

Book Selection

Edited by CHRIS BEAUMONT

D.W BUNN: <i>Applied Decision Analysis</i>	173
R.T. ROCKAFELLER: <i>Network Flows and Monotropic Optimization</i>	173

Applied Decision Analysis

D.W. BUNN

McGraw-Hill Inc., New York, 1984. vii + 251 pp. £24.50

ISBN 0 07 008292 8

My first impression on seeing this book was what a welcome addition to literature on decision analysis it was. I am delighted to say that this impression remains on a closer reading. True, I can find several minor faults with particular sections, one or two of which nag; but it would be churlish to dwell on those, because as a total piece of work this is really rather successful. It both introduces the reader to the techniques of decision analysis and manages to create the right image of their use.

Decision analysis is so often seen as providing a prescription for the correct decision, whereas decision analysis does - or is intended to do - nothing of the sort. Its purpose is to provide a framework for discussing, thinking about and exploring problems, and its output is understanding and guidance. At several places in his book, particularly in the final chapter, Bunn conveys this view. This is the great strength of his work. Too often, introductory texts leave the reader with a very naive view of decision analysis, which alas leads them to reject the techniques as dictatorial and impractically precise.

Most of the standard theory of subjective probability, utility, multi-objectives, decision trees, etc. is given, and numerical examples provided to illustrate their use. There is not a full case study of a major problem, say a facility-siting problem, but that does not seem to detract from Bunn's ability to provide a picture of the practice of decision analysis. The end-of-chapter exercises are excellent both in helping the reader understand the mechanics of the methods and in catalyzing critical discussion.

I welcome and warmly recommend the book as a source work for teaching, as an introduction for decision makers and as general reading for those interested in decision analysis. The only demands it makes of the reader are a reasonable mathematical background (but no more than that found in M.B.A.s or O.R. courses) and a willingness to part with £24.50, which, despite the book's qualities, does seem an excessively high price.

SIMON FRENCH

Network Flows and Monotropic Optimization

R.T. ROCKAFELLER

John Wiley-Interscience. 1984. 615 pp. £44.50

ISBN 0 471 880787

My first impression was favourable. A glance at the contents revealed all the right ingredients for a book containing the word 'network' in the title - beginning with a definition of a network, through incidents, cuts, flux and flows, paths, forests, trees and nodes, and concluding with a chapter entitled "Monotropic programming". Studying the flycover whetted my appetite for monotropic optimization