PERSPECTIVES in PROBABILITY and STATISTICS

Papers in honour of **M. S. Bartlett**

Edited by **J. Gani**

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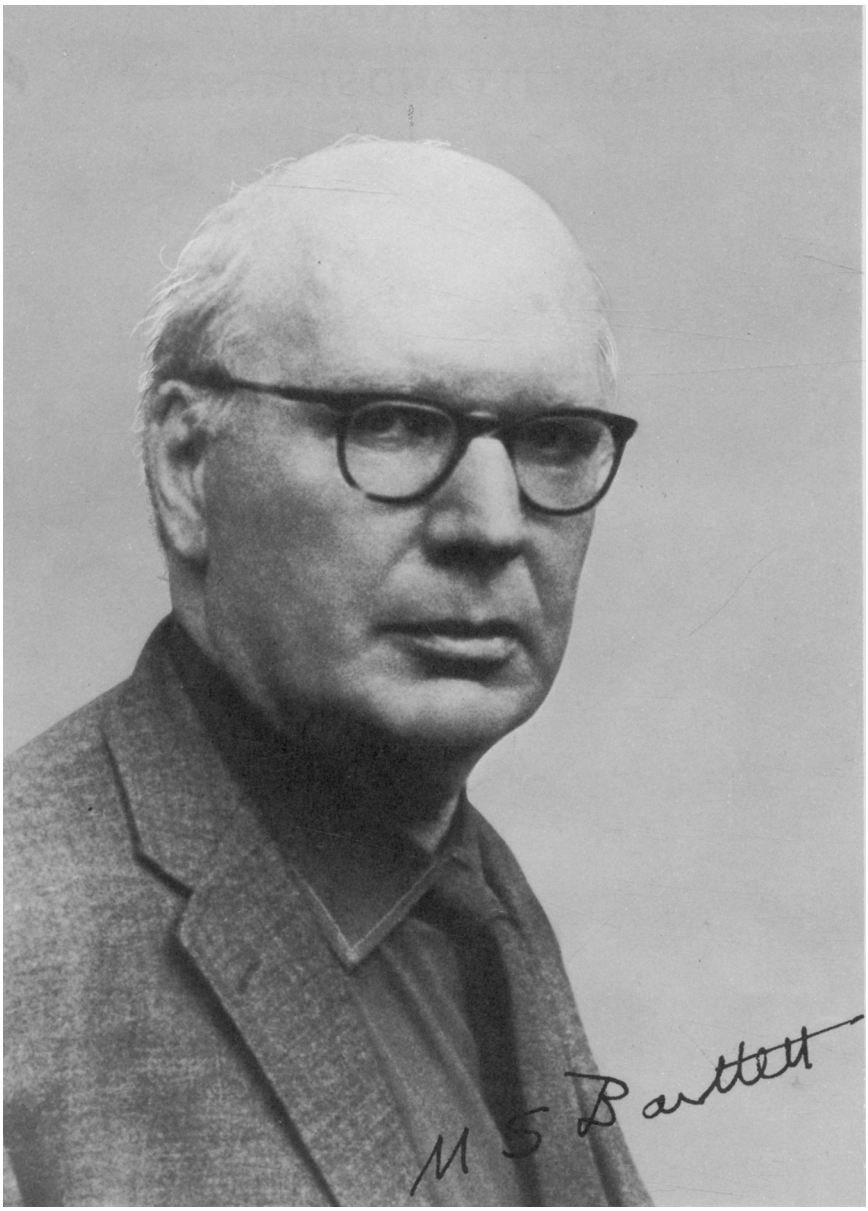

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M. S. BARTLETT

on the occasion of his sixty-fifth birthday

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Preface

Maurice Bartlett, Professor of Biomathematics in the University of Oxford, celebrates his sixty-fifth birthday on 18 June 1975. We, his colleagues and friends, welcome this opportunity of honouring a remarkable probabilist and statistician; his very broad interests and catholic taste have been an inspiration to several generations of research workers. It is also fitting that we express our high personal regard and affection for him on this happy occasion.

I first met Maurice in 1956 at the University of Manchester, where I had journeyed as a young Nuffield Research Fellow from Australia. The Statistical Laboratory, of which he was then head, was housed in a small building at the North end of the campus; among the staff at that time were Jo Moyal (now at Macquarie University, Sydney), Harold Ruben (now at McGill University, Montreal), Maurice Priestley and Peter Wallington (both now at UMIST, Manchester). We were a happy group, busy with our lecturing and research duties, and presided over benignly by Maurice, whose shy thoughtfulness was a byword among us. We were learning a great deal from him: his wide range of interests and his multifarious research activities sustained us all in our endeavours. Every problem we raised inevitably called forth a ready and learned response from the wide stock of his experience.

It is difficult to describe the magnitude of Bartlett's contribution to the fields of probability and statistics. His earliest work was on moment-generating functions, multiple regression, the meaning of probability, mathematical genetics, some classical statistical problems and their applications to agricultural experiments, psychology and biology. He gradually became more comprehensively interested in multivariate analysis, and later in stochastic processes; here his work included inference problems for Markov chains and time series. While developing these new fields, he did not relinquish his previous concern with statistical applications in physics and psychology. His interest in stochastic processes found ready application in epidemic theory, where he made fundamental contributions to the understanding of the spread of measles. Point processes were a further interest, and with his appointment to the Oxford Chair came his increased activity in biological models. In every one of these areas, his contribution has been fundamental.

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What we have attempted to do in this volume is to reflect the breadth of Bartlett's interests. All the contributors owe Bartlett a debt both as a teacher and as a friend: all have benefited from his flair for relevant problems, and from his demonstration that breadth need not be the enemy of depth. Regrettably, not all who might have wished to join us in honouring him could be invited to contribute to this book; we know, however, that they will insist on joining us in wishing him a very happy sixty-fifth birthday.

In conclusion, may I thank all those who have helped to make this volume possible: Mavis Hitchcock, whose work on the layout and proofreading has been invaluable, Carol Nixon, Julie Musgrave and Kathleen Lyle, who have prepared the typescripts and proofread the printed material in its several stages of production, and last but not least the printers who have set up the type by their new electronic setting system.

C.S.I.R.O., Canberra J. GANI
January 1975

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