

3 New magazine on type and typography

Don Hosek, an occasional contributor to this publication, has announced his own entry into the field of typographic periodicals.

Serif, a new quarterly publication on type and typography, will begin publication in the fourth quarter of 1994, and then continue regularly every third month beginning March 1995.

Authors are invited to write articles on all aspects of type and typography; submissions will be paid for at market rates, depending on length and content. Interested parties should request an author's guide by writing to the address below, and including their *postal* address.

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Inquiries are also invited from potential advertisers and subscribers.

4 Hyphenation and exceptions

The list of (U.S. English) hyphenation exceptions hasn't appeared for over a year, so it's time to start polishing it up again for publication in the fall. If you have encountered any words that \TeX doesn't hyphenate properly, check the last edition and send in anything new; see *TUGboat* 13, no. 4, p. 452, or retrieve it from a CTAN site, where it is filed as

.../digests/tugboat/tb0hyf.tex

Please remember that the authority for the U.S. patterns is *Webster's Third New International Dictionary*; you may not always agree with it (I don't), but it's the resource that has been adopted.

I'm also trying to collect information on who is maintaining similar lists for other sets of hyphenation patterns, for publication either in *TUGboat* or in a future resource directory. If you are maintaining such a collection, or know who is doing so, please send me the following information:

- the name and address (e-mail preferred) of the person maintaining the collection;
- the language for which the patterns are used;
- the creator of the patterns and the name of the patterns file.

I will forward this information to the Technical Working Groups concerned with language matters.

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The \TeX Hierarchy

Donald Arseneau, Raymond Chen and
 Victor Eijkhout

Introduction

For the UNIX operating system, a list of characterizations exists describing what constitutes a novice, a user, a guru, ... Here we give a similar list for users of \TeX . The reader is kindly asked to take this purely in a humorous vein.

The name

Novice says 'tecks'.

User says 'tecchh' but still moistens the screen doing it.

Programmer correctly pronounces ' \TeX '.

Wizard has made at least one bad pun on the name \TeX .

Guru knows that even Knuth says 'tek'.

The manual

Novice owns *The \TeX book*.

Programmer has just made a first correction to the text.

Hacker has formatted `texbook.tex` and knows about Knuth's 'little joke'.

Wizard is thinking of ways to supply the missing 'tactile and olfactory sensations' of \TeX .

Guru thinks ' \TeX : the program' is more useful.

The index of *The \TeX book*

Novice is confused by the number of references for each entry, has laughed at ' \TeX : bad puns on the name', and has counted the number of middle names of Barbara Beeton.

User knows about Bo Derek (in *The \TeX book*), Jill Knuth (in *The METAFONTbook*), and Ellen Gilkerson (in the \LaTeX manual).

Wizard knows why some entries are italicized or underlined.

Guru knows to look up Bourbaki for smart line breaks in paragraphs.

The system

Novice has found many bugs in \TeX .

User has learned that there are no bugs in \TeX , but doesn't understand why 'it doesn't work!'.

Guru has actually found bugs in \TeX ; frames the check from DEK.

Guru extraordinaire cashes checks from DEK.

Famous people

Novice is not sure whether Leslie Lamport is a man or a woman.

User knows not to capitalize ‘barbara beeton’.

Wizard knows how to pronounce ‘Knuth’ and ‘Eijkhout’.

Guru Knuth has asked about their middle name(s).

Programming style

Novice uses grouping without knowing why.

User writes `\bf{ ... }` and doesn’t understand what went wrong.

Programmer writes `\def\bold#1{{\bf #1}}`.

Programmer first class writes `\long\def\bold#1{{\bf #1}}`.

Hacker writes `\def\beginbold{\bgroup\bf}`
`\def\endbold{\egroup}`

Wizard writes `\def\bold{\bgroup\bf\let\next=}`.

Guru writes `\def\bold#1{\bgroup\bf\let\next=}`.

Style (cont’d)

Novice has heard of ties.

User inserts ties and writes ‘dr.\ ’.

Hacker writes ‘dr.\ ’, except in bibliographies where frenchspacing is in effect.

Guru makes ‘.’ an active character in bibliographies so that ‘D.E. Knuth’ means ‘D.\,E.\penalty 300\ Knuth’.

Errors

Pre-novice wonders why ‘Q’ takes so long to quit.

Novice will exit on the first ‘error’, even if the message starts with ‘OK’.

User keeps pressing return to scroll past errors, until that gets into an infinite loop.

Guru, having written the input file with ‘cat >’ in the first place, will type ‘i’ at an error, correcting all typos and supplying all missing macros interactively, thereby successfully completing the formatting in the first run.

Capacity Exceeded ...

Novice constantly runs into the ‘TeX capacity exceeded’ error and asks the admin to build a larger version.

User knows how to find unbalanced curly braces.

Hacker occasionally runs into ‘TeX capacity exceeded’ errors and usually finds a way around them.

Wizard knows how to increase TeX’s capacity, taking care to read DEK’s warnings about setting the values too high.

Guru ignores DEK’s warnings.

Printing and previewing

Novice prints the whole document after each run of TeX.

User knows of previewers.

Programmer knows at least two previewers and vigorously argues why one is utter garbage.

Wizard thinks that

```
\tracingoutput=1
\showboxdepth\maxdimen
\showboxbreadth\maxdimen
```

is the best previewer.

Macros

Novice has heard of macros, but has never seen one.

User writes macros that are used once, and that are longer than the code they replace.

Programmer, having been bitten by unwanted spaces, writes macros that don’t contain spaces, and every line ends with a ‘%’.

Hacker has written self-modifying macros, writes `\endlinechar=-1` or `\catcode‘\~M=9` to prevent having to put %’s at the end of lines in macros.

Guru has written macros containing #####, more than 3 `\expandafter`’s in a row, and the sequence `\expandafter\endcsname`.

Fossil still has macros written in TeX78.

Macros (cont’d)

Novice has written a macro `\box` to draw a box.

User has renamed it to `\boxit`.

Wizard has redefined `\mbox` so that it can have `\verb` in its arguments.

L^AT_EX

Novice uses L^AT_EX because colleagues and friends do.

User uses L^AT_EX, even though colleagues and friends use Microsoft Word or WordPerfect.

Wizard uses L^AT_EX for journal and conference submissions, but homegrown macros when working alone.

L^AT_EX errors

Novice actually takes the manual when it says ‘LaTeX error. See LaTeX manual for explanation.’

User knows what the relevant bits of L^AT_EX error messages are.

Programmer knows what to type at the question mark when L^AT_EX reports ‘\begin{document} ended by \end{itemize}’.

Wizard doesn't make errors in L^AT_EX, and answers questions about L^AT_EX by editing `latex.tex`.
Guru knows whether to edit `latex.tex`, `lplain.tex`, `article.sty`, or `art10.sty`.

L^AT_EX style

Novice types `a$_{1}$` because the error in `a_{1}` occurred on the `'_'`.

User types `a_{1}` because Leslie Lamport says so.

Other packages

Novice could do more in Pagemaker.

User doesn't see the difference between T_EX macros and WordPerfect macros.

Hacker writes macros to make T_EX look more like `troff`.

Wizard types `\input troff` to process old `troff` files.

Guru types

```
\input txtmacros
\input text.txt
to format plain text.
```

Life, everything

Novice thinks that learning T_EX will take a long time.

User realises that it wasn't so bad after all.

Programmer tries to convince himself that the next macro is really going to save time in the future.

Wizard daydreams idly about how much he could have done with his life if he had never heard of T_EX.

Guru realises that a life without T_EX is not worth living.

(Also thanks to Barbara Beeton, Tim Chow, Denys Duchier, Dan Ellard, Michael Sofka.)

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Philology

Some remarks on typesetting classical Latin

Claudio Beccari

Abstract

Besides requiring special fonts and/or hyphenation patterns, typesetting of ancient languages, in particular classical Latin, requires that some stylistic points should be taken into consideration; for instance, medieval codices and Renaissance books should *not* be taken as models, but, if an old style flavor is desired, books printed in the late XVII century should be imitated. Particular attention is given to the issue of the letters 'u' and 'v'.

1 Introduction

The excellent paper by Yannis Haralambous [1] on hyphenation of ancient Greek and Latin published in *TUGboat* 13.4 gives me the opportunity of expressing my ideas about the style of composition of ancient languages with particular reference to classical Latin. Having prepared the hyphenation patterns for modern Latin [4], I was very pleased to find Haralambous's work on ancient Latin and ancient Greek and to see how he solved the difficulty of preparing hyphenation tables that allow to deal with prefixes that are so common in both languages.

Haralambous cites a Latin example from [7], having taken into account the Chicago manual of style [8], where: a) upper-case 'V' and its corresponding lower-case 'u' are used; b) the ligature 'æ' (which implies also œ, Æ, Œ) is used. The Chicago manual of style, in practice, suggests to set Latin according to what the scholars call the *restituta* [*lectio*], that is in a way that supposedly imitates the original setting.

In this paper I will try to prove that the *restituta* in reality imitates the medieval codices and the first printings, not the original way of writing Latin by the Roman themselves, so that the *restituta* should be avoided in favor of a more modern way of setting classical Latin.

2 The Latin script

We are all aware that ancient Romans used 'V' for indicating several different sounds, one of which was the back closed vowel /u/, another was the closed bi-labial vowel /y/ (same as the Greek Υ from which the Roman glyph 'V' derives), but certainly also the voiced labio-dental fricative consonant /v/, especially when it was in intervocalic position (how