Alan C. Kay

Leader of the group at Xerox PARC which originated many of the concepts now common in personal computing, including the Alto workstation and the basic concepts of object-oriented programming which led to the programming language Smalltalk; sometimes referred to as the "father of the personal computer."

Education: BS, mathematics and molecular biology, University of Colorado, 1966; PhD, computer science, University of Utah, 1969.

Professional Experience: AI Project (SAIL), Stanford Junior University, 1969-present.

Honors and Awards: Apple Fellow; ACM Software Award, 1987.

Kay got his start through a "blank-check" project organized by Xerox Corporation at the Xerox Palo Alto Research Center (Xerox PARC), where he conceived of the Dynabook, a powerful notebook-sized personal computer, which in turn inspired the "Alto." Xerox did not take advantage of this development, and the concept appeared next in the Apple Macintosh system. Concurrently Kay conceived of a high-level, object-oriented programming language, named Smalltalk, and pioneered the use of icons as keys to actions that might be chosen by a user.

QUOTATIONS

"Computers are to computing as instruments are to music. Software is the score whose interpretation amplifies our reach and lifts our spirits. Leonardo da Vinci called music "the shaping of the invisible," and his phrase is even more apt as a description of software." (Kay 1984)

I think that since children appear to have to construct the world inside their heads in order to become human beings, then people must be natural constructors. Computers are the best construction material we have ever come up with outside of our brains."

"Some people worry that artificial intelligence will make us feel inferior, but then, anybody in his right mind should have an inferiority complex every time he looks at a flower."

BIBLIOGRAPHY

Biographical

Caddes, Carolyn, *Portraits of Success: Impressions of Silicon Valley Pioneers,* Tioga Publishing Co., Palo Alto, Calif., 1986.

Significant Publications

Kay, Alan, "Computer Software," *Scientific American,* Sept. 1984.

Kay, Alan, 'The Early History of Smalltalk," *ACM SIGPLAN Notices,* Vol. 28, No. 3, Mar. 1993, pp. 69-96.

UPDATES

Kay was the recipient of the ACM Turing Award in 2003. (MRW 2012)

Portrait inserted (MRW, 2013)