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## .This Week's Citation Classic®\_\_\_

Luce R D & Raiffa H. Games and decisions: introduction and critical survey. New York: Wiley, 1957. 509 p. [Harvard University, Cambridge, MA]

The title says it accurately: an introductory survey of the main ideas, as of 1956, about both 2-person and n-person games and statistical decision problems, citing weaknesses in their development. [The SSCI® indicates that this book has been cited in over 1,360 publications since 1966.]

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In 1953 I became managing director of Columbia University's Behavioral Models Project, which was the creation of an interdisciplinary faculty committee, led by the late Paul F. Lazarsfeld and including, among others, Howard Raiffa. Its charge was expository pieces about mathematical modeling of behavioral and social problems. Raiffa opted to cover 2-person games and statistical decision theory, and I focused on both n-person games, which had attracted my interest while studying small groups at the Massachusetts Institute of Technology, and information theory. Late that year, Raiffa and I recognized that we should combine our gametheory essays and that a book, not an essay, was in the making.

We outlined it just before I, as Lazarsfeld's assistant, joined the Center for Advanced Study in the Behavioral Sciences, Stanford, California, for its inaugural year, 1954-1955. Ralph W. Tyler, its director, backed by his board, wisely decreed Fellows all to be equal, none assisting others. In addition to working on the still-untitled book, I spent time on two research topics<sup>1,2</sup> that initiated my work

in measurement<sup>3</sup> and psychophysics.<sup>4</sup> Raiffa was also at work on the book, but perhaps less intensely because of university duties. The following academic year our locations and responsibilities were exactly reversed. I have always felt that we would never have completed it in three years had we been at the same location. By the end of the year we had a fairly complete manuscript with the working title Conflict, Collusion, and Conciliation (our ultimate title was suggested by Albert Tucker) on which we received comments, the most extensive being from Harold W. Kuhn, and early in 1957 we considered it finished.

Raiffa left publishing negotiations to me. I favored Wiley, mainly because of its beloved editor the late Gordon Ierardi, but McGraw-Hill, estimating sales of 7,000 as against Wiley's 3,000, made the better offer. Ierardi and I evolved a scheme yielding the same total royalties should sales be adequate. Favorable field reports shortly before publication led them to scrap the formula, and sales far exceeded either estimate.

Our book introduced many people, especially in economics and business schools, to the then new ideas of game and decision theory and did so in a way that was far easier to grasp than either the original monographs by J. von Neumann and O. Morgenstern<sup>5</sup> or by A. Wald.<sup>6</sup> For as long as the book remained in print—until 1986—there were those who found parts of it still the best introduction to the subject. They will be pleased to know that it will soon be reissued by Dover Publications. Of course, much of the material became dated, but as each of us had moved on to other things we were reluctant to revise it. No doubt it has been widely cited primarily because it was the basic primer in the subject for at least two decades.

 Luce R D & Edwards W. The derivation Psychol. Rev. 65:222-37, 1958.

- von Neumann J & Morgenstern O. The theory of games and economic behavior. Princeton, NJ: Princeton University Press, 1944. 641 p. (Cited 1.110 times since 1966.)
- 6. Wald A. Statistical decision functions. New York: Wiley, 1950. 179 p. (Cited 180 times since 1966.)

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<sup>1.</sup> Luce R D. Semiorders and a theory of utility discrimination. Econometrica 24:178-91, 1956. (Cited 130 times since 1966.) 2. Luce R D & Edwards W. The derivation of subjective scales from just noticeable differences.

<sup>3.</sup> Luce R D. Response times. New York: Oxford University Press, 1986. 562 p.

Krantz D H, Luce R D, Suppes P & Tversky A. Foundations of measurement, I. New York: Academic Press, 1971. 577 p. (Volumes II and III in press.) (Cited 525 times.)