

Adriaan¹ Van Wijngaarden

Born November 2, 1916, died February 7, 1987,- leader in programming linguistics and language translation; contributor to Algol 60 and 68 development, and versatile supporter of IMP



Education: mechanical engineering, Technical University of Delft; PhD, Technical University of Delft.

Professional Experience: various positions, including director, Amsterdam Mathematisch Centrum, 1947-1981.

Honors and Awards: member, Royal Dutch Academy of Sciences, 1959; first honorary member, Dutch Computer Society, 1972; IFIP Silvercore Award, 1974; IEEE Computer Society Pioneer Award, 1986.

Born on November 2, 1916, Adriaan van Wijngaarden was educated as a mechanical engineer at the technical University of Delft, where he obtained his PhD. He joined the Amsterdam Mathematisch Centrum on January 1, 1947, later becoming its director, and remained there until he retired in 1981.

His first assignment was to tour the UK and the US in an attempt to determine to what extent the newly invented automatic calculating machine would influence the work of the Centre. Upon his return he convinced the Centre's management that computing power is essential to applied mathematics, and stimulating to the emerging discipline of computer science. In those days there was no way to acquire such power other than building one's own machine. The result, commissioned in 1952, was ARRA. The group who built this machine contained people such as G.A. Blaauw, Edsger W. Dijkstra, and W.L. van der Poel, themselves to become trailblazers in the world of computing. After constructing ARRA, the group went on to build ARMAC and finally the fully transistorized X1.

In the meantime, van Wijngaarden pursued two other main activities. While he was a late-joining member of the joint ACM/GAMM group that developed Algol 60, he was very active in the subsequent development of Algol 68. Initially the proposal for an update to Algol was Algol X, with Algol Y being the name reserved for the corresponding metalanguage. Van Wijngaarden produced a paper for the 1963 IFIP programming language committee, entitled "Generalized Algol," which contained the basic concepts which were eventually incorporated into Algol 68. During this period he was a central figure in the organization of the International Federation for Information Processing (IFIP) serving as Congress vice president, general assembly member, vice president, and chairman of Technical Committees 1 and 2.

After his retirement, Professor van Wijngaarden lived more or less hidden in his home, following computer developments closely but only occasionally appearing at an event. His declining health kept him ever more closely tied to his home; he died on February 7, 1987.²

¹ There seems to be some disagreement regarding van Wijngaarden's first name. Naur (Wexelblat 1981) refers to him as "Aad." Cortada (1987) uses the first name "Arie."

²From Zemanek 1989.

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UPDATES

Regarding the name Adriaan (see footnote), the names "Aad" and "Arie" are simply Dutch abbreviations for Adriaan. (MRW, 2012). Portrait added (MRW. 2013)

¹His obituary contains an extensive list of publications of van Wijngaarden.