## **Book Reviews**

Book review: A TEX Primer for Scientists, by Sawyer and Krantz

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Stanley Sawyer and Steven Krantz, A TEX Primer for Scientists. CRC Press, Boca Raton, FL, 1993, ISBN 0-8493-7159-7.

In general, I like this book. It is written with the novice user in mind and the presentation is successful. As stated in the preface,

...1) It is an aid to the busy scientist, mathematician, or engineer who wants to learn to use the computer typesetting system TEX as quickly and easily as possible; 2) It is a reference for the more experienced TEX user.

The "how-to" approach works. Examples are presented in abundance. This makes the text useful as a copybook. Furthermore, the authors discuss likely typesetting errors and the correct TeX code to use for repairs. When I commit to learning TeX and leave LATeX this will be one of the books I use to effect the transition.

Krantz and Sawyer is organized into two major divisions: A First Course in TeX (Chapters 1-7) and A Second Course in T<sub>E</sub>X (Chapters 8–14). The first division focuses on introductory issues, particularly topics required for mathematical typesetting. I believe that a fledgling typesetter should be able to handle most of the tasks required for scientific typesetting after reading the first division. The authors begin their book with the obligatory introductory chapter, then present three chapters on typesetting mathematics. A discussion of text macros and T<sub>F</sub>X fonts follows in chapter 5. The authors use the final two chapters in the first division to flesh out details required for typesetting technical documents. Items such as type size and margins, headers and footers, references, etc., are discussed. Also included is discussion of the differences between typesetting and word processing: ligatures, hyphens, kerning, and spacing.

Although one might be tempted to consider the first division elementary typesetting, this is not the case. Krantz and Sawyer move beyond elementary typesetting issues and discuss typesetting of complicated formulae. They provide difficult examples and effectively demonstrate production of well-typeset mathematics for the reader. The plentiful examples

should provide templates a reader of this book can use right away.

The second division is an investigation of more detailed items. In these chapters are presented the niceties that have kept me using LATEX (but the book is about TEX). Instructions for setting up numbered lists, displays, graphics, and more fonts are presented. Also discussed are low-level programming considerations: variables, counts, boxes, and font magnification. Some additional topics of interest to routine users of TEX are the tabbing environment, table typesetting, and a discussion of typesetting tables of contents, indices, and so forth.

I have only two minor complaints: I found the discussion of hardware and software systems for TEX systems weak. I would have relegated this material to an appendix or deleted it. In addition, I found one minor error (not in the TEX part of the presentation): Krantz and Sawyer mistakenly state that the text editor QEdit is part of the MSDOS operating system. This is not true. QEdit is the product of SEMWare located in Marietta, Georgia (blatant plug). I use SEMWare's products and can heartily recommend them.

In summary, I recommend Krantz and Sawyer as a reference work for new TeX users. I am not an advanced TeX user, so I cannot address the utility of this work for advanced users; however, my subjective assessment is that Krantz and Sawyer and The TeXbook would be an excellent starting point for moving from novice to hacker.

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