

BOOK REVIEWS

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F. N. DAVID, *Games, Gods and Gambling. The Origins and History of Probability and Statistical Ideas from the Earliest Times to the Newtonian Era.* Hafner Publishing Company, New York; Charles Griffin & Company, London, 1962. \$6.50 xvi + 275 pp.

Review by OYSTEIN ORE

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The close relations between gambling and probability theory have already tempted several science writers to explore the alliteration in the title, the appeal to the gods appearing in the form of divination. The introductory chapters the author devotes to these topics. Although no correct probabilities are known from medieval sources, the cases on dice and astragals are enumerated in many instances.

The honor of having introduced the first rules and results from a rudimentary probability calculus must be awarded to Cardano. Yet the author seems strangely reluctant to admit this state of affairs. She writes in connection with the "Liber de Ludo Aleae": ". . . there is more than a suggestion in the work that Cardano did not really know what he was doing." More peculiar still is the repeated suggestion that Ferrari to a large extent should have inspired it; for this there exists no evidence whatever.

The following writers on probability follow in order: Galileo, Fermat-Pascal, Graunt, Huygens, Wallis, Newton, Jakob Bernoulli, Montmort and de Moivre, each with a brief and standard biography. De Méré still figures as the "Assiduous gambler". Most informative are the life stories of Montmort and de Moivre.

An appendix of nearly 100 pages includes Galileo's fragment "Sopra le scoperte dei dadi", the correspondence between Fermat and Pascal and an excerpt from de Moivre's "The Doctrine of Chances" (3rd edition), all important documents. But the larger part is occupied by Buckley's *Memorable Arithmetic* and de Coste's *Life of Father Marin Mersenne*, both works whose relations to probability are extremely tenuous.

Many readers will, of course, find new information in this work. However, in a history of probability one should expect a deeper analysis of the ideas of the subject itself. In this respect the book is pervaded by a general vagueness which leaves an unsatisfactory impression.