

Edmund C. Berkeley

Born March 21, 1909, New York City; died March 7, 1988, Newton, Mass.; founder of ACM and author of the early book Giant Brains, Or Machines that Think, the first popularization of computers; as editor of Computers and People, also known as Neil D. MacDonald.

Education: BA mathematics and logic, Harvard University, 1930.

Professional Experience: actuarial clerk, Mutual Life Insurance of New York, 1930-1934; chief research consultant, Prudential Insurance of America, 1934-1942, 1946-1948; US Navy, Dahlgren Laboratory and Harvard Computational Center, 1942-1946; president, Berkeley Associates, 1948-1988.

Edmund Callis Berkeley, founder and lifelong editor/ publisher of *Computers and People*, the oldest computing periodical still in existence, died of cancer after months of illness on March 7, 1988, just 2 weeks short of his 79th birthday. Berkeley was part of Howard H. Aiken's Harvard Mark II team; was the founder and first member of the Association for Computing Machinery (ACM); wrote the first book to popularize computers, *Giant Brains, Or Machines that Think*; and devoted his life to the mental improvement of his readers, the prevention of nuclear war, and the saving of the world.

Throughout his life Berkeley was a didactic writer, editor, and publisher, first in the field of computers in their earliest technical aspects, later in regard to their interrelations with people (when he changed the name of his magazine from *Computers and Automation* to *Computers and People*), and finally in an effort to bring sanity to a world seemingly determined to destroy itself with nuclear weapons. He was active and vigorous in using publications to teach his fellows and improve his world until ill health slowed him down and forced him to adopt the title of editor emeritus of his magazine. Even then he looked on the months remaining to him as an opportunity to tie up loose ends and, perhaps, as a friend put it, to unravel a few new ones.

Berkeley was born in New York City in 1909, graduated with an AB *summa cum laude* in mathematics and logic from Harvard College in 1930, entered the computer field in 1938 as an actuary using punched-card machines for the Prudential Insurance Company of America, and worked with Howard Aiken during the war as an active-duty naval reserve officer. After demobilization, he returned briefly to Prudential, where he participated in studies that led to the purchase of a Univac I. In 1947, he invited seven friends to a meeting that resulted in the establishment of the ACM (then known as the Eastern Association for Computing Machinery). Of this founding group only Robert V. D. Campbell and Harry E. Goheen survive in 1994. Berkeley was the first secretary of ACM, holding that office until 1953, and continued as a member until his death.

In 1948 he went into business for himself as Edmund C. Berkeley and Associates (later Berkeley Enterprises), started *Computers and Automation* in 1951, consulted for industry, and devised and

sold several relay computers and small robots (Simon, Squee, Relay Moe, and so on) as educational projects in kit form.

In 1949 he wrote the first carefully crafted and widely accepted popularization of computers, *Giant Brains, Or Machines that Think*, a book that fastened the “brain” name on computers and presented a somewhat optimistic view of what computers could do or would do soon. Berkeley never recanted and insisted all his life that he had it right in his first book. *Giant Brains* was followed in 1956 by *Computers-Their Operations & Applications*, and 13 other books that had total sales in excess of \$110,000. The objective of all his writing and editing was not to entertain but to educate, uplift, and improve his readers, although he sometimes despaired of being able to do so. His later books and articles were often concerned with the problems of how to think clearly and act wisely. His language, in writing and speaking, reflected his mind: precise, careful, and crisp-determined to be both correct and clear, not just brief, amusing, or acceptable.

In 1972 ACM honored Berkeley as its singular founder at its 25th anniversary dinner. His acceptance speech was a direct denunciation of those in computing who worked on the killing devices used in the Vietnam War, or computing companies that made such horrors, and of ACM for ignoring this immorality. He said that it was a “gross neglect of responsibility” that ACM was not investigating whether computer applications were good or evil and how computers could be used to increase the good of society. Several prominent ACM members, employees of the firms and government military agencies that Berkeley had pointed to, ostentatiously walked out of the banquet room while he was speaking. The leaders of ACM were clearly embarrassed by their honoree, and ACM never publicly referred to his speech in any way.

Berkeley's lifetime goal, only partly achieved at his death, was to educate his readers so that they could do as he did: think clearly about important matters, reach wise conclusions, and act bravely in support of their principles. He aspired to be, and was accepted by many as, the conscience of the computer industry because of his devotion to the idea that computers should work for the good of and not the destruction of mankind.

QUOTATIONS

The last issue of *Computers and People* to which he contributed, January-February 1988, contains this note: “There will be zero computer field and zero people if the nuclear holocaust and nuclear winter occur. Every city in the United States and the Soviet Union is a multiply-computerized target. Radiation, firestorms, soot, darkness, freezing, starvation, megadeaths, lie ahead. Thought, discussion, and action to prevent this earth-transforming disaster is imperative. Learning to live together is the biggest variable for a computer field future.”

It is also significant that Berkeley indicated his views on pacifism in his 1952 article on Machine “Intelligence”: “An automatic computing machine which has developed a wonderful facility in this particular kind of problem [the meaning of words] is the military deciphering machine, *of which persons like myself, who do not wish to be contaminated with classified information, know very little.*” [Emphasis added.]

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Biographical

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Significant Publications

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UPDATES