Philip Henry Dorn

Born August 14, 1930, New York City; died June 8, 1993, New York City; software pioneer, champion of computing, skilled industry analyst, respected consultant, gifted writer and speaker, and friend and supporter of people in the world of computing and beyond.



Education: BA, political science, Princeton University, 1952.

Professional Experience: US Army, 1953-1956; Personnel Laboratory, Inc., 1956-1958; System Development Corp. (SDC), 1958-1961; General Motors Research Laboratories (GMR), Warren, Michigan, 1961-1965; Computer Applications, Inc., New York City, 1965-1966; Technical Services Group, Union Carbide Corp., New York City, 1966-1972; The Equitable Life Assurance Society, 1972; Dorn Computer Consultants, Inc. 1972-1993.

Philip Henry Dorn, software pioneer, champion of computing, skilled industry analyst, respected consultant, gifted writer and speaker, and friend and supporter of people in the world of computing and beyond, died suddenly while returning by taxi to his New York City home from a ballet performance on June 8, 1993. He was 62 years old.¹

Dorn was born on August 14, 1930, and brought up in New York City, in Manhattan. He attended the Lawrenceville School in New Jersey, from which he graduated in 1948. Discouraged by his parents from pursuing studies in engineering, he earned a BA in political science from Princeton University in 1952. He then entered the law school at Stanford University. At Stanford he met Sue Bricker, a native of the Pacific Northwest, who became his wife in 1955 and was at his side when he died.

Dorn was drafted out of law school in 1953, and, while serving in the Army, he decided that law was not for him. In 1956, following his discharge and marriage, he took a customer-liaison position with a firm, Personnel Laboratory, Inc., that specialized in testing candidates for employment. This enabled him to support his family, but he became restless and intellectually dissatisfied.

In 1958, with his wife's encouragement, he answered an employment advertisement placed by System Development Corporation (SDC). In those days, when most people had no concept of computers, SDC would simply seek people who were intelligent and intellectually curious—which described Dorn perfectly. He told the interviewer that he had no background in mathematics or engineering, but his score on a screening examination was off the top of the scale, and he was offered a position.

SDC had major responsibilities for programming the SAGE air defense system on AN/FSQ-32 computers. [See the Special Issue on SAGE, *Ann. Hist. Comp., Vol.* 5, No. 4, Oct. 1983.] There was no ready supply of programmers; computer science departments did not exist, and few universities even offered serious courses in programming. So SDC ran its own school, offering its employees introductory courses in "bits, bytes, ones, and zeros" and advanced courses in air defense applications.

¹ Rosin 1994.

Dorn excelled in both the introductory and advanced courses and, upon completing the latter, became one of SDC's instructors. His teaching colleagues found him delightful to work with. But he also had very high standards. If Dorn respected a colleague intellectually, their relationship could be very positive; but woe to a lesser person who let Dorn get the upper hand.

Although he enjoyed his work and the opportunity to play tennis year-round, Dorn was not cut out for Southern California-in particular, he did not drive a car-so in 1961 he joined the staff at General Motors Research Laboratories (GMR) in Warren, Michigan.

At this time, an IBM-7090 computer was installed at GMR to support development of a system for vehicle body design. The resulting system, DAC-1, was the first industrial computer-aided design system and the system that pioneered the use of computer graphics in industry. [See Krull, F., "The Origin of Computer Graphics within General Motors" *IEEE Annals of the History of Computing, Vol.* 16, No. 3, 1994, pp. 40-56.]

Along with a colleague, Phyllis Cole, Dorn's role in the DAC-1 project was to develop the disk-based memory system, including the design of a storage access method. The work began before any disk drive was available for the IBM-7090, so Dorn and Cole simulated the storage system they were designing, first using tape drives, and then with an IBM-1401 that had a very early disk drive. Dorn wrote and checked out the first customer-developed programs for the IBM-1301 disk drive at IBM prior to delivery of that hardware to GM.

Dorn's professional relationship with Cole was typical of the way he interacted with women throughout his career; he treated them equally with men. Women whom he respected intellectually, and there were many, became trusted colleagues and friends. He also encouraged women, telling one who expressed doubts, "You are not a woman manager—you are a manager!"

While DAC-1 was the most exciting experience in his entire career-and Michigan was closer to home than California-Dorn was an inveterate Manhattanite. So in 1965 he joined Computer Applications, Inc., in New York City, where he co-directed implementation of the Indexed Sequential Access Method (ISAM) for OS/360 under a contract with IBM.

In 1966 Union Carbide Corporation formed a corporate-level Technical Services Group in New York City, and Dorn was one of four people selected to staff it. This group established policies and plans for third-generation computing in Union Carbide, and its members served on related committees and projects in data centers throughout the corporation. Here Dorn honed his skills as a technical consultant. He had a reputation for offering an opinion on everything, but that opinion was formed on the basis of what he heard and read-and he always knew everyone else's opinion. When the Technical Services Group was broken up a few years later, its members were assigned to various Union Carbide data centers. Dorn, of course, stayed in New York.

While at GM, Dorn had become involved in SHARE, then known as the "IBM user group for large, scientific computers."¹ During his 12-year formal relationship with SHARE, he managed the SHARE PL/I Project and its Systems Division, served as SHARE vice president and, in 1969-1970, as president. After his presidency, he served another term on the SHARE Board as past president, and he continued to consult for the SHARE management long after he was affiliated with a SHARE member corporation.

¹ See Armer, Paul, "SHARE-A Eulogy to Cooperative Effort," Ann. Hist. Comp., Vol. 2, No. 2, Apr. 1980, pp. 122-129.

The 1960s were years of significant turmoil in SHARE. Among other major issues, IBM announced and delivered its System/360 and OS/360, and in 1969 IBM announced its decision to "unbundle" its software and sell it separately from its hardware products. Dorn took a leading role in developing SHARE's response to this announcement, which resulted in vendors other than IBM participating in SHARE and SHARE's incorporation as a tax-exempt organization. An attorney retained by SHARE during this period credits Dorn with teaching him to write with a precision that, he says, still distinguishes him from most other lawyers.

Dorn left Union Carbide in late 1972 and, after a short stint with the Equitable Life Assurance Society, began independent consulting under the rubric Dorn Computer Consultants, Inc. He set up an office in his Manhattan cooperative apartment, and began to serve clients in the US and abroad. In addition to his areas of technical expertise, he offered services in organizational studies, installation audits, product planning and marketing, and evaluation and selection of hardware and software.

As a consultant Dorn also capitalized on his talents as a writer and editor. He was a member of the *Datamation* editorial advisory board and contributed regularly to that publication. He was a regular columnist for data processing publications in Denmark, Finland, Iceland, Japan, New Zealand, and Australia. He was a reviewer for the *Annals* and *ACM Computing Reviews*, a referee for *Communications of the ACM*, and, for a while, edited the News and Notices Section of the *Annals*.

Dorn was also an effective speaker. In his first lecture in Iceland, which filled the largest room in the university, he introduced his audience of data processing managers to spreadsheets. He warned them to "embrace the coming personal computer revolution or lose control.... Departments will find ways to buy personal computers even if not budgeted to do so." This prediction was made in 1979, well before introduction of the IBM PC. Dorn was the most frequent speaker at the annual Scandinavian Norddata Conference, at which he addressed overflow audiences for 15 consecutive years.

One of Dorn's more recent activities was to serve as a charter member of the Harvard Business School History of MIS Project, which is led by James L. McKenney, a colleague from their days at SDC. This project, some of whose reports appear periodically in the *Annals*, has as its goal to show how information technology, especially software, has transformed industries. [See Carlson, Walter M., "Transforming an Industry Through Information Technology," *Ann. Hist. Comp., Vol. 15*, No. 1, 1993, pp. 39-43.] Dorn was a strong force in the project and was an extraordinary and most critical editor-making English mean what it says.

Dorn's relationship with New York City was an abiding one. He was a regular attendee at the ballet, concerts, and New York Ranger hockey games-and he never did drive an automobile. His other interests included the history of the Civil War and the art of the Inuit people. He was also a frequent visitor to the Museum of Modern Art, where his wife Sue has been deputy director for development and public affairs since 1987.

Dorn's public image was as an outspoken, opinionated pragmatist, but those who knew him well benefited from a very different, private personality. To his many friends, he was warm, loyal, and caring. He was a source of personal support to those who needed it—phoning daily to friends suffering the death of a spouse, serving as surrogate father to children whose fathers had died, sending personal notes of praise for work well done, and generously providing free advice and counsel to professional colleagues in difficulty. This aspect of his character is also reflected in obituaries that have appeared in computer industry publications throughout the world, for example, *ComputerWorld Denmark*, June 11, 1993, *Information Week (USA)*, June 14, 1993, and *ComputerWorld Australia, July 16*, 1993.

BIBLIOGRAPHY

Biographical

Rosin, Robert F., "Philip Dorn," Ann. Hist. Comp., Vol. 15, No. 4, 1994, pp. 84-85.

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