

Bibliography

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The “black book” contains the specifications for Adobe’s Type 1 font format and describes how to create a Type 1 font program. The book explains the specifics of the Type 1 syntax (a subset of PostScript), including information on the structure of font programs, ways to specify computer outlines, and the contents of the various font dictionaries. It also covers encryption, subroutines, and hints. <http://partners.adobe.com/asn/developer/pdfs/tn/T1Format.pdf>

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This technical note defines a standard set of document structuring conventions (DSC), which will help ensure that a PostScript document is device independent. DSC allows PostScript language programs to communicate their document structure and printing requirements to document managers in a way that does not affect the PostScript language page description.

http://partners.adobe.com/asn/developer/pdfs/tn/5001.DSC_Spec.pdf

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With Eitan M. Gurari, Ross Moore, and Robert S. Sutor.
This book teaches (scientific) authors how to publish on the web or other hypertext presentation systems, building on their experience with $\text{\LaTeX}$ and taking into account their specific needs in fields such as mathematics, non-European languages, and algorithmic graphics. The book explains how to make full use of the Adobe Acrobat format from $\text{\LaTeX}$, convert legacy documents to HTML or XML, make use of math in web applications, use $\text{\LaTeX}$ as a tool in preparing web pages, read and write simple XML/SGML, and produce high-quality printed pages from web-hosted XML or HTML pages using $\text{\TeX}$ or PDF.
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The book shows how to incorporate graphic files into a $\text{\LaTeX}$ document, program technical diagrams using several different languages, produce color pictures, achieve special effects with fragments of embedded PostScript, and make high-quality music scores and game diagrams. It also contains detailed descriptions of important packages such as xypic, pstricks, and MetaPost, the standard $\text{\LaTeX}$ color and graphics packages, PostScript fonts and how to use them in $\text{\LaTeX}$, and the dvips and ghostscript programs.
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A widely used U.K. reference for authors and editors. With the *Oxford Dictionary for Writers and Editors* it presents the canonical house style of the Oxford University Press. See also [143].
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The first part of this book provides a brief but comprehensive overview of $\text{\TeX}$, $\text{\LaTeX}$, $\text{\METAFONT}$, and $\text{\MetaPost}$, with particular emphasis on how everything fits together, how the production cycle works, and what kinds of files are involved. The second part is devoted to details of fonts and their use in $\text{\TeX}$. Of particular interest are 30 pages of examples showing how various combinations of well-known text typefaces might be used together with the few choices of math fonts currently available. The final part of the book discusses graphics applications—in particular, $\text{\TeX}$ -friendly methods such as $\text{\METAFONT}$ and $\text{\MetaPost}$, the $\text{\pstricks}$ package, $\text{\PCTEX}$, and $\text{\Mfpic}$.
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Finally, the author shows how to build a new multilingual document class and bibliography style.
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Analysis of Chapter 3 Verse 16 of each book of the Bible. Contains wonderful calligraphy.
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Based on a lecture he gave in 1978, Knuth makes the point that mathematics books and journals do not look as now beautiful as they did in the past. As this is mainly due to the fact that high-quality typesetting has become too expensive, he proposes to use mathematics itself to solve the problem. As a first step he sees the development of a method to unambiguously mark up the math elements in a document so that they can be easily handled by machines. The second step is to use mathematics to design the shapes of letters and symbols. The article goes into the details of these two approaches.
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An explanation of what virtual fonts are and why they are needed, plus technical details.
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<http://www.tug.org/TUGboat/Articles/tb07-2/tb14knut.pdf>
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<http://www.tug.org/TUGboat/Articles/tb10-3/tb25knut.pdf>
- [96] Donald E. Knuth. “The future of $\text{\TeX}$ and METAFONT”. In Knuth [89], pp. 571–572. Originally published in *TUGboat* 11(4):489, 1990.
In this article Knuth announces that his work on $\text{\TeX}$, METAFONT, and Computer Modern has “come to an end” and that he will make further changes only to correct extremely serious bugs.
<http://www.tug.org/TUGboat/Articles/tb11-4/tb30knut.pdf>
- [97] Donald E. Knuth and Pierre MacKay. “Mixing right-to-left texts with left-to-right texts”. In Knuth [89], pp. 157–176. Originally published in *TUGboat* 8(1):14–25, 1987.
 $\text{\TeX}$ was initially designed to produce documents with material flowing left-to-right and top-to-bottom. This paper clarifies the issues involved in mixed-direction document production and discusses changes to $\text{\TeX}$ that can extend it to become a bidirectional formatting system.
<http://www.tug.org/TUGboat/Articles/tb08-1/tb17knutmix.pdf>
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The two authors explain, in this article originally published in 1989, how a collaboration between scientists and artists is helping to bring beauty to the pages of mathematical journals and textbooks.
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KOMA-Script is a bundle of $\text{\LaTeX}$ classes and packages that can be used as replacements for the standard $\text{\LaTeX}$ classes offering extended functionalities. German and English manuals are provided as part of the distribution.
On CTAN at: [macros/latex/contrib/koma-script/scrguide.pdf](http://www.ctan.org/macros/latex/contrib/koma-script/scrguide.pdf)
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An introductory guide to $\text{\LaTeX}$ with a different pedagogical style than L^Ampport’s *ET $\text{\TeX}$ Manual* [104].

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The ultimate reference for basic user-level ETeX by the creator of ETeX 2.09. It complements the material presented in this book.
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An Open Source License used by the core ETeX2 ϵ distribution and many contributed packages.
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The author tries to demonstrate that typesetting Greek in $\text{\TeX}$ with the gr family of fonts can be as easy as typesetting English text and leads to equally good results. The article is meant as a tutorial but some technical details are given for those who will have acquired greater familiarity with the font. <http://www.tug.org/TUGboat/Articles/tb09-1/tb20levy.pdf>
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The output of $\text{\TeX}$ is compared with that of hand-typeset documents. It is shown that many important concepts of high-quality typesetting are not supported and that further research to design a “successor” typesetting system to $\text{\TeX}$ should be undertaken. <http://www.tug.org/TUGboat/Articles/tb11-3/tb29mitt.pdf>
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Some problems with K. Berry’s naming scheme are discussed, especially from the point of view of defining certain font characteristics independently and the use of the scheme with NFSS. <http://www.tug.org/TUGboat/Articles/tb13-1/tb34mittfont.pdf>
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Description of the concepts and implementation of the test suite used to test for unexpected side effects after changes to the $\text{\LaTeX}$ kernel. One of the most valuable maintenance tools for keeping $\text{\LaTeX} 2_{\epsilon}$ stable. <http://www.tug.org/TUGboat/Articles/tb18-4/tb57mitt.pdf>
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This paper discusses the structure and processing of multilingual documents, both at a general level and in relation to a proposed extension to standard $\text{\LaTeX}$. <http://www.tug.org/TUGboat/Articles/tb18-3/tb56lang.pdf>
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Descriptions of features and concepts of a new output routine for $\text{\LaTeX}$ that can handle spanning floats in multicolumn page design. <http://www.tug.org/TUGboat/Articles/tb21-3/tb68mittel.pdf>
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A description of the trace package for controlling debugging messages from $\text{\LaTeX}$ packages. <http://www.tug.org/TUGboat/Articles/tb22-1-2/tb70mitt.pdf>

- [123] Frank Mittelbach, David Carlisle, and Chris Rowley. “New interfaces for $\text{\LaTeX}$ class design, Parts I and II”. *TUGboat*, 20(3):214–216, 1999.

Some proposals for the first-ever interface to setting up and coding $\text{\LaTeX}$ classes.

<http://www.tug.org/TUGboat/Articles/tb20-3/tb64carl.pdf>

- [124] Frank Mittelbach, David Carlisle, Chris Rowley, et al. “Experimental $\text{\LaTeX}$ code for class design”.

At the $\text{\TeX}$ Users Group conference in Vancouver the $\text{\LaTeX}$ project team gave a talk on models for user-level interfaces and designer-level interfaces in $\text{\LaTeX}$ 3 [123]. Most of these ideas have been implemented in prototype implementations (e.g., template design, front matter handling, output routine, galley and paragraph formatting). The source code is documented and contains further explanations and examples; see also [121].

Slides: <http://www.latex-project.org/papers/tug99pdf>

Code: <http://www.latex-project.org/code/experimental>

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Describes the implementation of the docstrip program.

On CTAN at: [macros/latex/base/docstrip.dtx](http://www.ctan.org/macros/latex/base/docstrip.dtx)

- [126] Frank Mittelbach and Chris Rowley. “ $\text{\LaTeX}$ 2.09 $\rightarrow$ $\text{\LaTeX}$ 3”. *TUGboat*, 13(1):96–101, 1992.

A brief sketch of the $\text{\LaTeX}$ 3 Project, retracing its history and describing the structure of the system. An update appeared in *TUGboat*, 13(3):390–391, October 1992. A call for volunteers to help in the development of $\text{\LaTeX}$ 3 and a list of the various tasks appeared in *TUGboat*, 13(4):510–515, December 1992. The article also describes how you can obtain the current task list as well as various $\text{\LaTeX}$ 3 working group documents via e-mail or FTP and explains how you can subscribe to the $\text{\LaTeX}$ 3 discussion list.

<http://www.tug.org/TUGboat/Articles/tb13-1/tb34mitt13.pdf>

- [127] Frank Mittelbach and Chris Rowley. “The pursuit of quality: How can automated typesetting achieve the highest standards of craft typography?” In C. Vanoirbeek and G. Coray, editors, “EP92—Proceedings of Electronic Publishing, '92, International Conference on Electronic Publishing, Document Manipulation, and Typography, Swiss Federal Institute of Technology, Lausanne, Switzerland, April 7–10, 1992”, pp. 261–273. Cambridge University Press, New York, 1992. ISBN 0-521-43277-4.

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A description of the basic macros used to implement the first version of $\text{\LaTeX}$ ’s New Font Selection Scheme.

<http://www.tug.org/TUGboat/Articles/tb10-2/tb24mitt.pdf>

- [129] Frank Mittelbach and Rainer Schöpf. “With $\text{\LaTeX}$ into the nineties”. *TUGboat*, 10(4):681–690, 1989.

This article proposes a reimplementaion of $\text{\LaTeX}$ that preserves the essential features of the current interface while taking into account the increasing needs of the various user communities. It also formulates some ideas for further developments. It was instrumental in the move from $\text{\LaTeX}$ 2.09 to $\text{\LaTeX}$ 2 ϵ .

<http://www.tug.org/TUGboat/Articles/tb10-4/tb26mitt.pdf>

- [130] Frank Mittelbach and Rainer Schöpf. “Reprint: The new font family selection — User interface to standard $\text{\LaTeX}$ ”. *TUGboat*, 11(2):297–305, 1990.

A complete description of the user interface of the first version of $\text{\LaTeX}$ ’s New Font Selection Scheme.

<http://www.tug.org/TUGboat/Articles/tb11-2/tb28mitt.pdf>

- [131] Frank Mittelbach and Rainer Schöpf. “Towards L^AT_EX 3.0”. *TUGboat*, 12(1):74–79, 1991.
The objectives of the L^AT_EX3 project are described. The authors examine enhancements to L^AT_EX’s user and style file interfaces that are necessary to keep pace with modern developments, such as SGML. They also review some internal concepts that need revision.
<http://www.tug.org/TUGboat/Articles/tb12-1/tb31mitt.pdf>
- [132] Gerd Neugebauer. “BIBTOOL: A tool to manipulate B^BT_EX files”, 2002.
Describes the bibtool program for pretty-printing, sorting and merging of B^BT_EX databases, generation of uniform reference keys, and selecting of references used in a publication.
On CTAN at: biblio/bibtex/utils/bibttool/bibttool.dvi
- [133] O. Nicole, J. André, and B. Gaulle. “Notes en bas de pages : commentaires”. *Cahiers GUTenberg*, 15:46–32, 1993.
Comments, clarifications, and additions to [10].
<http://www.gutenberg.eu.org/pub/GUTenberg/publicationsPDF/15-nicole.pdf>
- [134] Scott Pakin. “The comprehensive L^AT_EX symbol list”, 2003.
This document lists more than 2800 symbols and the corresponding L^AT_EX commands that produce them. Some of these symbols are guaranteed to be available in every L^AT_EX2_ε system; others require fonts and packages that may not accompany a given distribution and that therefore need to be installed. All of the fonts and packages described in the document are freely available from the CTAN archives.
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Together with Appendix B of *The Manual* [104], this describes the user interface to B^BT_EX with useful hints for controlling its behavior.
On CTAN at: biblio/bibtex/contrib/doc/btxdoc.pdf
- [136] Oren Patashnik. “Designing B^BT_EX styles”, 1988.
A detailed description for B^BT_EX style designers of the postfix stack language used inside B^BT_EX style files. After a general description of the language, all commands and built-in functions are reviewed. Finally, B^BT_EX name formatting is explained in detail.
On CTAN at: biblio/bibtex/contrib/doc/btxhak.pdf
- [137] John Plaice and Yannis Haralambous. “The latest developments in Ω”. *TUGboat*, 17(2):181–183, 1996.
The article describes ΩTimes and ΩHelvetica, public-domain virtual Times- and Helvetica-like fonts based on real PostScript fonts, called “Glyph Containers”, which will contain all necessary characters for typesetting with high T_EX quality in all languages and systems using the Latin, Greek, Cyrillic, Arabic, Hebrew, and Tinagh alphabets and their derivatives. Other alphabets, such as Coptic, Armenian, and Georgian, will follow, as well as mathematical symbols, dingbats, and other character collections. Ultimately, the Ω font set will contain glyphs for the complete Unicode character set, plus some specific glyphs needed for high-quality typography.
<http://www.tug.org/TUGboat/Articles/tb17-2/tb51omeg.pdf>
- [138] John Plaice, Yannis Haralambous, and Chris Rowley. “A multidimensional approach to typesetting”. *TUGboat*. To appear.
Outline of an approach to micro-typesetting that substantially improves on that of T_EX and Ω2.0.
<http://www.tug.org/TUGboat/Articles/...>
- [139] Sunil Podar. “Enhancements to the picture environment of L^AT_EX”. Technical Report 86-17, Department of Computer Science, S.U.N.Y, 1986. Version 1.2: July 14, 1986.
This document describes some new commands for the `picture` environment of L^AT_EX, especially higher-level commands that enhance its graphic capabilities by providing a friendlier and more powerful user interface. This lets you create more sophisticated pictures with less effort than in basic L^AT_EX.

- [140] Rama Porrat. “Developments in Hebrew T_EX”. In “Proceedings of the 7th European T_EX Conference, Prague”, pp. 135–147. CsTUG, Prague, 1992. ISBN 80-210-0480-0.
Discussion of available software and macro packages that support typesetting in two directions, and of associated Hebrew fonts.
- [141] Bernd Raichle, Rolf Niepraschk, and Thomas Hafner. “DE-TeX-FAQ—Fragen und Antworten über T_EX, L^AT_EX und DANTE e.V.”, 2003.
Frequently Asked Questions with answers about T_EX and the German T_EX users’ Group DANTE e.V. (in German language). <http://www.dante.de/faq/de-tex-faq>
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Index of Commands and Concepts

This title somewhat hides the fact that everything except the author names is in this one long index. To make it easier to use, the entries are distinguished by their “type” and this is often indicated by one of the the following “type words” at the beginning of the main entry or a sub-entry:

attribute, BibTeX built-in function, BibTeX command, BibTeX entry type, BibTeX field, BibTeX style, boolean, counter, document class, env., env. variable, file, file extension, folio style, font, font encoding, function, key, key/option, key value, keyword, length, option, package, page style, program, rigid length, or syntax.

The absence of an explicit “type word” means that the “type” is either a L^AT_EX “command” or simply a “concept”.

Use by, or in connection with, a particular package is indicated by adding the package name (in parentheses) to an entry or sub-entry. There is one “virtual” package name, `tlc`, which indicates commands introduced only for illustrative purposes in this book.

When there are several page numbers listed, **bold** face indicates a page containing important information about an entry, such as a definition or basic usage. A [blue](#) page number indicates that use of the command or concept is demonstrated in an example on that page.

When looking for the position of an entry in the index, you need to realize that, when they come at the start of a command or file extension, both of the characters `\` and `.` are ignored. All symbols come before all letters and everything that starts with the `@` character will appear immediately before A.

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