Book Review: A. Syropoulos *et al.*, *Digital Typography Using LaTeX*

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Abstract The book *Digital Typography Using LaTeX* was published by Springer–Verlag in 2002, but has been mostly ignored by the LaTeX community. However, Syropoulos and his co-authors have put lots of effort in creating a very good guide for the novice and the aspiring TeXnician. Despite some objections on how the book is structured, it can be said that *Digital Typography Using LaTeX* is a very good, if not excellent, everyday guide for producing beautiful documents.

In 2002, Apostolos Syropoulos, the founder and president of the Greek TeX LUG ($*\epsilon\phi\tau*$), together with Antonis Tsolomitis and Nick Sofroniou, two other Greek TeX gurus, published an extensive guide of LaTeX and other related typesetting systems and gismos [1]. The book passed almost unnoticed by the TeX community, with the exception of a few citations in *TUGboat* [2, 3] and elsewhere [4, 5]. Considering that this book merits some more attention, it is worth presenting it in the pages of The PracTeX Journal.

The two first questions that come to mind when you face yet-another-LaTeX-guide are: *What is the purpose of this book? Aren't there enough LaTeX cookbooks out there?* Certainly, there are several—if not many—LaTeX guides; from Lamport's gospel [6] to the ever-growing companions written by Lamport's disciples.

The difference with this new book is that it strives to be the mid-size guide for the amateur, the sophomore LaTeX user, like the author of the present note, and the aspiring TeXnician. The authors claim that their book is built so that the regular user of LaTeX and friends will not have to browse endlessly through several fatty guides. And in a sense, the authors succeed in that objective.

The book starts with an introductory chapter on TeX, LaTeX and related software. What follows in Chapter 2 is a description of standard LaTeX typesetting: characters, classes and packages, document structure as well as advanced document assembly, which may come handy if you are facing the daunting task of putting together a proceedings volume. Basic font usage, together with a few extras for Latin-based languages is covered next in Chapter 3. In Chapter 4, the authors discuss "lists and catalogues" (sic), including verse, quotations, footnotes, endnotes and text alignment—a weird mix from a first look. (You need to know a bit better the basic notions of LaTeX to understand this combination.)

Math typesetting is covered in Chapter 5. The authors explain what is math mode for TeX/LaTeX, what fonts can be used in math typesetting, the symbols offered by basic LaTeX and additional packages, and the art of math formula composition. The authors also detail the extra abilities in math typesetting with the use of amsmath. This chapter has a number of *errata*, most of which are the printer's fault. Probably, the printer did not know that, like the omnipresent Printer's Devil, some old Adobe Acrobats are chewing up characters.

In Chapter 6, the authors discuss LaTeX's automata—cross referencing, counters, floats, boxes, etc.—together with space manipulation and page design. Again, the matter of this Chapter seems to be combined in a haphazard way. For example, page layout could have been discussed in another chapter, either at the beginning of the book (so that the user has an idea of his/her page layout), or at the end (as an advanced topic, which it unfortunately is).

Chapter 7 deals with a few more useful packages for drop caps, multiple column setting, CD cover preparation, etc. Many more packages are discussed here and there throughout the book. Chapter 8 deals with bibliography and index creation by BibTeX and MakeIndex, including the creation of multilingual bibliographies and indexes.

The creation of graphics with LaTeX's `picture` environment and with Gnuplot is explained in Chapter 9. The discussion on graphics includes also the handling of external image files in different formats (Encapsulated PostScrip, TIFF, JPEG, etc.) and color manipulation using the graphicx bundle.

In Chapter 10, which covers about 70 pages, the authors discuss in great length the use of LaTeX's babel, Omega (Ω) and Lambda (Λ) to typeset documents in other-than-English texts. This is a very good and perhaps the most extensive discussion on multilingual typesetting to be found in any LaTeX manual. The authors discuss even Inuktikut, the language spoken by Inuit in the Canadian

Arctic. One very important language is, however, missing: Chinese. One of the authors (AS) has said that they were not able to find a native Chinese speaker to help them in this matter in time.

Chapter 11 ("To err is human", a title used previously in Doob's T_EX manual [7]) is dedicated to errors and recovery from errors. In the last Chapter (Chapter 12), the authors discuss advanced font installation for L^AT_EX, a subject which remains the weak point of T_EX etc. in our WYSIWYG OpenType era. Next, in five appendices, the authors present `dvips`, perhaps the most versatile DVI driver, together with visual editing (e.g., LyX), XML and Web publishing. The book closes with the solutions to all exercises.

Overall, one may say that *Digital Typography Using LATEX* is an introductory/intermediate and yet-thorough handbook for doing what its title says. It is not as rudimentary as some other basic guides, nor as exhaustive as the heavy companions. Despite some objections on how the book is arranged, it can be said that *Digital Typography Using LATEX* is a very good, if not excellent, everyday guide.

References

[1] A. Syropoulos, Antonis Tsolomitis and Nick Sofroniou, *Digital Typography Using LATEX*, Springer–Verlag, New York 2002, pp. xxx + 510 (includes CD-ROM). ISBN 0-387-95217-9.

[2] C. Beccari, "Book Review: *The LATEX Companion*, Second Edition." *TUGboat*, **24** (2), 2003, pp. 275–277.

[3] S. Peter, "T_EX and linguistics." *TUGboat*, **25** (1), 2004, pp. 58–62.

[4] D. Filippou, "Book presentation." *Eutypon*, No. 9, pp. 65–69. (In Greek.)

[5] J.-H. Cho and H. Okumura, "Typesetting CJK languages with Ω." In *T_EX, XML and Digital Typography* (edited by A. Syropoulos, K. Berry, Y Haralambous, S. Peter and J. Plaice), pp. 139–148. Springer–Verlag, Berlin–Heidelberg (2004).

[6] L. Lamport, *LATEX: A Document Preparation System*, 2nd edition. Addison–Wesley, Reading, MA, USA (1994).

[7] M. Doob, *T_EX: Starting from 1*. Springer–Verlag, Berlin–Heidelberg (1993).