

of a teacher, since the examples are not numerous, but a strong student with an interest in problem solving and contests could handle this book alone.

On the other hand, a teacher reading this book would find a refreshing, concise source of problems. It is different from a typical textbook. Its “short and sweet” approach leaves a lot of room for a teacher wanting to create course notes to complement the book. It is a good read.

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*Luck, Logic and White Lies: The Mathematics of Games*

By Jörg Bewersdorff, translated by David Kramer, published by AK Peters, 2004

ISBN 1-56881-210-8, paperback, 504 pages, US\$49.00.

Reviewed by **Sarah K.M. Aldous**, Lambeth Academy, London, UK.

This fascinating and readable book has been translated from the German original, which is now in its third edition. The book contains three sections, each covering a different aspect of game theory. The first section addresses games of chance, including roulette, die tossing, and blackjack. The focus is on finding the probability of winning. The second section centres on combinatorial games. The well-known heap game, Nim, is studied, and some aspects of Go, Backgammon, and other games of intellect are also examined. The third section deals with classical strategic games and uses tools such as minimax, maximin, saddle points, and optimal playing strategies derived from linear optimization. The three sections contain about fifteen chapters each, and these are engaging and atomic. Chapters from different sections can be read independently.

This book would be beneficial in several circumstances. First, the book is a broad introduction to three distinct aspects of game theory and, as such, would make a good textbook for a one-term overview of game theory. However, it lacks problems except for a motivating question at the start of each chapter; further problems would have to be supplied by the instructor. Secondly, the book is a great teaching resource. It is clearly written and progresses smoothly from basic to more advanced concepts. Many of the forty-five short chapters can be read independently, and the mathematical levels vary widely. This makes it a helpful supply for enrichment lessons, for example, for students from middle school to university. A motivated student could select chapters to use as a self-study project. More information on topics of interest can be found in the further reading lists, provided at the end of most chapters instead of in a common bibliography.

Overall, the writing of Bewersdorff and Kramer is easy to understand, engaging, and stimulating. There are very few errors and the translation is rarely awkward. The text is sprinkled with anecdotes and notes, often humorous or insightful. The diversity of topics make this an interesting read and a rich resource.