

which will be in several volumes and contain several hundred diagrams, will contain a complete description, detailed block diagrams, and coding.

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Book Review

Mathematical Methods and Theory in Games, Programming, and Economics, by SAMUEL KARLIN, 1959; 2 volumes, 819 pages. (London: Pergamon Press, 75s. 0d. each volume.)

The present review is written under the assumption that readers of this Journal are mainly interested in contributions to computing theory and practice. It would be most valuable to have a book on those subjects in the title, dealing with their computing aspects, but these two volumes do not constitute such a text. This should not detract from their value, which will certainly be praised in other reviews; the author did not set out to write a book on computing, and he cannot be blamed for it.

The two volumes deal, on an advanced level of mathematical abstraction, with the theory of matrix games, of linear and non-linear programming, and of mathematical economics. Volume 2 is entirely devoted to infinite games,

i.e. games where at least one of the players can choose from an infinity of strategies. The wide scope of this theory is well illustrated.

Chapter 6 is entitled Computational Methods for Linear Programming and Game Theory. It presents the Simplex Method with a brief illustration, some slight modifications of it, a computation of network flow—without making clear the position of this algorithm in relation to other methods mentioned—and finally a differential-equation method for determining the value of a game. No numerical methods for solving non-linear problems are exhibited, although such methods exist.

On its own advanced level the book is excellent, and so is the contribution of the publishers, concerning type, display of formulae, paper, etc. The two volumes are worthy of a place in any library of modern mathematical texts.

S. VAJDA.