

to applications to analysis without first computing even one real probability distribution, be it for a passage time, a hitting probability, an occupation time, or some more involved functional. Secondly, the overall tone of the work is already set in the preface as follows: "The great day of the dedicated solitary researcher is over, if indeed it ever existed. . . . In their stead, concern for the human consequences of scientific and technological achievement must become part of our working lives, . . . Only through organized collective action can this be achieved." This being so, it is easy to imagine why the methods and ideas of a generation of researchers should be presented here in a condensed and transparently clear form, with no suggestion of the effort that must have gone into developing them. Professor Lamperti has indeed done a highly praiseworthy job in providing us with a careful and painless review of stochastic processes. For some readers, however, the work may be a trifle unoriginal. A few more novel calculations, descriptive generalities, or even loose ends, might have alleviated the collective mentality and given the reader more to remember.

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Vector measures, by J. Diestel and J. J. Uhl, Jr., Math. Surveys, no. 15, Amer. Math. Soc., Providence, R.I., 1977, xiii + 322 pp., \$35.60.

I am an avid reader of the mystery novels of John Dickson Carr and the Poirot stories of Agatha Christie. I was led to these authors by a keen earlier interest in the works of Edgar Allen Poe and the Sherlock Holmes Stories of Sir Arthur Conan Doyle. Thus, in good faith, I cannot say that this book under review is the most entertaining book I've read; however, I can say that it is the most entertaining mathematics book I've ever read (including a famous measure theory book much enjoyed in my wasted youth). Indeed this serious, but sometimes irreverent, romp through vector measures can be enjoyed even by those misguided souls with a strong dislike for vector valued integration and the geometry of Banach spaces.

I will go so far as to say that the introduction alone is worth the (exorbitant?) price of the book: ". . . shortly after 1936, Dunford was able to recognize the Dunford-Morse theorem and the Clarkson theorem as genuine Radon-Nikodym theorems for the Bochner integral. This was the first Radon-Nikodym theorem for vector measures on abstract measure spaces."

"B. J. Pettis, in 1938, made his contribution to the Orlicz-Pettis theorem for the purpose of proving that weakly countably additive vector measures are norm countably additive."

". . . Dunford and Pettis, in 1940, built on their earlier work to represent weakly compact operators on L_1 and the general operator from L_1 to a separable dual space by means of a Bochner integral. By means of their integral representation they were able to prove that L_1 has the property now known as the Dunford-Pettis property."

"Then came the war! By the end of the war, the love affair between vector measure theory and Banach space theory had cooled. They began to drift down separate paths. Neither prospered. Much of Banach space theory