

JOHN VON NEUMANN

1903–1957

S. ULAM

In John von Neumann's death on February 8, 1957, the world of mathematics lost a most original, penetrating, and versatile mind. Science suffered the loss of a universal intellect and a unique interpreter of mathematics, who could bring the latest (and develop latent) applications of its methods to bear on problems of physics, astronomy, biology, and the new technology. Many eminent voices have already described and praised his contributions. It is my aim to add here a brief account of his life and of his work from a background of personal acquaintance and friendship extending over a period of 25 years.

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John von Neumann (Johnny, as he was universally known in this country), the eldest of three boys, was born on December 28, 1903, in Budapest, Hungary, at that time part of the Austro-Hungarian empire. His family was well-to-do; his father, Max von Neumann, was a banker. As a small child, he was educated privately. In 1914, at the outbreak of the First World War, he was ten years old and entered the gymnasium.

Budapest, in the period of the two decades around the First World War, proved to be an exceptionally fertile breeding ground for scientific talent. It will be left to historians of science to discover and explain the conditions which catalyzed the emergence of so many brilliant individuals (—their names abound in the annals of mathematics and physics of the present time). Johnny was probably the most brilliant star in this constellation of scientists. When asked about his own opinion on what contributed to this statistically unlikely phenomenon, he would say that it was a coincidence of some cultural factors which he could not make precise: an external pressure on the whole society of this part of Central Europe, a subconscious feeling of extreme insecurity in individuals, and the necessity of producing the unusual or facing extinction. The First World War had shattered the existing economic and social patterns. Budapest, formerly the second capital of the Austro-Hungarian empire, was now the principal town of a small country. It became obvious to

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