



Helmut Kopka, 1932–2009

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In the English-speaking \LaTeX world, the name *Helmut Kopka* is most widely associated with my own, as the authors of the *Guide to \LaTeX*. In Germany, he is known as the single author of a three-volume set of \LaTeX manuals: *Einführung* (Introduction), *Ergänzungen* (Additions), *Erweiterungen* (Extensions).

Helmut's interest in first T_EX, and then L^AT_EX, started while he was on an extended stay in the United States, in preparation for a major scientific project on which he was working. This was in the late 80s, when word processing programs were proliferating; Helmut even started working on his own until he was introduced to T_EX; recognizing a vastly superior product, he quickly embraced it. He did make his own initial contribution with the DVI driver `dvi2pcl` for the LaserJet printers.

Back at his home institute in Germany, he introduced L^AT_EX as the standard text system for the secretarial work there, at a time when computers were invading the non-scientific offices. He complemented this by writing a series of notes, or lectures, explaining to the secretaries how this system was to be used. These notes later became the basis for his first L^AT_EX textbook, the *Einführung*.

The success of this book in Germany was so great (he once told me that it sold more copies in Germany than Lamport in the world, but I cannot confirm this) that the publisher Addison-Wesley Deutschland considered an English translation. This was where I came into the picture.

Helmut was nothing if not direct. He knew that I was a major user of L^AT_EX, that I was writing *style* files, as packages were called back in the 2.09 days, and as a Canadian was a native English speaker. It was the middle of an Open-House Day in the Institute, we were besieged with thousands of visitors, many from across the recently opened Iron Curtain a mere 20 km away. In the midst of all this, Helmut comes to me and asks if I would be interested in translating his L^AT_EX manual into English, as though this could be done in a day or two. I answered that I would think it over. The rest is L^AT_EX history.

The first edition of *A Guide to L^AT_EX* was very much a translation. While working on it, I was impressed by Helmut's skill at explaining complex ideas very simply, and by the examples he used to illustrate the points. When I was half-way through the translation (it took a year) I realized I could start using it myself as my own reference manual. He was an enthusiastic teacher; a visit to his office with a simple question could result in a fascinating lecture on how METAFONT works. I very much appreciated the material that he had given me to work with.

With the second edition, *A Guide to L^AT_EX 2_ε*, I began the rewriting needed to explain the new L^AT_EX version that was about to come out. I consulted Helmut all the time and he incorporated many of my changes into the German equivalent. When I wanted to add an additional appendix, he was hesitant: the

original book had 9 chapters and 6 appendices (A–F) and the 7th appendix H would destroy the nice hexadecimal nature of the layout. He did acquiesce in the end.

L^AT_EX was of course only part of Helmut's life. He was born in Dortmund, studied physics in Göttingen with a degree in fluid dynamics, joined the Max-Planck-Institut für Aeronomie in Lindau (am Harz) in 1963, where he started applying advanced computer techniques when high level computer languages were in their infancy. His specialty was now ionospheric physics. In 1974 he became part of a new project called Heating, a very powerful short-wave transmitter designed to perturb and heat electrons in the ionosphere. These active experiments in ionospheric and plasma physics were carried out near Tromsø, in northern Norway, where the sister project, the EISCAT incoherent scatter radar facility, was also located. He was to become a co-leader of this project, financed by the Max Planck Society, the Max-Planck-Institut für Aeronomie, and the German Research Foundation. It was his task to design an antenna and transmission line system which could be realized within the modest budget available. He managed this magnificently through the imaginative use of his physics, mathematics, and computing skills.

Helmut was also very politically engaged. He served as mayor for a few years in his village and even considered going into state politics. He was instrumental in getting a workers' council established in the Institute against the wishes of the director. When the then Ministerpräsident of Lower Saxony, Gerhard Schröder, visited the Institute as part of his campaign to become Chancellor of Germany, he insisted on meeting his "old friend Helmut".

Helmut retired from his duties at the Institute in 1997 at which time he began a long battle against cancer, which he ultimately won. He was still a regular visitor to the Institute, coming for lunch every Tuesday with the others from his old group. He enjoyed telling stories about his grandchildren. And he continued to work on his L^AT_EX manuals, being very proud that they now appeared as eBooks.

Helmut Kopka passed away on January 7, 2009, after a short illness; we now mourn a talented, dedicated, affectionate colleague and friend.

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