maths would make the going easier. First year students on operational research and quantitative methods 'service' courses would also find this an excellent introductory text.

In summary, a well-presented text with some good exercises, which covers a wide quantitative modelling field in a non-technical and application-orientated manner. *Decision Analysis* is very suitable as an introductory text for the first year of specialist quantitative degree courses, and as a third year text on more generalist business and management degree schemes, but an elementary degree of numeracy is required. I shall recommend it as a course text.

COLIN JEX

Evaluating Applied Research: Lessons from Japan
JOHN IRVINE
Pinter, London, 1988. 103 pp. £20.00
ISBN 0 86187 945 7

I am not sure who this book was aimed at, but knowing very little about this subject, I found it generally easy to read. However, I am sure I would have got more out of it if I had been heavily involved in government-funded research, if there is any, into industrial processes, etc.

The book was the result of a 5-week study by John Irvine, undertaken for the Department of Trade and Industry, into the experience in Japan of assessing applied research, and read largely like a report. The evaluation of research in various government, or government-funded bodies was examined, with one or two case studies putting the evaluation process into context. The research seems to be largely related to industrial processes and scientific research, which I did not realize until half way through—one of the case studies at the beginning might have made it clearer what the book was about.

My feelings on finishing the book were—so what! This may be partly because I know nothing about the British experience of assessing applied research, so could not really tell what the lessons were (there was a brief mention of what Britain could learn at the end of the book). In addition, my concentration on the main topic in the book—evaluation of applied research—was somewhat marred by the description of the Japanese government bodies and agencies, which I found confusing, especially when the agencies' names were abbreviated. I was not sure how important the interrelationship of these bodies was to the understanding of the rest of the text.

The lessons to be learnt seemed obvious—but obviously not to the British institutions—e.g. stating the aims at the beginning, having mid-term reviews, having post-mortes, stopping research before its time was up but after it was deemed to be of no more value, and taking only limited account of citation reviews. The problem of research into completely new areas was touched on, and the problem of evaluating this type of work was recognized, but no suggestion of how to overcome the problem was offered—except to leave it alone.

The book also showed how heavily involved the Japanese government is in industrial applied research, which I found surprising given the impression I had of Japan being *laissez-faire*. The government seems involved in the decisions on where the industrial base needs support and encouragement.

One criticism of the publishers: some of the tables are much too small, and make you wonder whether it really is worth straining your eyes to read them.

If you have an interest in the evaluation of industrial applied research—e.g. integrated circuit technology, opto-electronic material, physical and chemical research—then this book will probably be of interest.

DIANE WARING

Linear Programming in Pascal
BRIAN D. BUNDAY and GERALD R. GARSIDE
Arnold, London, 1987. 188 pp. £9.95
ISBN 0 7131 3647 2

This book provides an introduction to linear optimization methods, along with a series of appropriate computer programs: the non-linear companion by the same authors was reviewed in the