

Bugs in Computers & Typesetting

26 March 1991

This is a list of corrections made to *Computers & Typesetting*, Volumes A–E, since the last publication of the Errata and Changes list (21 September 1990). Corrections to the softcover version of *The T_EXbook* are the same as corrections to Volume A; corrections to the softcover version of *The METAFONTbook* are the same as corrections to Volume C.

Page A137, lines 2 and 3 from the bottom (11/9/90)

*and you shouldn't even be reading this manual,
which is undoubtedly all English to you.*

Page A141, line 15 from the bottom (10/18/90)

Thus if you type '\$1\over2\$' (in a text) you get $\frac{1}{2}$, namely style *S* over style *S'*;

Page A377, the bottom 14 lines (3/26/91)

ASCII (space); the macro also decides whether a space token is explicit or implicit.

```
\newif\ifspace \newif\iffunny \newif\ifexplicit
\def\stest#1{\expandafter\s\the#1! \stest}
\def\s{\funnyfalse \global\explicitfalse \futurelet\next\ss}
\def\ss{\ifcat\noexpand\next\stoken \spacetrue
\ifx\next\stoken \let\next=\sss \else\let\next=\ssss \fi
\else \let\next=\sssss \fi \next}
\long\def\sss#1 #2\stest{\def\next{#1}%
\ifx\next\empty \global\explicittrue \fi}
\long\def\ssss#1#2\stest{\funnytrue {\uccode'#1='~
\uppercase{\ifcat\noexpand#1}\noexpand~% active funny space
\else \escapechar=\if*#1'\else'*\fi
\if#1\string#1\global\explicittrue\fi \fi}}
\long\def\sssss#1\stest{\spacefalse}
```

Page A444, lines 15–26 (3/26/91)

14. If the current item is an Ord atom, go directly to Rule 17 unless all of the following are true: The nucleus is a symbol; the subscript and superscript are both empty; the very next item in the math list is an atom of type Ord, Op, Bin, Rel, Open, Close, or Punct; and the nucleus of the next item is a symbol whose family is the same as the family in the present Ord atom. In such cases the present symbol is marked as a text symbol. If the font information shows a ligature between this symbol and the following one, using the specified family and the current size, then insert the ligature character and continue as specified by the font; in this process, two characters may collapse into a single Ord text symbol, and/or new Ord text characters may appear. If the font information shows a kern between the current symbol and the next, insert a kern item following the current atom. As soon as an Ord atom has been fully processed for ligatures and kerns, go to Rule 17.

Page C11, replacement for second quotation at bottom of page (9/27/90)

*To anyone who has lived in a modern American city (except Boston)
at least one of the underlying ideas of Descartes' analytic geometry
will seem ridiculously evident. Yet, as remarked,
it took mathematicians all of two thousand years
to arrive at this simple thing.*

— ERIC TEMPLE BELL, *Mathematics: Queen and Servant of Science* (1951)

Page C262, line 15 (3/26/91)

```
string base_name, base_version; base_name="plain"; base_version="2.7";
```

Page C262, lines 19–21 (11/9/90)

for commonly occurring idioms. For example, 'stop "hello"' displays 'hello' on the terminal and waits until <return> is typed.

```
def upto = step 1 until enddef; def downto = step -1 until enddef;
```

Page C271, line 17 from the bottom (3/26/91)

```
currentpen_path shifted (z.t_) withpen penspeck enddef;
```

Page C329, line 325 (12/29/90)

which can be used to specify a nonstandard file area or directory name for the gray

Page C347, left column (9/27/90)

Bell, Eric Temple, 11.

Page C347, Bront"e entry (1/29/91)

[The accent was clobbered; her name should, of course, be Brontë. Fix the entries for Dürer, Möbius, and Stravinsky in the same way.]

Page C349, left column (9/27/90)

Descartes, René, 6, 11, 19.

Page C356, right column (9/27/90)

[remove the entry for Rex Stout.]

Page C358, right column (9/27/90)

[remove the entry for Nero Wolfe.]

Changes to the Programs and Fonts

26 March 1991

T_EX

Changes subsequent to errata publication, 21 September 1990:

 Note: When making change 376, I forgot to delete the redundant code in module 883, and I should also have changed the name of that module. These cosmetic changes (and some changes to the comments) were made in version 3.14, in addition to the following two changes.

393. Show unprintable characters in font id's (Wayne Sullivan, Dec 1990)

```
@x module 63
print(s);
@y
slow_print(s);
@z
@x module 262 can now be spruced up
else begin print_esc(""); slow_print(text(p));
@y
else begin print_esc(text(p));
@z
@x and module 263 likewise
else begin print_esc(""); slow_print(text(p));
    end;
@y
else print_esc(text(p));
@z
```

394. Avoid range check if total_pages>65535 (Eberhard Mattes, Dec 1990)

```
@x module 642
    dvi_out(total_pages div 256); dvi_out(total_pages mod 256);@/
@y
    dvi_out((total_pages div 256) mod 256); dvi_out(total_pages mod 256);@/
@z
```

 395. The absolutely final change (to be made after my death)

```
@x module 2
@d banner=='This is TeX, Version 3.14' {printed when \TeX\ starts}
@y
@d banner=='This is TeX, Version $\pi$' {printed when \TeX\ starts}
@z
```

My last will and testament for TeX is that no further changes be made under any circumstances. Improved systems should not be called simply 'TeX'; that name, unqualified, should refer only to the program for which I have taken personal responsibility. -- Don Knuth

METAFONT

Changes since 21 September 1990.

557. The absolutely final change (to be made after my death)

@x module 2

@d banner=='This is METAFONT, Version 2.7' {printed when \MF\ starts}

@y

@d banner=='This is METAFONT, Version \$e\$' {printed when \MF\ starts}

@z

My last will and testament for METAFONT is that no further changes be made under any circumstances. Improved systems should not be called simply 'METAFONT'; that name, unqualified, should refer only to the program for which I have taken personal responsibility. -- Don Knuth

Computer Modern fonts

Changes since 25 March 1990.

No current changes.