Herbert Reuben John Grosch



Born September 13, 1918, Saskatoon, Sask., Canada; discoverer of the computer price/performance law that bears his name.

Professional Experience: astronomer, US Naval Observatory, 1941-1942; physicist, Navy Ordnance, 1942; optical engineer, Sperry Gyroscope Co., 1943; designer, Farrand Optical Co., 1944-1945; computer scientist,¹ IBM Corporation, 1945-

1951; head, logical design research, Digital Computer Laboratory, MIT, 1951-1952; manager, investigations, Aircraft Gas Turbine Division, General Electric Company, Evendale, Ohio, and Lynn, Mass., 1952-1956; manager, applications, Computer Department, General Electric Company, Phoenix, Ariz., 1956-1958; manager, space programs, IBM Corp., 1958-1959; consultant, computer manufacturing, New York City, 1959-1962, Monte Carlo and Lausanne, 1962-1965; director, Deacon Project, Center for Advanced Studies, General Electric Company, Santa Barbara, Calif., 1965-1967; National Bureau of Standards, Washington, D.C.: director, Center for Computer Science and Technology, 1967-1970, senior research fellow, 1970-1973; editorial director, *Computerworld*, Boston, Mass., 1973-1976; consultant, International Computer Manufacturing, Sunnyvale, Calif., 1976-1980, Netherlands, 1980-1983, Switzerland, 1980-present; president, ALAA, 1951; Association for Computing Machinery: council member, 1968-1987, vice president, 1974-1976, president, 1976-1978.

Honors and Awards: fellow, AIAA; fellow, British Computer Society.

The computer fraternity has characters, notables, and pioneers; Herb Grosch is an all-in-one of these. Originally trained as an astronomer, with the credits of the discovery of several satellites of Jupiter, and having served as the president of the Rocket Society, he transmogrified into a computer attendee (as contrasted with *being* a computer) through the Watson Scientific Computing Laboratory at Columbia University under the tutelage of Wallace Eckert. Grosch has been a compulsive documenter throughout his career, appearing as a curmudgeon with the trademark of a black hat in *Computerworld* and as a extender of the truth as a regular contributor to the "Comments, Queries, and Debate" department of *The Annals of the History of Computing*. Grosch discovered the relationship between the speed and cost of computer systems in 1950, a concept which was only overtaken in the mid-1980s by radical changes in computer architecture. He has worked twice for IBM (and on many occasion has claimed to be the only person *fired* twice by IBM), twice for General Electric Company, and twice for the federal government. He was a charter member, in 1947, of the Association for Computing Machinery

Education: BS, astronomy, University of Michigan, 1938; PhD, astronomy, University of Michigan, 1942.

¹ Obviously in 1945 the title "computer scientist" had not been invented; in his autobiography Grosch refers to himself simply as "scientist"--the second to be hired by IBM. Grosch's autobiography does note that fie was "made into a computer" in 1936, so perhaps the combination of words is not totally inappropriate. In his autobiography, Grosch explains this move to IBM by writing "Drafted into IBM by the Manhattan Project" and "Helps establish the Watson Laboratory at Columbia."

(ACM), eventually being elected as president in 1976 after a membership petition placed him on the ballot alongside those selected by the nominations committee. His autobiography, *Computer: Bit Slices from a Life, is* a mixture of corporate, professional, personal, and interpersonal relationships, which is well worth reading if one wants to learn about many of his associates. If anything, Herb gets overlooked because he has been in on the birth of many, many projects and endeavors, has had his fingers in many, many aspects of the history of computing, but has rarely stayed around long enough to be in on the culminating celebrations-at the time it got uninteresting to Herb, he moved on to another challenge.

QUOTATION

"Mini [computer]s are the methadone by which users hope to get unhooked from the heroin of time-sharing."

BIBLIOGRAPHY

Biographical

Grosch, Herbert R. J., "The 701 at General Electric," *Ann. Hist. Comp.*, Vol. 5, No. 2, Apr. 1983, pp. 195-197. Grosch, Herbert R. J., *Computer: Bit Slices from a Life*, Third Millennium Books, Lancaster, Pa., 1991.

Significant Publications

Grosch, Herbert R. J., "In von Braun Country," Ann. Hist. Comp., Vol. 11, No. 1, 1989, pp. 44-48.

UPDATES