

Ole-Johan Dahl

Born October 12, 1931, Mandal, Norway; with Kristen Nygaard, developer of the SIMULA programming language, which introduced classes and inheritance into the field of programming languages.



Education: MS, numerical mathematics, University of Oslo, 1957.

Professional Experience: Norwegian Defense Research Establishment (NDRE), 1952-1963; Norwegian Computing Center, 1963-1968; professor, computer science, University of Oslo, 1968-present.

Dahl worked with the Norwegian Defense Research Establishment (NDRE) from 1952 to 1963 in computing and programming under Jan V. Gatwick. From 1956 onwards his main activity was software development. His master's thesis ("Numerical Mathematics," 1957, University of Oslo) addressed the representation and manipulation of multidimensional arrays on a two-level store computer. His main contribution at the NDRE was a high-level programming language, MAC, used locally during the 1960s (first specification was dated 1957; the implemented version was modified as a result of the Algol effort). In 1963 he joined the Norwegian Computing Center for full-time work on SIMULA, and in 1968 he became a professor of computer science, then a new discipline at the University of Oslo. His main research during recent years has been in the areas of program architecture, specification tools, and verification techniques.

From 1964 to 1976 he was the Norwegian delegate to IFIP Technical Committee 2 (Programming Languages), and from 1970 to 1977 he was a working member of IFIP Working Group 2.2 (Language Definition). He has been a member of IFIP Working Group 2.3 (Programming Methodology) since its founding in Oslo in 1969.¹

BIBLIOGRAPHY

Biographical

Nygaard, Kristen, and Ole-Johan Dahl, "The Development of the SIMULA Languages," in Wexelblat, Richard L., ed., *History of Programming Languages*, Academic Press, New York, 1981.

Significant Publications

Dahl, O.-J., and K. Nygaard, "SIMULA-An Algol Based Simulation Language," *Comm. ACM*, Vol. 9, No. 9, Sept. 1966, pp. 671-682.

¹ Adapted from the biography in Wexelblat, Richard L., ed., *History of Programming Languages*, Academic Press, New York, 1981, Chapter 9.

Dahl, O.-J., and K. Nygaard, "Classes and Subclasses," in Buxton, J., ed., *Simulation Programming Languages*, North-Holland, Amsterdam, 1967.

Dahl, O.-J., and C.A.R. Hoare, "Hierarchical Program Structures," in Dahl, O.J., E. Dijkstra, and C.A.R. Hoare, *Structured Programming*, Academic Press, New York, 1972.

Dahl, O.J., *Verifiable Programming*, Prentice-Hall, Englewood Cliffs, NJ., 1992.

UPDATES

Dahl received the ACM Turing Award (joint with Kirsten Nygaard) in 2001 for ideas fundamental to the emergence of object oriented programming languages. (MRW, 2012)

Ole-Johan Dahl died June 29, 2002 after a long battle with lymphatic cancer. (MRW, 2012).

Portrait changed. (MRW, 2012)