

JOHN W. TUKEY: HIS LIFE AND PROFESSIONAL CONTRIBUTIONS¹

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As both practicing data analyst and scientific methodologist, John W. Tukey made an immense diversity of contributions to science, government and industry. This article reviews some of the highly varied aspects of his life. Following articles address specific contributions to important areas of statistics.

I believe that the whole country—scientifically, industrially, financially—is better off because of him and bears evidence of his influence.

John A. Wheeler, Princeton Professor of Physics Emeritus [65]

1. Introduction. John Wilder Tukey (JWT)—chemist, topologist, educator, consultant, information scientist, researcher, statistician, data analyst, executive—died of a heart attack on July 26, 2000 in New Brunswick, New Jersey. The death followed a short illness.

Tukey was born in New Bedford, Massachusetts on June 16, 1915. He was educated at home until commencing college. He obtained B.Sc. and M.Sc. degrees in chemistry from Brown University and then he went to graduate school at Princeton. At Princeton he obtained M.A. and Ph.D. degrees in mathematics. In 1985 at age 70 he retired from Bell Telephone Laboratories and from teaching at Princeton University with a “Sunset salvo” [97].

While JWT’s graduate work was mainly in pure mathematics, the advent of World War II led him to focus on practical problems facing his nation and thereafter to revolutionize methods for the analysis of data. This encompasses most everything nowadays. At the end of the War he began a joint industrial-academic career at Bell Telephone Laboratories, Murray Hill and at Princeton University. Science and the analysis of data were ubiquitous. Even after retirement his technical and scientific work continued at a high level of creativity.

An avowed scientific generalist, JWT made a remarkable number of contributions to science, academia and industry and to his nation during a more than sixty-year career. His immense productivity and diversity defy ready summary. This

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