

Theory of Rank Tests, by J. Hajek and Z. Sidak. Academic Press, 1967. 297 pages. \$8.00.

This book is an excellent comprehensive treatment of the theory of rank tests. The level of abstraction is fairly high; much of the book would be difficult for a reader without measure theory.

The small sample theory of rank tests and modified rank tests is treated in full detail for the usual null hypotheses. The large sample, or asymptotic theory is discussed both for null hypotheses and for alternatives which are asymptotically close to the null hypotheses. Principles for selection of modifications of rank tests which are asymptotically optimum for particular classes of alternatives are given in forms which are both very general and easily applicable.

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A selection of early statistical papers of J. Neyman. University of California Press, 1967. ix + 429 pages. \$14.95.

This volume contains 28 papers of J. Neyman which were written between 1923 and 1945. (A bibliography of 156 publications of Neyman is included). The following quotation is from the cover's excellent description of the subjects of the works in this volume.

"The group of papers gives a clear and consistent view of the general objective approach to statistical inference introduced by J. Neyman in the formulation and treatment of problems of estimation and (with E. S. Pearson) in the treatment of tests of statistical hypotheses.

The papers also give an indication of Neyman's general approach to practical statistical problems. This consists of constructing appropriate stochastic models reflecting the essential features of the phenomenon under study and then deriving definite and specific optimal statistical procedures adapted to the problem, instead of relying on standard methods.

Neyman's fundamental papers on the formulation of the theory of estimation and the construction of confidence intervals are included with papers discussing the relations of this theory to the then prevalent methods of fiducial inference proposed by Sir Ronald Fischer. On the theory of testing hypotheses, the volume contains Neyman's papers on the construction of locally optimal similar or unbiased tests of composite hypotheses and a number of papers indicating, in particular, the relations of the Neyman-Pearson approach to the Bayesian approach.

The papers on contagious distribution, on the dilution method and similar subjects present interesting approaches to practical problems. Neyman's famous papers on sampling of human populations and on the representative method are also included. Papers on the "smooth" test