

JOURNAL OF THE
ROYAL STATISTICAL SOCIETY

Issued three times per year. Annual subscription £7.50 (U.S. \$18.75). Price per part £2.50. Notes on the submission of papers appear in the preliminary pages of each issue. All editorial and advertisement enquiries should be addressed to The Secretary, Royal Statistical Society, 21 Bentinck Street, London WAM 6AR, U.K.

SERIES B—METHODOLOGICAL Vol. 35, No. 1, 1973

- Central limit analogues for Markov population processes (with Discussion) D. R. MCNEIL AND S. SCHACH
Some approximations for the distribution of a multivariate likelihood ratio criterion B. P. KORIN AND E. H. STEVENS
A note on the admissibility of a response surface design L. L. KUPPER
A new test for autocorrelated errors in the linear regression I. I. BERENBLUT AND G. I. WEBB
Multifactor mixture experiments A. K. NIGAM
Simultaneous confidence intervals for product-type interaction contrasts K. R. GABRIEL, J. PUTTER AND Y. WAX
Survey design, symmetry and posterior distribution A. SCOTT AND T. M. F. SMITH
A stochastic model for repeated surveys B. J. N. BLIGHT AND A. J. SCOTT
A general Bayesian linear model A. F. M. SMITH
The estimation of parameters in multivariate time series models G. TUNNICLIFFE WILSON
Some power comparisons between bivariate tests and a twofold univariate test A. GENIZI
The performance of a sequential procedure for a slippage problem M. S. SRIVASTAVA
Queues with scheduled arrivals: a correction, simplification and extension A. MERCER
Asymptotic results on matching distributions J. LANKE
Some general points in the theory of optimal experimental design P. WHITTLE
On the estimation of the parameters in the bivariate negative binomial distribution
K. SUBRAHMANIAM AND KATHLEEN SUBRAHMANIAM
On Tukey's confidence intervals for the contrasts in the means of the intraclass correlation model
R. P. BHARGAVA AND M. S. SRIVASTAVA

The Royal Statistical Society, 21 Bentinck Street, London, W. 1

SOUTH AFRICAN STATISTICAL JOURNAL

Vol. 6, No. 2

Contents

November 1972

-
- On the Moments of the Trace of Noncentral Wishart Matrices and Submatrices
D. G. Nel
- On Quadratic Forms from Mixtures of Two Normal Populations
K. Subrahmaniam
- Some Further Properties of Test Criteria in Multivariate Analysis
C. G. Troskie and A. H. Money
- Asymptotic Distributions of Certain Test Criteria of Normality
T. de Wet and J. H. Venter
- The Distributions of Some Test Criteria Depending on Multivariate Dirichlet
Distributions. *C. G. Troskie*
- Approximations for the Noncentral Wishart Distribution
H. S. Steyn and J. J. J. Roux

BOOK REVIEWS

Summaries of Theses approved at South African Universities

The South African Statistical Journal is the official journal of the South African Statistical Association. Annual subscription is R3,00 per volume consisting of two issues. All enquiries should be addressed to: The Treasurer, South African Statistical Journal, Department of Statistics, University of Pretoria, Pretoria, South Africa.

THE ANNALS OF PROBABILITY

INSTRUCTIONS FOR AUTHORS

Submission of Papers. Papers to be submitted for publication should be sent to the Editor of the *Annals of Probability* (For current address, see the latest issue of the *Annals*.) The original (or xerox copy) should be submitted with two additional copies on paper that will take ink corrections. The manuscript will *not* normally be returned to the author; when expressly requested by the author, one copy of the manuscript will be returned.

Preparation of Manuscripts. Manuscripts should be typewritten, entirely double-spaced, including references, with wide margins at sides, top and bottom. Dittoed or mimeographed papers are acceptable only if completely legible; xerox copies are preferable. When technical reports are submitted, all extraneous sheets and covers should be removed.

Submission of Reference Papers. Copies (preferably two) of unpublished or not easily available papers cited in the manuscript should be submitted with the manuscript.

Title and Abbreviated Title. The title should be descriptive and as concise as is feasible, i.e., it should indicate the topic of the paper as clearly as possible, but every word in it should be pertinent. An abbreviated title to be used as a running head is also required, and should be given below the main title. This should normally not exceed 35 characters. For example, a title might be "A Limit Theorem for Conditioned Recurrent Random Walk Attracted to a Stable Law," with the running head "Limit Theorem for Recurrent Random Walk" or possibly "Recurrent Random Walk Attracted to a Stable Law", depending on the emphasis to be conveyed.

Abstract. Each manuscript is required to contain an abstract, which will be printed immediately after the title, clearly separated from the rest of the paper. Its main purpose is to inform the reader quickly of the nature and results of the paper; it may also be used as an aid in retrieving information. The length of an abstract will clearly depend on the length and difficulty of the paper, but in general it should not exceed 150 words. It should be typed on a separate page, under the heading "Abstract", followed by the title of the paper. Formulas should be used as sparingly as possible. The abstract should not make reference to results or formulas in the body of the paper—it should be self-contained.

Footnotes. Footnotes should be reduced to a minimum and, where possible, should be replaced by remarks in the text or in the references; formulas in footnotes should be avoided. Footnotes in the text should be identified by superscript numbers and typed together, double-spaced on a separate page.

Key Words. Included as the first footnote on page 1 should be the headings:

American Mathematical Society 1970 subject classifications. Primary—; Secondary—.

Key words and phrases.

The classification numbers representing the primary and secondary subjects of the article may be found with instructions for its use, as an Appendix to *Mathematical Reviews* Index to Volume 39, June 1970. (See, also, *The Notices of the American Mathematical Society*, June 1970, pp. 616–618, for more details.) The key words and phrases should describe the subject matter of the article; generally they should be taken from the body of the paper.

List of Symbols. A completely typewritten list of symbols, identified typographically, not mathematically, should be attached to the manuscript on a separate page. Distinguish between "oh" and "zero"; "ell" and "one"; "kappa" and "kay", etc. Indicate also when special type is required (Greek, German, script, boldface, etc.); other letters will be set in italics.

Figures and Tables. Figures, charts, and diagrams should be prepared in a form suitable for photographic reproduction and should be professionally drawn twice the size they are to be printed. (These need not be submitted until the paper has been accepted for publication.) Tables should be typed on separate pages with accompanying footnotes immediately below the table.

Formulas. Fractions in the text are preferably written with the solidus or negative exponent;

thus, $(a + b)/(c + d)$ is preferred to $\frac{a + b}{c + d}$, and

$(2\pi)^{-1}$ or $1/(2\pi)$ to $\frac{1}{2\pi}$. Also, $a^{b(c)}$ and $a_{b(c)}$ are pre-

ferred to a^{bc} and a_{bc} , respectively. Complicated exponentials should be represented with the symbol exp. A fractional exponent is preferable to a radical sign.

References. References should be typed double-spaced and should follow the style:

- [5] Wilks, S. S. (1938). The large-sample distribution of the likelihood ratio for testing composite hypotheses. *Ann. Math. Statist.* 9 60–62.

In textual material, the format "... Wilks (1938) ..." is normally preferred to "... Wilks [5] ...". Multiple references can be distinguished as "... Wilks (1938a) ...". Abbreviations for journals should be taken from *Mathematical Reviews* Index to Volume 40, 1970, pp. 1683–1702.

Proofs. Author will ordinarily receive galley proofs. Corrected galley proofs should be sent to the Managing Editor of the *Annals of Probability* (For current address, see the latest issue of the *Annals*.)

Contents (Continued)

Note

Correction to "A counterexample on measurable processes" R. M. DUDLEY 191

Book Review

Review of "An Introduction to Probability Theory and its
Applications," 2 by William Feller, 2nd. ed. KAI LAI CHUNG 193

