## Joseph Weizenbaum

Born January 8, 1923, Berlin, Germany; inventor in 1965 of ELIZA, the mechanical psychiatrist, who first warned of the dangers of confusing computers with people and vice versa.



Education: BS, Wayne University, 1948; MS, Wayne University, 1950.

Professional Experience: systems engineer, Computer Development Laboratory, General Electric Corp., 1955-1963; MIT: visiting associate professor, electrical engineering, 1964, associate professor, 1964-1970, professor, computer science and engineering, 1970-present.

Honors and Awards: fellow, American Association for the Advancement of Science.

Weizenbaum started his professional career with the General Electric Corp. at the time that they were working on the project under Barnie Oldfield to create an automated banking operation for the Bank of America, the computer system of which was named ERMA. He developed a programming language which (retrospectively) had the qualities of artificial intelligence (AI). This work led him to an interest in the subject being promulgated by John McCarthy and eventually he joined the faculty at MIT where he could pursue these interests. In the early 1960s, working with the emerging technology of time-sharing, interactive computers, he developed a mechanical psychiatrist named ELIZA, which appeared to be capable of conducting meaningful conversations. In fact the system (Weizenbaum 1965) used keywords in the responses of the user to create commonly used questions that gave the appearance of understanding and responsiveness. In some ways, ELIZA may have been one of the early approaches to the solution of the Turing test for intelligence.

In the 1970s Weizenbaum found himself on the outside of the mainstream of Al for his views on the ultimate limits of computation. He criticized his colleagues for overselling Al and for not reaching their professed goals in a reasonable time span. Promises had been made by the profession that were not being fulfilled, and he had the temerity to tell the world of their shortcomings.

## **BIBLIOGRAPHY**

## **Significant Publications**

Weizenbaum, Joseph, "ELIZA-A Computer Program for the Study of Natural Language Communication Between Man and Machine," *Comm. ACM, Vol.* 9, No. I, Jan. 1965, pp. 36-45.

Weizenbaum, Joseph, Computer Power and Human Reason: From judgment to Calculation, W.H. Freeman & Co., New York, 1976.

## **UPDATES**

Weizenbaum died on March 5, 2008, in Germany (MRW, 2012).

Portrait added (MRW, 2013)