Bibliography of Niklaus Wirth (1934–2024)

Nelson H. F. Beebe

The renowned computer scientist Niklaus Wirth passed away on January 1, 2024. After 26 days of intense work, on January 30 I checked in as version 1.00 this bibliography of his works:

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https://math.utah.edu/pub/bibnet/authors/w/
     wirth-niklaus.bib, wirth-niklaus.html, ...
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(Further changes will bump the version number to 1.01, 1.02, . . .)

The document preamble has a brief resume of Wirth's career, and (not so briefly) discusses the use of Pascal in the rewriting of TeX and METAFONT that led to the 1982 release, and also credits Barry Smith for his work on a polished implementation on the Apple Macintosh. The other languages with which Wirth was involved are also discussed.

My extensive literature searches give me some confidence that I have located almost everything that Niklaus Wirth published in his 58 years of academic activity, but book chapters and technical reports are always hard to find, so a few more might yet surface. I don't have access to a curriculum vitae for him; that may turn up in the future, and permit a cross check of what I have already found in the literature. Contributions welcome!

If we go back to 1980 and ask what programming language Don Knuth could have chosen for the rewrite from SAIL, it seems clear with 44 years of hindsight that Pascal was really the *only choice*, despite its many shortcomings. The bibliography preamble discusses those misfeatures, and gives references to entries later in the file. Brian Kernighan's famous article, "Why Pascal is not my favorite programming language", was worth rereading. I have my own list of gripes about Pascal after using it extensively in the 1980s on DECsystem-20 machines running TOPS-20.

In short, we very likely would not have TeX, METAFONT, and the worldwide TeX community without Niklaus Wirth and Pascal, and that would have made a huge difference in my own professional life. This bibliography is my personal tribute to Niklaus Wirth, with deep thanks for the influence he has had on me. He and I never got to meet in person, and the first view that I ever had of him was earlier this month, watching recent video interviews that are listed in the bibliography. Because of his many years at Stanford and Xerox PARC, I'm sure that he and Don Knuth knew each other well.

⋄ Nelson H. F. Beebe
University of Utah