

The xltextra package

Will Robertson

2009/09/02 v0.5

Contents

1	Introduction	2
1.1	Usage	2
2	Features	2
2.1	<code>\textsuperscript</code> and <code>\textsubscript</code>	2
2.2	Inner emphasis	3
2.3	Unicode footnote symbols	3
2.4	Verbatim	3
2.5	Logos	4
2.6	Discretionary hyphenation: <code>\-</code>	4
2.7	Vulgar fractions	4
2.8	Named glyphs	5
2.9	The <code>\showhyphens</code> command	5
I	The xltextra package	6
3	Programmming bits and pieces	6
4	Logos	6
5	ϵ-TeX functionality	8
5.1	Unicode footnote symbols	8
5.2	Emph	8
5.3	<code>\-</code>	9
5.4	Subscript and superscript	9
5.5	Verbatims	12

1 Introduction

This document describes the `xltextra` package. It implements some odds-and-ends features and improved functionality for broken or sub-standard L^AT_EX methods when using the X_ET_EX format.

1.1 Usage

Easy: `\usepackage{xltextra}`. This package automatically loads the following packages: `fixltx2e`, `etex`, `xunicode`, `fontspec`.

There are some package options to disable various functionality that could clash with other things:

no-sscript Swaps the definitions of `\textsubscript` and `\textsuperscript` with their respective starred versions, as described in section §2.1.

no-emph Disables the redefinition of `\emph` and `\em` described in section §2.2.

no-logos Disables the redefinition of `\TeX`, etc. described in section §2.5, but *does* still define the `\XeTeX` and `\XeLaTeX` logo commands.

no-hyphen Disables the redefinition of `\-` (probably harmless anyway) described in section §2.6.

no-verb Disables the redefinition of `\verb*` and `\begin{verbatim}`, and the patching of various verbatim packages, as described in section §2.4.

2 Features

2.1 `\textsuperscript` and `\textsubscript`

These two macros have been redefined to take advantage, if possible, of actual superior or inferior glyphs in the main document font. This is very important for high-quality typesetting — compare this first example to the third; yes, they are the same font.

<code>\textsuperscript</code>	<code>abcdefghijklmnopqrstuvwxyz1234567890</code>
<code>\textsubscript</code>	<code>abcdefghijklmnopqrstuvwxyz1234567890</code>

But will fall back on ‘faked’ ones if they don’t exist: (this is Didot)

<code>\textsuperscript</code>	<code>abcdefghijklmnopqrstuvwxyz1234567890</code>
<code>\textsubscript</code>	<code>abcdefghijklmnopqrstuvwxyz1234567890</code>

The original definitions are available in starred versions of the commands:

<code>\textsuperscript*</code>	<code>abcdefghijklmnopqrstuvwxyz1234567890</code>
<code>\textsubscript*</code>	<code>abcdefghijklmnopqrstuvwxyz1234567890</code>

But beware fonts lacking the full repertoire: (this is Adobe Jenson Pro)

<code>\textsuperscript</code>	ab ^c de ^f g ^h i ^j k ^l mno ^p q ^r st ^u v ^w x ^y z ¹²³⁴⁵⁶⁷⁸⁹⁰
<code>\textsubscript</code>	abc _d ef _g h _i j _k l _m no _p q _r st _u v _w x _y z ₁₂₃₄₅₆₇₈₉₀

The `[no-sscript]` package option will swap the definitions of the starred and non-starred versions of the commands described above if the new definitions are undesirable.

The macros `\realsubscript`, `\realsuperscript`, `\fakesubscript`, and `\fake-superscript` may be used to access the ‘new’ and ‘old’ functionalities regardless of the `[no-sscript]` package option.

2.2 Inner emphasis

`fixltx2e`’s method for checking for “inner” emphasis is a little fragile in \TeX , because font slant information might be missing from the font. Therefore, we use \LaTeX ’s `NESS` information, which is more likely to be correct.

Nested emphasis is now fixed.

```
\renewcommand\eminnershapes{\scshape}
\fontspec{Didot}
Nested {\em emphasis is
        \emph{now} fixed.}
```

The `[no-emph]` package option will disable this redefinition.

2.3 Unicode footnote symbols

By default \LaTeX defines symbolic footnote characters in terms of commands that don’t resolve well; better results can be achieved by using specific unicode characters or proper LICRs with the `xunicode` package.

This problem has been solved by loading the `fixltx2e` and `xunicode` packages in `xltxtra`.

2.4 Verbatim

Many verbatim mechanisms assume the existence of a ‘visible space’ character that exists in the `ASCII` space slot of the typewriter font. This character is known in unicode as `U+2434: BOX OPEN`, which looks like this: ‘`□`’.

When a unicode typewriter font is used, \LaTeX no longer prints visible spaces for the `verbatim*` environment and `\verb*` command. `xltxtra` fixes this problem by using the correct unicode glyph, and patches the following packages to do the same: `listings`, `fancyvrb`, `moreverb`, and `verbatim`.

In the case that the typewriter font does not contain ‘`□`’, the Latin Modern Mono font is used as a fallback.

2.5 Logos

This part of the package essentially exists to define the `\XeTeX` and `\XeLaTeX` logos, which need to be tuned according to the font that is used. Andrew Moschou’s `metalogo` package is used to achieve this. Here are some examples. The default:

<code>T_EX</code> <code>X_ET_EX</code> <code>L_AT_EX</code> <code>X_EL_AT_EX</code>	<code>\TeX</code> <code>\XeTeX</code> <code>\LaTeX</code> <code>\XeLaTeX</code>
---	---

Notice it’s a bit tight compared to not using Computer Modern, for which the logos were designed:

<code>T_EX</code> <code>X_ET_EX</code> <code>L_AT_EX</code> <code>X_EL_AT_EX</code>	<code>\usefont{OT1}{cmr}{m}{n}</code> <code>\TeX</code> <code>\XeTeX</code> <code>\LaTeX</code> <code>\XeLaTeX</code>
---	--

Look in the implementation corresponding to this section to see how to customise the spacings in these logos and refer to the documentation for `metalogo` for more information.

The `[no-logos]` package option will not redefine `\TeX` or `\LaTeX` but will still define `\XeTeX` and `\XeLaTeX`.

If the `hyperref` package is loaded, these logos will be set up to behave properly in PDF bookmarks and so on.

2.6 Discretionary hyphenation: `\-`

`LATEX` defines the macro `\-` to insert discretionary hyphenation points. However, it is hard-coded in `LATEX` to use the hyphen `-` character. Since `fontspec` makes it easy to change the hyphenation character on a per font basis, it would be nice if `\-` adjusted automatically — and now it does.

2.7 Vulgar fractions

The `\vfrac` command for setting ‘vulgar’ fractions based on AAT or OpenType font features. Not really recommended for many purposes, depending on your text, but it’s a good example of how to program such things using `fontspec`.

AAT: $\frac{123}{456}$	<code>\fontspec{Skia}</code>
ICU: $\frac{123}{456}$	AAT: <code>\vfrac{123}{456}</code> <code>\</code>
	<code>\fontspec{Warnock Pro}</code>
	ICU: <code>\vfrac{123}{456}</code>

(This can also be achieved in regular L^AT_EX with either the `nicefrac` or `xfrac` package.)

Only use it when you know it will work; no warnings are given if the font doesn't support the necessary features.

2.8 Named glyphs

Along the way somewhere, X_ET_EX added support for selecting glyphs from a TrueType-based OpenType font based on their internal glyph name. Jonathan Kew posted the following definition as a nice interface to it.

¥ [smile]	<code>\fontspec{Charis SIL}</code>
	<code>\namedglyph{yen}</code>
	<code>\namedglyph{smile}</code>

2.9 The `\showhyphens` command

The default definition doesn't work in X_ET_EX. A new version, written by Jonathan Kew, is included in this package that *does* work. Minor differences with the original: the showing of hyphens in the console output will be marked with explanatory text. Also, multiple words, separated by commas, will end up in separate instances of 'showing hyphens'.

File I

The **xltextra** package

This is the package implementation.

```
1 \ProvidesPackage{xltextra}
2 [2009/09/02 v0.5 Improvements for the "XeLaTeX" format]
```

Option processing

```
3 \newif\if@xxt@nosscrip@
4 \newif\if@xxt@nologos@
5 \newif\if@xxt@nohyphen@
6 \newif\if@xxt@noemph@
7 \newif\if@xxt@noverb@
8 \DeclareOption{no-sscript}{\@xxt@nosscrip@true}
9 \DeclareOption{no-logos}{\@xxt@nologos@true}
10 \DeclareOption{no-hyphen}{\@xxt@nohyphen@true}
11 \DeclareOption{no-emph}{\@xxt@noemph@true}
12 \DeclareOption{no-verb}{\@xxt@noverb@true}
13 \ProcessOptions*
```

Required packages

```
14 \RequirePackage{ifxetex}
15 \RequireXeTeX
16 \RequirePackage{fontspec}
17 \RequirePackage{xunicode}
```

3 Programmming bits and pieces

4 Logos

\XeTeX The T_EX-related logos people insist upon using need to be tuned on a per-font ba-
\XeLaTeX sis. This package calls upon Andrew Moschou's package `metalogo` for this pur-
pose. To tune the logos to each font, use the commands `\setlogokern`, `\setlo-`
`godrop`, etc. Refer to `mathspec`'s documentation for further details.

	<code>\setlogokern{Xe}{-0.061em}</code>
	<code>\setlogokern{eL}{-0.057em}</code>
	<code>\setlogokern{La}{-0.265em}</code>
	<code>\setlogokern{aT}{-0.0585em}</code>
	<code>\setlogokern{Te}{-0.0575em}</code>
<code>TeX XeTeX LaTeX XeLaTeX</code>	<code>\setlogokern{eX}{-0.072em}</code>
<code>LaTeX 2_ε</code>	<code>\setlogokern{eT}{-0.056em}</code>
	<code>\setlogokern{X2}{0.1667em}</code>
	<code>\setlogodrop{0.153em}</code>
	<code>\setLaTeXa{\scshape a}</code>
	<code>\setLaTeXee{\mbox{\fontspec{Times}\itshape ε}}</code>
	<code>\TeX\ XeTeX\ LaTeX\ XeLaTeX\ LaTeXe</code>

```

18 \RequirePackage{metalogo}
19 \setlogokern{Te}{-0.15em}
20 \setlogokern{eX}{-0.15em}
21 \setlogokern{La}{-0.36em}
22 \setlogokern{aT}{-0.15em}
23 \setlogokern{Xe}{-0.15em}
24 \setlogokern{eT}{-0.15em}
25 \setlogokern{eL}{-0.1em}
26 \setlogokern{X2}{default}
27 \setlogodrop{.5ex}
28 \setLaTeXa{\scshape a}

```

The [no-logos] package option might be in effect, in which case `\TeX`, `\LaTeX` and `\LaTeXe` should keep their original definitions (which were saved by `metalogo`).

```

29 \if@xxt@nologos@
30   \let\TeX\original@TeX
31   \let\LaTeX\original@TeX
32   \let\LaTeXe\original@LaTeXe
33 \fi

```

`\TeX@logo@spacing` This macro is now deprecated. It is recommended to use the commands from `metalogo`.

```

34 \newcommand*\TeX@logo@spacing[6]{%
35   \PackageWarning{xltextra}{%
36     Use of \protect\TeX@logo@spacing\space is deprecated,\MessageBreak
37     recommend to use commands from package `metalogo' instead}
38   \setlogokern{Te}{#1}%
39   \setlogokern{eT}{#1}%
40   \setlogokern{eX}{#2}%
41   \setlogokern{Xe}{#2}%
42   \setlogodrop{#3}%
43   \setlogokern{La}{#4}%

```

```

44 \setlogokern{aT}{#5}%
45 \setlogokern{eL}{#6}}

hyperref-safe versions of the logos:
46 \AtBeginDocument{%
47 \ifpackageloaded{hyperref}{%
48 \pdfstringdefDisableCommands{%
49 \def\TeX{TeX}%
50 \def\XeTeX{XeTeX}%
51 \def\LaTeX{LaTeX}%
52 \def\LaTeXe{LaTeX2e}%
53 \def\XeLaTeX{XeLaTeX}%
54 }%
55 }{}%
56 }

```

5 ε -TEX functionality

Because it's just sensible, we load the package that actually allows L^AT_EX to access the extra registers, etc., provided by ε -TEX.

```

57 \RequirePackage{etex}

```

5.1 Unicode footnote symbols

```

58 \RequirePackage{fixltx2e}[2006/03/24]

```

5.2 Emph

```

59 \unless\if@xxt@noemph@

\em   Redefinition of {\em ...} and \emph{...} to use NFSS info to detect when the
\emph inner shape should be used.

60 \DeclareRobustCommand\em
61   {\@nomath\em
62   \edef\@tempa{\f@shape}%
63   \edef\@tempb{\itdefault}%
64   \ifx\@tempa\@tempb
65     \emminnershape
66   \else
67     \emshape
68   \fi}
69 \DeclareTextFontCommand{\emph}{\em}
70 \let\emshape\itshape
71 \let\emminnershape\upshape

72 \fi

```


5.3 \-

```
73 \unless\if@xxt@nohyphen@
```

\- This macro is courtesy of Frank Mittelbach and the L^AT_EX 2_ε source code.

```
74 \DeclareRobustCommand{\-}{%
75   \discretionary{%
76     \char\ifnum\hyphenchar\font<\z@
77       \xlx@defaultthyphenchar
78     \else
79       \hyphenchar\font
80     \fi}{}}{}
81 \def\xlx@defaultthyphenchar{`-}

82 \fi
```

5.4 Subscript and superscript

For OpenType fonts, the subscript feature (subs) is used, but if that doesn't exist then the scientific inferior feature (sinf) is used on the assumption that something's better than nothing. This matches current trends in OpenType font design.

Footnotes are patched to use this better `\textsuperscript`.

`\fakesubscript` The old ('fake') methods:

```
\fakesubscript 83 \DeclareRobustCommand*\fakesubscript[1]{%
84   \@textsubscript{\selectfont#1}}
85 \DeclareRobustCommand*\fakesuperscript[1]{%
86   \@textsuperscript{\selectfont#1}}
```

`\textsubscript` These commands are either defined to create fake or real sub-/super-scripts if they
`\textsubscript*` are starred or not, respectively. This swaps if the [no-sscript] package option is
`\textsuperscript` in effect. Text subscripts:
`\textsuperscript*`

```
87 \if@xxt@noasscript@
88   \DeclareRobustCommand*\textsubscript{%
89     \@ifstar{\realsubscript}{\fakesubscript}}
90   \DeclareRobustCommand*\textsuperscript{%
91     \@ifstar{\realsuperscript}{\fakesuperscript}}
92 \else
93   \DeclareRobustCommand*\textsubscript{%
94     \@ifstar{\fakesubscript}{\realsubscript}}
95   \DeclareRobustCommand*\textsuperscript{%
96     \@ifstar{\fakesuperscript}{\realsuperscript}}
97 \fi
```

`\realsubscript`

```
98 \DeclareRobustCommand*\realsubscript[1]{%
99   \begingroup
```

```

100 \ifcsname zf@family@fontdef\ f@family\endcsname
101 \c@zf@script 1818326126\relax
102 \font\zf@basefont="\csname zf@family@fontdef\ f@family\endcsname" at \f@size pt
103 \zf@set@font@type
104 \ifzf@icu
105 \zf@check@ot@feat{+subs}%
106 \if@tempswa
107 {\addfontfeature{VerticalPosition=Inferior}#1}%
108 \else
109 \zf@check@ot@feat{+sinf}%
110 \if@tempswa
111 {\addfontfeature{VerticalPosition=ScientificInferior}#1}%
112 \else
113 \fakesubscript{#1}%
114 \fi
115 \fi
116 \else\ifzf@atsui
117 \zf@make@aat@feature@string{10}{2}%
118 \unless\ifx\@tempa\@empty
119 {\addfontfeature{VerticalPosition=Inferior}#1}%
120 \else
121 \fakesubscript{#1}%
122 \fi
123 \fi\fi
124 \else
125 \fakesubscript{#1}%
126 \fi
127 \endgroup}

```

\realsuperscript Text superscripts:

```

128 \DeclareRobustCommand*\realsuperscript[1]{%
129 \begingroup
130 \ifcsname zf@family@fontdef\ f@family\endcsname
131 \c@zf@script 1818326126\relax
132 \font\zf@basefont="\csname zf@family@fontdef\ f@family\endcsname" at \f@size pt
133 \zf@set@font@type
134 \ifzf@icu
135 \zf@check@ot@feat{+sup}%
136 \if@tempswa
137 {\addfontfeature{VerticalPosition=Superior}#1}%
138 \else
139 \fakesuperscript{#1}%
140 \fi
141 \else\ifzf@atsui
142 \zf@make@aat@feature@string{10}{1}%
143 \unless\ifx\@tempa\@empty
144 {\addfontfeature{VerticalPosition=Superior}#1}%

```

```

145         \else
146         \fakesuperscript{#1}%
147         \fi
148     \fi\fi
149     \else
150     \fakesuperscript{#1}%
151     \fi
152 \endgroup}

```

Patching footnotes:

`\@makefnmark`

```

153 \def\@makefnmark{\mbox{\normalfont\textsuperscript{\@thefnmark}}}

```

`\vfrac` #1: Numerator

#2: Denominator

No error checking is done to ensure that the font actually has the necessary features. Requires the xunicode package for `\textfractionsolidus`.

```

154 \newcommand*\vfrac[2]{%
155     \begingroup
156     \c@zf@script 1818326126\relax
157     \font\zf@basefont="\csname zf@family@fontdef\fontfamily\endcsname" at \f@size pt
158     \zf@set@font@type
159     \ifzf@icu
160         {\addfontfeature{VerticalPosition=Numerator}#1}%
161         \textfractionsolidus
162         {\addfontfeature{VerticalPosition=Denominator}#2}%
163     \else\ifzf@atsui
164         {\addfontfeature{VerticalPosition=Superior}#1}%
165         \textfractionsolidus
166         {\addfontfeature{VerticalPosition=Inferior}#2}%
167     \fi\fi
168 \endgroup}

```

`\namedglyph` #1: Name of the font glyph to be typeset

```

169 \newcommand\namedglyph[1]{%
170     \@tempcnta=\XeTeXglyphindex "#1"\relax
171     \ifnum\@tempcnta>0
172         \XeTeXglyph\@tempcnta
173     \else
174         \xxt@namedglyph@fallback{#1}%
175     \fi}

```

`\xxt@namedglyph@fallback` Redefine this macro to change how glyph names that aren't found get typeset.

```

176 \newcommand\xxt@namedglyph@fallback[1]{[#1]}

```

`\showhyphens` This macro is entirely due to Jonathan Kew. I wish I knew how to write these sorts of things.

```

177 \newbox\xxt@tempbox
178 \def\showhyphens#1{%
179   \typeout{^^j*****}
180   \string\showhyphens:
181   *****}%
182   \@for\@ii: =#1\do{\xxt@showhyphens{\@ii}}%
183   \typeout{^^j*****}
184   *****%
185   *****^^j}}
186 \def\xxt@showhyphens#1{%
187   \setbox\@tempboxa=\vbox{%
188     \hsize1sp \hbadness10000 \hfuzz\maxdimen
189     \everypar={}\leftskip\z@\rightskip\leftskip
190     \pretolerance\m@ne \noindent \hskip\z@ #1\par
191     \global\setbox\xxt@tempbox=\hbox{\xxt@sh@cat}%
192     \setbox\@tempboxa=\hbox to \maxdimen{\unhbox\xxt@tempbox}}
193 \def\xxt@sh@cat{\unskip\unpenalty
194   \setbox\@tempboxa=\lastbox
195   \unless\ifvoid\@tempboxa
196     \global\setbox\xxt@tempbox=\hbox{%
197       \unhbox\@tempboxa
198       \unskip\unskip
199       \unhbox\xxt@tempbox}%
200   \expandafter\xxt@sh@cat
201   \fi}

```

5.5 Verbatims

Many thanks to Apostolos Syropoulos for discovering this problem and writing the redefinition of L^AT_EX's `verbatim` environment and `\verb*` command.

```

202 \unless\if@xxt@noverb@

```

`\xxt@visiblespace` Print U+2434: OPEN BOX, which is used to visibly display a space character.

```

203 \def\xxt@visiblespace{%
204   \iffontchar\font"2423
205   \expandafter\textvisiblespace
206   \else
207   \expandafter\xxt@visiblespace@fallback
208   \fi}

```

`\xxt@visiblespace@fallback` If the current font doesn't have u2434, use Latin Modern Mono instead.

```

209 \def\xxt@visiblespace@fallback{%
210   \usefont{EU1}{lmtt}{\f@series}{\f@shape}%
211   \textvisiblespace}

```

`\xxt@vprintspaces` Helper macro to turn spaces active and print visible space instead.

```
212 \begingroup
213 \catcode`\ =\active%
214 \gdef\xxt@vprintspaces{\catcode`\ \active\let \xxt@visiblespace}%
215 \endgroup
```

`\verb` Redefine `\verb` to use `\xxt@vprintspaces`.

```
\verb*
216 \def\verb{\relax\ifmmode\hbox\else\leavevmode\null\fi
217 \bgroup
218 \verb@eol@error \let\do\@makeother \dospecials
219 \verbatim@font\@noligs
220 \@ifstar\@sverb\@verb}
221 \def\@sverb{\xxt@vprintspaces\@sverb}
```

It's better to put small things into `\AtBeginDocument`, so here we go:

```
222 \AtBeginDocument{%
223 \xxt@patch@verbatim
224 \xxt@patch@moreverb
225 \xxt@patch@fancyvrb
226 \xxt@patch@listings}
```

`verbatim*` With the `verbatim` package.

```
227 \def\xxt@patch@verbatim{%
228 \@ifpackageloaded{verbatim}{%
229 \namedef{verbatim*}{\begingroup\@verbatim\xxt@vprintspaces\verbatim@start}%
230 }{%}
```

This is for vanilla LaTeX.

```
231 \namedef{verbatim*}{\@verbatim\xxt@vprintspaces\@sxverbatim}%
232 }}
```

`listingcont*` This is for `moreverb`. The main `listing*` environment inherits this definition.

```
233 \def\xxt@patch@moreverb{%
234 \@ifpackageloaded{moreverb}{%
235 \namedef{listingcont*}{%
236 \def\verbatim@processline{%
237 \thelisting@line \global\advance\listing@line1
238 \the\verbatim@line\par}%
239 \@verbatim\xxt@vprintspaces\verbatim@start}%
240 }{}}
```

`listings` and `fancyvrb` make things nice and easy:

```
241 \def\xxt@patch@fancyvrb{%
242 \@ifpackageloaded{fancyvrb}{%
243 \let\FancyVerbSpace\xxt@visiblespace
244 }{}}
```

```
245 \def\xxt@patch@listings{%  
246   \@ifpackageloaded{listings}{%  
247     \let\lst@visible\xxt@visible  
248   }{}}
```

Finish verbatim features:

```
249 \fi
```

Index

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in *roman* refer to the code lines where the entry is used.

Symbols	
\-	<u>74</u>
\@@sverb	220, 221
\@empty	118, 143
\@for	182
\@ifpackageloaded	47, 228, 234, 242, 246
\@ifstar	89, 91, 94, 96, 220
\@ii	182
\@makefnmark	<u>153</u>
\@makeother	218
\@namedef	229, 231, 235
\@noligs	219
\@nomath	61
\@sverb	221
\@sxverbatim	231
\@tempa	62, 64, 118, 143
\@tempb	63, 64
\@tempboxa	187, 192, 194, 195, 197
\@tempcnta	170–172
\@textsubscript	84
\@textsuperscript	86
\@thefnmark	153
\@verb	220
\@verbatim	229, 231, 239
\@xxt@noemph@true	11
\@xxt@nohyphen@true	10
\@xxt@nologos@true	9
\@xxt@noscript@true	8
\@xxt@noverb@true	12
A	
\active	213, 214
\addfontfeature	107, 111, 119, 137, 144, 160, 162, 164, 166
\advance	237
\AtBeginDocument	46, 222
B	
\begingroup	99, 129, 155, 212, 229
\bgroup	217
C	
\c@zf@script	101, 131, 156
\catcode	213, 214
\char	76
\csname	102, 132, 157
D	
\DeclareOption	8–12
\DeclareRobustCommand	60, 74, 83, 85, 88, 90, 93, 95, 98, 128
\DeclareTextFontCommand	69
\def	49–53, 81, 153, 178, 186, 193, 203, 209, 216, 221, 227, 233, 236, 241, 245
\discretionary	75
\do	182, 218
\dospecials	218
E	
\edef	62, 63
\else	66, 78, 92, 108, 112, 116, 120, 124, 138, 141, 145, 149, 163, 173, 206, 216
\em	<u>60</u>
\emminershape	65, 71
\emph	<u>60</u>
\emshape	67, 70
\endcsname	100, 102, 130, 132, 157
\endgroup	127, 152, 168, 215
environments:	
\listingcont*	<u>233</u>
\verbatim*	<u>227</u>
\everypar	189
\expandafter	200, 205, 207
F	
\f@family	100, 102, 130, 132, 157
\f@series	210
\f@shape	62, 210
\f@size	102, 132, 157
\fakesubscript	<u>83</u> , 89, 94, 113, 121, 125

<code>\fakesuperscript</code>	83, 91, 96, 139, 146, 150		
<code>\FancyVerbSpace</code>	243		
<code>\fi</code>	33, 68, 72, 80, 82, 97, 114, 115, 122, 123, 126, 140, 147, 148, 151, 167, 175, 201, 208, 216, 249		
<code>\font</code>	76, 79, 102, 132, 157, 204		
G			
<code>\gdef</code>	214		
<code>\global</code>	191, 196, 237		
H			
<code>\hbadness</code>	188		
<code>\hbox</code>	191, 192, 196, 216		
<code>\hfuzz</code>	188		
<code>\hsize</code>	188		
<code>\hskip</code>	190		
<code>\hyphenchar</code>	76, 79		
I			
<code>\if@tempswa</code>	106, 110, 136		
<code>\if@xxt@noemph@</code>	6, 59		
<code>\if@xxt@nohyphen@</code>	5, 73		
<code>\if@xxt@nologos@</code>	4, 29		
<code>\if@xxt@nosscript@</code>	3, 87		
<code>\if@xxt@noverb@</code>	7, 202		
<code>\ifcsname</code>	100, 130		
<code>\iffontchar</code>	204		
<code>\ifmmode</code>	216		
<code>\ifnum</code>	76, 171		
<code>\ifvoid</code>	195		
<code>\ifx</code>	64, 118, 143		
<code>\ifzf@atsui</code>	116, 141, 163		
<code>\ifzf@icu</code>	104, 134, 159		
<code>\itdefault</code>	63		
<code>\itshape</code>	70		
L			
<code>\lastbox</code>	194		
<code>\LaTeX</code>	31, 51		
<code>\LaTeXe</code>	32, 52		
<code>\leavevmode</code>	216		
<code>\leftskip</code>	189		
<code>\let</code>	30–32, 70, 71, 214, 218, 243, 247		
<code>\listing@line</code>	237		
<code>listingcont*</code> (environment)	233		
<code>\lst@visiblespace</code>	247		
M			
<code>\m@ne</code>	190		
<code>\maxdimen</code>	188, 192		
<code>\mbox</code>	153		
<code>\MessageBreak</code>	36		
N			
<code>\namedglyph</code>	169		
<code>\newbox</code>	177		
<code>\newcommand</code>	34, 154, 169, 176		
<code>\newif</code>	3–7		
<code>\noindent</code>	190		
<code>\normalfont</code>	153		
<code>\null</code>	216		
O			
<code>\original@LaTeXe</code>	32		
<code>\original@TeX</code>	30, 31		
P			
<code>\PackageWarning</code>	35		
<code>\par</code>	190, 238		
<code>\pdfstringdefDisableCommands</code>	48		
<code>\pretolerance</code>	190		
<code>\ProcessOptions</code>	13		
<code>\protect</code>	36		
<code>\ProvidesPackage</code>	1		
R			
<code>\realsubscript</code>	89, 94, 98		
<code>\real superscript</code>	91, 96, 128		
<code>\relax</code>	101, 131, 156, 170, 216		
<code>\RequirePackage</code>	14, 16–18, 57, 58		
<code>\RequireXeTeX</code>	15		
<code>\rightskip</code>	189		
S			
<code>\scshape</code>	28		
<code>\selectfont</code>	84, 86		
<code>\setbox</code>	187, 191, 192, 194, 196		
<code>\setLaTeXa</code>	28		
<code>\setlogodrop</code>	27, 42		
<code>\setlogokern</code>	19–26, 38–41, 43–45		
<code>\showhyphens</code>	177		
<code>\space</code>	36		
<code>\string</code>	180		
T			
<code>\TeX</code>	30, 49		

