

Book Review

L^AT_EX Line by Line, Tips and Techniques for Document Processing

Antoni Diller

291 pp., £19.95 ISBN 0-471-93471-2 John Wiley & Sons, 1993

Diller's *L^AT_EX Line by Line* is very much in the mould of the first book of L^AT_EX by Lamport, even to the computer manual style of binding and the use of Computer Modern Roman (both unnecessary). Both authors are computer scientists but, as he states in his preface, Diller does not like gnus. The scene was thus set for a practical, but precise, guide to L^AT_EX. A quick browse certainly sells the book as it is richly packed with examples. As someone who regularly typesets science and engineering papers, this was why I bought it. However, it was more for my secretary than for me. She, like other secretaries, had found Lamport difficult to use and they all liked Diller. They still use a folio of examples that I have worked on over the years, but to have more, with an index and glossary, was a real advantage.

The book starts with an brief introduction on 'Why L^AT_EX?'. Diller is obviously a convert, but a more convincing explanation than showing how programmable it is is demanded today. There is now only one reason for using such a dinosaur as L^AT_EX and that is for mathematical typesetting—it is still the best and most accessible tool for the job. Despite the bland word 'document' in the book subtitle, this book is really about academic document production.

After the introduction there is a tour showing how L^AT_EX is used and introducing key concepts such as LR mode and math mode. Then odd things start to happen: descriptions of how to change the margins and how to define your own commands. These are inappropriate digressions and it is a recurring problem. Then, after describing environments and floats, there is an interval where bibliography and index preparation is fully discussed. To finish the overview there is a chapter on creating a whole document with the standard document styles.

Thereon, mathematical formatting dominates the book with two chapters describing in progressive detail how to coax L^AT_EX to do the best math typesetting T_EX is capable of producing. For me, this was the meat in the sandwich. Diller's attention to detail extended to arguing convincingly for the reinstatement of some of plain T_EX commands, particularly `\qalign`. The penultimate chapter deals with drawing diagrams which is odd since earlier in the book he discusses the EPS inclusion extension. Today you would have to be desperate to draw diagrams in L^AT_EX so this seems inappropriate except for the 'small' pictures some math users might want to include in their settings. The final chapter is set in two-columns per page and skims over the behaviour of L^AT_EX in this style. As a math setter, it is again odd that Diller says nothing about how to cope with math on the narrow measures the style allows. The body of the book finishes at p167 and the remaining pages to p291 comprise Appendices, a very large glossary and index.

In use, the glossary turns out to be the entry into the book. There is information in the glossary which is not in the main text and it is not totally complete. If you do not get sufficient for your needs from the glossary then the index is used next. The index is

comprehensive and will direct you to targets anywhere in the book, even if they are in footnotes.

Diller's background is clearly mathematical and this belies a slight deficiency regarding math setting for the physical sciences or engineering. The most common errors I encounter are barely mentioned: the importance of ties, particularly when coupling figures and units, decimal point alignment in tables, the use of tabbing for program listings and the importance of using `\%` when you want a percent sign (omitting the slash is a proof readers' nightmare!). Granted, the information is there, but it is with insufficient stress. I would argue about the use of punctuation and LR mode in displayed math—but now I am getting as pedantic as Diller!

ADRIAN PICKERING
University of Southampton, UK
jap@ecs.soton.ac.uk