of the American Statistical Association held its "First International Biometric Conference," financially supported by the Rockefeller Foundation. Linder was president of the Biometric Society in 1950-1951, following R. A. Fisher, who had been the first president during 1948-1949. In 1953 he also belonged to those who initiated the founding of the German Region of the

Biometric Society, and, in the same way, his initiative was essential for the establishment of the Austro-Swiss Region (RoeS), of which he was the first president in 1961. In recognition of his many contributions to the statistical community, Arthur Linder was the recipient of several honorable nominations. In 1948 he became a member of the International Statistical Institute (Of which he was vice president from 1963 to 1967); he was made Fellow of the American Statistical Association and Member d' Honneur of the Société Adolphe Quételet in 1954; he served as Member of the Review Committee, National Sample Survey of India in 1956; further honors include Honorary Fellow of the Royal Statistical Society and Honorary Member, Arbeitkreis Operations Research beim Ausschuss für Wirtschaftliche Fertigung, Germany (1961); Fellow of the Institute of Mathematical Statistics (1966); Honorary Member of the German Society for Operations Research (1973), and Honorary Life Member of the Biometric Society (1975). In 1960 he was awarded an MD Honoris Causa by the University of Geneva.

Arthur Linder was an invited as a visiting professor at the Indian Statistical Institute and the International Statistical Education Center in Calcutta in 1951, where he was consulting – together with R. A. Fisher and P. C. Mahalanobis on the Indian Five-years plan. During this visit, he was also involved in activities related to statistical quality control of the operations at EKA Press, operations at Ordnance Factories, data entry operations for data collected in National Sample Surveys, sampling design for Cinchona bark survey, etc. He gave many lectures during the visit and collaborated extensively with statisticians and other scientists in India. He delivered the 2nd Convocation Address at Indian Statistical Institute in 1963.

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