mixtures. Methods for sampling from all the standard distributions presents the usual methods of generating stochastic variates, good account of congruential methods and includes a brief sequences of pseudo-random numbers. It gives a particularly important areas of simulation design and analysis.

Chapter 3 is concerned with the generation and testing of pseudo-random numbers. It gives a particularly good account of congruential methods and includes a brief but useful appendix on elementary number theory. Chapter 4 presents the usual methods of generating stochastic variates, viz. inverse transformation, rejection and the method of mixtures. Methods for sampling from all the standard distributions follow, each being preceded by a laboured description, which must surely be unnecessary since in the preface the authors assume some knowledge of mathematical statistics in their readers. FORTRAN subroutines are given for the generation procedures presented. It is unfortunate that so little is included on generating correlated variates.

For those who believe that simulation techniques were invented by, and exist to solve the problems of, frustrated queueing theorists, examples are given in Chapters 5 and 6 of simulation models applied to queueing, inventory and scheduling systems, and to the firm, industry, and the national economy as a whole. Several useful exercises for the reader are given at the end of both these chapters, although most assume a working knowledge of FORTRAN. The authors’ preoccupation with FORTRAN throughout the book is, perhaps, the feature most likely to irritate ALGOL proponents. This is particularly true of the inevitable chapter on simulation languages which follows. The reviewer found this the most disappointing chapter in the book. In spite of detailed descriptions of several languages (all American in origin) no critical comparison is made; and whereas GPSS II is described in 30 pages (reprinted verbatim from the IBM Systems Journal), GSP, ESP and CSL are together dismissed in a single page.

Chapters 8 and 9 discuss the problem of verification and design of simulation experiments respectively. The former is in the nature of a philosophical diversion and is too brief to be really useful. Design of experiments receives more attention but the chapter is in effect little more than a valuable literature survey of the area.

The references and bibliography which follow each chapter are one of the strong points of the book; even if the reader may sometimes be disappointed in the content of a section, he is never ignorant of where to look for further guidance. This book is ambitious in its aim and in several respects falls short of achieving it. It is nevertheless a worthwhile addition to the potential simulator’s bookshelf.