

Abstracts

The design of T_EX and METAFONT: A retrospective

Nelson Beebe, University of Utah

This article looks back at the design of T_EX and METAFONT, and analyzes how they were affected by architectures, operating systems, programming languages, and resource limits of the computing world at the time of their creation by a remarkable programmer and human being, Donald E. Knuth. This paper is dedicated to him, with deep gratitude for the continued inspiration and learning that I've received from his software, his scientific writing, and our occasional personal encounters over the last 25+ years.

(This was also the keynote address at the Practical T_EX 2005 conference, and was printed in *TUGboat* **26**:1. *Ed.*)

Practical use of \special commands in DVIPDFM x

Jin-Hwan Cho, University of Suwon

\special commands in T_EX provide the only way to communicate arbitrary information to DVI drivers. DVIPDFM x , one such driver, translates the standard DVI output of T_EX into the PDF format defined by Adobe for platform independent transmission of digital documents.

In this presentation, we discuss the \special commands supported by DVIPDFM x and show some practical applications for package designers as well as for T_EX end users.

Strategies for including graphics in L^AT_EX documents

Klaus Höppner, DANTE e.V. and TUG

This talk presents strategies for including graphics into L^AT_EX documents. It shows the usage of the standard graphics packages of L^AT_EX as well as an introduction to different graphics formats. Some external tools for converting graphics formats are discussed.

(This paper was also presented at the Practical T_EX 2005 conference, and was printed in *TUGboat* **26**:1. *Ed.*)

Wavelet transformations and Chinese font design

Hong Feng, CTUG and Ron's Datacom Inc.

Originally, the fonts used for the T_EX system were designed with the METAFONT program. In the past two decades, the wavelet transformation has seen wide application, and it can also be applied in font design for T_EX. METAFONT (or MetaPost) and the wavelet transformation can be mutually complementary in Chinese font design.

(We hope to publish the full paper in a future issue of *TUGboat*. *Ed.*)

L^AT_EX maintenance and development

Chris Rowley, L^AT_EX Project and Open University

This talk gives a brief history of the L^AT_EX Project, with some insights into what is involved in the enhancement and maintenance of a robust and widely used software system for the automated formatting of complex documents.

Grid-based typesetting in L^AT_EX

Philip Taylor, TUG and University of London

The first edition of Rosalind Gibson's *Principles of Nutritional Assessment* was jointly typeset by her husband Ian and myself in the years preceding its publication in 1990; the preparation of this edition was the subject of one of my very first talks at a TUG meeting. Now, fifteen years later, Ian and I have again collaborated in the typesetting of the second edition, which — unlike the first — is typeset in two columns on a strict grid. L^AT_EX is not easily coerced into grid-based typesetting, so the main thread of this talk will be the various measures we used to achieve the desired effect.

(We hope to publish the full paper in a future issue of *TUGboat*. *Ed.*)