Book reviews[1]

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LaTeX for Everyone,
Jane Hahn,
1st edition, Personal TeX Inc. 1991,
softbound, 346 pages

Writing a book is hard work. It can also be rewarding work – if the readers are satisfied with the book. In comparison, writing a review about a book is easy: in a few paragraphs you criticize what it tooks years to write. Nevertheless, the readers deserve an honest review, so I won't hide the fact that in my opinion the first book reviewed here is less than what it could have been. This book, *LaTeX for Everyone* by Jane Hahn, is published by Personal TeX, Inc. (PTI), and which will replace *LaTeX, a Document Preparation System* by Leslie Lamport in the PC-TeX packages that PTI sells.

Surely, Lamport's book leaves a lot to be desired as an introductory book. For this purpose, you need a book with a clear expository style, a sufficient number of examples and well designed exercises. On the surface, it looks as if *LaTeX for Everyone* could have been such a book, since it has a clear 'if you want this, do that' way of explaining, it has summaries at the end of all sectional units, and lots of exercises.[2] Unfortunately it falls short of being a good introduction: it shows structural flaws, it contains a substantial number of mistakes, and it explains several parts of LaTeX confusingly or not at all.

Structure

Chapter 2 introduces the basic commands of LaTeX, and it also tells you how to adjust line spacing, margins, paragraph indentation, and footnote spacing – I will come back to this in a minute.

Chapter 3 is an odd mixture of things: it explains about document styles, typefaces and typeface sizes, sectioning commands, symbolic references, hyphenation, lists, formulas, accents, and headers and footers.

Chapter 4 deals with mathematics, but the environments for displayed equations were treated in chapter 3. Chapter 5, *Rows and Columns*, discusses `tabbing`, `tabular`, `array` and `eqnarray`. There are two problems with this arrangement of material.

1. The information on mathematical formulas is spread over three chapters.
2. `array` is used in chapter 4 on pages 93 and 99, but is not explained until later on, on page 128.

Chapter 6, *Customization*, treats page and line breaks, centering, vertical and horizontal space, lengths and boxes. This is followed by a chapter on floating objects and one on preparing large documents. In my view, chapter 6 should have been put after chapters 7 and 8, and combined with parts from chapter 3 in a chapter on influencing the layout.

Chapter 7 contains a lot of useful information about floating tables and figures, but it could have been written more concisely I think. And, like other authors of books on LaTeX – see some of my earlier reviews – Ms. Hahn does not clarify what `table` and `figure` are, namely 'envelopes' for floating figures and tables.

Furthermore, the book contains seven appendices. Appendices A and B, on user-defined commands and counters respectively, contain lots of useful information with instructive examples. Appendix C, on style parameters, is also a nice appendix, but it lacks the page-layout and list-layout diagrams, which are by now familiar to most LaTeX users.

Appendix D treats the `picture` environment. Appendix E, *Errors*, is a particularly good appendix, with lots of examples. I missed one thing in this appendix: what happens when you forget the required argument of `\begin{thebibliography}`?

Appendix F gives examples in the form of question and answer, and is one of the best parts of the book!

Appendix G 'discusses' SLITeX in twelve (sic!) lines. The page on which it is printed can just as easily be torn out of the book, since all it tells the reader is that SLITeX is a program similar to LaTeX, designed for creating slides, and with commands different from those of LaTeX. If the reader wants to know more, he

[1] To be published in TUGboat 13.1, 57–59 (1992).
[2] I should add that the answers to the exercises are given in small print below the questions.

or she is advised to print and read `slides.tex` and `local.tex`.

Finally, the index is awkward to work with: all environments must be looked up under the main entry 'environment', and all commands under the main entry 'commands'. Strangely, the entry 'commands' is followed by 'captions', '`center`', 'comment', ...[3] My preference would be to list, e.g., '`picture`' environment between 'picture' and 'placement', as in the LaTeX User's Guide, or to have a separate command index.

My main criticism is that the structure of *LaTeX for Everyone* does not reflect the philosophy behind LaTeX – like most other books on LaTeX unfortunately. Chapters 2–4 of *LaTeX, a Document Preparation System* by LaTeX's creator Leslie Lamport mostly explain about those features of LaTeX that are related to logical structure of a document. Only in chapter 5 does he discuss those features that are more related to the visual structure of a document.

By contrast, Ms. Hahn continually mixes structure commands with layout commands.

An example: in almost every chapter Ms. Hahn introduces a command that accepts the `\\` command, and every time she explains what `\\[...]` does. If she had moved this to a separate appendix on layout changes, this would reflect the philosophy of LaTeX, and it would make the exposition much clearer.

Another one: in section 3.10.1 she gives this example

```
\begin{itemize}
\item [$\heartsuit$] potatoes
\item [$\heartsuit$] celery
\item [$\heartsuit$] frying chicken
\item [$\heartsuit$] milk
\end{itemize}
```

immediately after she has introduced the `itemize` environment. First of all, this can be done much simpler with a `\renewcommand` of `\labelitemi`. Secondly, this sort of example really belongs in a separate chapter on layout changes.

Errors

This review column does not provide the space required for an extensive summary of all errors in *LaTeX for Everyone*. Instead, I will mention a few interesting ones.

1. The author confuses the document style `book` with the abstract class of documents that can be called 'book'. Furthermore, to confuse the reader she introduces a new term, 'style guide', as a synonym for 'document style'. She also confuses LaTeX with its standard document styles (p. 69–70)
2. On page 42 she calls TeX's 'usual' typeface, Computer Modern, Times Roman.
3. On page 88: 'A super- or subscript that is an English word should be set in roman type'. Is this not the case for mathematical texts in French or Dutch?
4. An explanation of `*{n}{cols}` is missing in all places where `tabular` is treated (pages 127 and 288).
5. 'You should get into the habit of typing names as follows: `... J.~S.~Bach`' (page 142). Not true, since it depends on the particular typographical convention one uses: in common usage the space between 'J.' and 'S.' is omitted.
6. A table in section 6.6 suggests that LaTeX does not understand the following units of length: `dd`, `cc`, `bp` and `sp`, which the basic TeX program, and therefore LaTeX, an extension, understands.
7. In section 6.7, the author uses `\makebox` to get an alignment!
8. On page 164, Ms. Hahn writes that
   ```
   \oddsidemargin=0in
   \textwidth=6.5in
   ```
   results in a right margin of 1 inch. This happens sometimes, but only if you use American letter size paper!
9. The 'default order of preference' for figure placement is `[bthp]`', according to the author, which is wrong, since this default is given by the document style, for example `[tbp]` in `article`.
10. On pages 194–197 Ms. Hahn suggests producing an index by sorting the entries in the `.idx` file in your editor, manually changing the `\indexentry` commands into `\item` and so forth, and then combining multiple entries into one. I find this appalling advice, with index programs such as MakeIndex available.
11. Similarly, in section 8.5 there is no mention of BibTeX.
12. The command `\setlength` is discussed in the main text, whereas `\newcommand`, `\renewcommand` and `\newenvironment` are treated in the appendices. In my view, the latter are more important, because they make typing easier or can clarify the structure of a document. A separate appendix on layout changes would be an appropriate place to discuss `\setlength`.
13. A discussion of `\newtheorem` is completely missing.

Besides this, Ms. Hahn sometimes suggests bad typography. For example a tall formula, an integral in display style, in text. Shouldn't authors of books on TeX keep traditional typographical rules of thumb in mind?

Conclusion

On the whole, *LaTeX for Everyone* is an unsatisfactory book. It has the potential of becoming a good book, in a revised edition, if the structural flaws are solved and all the errors are removed.

[3] Probably because the index was generated as explained on pages 194–197 of the book – see further on.

The author considers math LaTeX's strongest feature, a position I disagree with strongly: its main merit is document structuring. Math is a TeX feature, and LaTeX does not *add* new math capabilities: it presents them in a structured and sometimes more user-friendly way. If Ms. Hahn had recognized the key role of document structuring in LaTeX, she would probably have written a different book.

A final remark: the publisher chose to have the book produced from 2000 dpi camera-ready copy, which is the high quality output a book on TeX, made by TeX deserves. Unfortunately, the typeface Computer Modern was used, and the layout is the standard `book` style. That TeX can produce 'masterpieces of the publishing art',[4] using other fine typefaces and a layout created by a professional designer, is shown too rarely – an exception is Victor Eijkhout's recent book *TeX by Topic*.

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Practical SGML, **Eric van Herwijnen, 1st edition, Kluwer Academic Publishers 1990, softbound, 307 pages**

'A review of a book on SGML in the columns of *TUGboat*?' some of you may wonder. What does SGML have to do with TeX? Well, nothing, but since the term SGML has surfaced often in *TUGboat* and on the TUG conferences the past years[5], I thought a review of an SGML book could be worthwhile.

Practical SGML is one of the best books on SGML currently available. To be absolutely honest, there are not many books on SGML – yet – but this book is the only one so far with 'many helpful hints and ideas on developing SGML, applications and discussions of the current software written to be conforming to the ISO standard', as is written in the foreword of the book. This is indeed a book about practical SGML!

The book is divided into three parts. Part I, *Getting started with SGML*, is an introduction to SGML. It explains what a document type definition or 'dtd' is, what the role of the dtd in the processing of the document is, and what steps are necessary to create and process an SGML document.

Part II is intended for document managers or programmers, and explains SGML in more depth. Some of the topics discussed in this part are: formal aspects of the language SGML, distinguishing data characters from markup, and the reference concrete syntax.

Part III is about SGML implementations and should be read by everyone who has to install and maintain an SGML software system. Mr. Van Herwijnen discusses what components are usually found in such a system, how to create SGML documents, how to convert SGML documents into documents that can be processed, for instance to get output on paper, or in order to store information in a database. He also gives some examples of SGML parsers.

The book also contains five appendices. Appendix A contains the answers to the exercises in the book. In appendix B Mr. Van Herwijnen tells how he wrote *Practical SGML* using SGML, and in appendix C he even gives the complete document type definition for his book.

Appendix D is a short appendix, in which the author gives common SGML definitions for use with TeX. Finally, appendix E contains useful advice on how to read the ISO standard (8879) in which SGML is defined.

At the end of the book we find a glossary and an index, and throughout the book the author gives lots of valuable references to existing literature on SGML and related topics.

Mr. Van Herwijnen, is leader of the text processing section at CERN, the European Laboratory for Particle Physics in Geneva, Switzerland. SGML is one of the important tools in the text processing section at CERN, which probably explains the high quality of *Practical SGML*: it was written by someone who has extensively used SGML in practice. Since no prior knowledge of text processing or publishing is required to understand what is written in *Practical SGML*, I can highly recommend it to anyone who is interested in this subject.

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TeX by Topic, A TeXnician's Reference, **Victor Eijkhout, 1st edition, Addison-Wesley Publishing Company, 1992 softbound, 307 pages**

Victor Eijkhout has definitely done the TeX community a service by presenting us with his book, 'TeX by Topic', published by Addison-Wesley. I recommend it highly to everyone who has had some acquaintance

[4] The last line of the last chapter of *The TeXbook*.
[5] See for example the proceedings of the 1991 TUG conference.

with TEX and who would like to 1) understand the basic mechanisms underlying TEX processing and 2) wants a concise TEX reference source.

The key to this book's success is the considerable effort and thought that went into the overall conception and in the care taken in transforming that concept into a systematic and thorough development of each topic presented.

It is a daunting task to write about TEX, since to describe any topic thoroughly inevitably includes defining its component parts, which can launch the author into another topic to the confusion of the readers. It is a task that must be approached with care.

This organizational problem can be seen even in the TEXbook, though one hesitates to complain. We TEXies have all spent hours poring over the TEXbook, enjoying its lovely writing, its complex concepts, and its illuminating examples. One cannot help admiring it and its author, of course. Still, it must be admitted, when a macro writer is struggling to find some particular bit of information, a quick definition, a nudge in the right direction, he or she can find the TEXbook index thoroughly unhelpful and the bit of information wanted scattered over many different pages in many different chapters.

'TEX by Topic,' on the other hand, excels in organization, making it a most helpful adjunct to the TEXbook. The basic plan is to break the whole subject of TEX commands and processing into about 40 topics, each discussed in its own chapter. Each chapter begins with a list of control sequences relevant to that chapter, followed by a brief explanation of the theory behind that topic, then brief remarks and examples. The chapters in the book are organized into three parts: chapters on basic mechanism; text treatment and math; and finally, output and aspects of TEX's connection to the outside world.

The book is meant as a reference source, not a tutorial. It assumes that the reader has a general grasp of TEX vocabulary and syntax. It is brief and concise and information dense.

It includes detailed explanations of the mechanisms underlying TEX's workings and TEX programming techniques. In the last part of the book is found a description of the differences between TEX Version 2 and Version 3, a 13 page glossary of TEX primitives, a bibliographical list of references, character tables, math symbols, a list of examples. The book ends with a 3 page Index by command and a 2 page Index by topic, each with sending readers to *one* particular page for information on each entry.

Evaluation:
I have found the book useful several time already, and I have been using TEX for the last nine years. Even if you have been using TEX for a number of years you may not have had occassion to use a particular command and using 'TEX by Topic' may save you valuable hours by quickly defining or demonstrating the bit of information you need. In the event that you must also consult the TEXbook, having two explanations rather than one for a given topic can be helpful.

I think my complaints about the book relate to its brevity which is also one of its virtues. 'T. by T.' tends to be more theoretical than practical, and it is somewhat sparse with examples. There are many times when it might well be helpful to readers to explain 'why' a particular construct should be used, as well as mentioning that it exists.

For instance, the strut is mentioned on p. 213. First, it is explained somewhat inaccurately by saying it is defined statically in Plain TEX as a `\vruleheight 8.5pt depth3.5pt width 0pt`.

Actually the definition of the `\strut` command only asks to copy the strut box. The strut box has been separately set to include a rule of those dimensions. When making up font families one need not change the definition of `\strut` but only the contents of the `\strutbox`. The `\strut` command itself is not static. The quick explanation given 'TEX by Topic' is understandable as an effort in extreme brevity but could be slightly misleading if taken literally. Secondly, the strut is mentioned only as being used in tables. How else can or is it used? Perhaps this question is considered to be too basic, but the strut is found in many other macros and its use could be explained further.

A similar example is found in the brief mention of `\everycr`. 'T. by T.' mentions that it is included after every nonredundant `\cr`, and defines it in the list of primitives. But how might the TEXnician make use of it?

Or, in the explanation of '`\let`' and '`\futurelet`' which are at least as clear as those found in the TEXbook, perhaps it would be helpful to let users know why it is advantageous to use those constructions instead of the roughly analogous '`\def`' and '`\expandafter`.' But perhaps that is a different book, a book on macro writing.

In the end, all this is mere quibbling. There is a wealth of well organized material included in this books' 300 pages. I am delighted to have 'TEX by Topic' at my elbow as I work, and if you are a serious TEX user, you will be too.

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Spivak's Œvre

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Abstract

Spivak's The Joy of TEX and LAMS-TEX— The Synthesis, are discussed.

1 Introduction

To my knowledge Spivak's work comprises the books The Joy of TEX, LAMS-TEX—The Synthesis, and his Wizard's manual. Next to DEK's books these are the best documented books/manuals of $\langle X\rangle$TEX implementations, I have seen. As should be the case with books which have passed some barriers the *quality* of the material is not the issue,[1] but more the relevancy, the intelligibility and the functionality compared to plain. Some numbers: plain is in the TEXbook 483p. and manmac comprises 12p, 'The Joy of TEX' another 290p. (no macro listings), LAMS-TEX, again 290p. (no macro listings either).

1.1 Dependencies

AMS-TEX has been commanded by the American Mathematical Society (AMS). It is not a proper extension to plain. DEK supervised the project. It is another TEX variant, like LATEX is. LAMS-TEX builds upon AMS-TEX and provides LATEX functionalities except for the picture environment, Spivak claims that it is less verbose than LATEX. The file `amstex1.tex` is needed to run LAMS-TEX. LAMS-TEX's table modules seem to be independent of AMS-TEX; I don't know whether the commutative diagram macros are. All the programs are in the public domain.

2 AMS-TEX—The Joy of TEX

The book consists of 3 parts: Starters ($\approx$ 50p), Main courses ($\approx$ 70p), and Sauces & Pickles ($\approx$ 75p), complemented with 10 appendices ($\approx$ 75p).

It is meant as an independent extension to TEX, and to the TEXbook. A consequence is that no references to the TEXbook are made, which I pity. The design is at least 10 years old. Moreover, the introduction says that 'You can remain blissfully ignorant of the complicated rules that typesetters have developed for the proper setting of mathematics formulas—TEX knows them all.' Well, that is not true. An author or typist can*not* remain blissfully ignorant, as is among others proved by the example on the next pages: explicit kernings and context dependent parentheses are used. Knowledge of typesetting in general and typesetting of mathematics in particular, remains necessary. A reference to Swanson (1986) should have been made. Moreover, I don't consider the approach realistic: AMS-TEX users should at least be TEX users. The abstraction from formatting into procedural mark up—although to be recommended in general—goes so far that the basic concepts of TEX: boxes, glue and penalties, are not explained. It is even stated at p123 '`\h(v)box` isn't a control sequence that you are ever supposed to use—it is a control sequence that TEX uses internally in all sorts of important ways.' I don't agree with the one-sidedness of the made choices, especially because it is overlooked that typists also need to get the TEXscript correct, that is, it has to pass the parser, and proofs have to come out, that is with use of the right fonts. There is no doubt about it that the error messages, and unawareness of the font selection schemes will cause trouble. Now and then the book says: 'AMS-TEX tries . . . ,' while it should have been 'TEX tries . . . '.

2.1 First part: Starters

Basic AMS-TEX processing, and the use of `\amsppt` style (the preprint style), constitute part 1. A nice getting started section. Some quibbles, however. Especially in relation to LAMS-TEX, the use of double quotes for quotations makes me realize that people change minds, and Spivak in particular.[2] What I missed with respect to spacing is the good habit to terminate a number by a space or `\relax`. Furthermore it is a white lie (p5) that curly braces can't be replaced by control sequences. Indeed not *all* occurrences can. I presume that `\bgroup` must be kept hidden for the user as well? In the subsections about spacing I missed the example `\TeX` itself. Spaces, trailing and the spurious ones, remain puzzling. That replacement texts *don't*

[1] And indeed let there be no doubt about it: the quality is very good!

[2] The more so when in the LAMS-TEX manual double quotes are used for a quotation, p187.

neglect spaces is well demonstrated among others by the exercises 19.3, .26, and .27.

2.2 Second part: Main Courses

This section constitutes what it is all about: to simplify the inputting of math.

Nowhere it is proofed or made acceptable in some way that the provided macros are better or easier to use. The macros are mainly different from plain's. In general terms the section is well-done. In exercise 8.10, I don't like the use of the multiplication dot.[3] When it is mentioned that no `\par`-s are allowed in display math mode, a note about blank lines would have been appropriate too.[4] In section 10 it is stated that the instructions ^, and _ apply only to the next single character. A white lie: it applies to the next token or group, in plain at least.

I don't like to be carried away by TEX's power. To become a bit loose about the good habit to choose as simple representations as possible, because of TEX's power is counter productive with respect to getting across what an author is up to. This holds for division representations, complicated exponents without use of `\exp` (there is also the spacing pitfall in the exponents), and complicated 'limits' to summation and integration symbols. Swanson advises to define names for complicated constructs and to use these names.

I don't like the heavy braces on among others the pages 103, 104, 106, 110, 111, 116.

Much functionality of TEX has been renamed on the one hand while on the other hand some functionality has been altered under the same name. This makes an $\mathcal{AMS}$-TEX script incompatible with plain.[5] Some names? For plain's infix command `\over`, there is the prefix command `\frac`. `\align`, `\aligned`, `\alignat`, `\split`, `\multiline`, and `\gather` with their `\end...` endings, add to plain's `\eqalign`, `\eqalignno`, and `\displaylines`. Moreover, there is `\tag` superseding `\eqno`. Different names, different syntaxis but no increased functionality. All the given formulas could have been typeset by TEX with roughly the same level of *discrepancy* between the *math copy and the TEXscript*. Then we have instead of `\matrix`, and `\pmatrix`, the substitutes `\bmatrix`, `\vmatrix`, `\pmatrix`, `\Vmatrix`, and `\smallmatrix`, while the powerful and practical `\bordermatrix` disappeared from the stage, I mean is not mentioned at all. At the definition front there is `\define`, `\redefine`, and `\predefine` as substitutes for `\def` and `\let`. (No replacement of the TEXnical `\futurelet`, of course.) `\edef` etc. disappeared as such. In `\accentedsymbol` it is used from the application viewpoint. This holds for some other TEX macros (or control sequences) too: `\overfullrule=0pt`, `\cr`, `\openup`, `\noalign`, `\phantom`, `\atop` and the like, `\vbox{\hsize=...}`, `\cal`, `\dots`, `\oldstyle`, `\hoffset`, `\voffset`, `\vadjust`, and the abbreviation period.

Next some examples of the same names but different functionality. `\item` has been redefined within the `\roster` environment. I personally love plain's `\item`; happily Appendix C reassures me that it can still be used as such. In that Appendix the different use of `\footnote`, `\proclaim` and the different attitude with respect to font changes are explained as well.

2.3 Third part: Sauces and Pickles

It starts with shorthand definitions, mainly to support typing efficiency. The example on p127, is very suited within the context, but horrible from a publishing math viewpoint, and inefficient with respect to the paper used. A waste of paper, not compensated by anything![6] The final part is an alphabetic enumeration of 'everything else.' Rich in nature, but a bit out of balance with respect to the earlier attitude. The `\struts` are hidden here, although they are very useful and common in practice.

2.4 Appendices

The collection of exercises is rich. The input format of bibliographies still does not pay enough attention to abstraction of interpunction and to abstraction of the order in which the information must be supplied. Appendix C explains in detail how to use plain ànd $\mathcal{AMS}$-TEX, that is, plain commands as well as $\mathcal{AMS}$-TEX's. I guess that Appendix F about Future fonts is outdated and reality by now.

2.5 Conclusion

A wealth of material from a user point of view is provided, ready to use. I personally pity the confusion which it will bring, because no more functionality has been provided, nor is the task of typists relieved. Many more names along with modified syntaxes have been introduced. As a self-publishing author I will stay with plain and use published and reviewed macros as extensions. Not the complete superseding collections. However, I will not refrain from using $\mathcal{AMS}$-TEX, nor will I refrain from using LATEX, if the publication at hand can be handled more effectively by those tools.

[3] Of course it is unnatural to tell a typist to type `\,`, but a `\mulspace` could have been defined with that functionality.

[4] The more so because people are used to insert blank lines and outside math mode extra blank lines are simply ignored. So, a double warning is in place.

[5] Agreed, the reader is warned for those occurrences in Appendic C.

[6] We should conform to reality: editors love to squeeze unnecessary space.

3 LAMS-TEX

This book also consists of 3 parts: Basic document preparation (≈120p.), Fancy mathematics (≈53p.), and Tables (≈84p.). The contents is somewhat unbalanced. The basics what *everybody* should know and adhere to, then the very specialized and advanced commutative diagrams for homologists or their colleagues, and finally the in depth treatment of formatting tables. The beginner, the math specialist, and the advanced table formatter. A broad audience.

3.1 Part 1: Basic Document Preparation

Perhaps inspired by the success of LATEX, LAMS-TEX starts with a section about basic document preparation. A very strong point in my opinion is the general mechanism for automatic numbering and symbolic referencing. Very strong, and I hope this can be used as a separate package. It competes with AMS-LATEX and LATEX. Apparently, the users and macro writers agree upon the need for these kinds of things. So it is relevant!

But, . . . , I missed the style options. What about 2(and more)-columns[7]? What about other sizes of the paper, a4.sty, for example? What about language flexibility? From section 6 we get that the names, such as Chapter or the similar name in another language is left to the style files. So LAMS-TEX is not enough! A bit out of the blue are the *plain* macros on p.73. A novelty, well a revival, is that footnotes start with number 1 on each page.

3.2 Part 2: Commutative Diagrams

The examples look quite complex. The language and notation look sensible. But I'm not a homologist. And leave this for whatever it is worth, keeping in mind, if ever I would need to typeset CD's, I will certainly return to this section.

3.3 Part 3: Tables

The tables part consists of modules, which can be run separately from the main part of LAMS-TEX.

3.3.1 Processing

Tables have to be TEXed separately from the main document. In the main document (floating) space has to be specified and processed. The merging can be done at the dvi-level.

The merging of the tables into the main document goes in two steps. First—in the main run—enough space is reserved to paste the table in the appropriate place. This can be done in the 'floating way.' Next at the dvi-level the tables are pasted in. Advanced, and very powerful. Hi-TEX!

With respect to the notation it is remarkable that curly braces are never used to enclose table dimensions. Is that really easier, once one has adopted the curly braces mania? I doubt it, just confusing. I was some years ago confused by LATEX's inconsistency at this point, especially with respect to the deviating conventions adopted within the picture environment, not to mention the separators of the `\item` parameter.

The section is well done, and it contains a wealth of material. It is not a surprise that a new syntax is used throughout. The table on p.201, is realistic, with a header part and 'halflines.' I pity that the 'h' is not vertically centered. A little further a table with Side SpecificationS is given, similar to the bordered matrix idea.[8]

Around p.232 row spans—called crossing rows—are introduced. The table has 3 logical columns, but the markup needs 5 columns. I mean the user deals with a 3 column table while in the mark up *he* has to think in terms of a 5 column table. Still a discrepancy between the logical mark up, and the formatting. P.234 formats complicated headers. But again, how many columns are formatted? According to the formatting 6, but logically 3, in my opinion. This remains confusing. The 3∗3-table on p.235, with a 2∗2-subtable/block in the left upper corner, is a nice challenge for table programs which claim to be able to format row spans and column spans, simultaneously. The table is symmetrical along the main diagonal, but the formatting is not symmetrical at all. It takes 9 rows and 3 columns!

At the end notes and footnotes to tables are treated. Moreover, the rules can vary in length and thickness. Very powerful!

What I missed is typesetting of simple tables with hardly no mark up information provided by the user. No need for a preamble, and no need for `&`-s and `\cr`-s; just spaces and carriage returns as separators. Similar to Cowan (1985).

3.4 Conclusion

LAMS-TEX is certainly up-to-date with some very powerful features. It combines basic mechanisms like general automatic numbering and symbolic referencing with advanced and esoteric commutative diagrams. A bit out of balance. The table macros are very powerful, but not simple to use. I missed the class of simple tables, and the tables which extend the page.[9] Both do occur in scientific publishing.

4 Some afterthoughts

How come that at the time of the birth of the lxiii project, 1989, LAMS-TEX appeared, and that there is no cooperation? The weaknesses of LATEX, which LAMS-TEX has tried to overcome—which are also the targets of lxiii—will be reprogrammed from scratch. It sounds

[7] Agreed, math papers generally don't take 2 or more columns.
[8] The SGML community talks about row stubs.
[9] Mentioning portait and landscape as variants to be handled at the driver level would have been nice.

like a gigantic waste of energy. And this is not the only effort in that direction. Cooperation remains apparently difficult. Perhaps we should be more modest in the spirit of Rogers[10]

> 'It's also unfortunate that Dr Spivak, as well as many others, choose to embed macros of this nature in large packages such as LAMS-TEX, AMS-TEX, LATEX, etc. I would rather see them made available as self-contained modules that can be easily incorporated into macro packages designed to accomplish specific purposes.'

I completely agree with that attitude.

References

[1] Cowan, R.F. (1985): Tables.tex (from the file server).

[2] Spivak, M.D. (1986): The Joy of TEX, AMS, ISBN 0-8218-2999-8 (second printing).

[3] Spivak, M, D. (1989): LAMS-TEX The Synthesis, TEXplorators. 3701 W. Alabama, Suite 450–273, Houston, TX 77027.

[4] Swanson, E. (1986): Mathematics into type, AMS, ISBN 0-8218-0053-1. (reprinted).

[10] Quoted from On Contrarian Views, TEXline 14.

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Volume 12.3, 12.4 and 13.1

December 1991 / April 1992

TUGboat tables of contents files are on `math.utah.edu` in `~ftp/pub/tex/pub/tugboat`, also accessible via `tuglib@math.utah.edu` server by 'send index from tex/pub/tugboat'.

1 TUGboat 12.3 (December 1991)[1]

2 TUGboat 12.4 (December 1991)[2]

[1] 1991 TUG Conference Proceedings — Part 1.
[2] 1991 TUG Conference Proceedings — Part 2.

3 TUGboat 13.1 (April 1992)

Tijdschriften zusterverenigingen

Het secretariaat ontvangt van de zusterverenigingen onder meer de volgende tijdschriften:

1. Cahiers GUTenberg (TEX Usersgroup Frankrijk)
2. Die TEXnische Komödie (TEX Usersgroup Duitsland)
3. TEX bulletin (TEX Usersgroup Tsjecho Slowakije)
4. SGML-Bulletin Holland (SGML Usersgroup Holland)

Deze tijdschriften zijn in te zien bij de tweejaarlijkse NTG bijeenkomsten. Geïnteresseerd in bepaalde artikelen of bepaalde tijdschriften? Neem dan even contact op met het secretariaat (bij voorkeur tijdens de bijeenkomsten).

Cahiers GUTenberg #9 (Jul 1991)

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- **Ph. Louarn**
  Lucida: une fonte complète pour LATEX et son installation, p. 32–40
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Die TEXnische Komödie #3.3 (Okt 1991)

EuroTEX 92 announcement

Jiri Vesely

jvesely@cspguk11

14–18 september 1992

Dear TEXfriends,

EuroTEX 92 is organized by CSTUG in collaboration with Charles University and Czech Technical University under the auspices of both Rectors. It takes place in Prague on:

14 September 1992 — 18 September 1992

(Please, make a note in your diary.) As standard accommodation we offer a relatively modern student hostel Kajetanka. We plan to organize for every morning the transfer by bus to Czech Technical University where the programme will be held (it is within some 25 minutes walk from Kajetanka). Lunch and dinner will be served at the conference site.

We intend to arrange an opening party on Monday evening, a concert in a historical hall typical of Prague on 16 September 1992, and some other events. To those who are coming during Monday morning we would like to offer a sightseeing tour on Monday afternoon. To keep things within everybody's budget, we offer the main programme as a package: whole programme from Monday to Friday morning (accommodation in double rooms, full pension from Tuesday to Thursday, opening party on Monday evening, concert, breakfast on Friday, conference fee and proceedings) for about 300 DM. Those who would prefer a single room should pay extra 60 DM. (Payment details, account numbers, etc., will be sent to you later.) For accompanying persons, a special programme will be organized including visits to galleries, places of interest, etc. For *additional* 50 DM a day, a limited number of participants may stay on till Sunday (one or two days more) either for tutorials or just to enjoy meeting friends and good beer in some of the pubs Good Soldier Svejk would visit.

Currency exchange rates: 1 DM is about 18 CSK (Czechoslovak krown), USD 1 is about 28 CSK
You can exchange within Czechoslovakia without any problem/obligation, no visa is required for most countries (all of Europe and Nothern America)

Why come to EuroTEX 92 ? Except for invited talks of leading specialists you will have a chance to listen lectures on different TEX applications and meet TEX friends from many countries. The meeting is the first offering really extensive contacts with people from former East European countries ("from behind the iron curtain" – can you still remember that?). It takes place in the Golden Heart of Europe – Prague, one of the nicest capitals in Europe. You can visit it for a surprisingly low price: since we would like to make EuroTEX 92 in Prague accessible to the majority of TEXfans from all over Europe, we arrange it on a modest but good level.

We would like to encourage people to submit papers for EuroTEX 92. Suggested topics of special interest include the following themes:

- Quo vadis, TEX?
- National versions and standardization
- Non-standard applications
- The use of TEX for small/newly emerging enterprises

The above list is by no means complete, and interesting contributions relevant to TEX are sought.

Important dates for submitting paper proposals:

- 1 May 1992: two-page (max.) abstract to be sent to the address of the Programme Committee chairman:

  Jiri Zlatuska
  Masaryk University
  Buresova 20
  601 77 Brno
  Czechoslovakia
  e-mail: zlatuska@cspuni12.bitnet
- 1 June 1992: acceptance/rejection announcement to the author
- 10 July camera-ready papers due to arrive to the Programme Committee chairman

EuroTEX 92 Programme Committee:

Peter Abbott	Jacques Andre
Jana Chlebikova	Bernard Gaulle
Karel Horak	Joachim Lammarsche
Erich Neuwirth	Petr Novak
Stefan Porubsky	Phillip Taylor
Jiri Vesely	Jiri Zlatuska

Those who are interested in taking part are kindly asked to fill in the following form and send it via e-mail to the address:

eurotex at cspguk11.bitnet

I intend to take part in EuroTeX 92, Prague (14.-18.9.1992)

name:
userid:
node:

Please send a more detailed information on EuroTeX to the following e-mail address (please, fill in):

(or: print the following form, fill in using block letters, and send to the address:

CS TeX --- EUROTEX 92
Mathematical Institute
Sokolovska 83
186 00 PRAHA 8 - Karlin
Czechoslovakia

```
*************************************************
*                                               *
*  Name: ....................................   *
*  Institution: .............................   *
*  Position: ................................   *
*  Address (business or home - circle one):     *
*  ..........................................   *
*  ..........................................   *
*  ..........................................   *
*  ..........................................   *
*                                               *
*    I intend to visit EuroTeX 92 in Prague     *
*       (September 14. -- 18.(20.),1992)        *
*                                               *
*  ..........................................   *
*                 (Signature)                   *
*                                               *
*************************************************
```

On behalf of organizers:

Karel Horak Jiri Vesely Jiri Zlatuska

NTG's Advanced TEX course
Insights & Hindsights

David Salomon

Groningen, 15–19th June, 1992

This advanced course, with no hands-on, is aimed at those TEX and/or LATEX users who are ready for a deeper insight into the TEXnigma. An extra one-day introductory course can be organized for inexperienced users, if there is enough demand.

Course outline

- **Day 1:**
  Introduction to TEX. The cm fonts. Tables (examples). Math typesetting (some advanced features). Modes of TEX.
- **Day 2:**
  Boxes & glue. Paragraphs & Horizontal mode.
- **Day 3:**
  Macros (advanced features & examples). Leaders. Tokens & \toks registers.
- **Day 4:**
  File I/O in TEX. Examples of two-pass jobs. Output routines.
- **Day 5:**
  Insertions. The line break algorithm (in detail). The page break algorithm (in general).
  The last afternoon will be spent answering specific questions, and discussing specific topics proposed by the participants.

Each day is a separate module, so it is possible to benefit from selected parts of the course.[1]

Whom? When? Where? How much?

- **For whom?**
  TEX or LATEX users with some hands-on experience will benefit most.
- **When?**
  June, 15–19th, 1992, 9.00–12.00 & 14.00–17.00hr.
- **Where?**
  RUG Paddepoel, Groningen, The Netherlands, Zernike Gebouw, room ZG114 and ZG107.[2]
- **How much?**
  For NTG members and members of similar user groups a flat Fl 100,– (Yes, only a hundred, but no lunches and refreshments are included; the University 'Mensa' is quite cheap and restaurants close by). For non-NTG members Fl 500,–.[3]

The teacher is David Salomon, an experienced TUG instructor, well known for his lucid tutorials in TUGboat.

How to subscribe?

Via snail

Send a note, mentioning 'Insights in TEX'-course along with name, complete address, phone number and email, to:

Kees van der Laan,
Hunzeweg 57,
9893 PB, Garnwerd,
The Netherlands
(+31 5941–1525)

Mentioning of topics to be treated in the last afternoon is very much appreciated.

Via email

Send a subscription note, mentioning 'Insights in TEX'-course along with name, complete address, phone number (and email), to:

cgl@rug.nl.

Payment

As soon as possible to:

Penningmeester NTG,
Giro: 1306238
mentioning 'Insights in TEX' course.

[1] At the same flat fee for members, however. For others—why not become a member?—Fl 100,– for each day, with at minimum Fl 250,–.

[2] For lodging contact VVV, Naberpassage 3, 9712 JV, Groningen, The Netherlands. Phone: +31 50 139700, Fax: +31 50 136358.

[3] For those who don't believe in a quality course at that fee — courseware included —, it should be mentioned that NTG subsidizes the project, so it is a unique opportunity. NTG's philosophy is that TEX education is paramount for people interested in high-quality typesetted documents.

Some Good Reasons

for subscribing to

Insights & Hindsights

You are a LATEX user, and

- attracted by the magic
- like to work more effectively
- like to learn more about TEX
- need to write (small) macros
- like to learn from your friends

You are a LATEX macro writer, and

- like to understand the basics
- like to write some real jewels
- like to write in TEX

You are a TEX user, and

- like more of it
- like to drop your questions
- like to publish in TUGboat

You are a (TEX) hacker:

- watch the teacher
- improve the notes
- be the next teacher

You are a novice?

Come along and meet the people

Groningen is a nice place, anyway

TEXies are good company, join them

And everybody likes to get the most out of it!

Moreover, it is a unique opportunity.
NTG won't organize such a course in the near future.
David's notes will appear in the MAPS; a continuing story.