

## A LIFE OF THE IMMEASURABLE MIND

MARK KAC, *Enigmas of Chance, An Autobiography*. Harper and Row, New York, 1985, xxvii + 163 pages, \$18.95.

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Live with the pleasure of the immeasurable mind.

Ralph Waldo Emerson, 1838

What worlds Mark Kac traversed! Born in August 1914, at the outbreak of World War I, he died in October 1984, somewhere between Mutual Assured Destruction and Star Wars. Born in Krzemieniec, Poland, a town that experienced Czarist, Polish, German, and Soviet control within his lifetime, he died in Los Angeles, California, near lots formerly used to make Hollywood movies, in a county of orange groves. Born where no teaching positions were open to his father, as a Jew, despite his father's advanced degrees from the universities of Leipzig and Moscow, Kac died in the fullness of honors the United States of America awards to those, of any origin, who create well. Born when the mathematical nature of probability theory was a mystery and statistical independence was an enigma within a mystery, he died during the spring flowering of probability theory and statistical physics.

In his autobiography, which he did not live to see in print, Mark Kac (pronounced "cots") aims to give the reader "a glimpse into the making of a scientist as he is influenced by his family, his teachers and collaborators as well as by those intangibles which pertain to his development: the political conditions and social attitudes of his time and the cataclysmic events of history."(xxvii) [I give page numbers after quotations.] The book does not aim to be, and is not, a history of probability theory in the twentieth century. With many delightful anecdotes, and with some keen insights into scientific creativity, the book gives a wonderful glimpse of Kac's life and times, incredible as they may seem to a younger generation brought up in the security of post-war America. And yet, as the book's title suggests, the enigmas remain.

**Early years and education in Poland.** In 1915, Kac's family moved from Krzemieniec east to Berdichev to get away from the fighting on the Eastern Front. With the Russian Revolution of 1917, civil war came to Berdichev. One of Kac's earliest memories is being bundled off to the cellar as a bombardment began. Early in the war he saw a man shot dead in the street.

Kac learned to read at home. "Except for an unusual memory [for poetry], I was not precocious in any respect... I was inordinately slow learning the

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