The longfigure Package*

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1 Usage

The longfigure package uses and relabels components of the well-known longtable package, written by David Carlisle, to provide a table-like environment that can display a stream of subfigures as a single figure that can break across pages.

The longtable package defines a longtable environment, which produces tables that can be broken by TEX's standard page-breaking algorithm. Similarly, the longfigure package defines a longfigure environment, which produces figures that can be broken by TEX's standard page-breaking algorithm. The internal structure of a long figure is similar to a long table. Rows might contain (for example) tables or graphics. Page breaks can occur only between rows.

The longfigure package differs from the longtable package in the following ways:

- The longfigure package supports two additional key-value options:
 - The figname= option specifies the counter for numbering longfigure environments. You can specify any string; the default is figure. When you specify a figname= value for which no counter already exists, the longfigure package loads the tocloft package and creates the counter.
 - The resetby= option specifies a counter (for example, resetby=chapter) such that output numbering is reset each time the counter value changes. If a counter is specified that does not exist, the tocloft package is loaded to create the new counter. For information about how the lists are typeset, see the tocloft package documentation.
- The counters and macros that start with \LT in the longtable package are renamed to start with \LF in the longfigure package to avoid namespace conflicts when the two packages are used together. The generic macros that are defined in the longtable package (\endfirsthead, \endhead,

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\endfoot, and \endlastfoot) are also renamed with \LF as a prefix in the longfigure package.

• The \LF@name macro is based on the \fnum@table macro from the longtable package. The \LF@name macro returns the capitalized counter name and value. For example, if the counter is figure and the macro is processing the second longfigure, the \LF@name macro would contain the value "Figure 2."

You can use the longfigure package defaults to produce a *List of Figures* by inserting the following tag in your document at the point where you want the list to appear:

```
\listoffigures
```

The default counter used to display figures is the figure counter, but you can specify a different counter. For example, if you want your figures to be labeled as "Display," specify figname=display when you load the longfigure package; to display a *List of Displays*, insert the following command in your document at the point where you want the list to appear:

```
\listofdisplay
```

Note: If you specify a counter that does not exist, an auxiliary file with extension .1ft is created to contain the information needed to create the list.

If you want to use more advanced features of the tocloft package, load it before you load the longfigure package so that the longfigure package sees that the counters specified by the figname= and resetby= options are already defined and does not attempt to create them.

1.1 Example

The following lines produce a single figure that contains three images and one tabular environment. Each element is a row of the longfigure environment. Page breaks can occur between rows.

```
\documentclass{book}
\usepackage{graphicx}
\usepackage{longfigure}
\begin{document}
\begin{longfigure}{c}
\caption{My Long Figure}\label{mlfig}\\
\includegraphics[width=3in]{myfig1}\\
\includegraphics[width=3in]{myfig2}\\
\includegraphics[width=3in]{myfig3}\\\
\begin{tabular}{11}
\one & two \\
\three & four\\
\end{tabular}
```

```
\end{longfigure}
\end{document}
```

In this example, the {c} argument in the \begin{longfigure} command specifies only a single centered column. You can also specify multiple columns and, if needed, use the \multicolumn command for more flexibility.

2 Implementation

This section describes the implementation of the longfigure package. The comments describe only the changes from the longtable package code. For complete details about the logic and usage of the longtable environment, see Carlisle (2004).

1 \ProvidesPackage{longfigure}[2014/01/06 longfigure]

The following statement loads the **xkeyval** package for declaring and processing package options:

2 \RequirePackage{xkeyval}

The following statement defines a new command, \LFcounter, to contain the string figure. Later code tests whether a counter with that name exists.

3 \newcommand*{\LFcounter}{figure}

The following statement defines a new command, \LFreset, to contain the name of the counter within which the longfigure number should reset. If no value is specified, the long figures are numbered consecutively through the document.

4 \newcommand*{\LFreset}{\@empty}

2.1 Options

The \LFcounter and \LFreset commands support the package options figname= and resetby= as follows:

- 5 \DeclareOptionX{figname}[figure]{\renewcommand*{\LFcounter}{#1}}
- 6 \DeclareOptionX{resetby}{\renewcommand*{\LFreset}{#1}}

The following statements further define the options that the longtable package defines:

- 7 \DeclareOptionX{set}{}
- 8 \DeclareOptionX{final}{}
- $\label{lem:prop:local_prop} $$ \operatorname{DeclareOptionX{errorshow}_{\def\LF@warn{\PackageInfo{longfigure}}}} $$$
- 10 \DeclareOptionX{pausing}{\def\LF@warn#1{\LF@err{#1}{This is not really an error}}}
- 11 $\P \sim 11$

The following statements process the options:

- 12 \def\LFProcessOptions#1{
- 13 $\ensuremath{\mbox{@ifundefined{c@#1}{\%}}$
- 14 \RequirePackage{tocloft}
- 15 \def\LFuc##1##2{\MakeUppercase{##1}{##2}}
- 16 \expandafter\def\csname list#1name\endcsname{List of \LFuc#1s}

```
17 \ifx\@empty\LFreset%
18 \newlistof{#1}{lft}{\csname list#1name\endcsname}
19 \else
20 \newlistof[\LFreset]{#1}{lft}{\csname list#1name\endcsname}
21 \fi
22 \}{}%
23 }
24 \expandafter\LFProcessOptions\expandafter{\LFcounter}
```

If a counter is specified that does not exist, its name (\color{local}) is unde-

fined and the longfigure package loads the tocloft package in order to use its commands to create the new counters and list.

Thus, the tocloft package is required only when a new counter is specified, and this automatic loading takes place only if the counter that is specified in the package options is not defined.

You can load the tocloft package before loading the longfigure package and retain all of the flexibility that the tocloft package offers. However, you must define the new counters yourself by using the \newlistof command in the tocloft package, and you must define the new list to use an auxiliary lft file where its auxiliary information is written.

2.2 Utilities

\strcfstr

The following macro, \strcfstr, checks whether two strings, which are provided as arguments, are equal (Wilson, 2001). A new boolean \ifLF@same contains the result of the test.

```
25 \newif\iftF@same
26 \newcommand{\strcfstr}[2]{%
27 \text{\LF@samefalse}
28 \begingroup\def\2{#2}
29 \ifx\2#1\endgroup\tF@sametrue
30 \else\endgroup
31 \fi
```

\LFupcase

The following macro, \LFupcase, uppercases the first letter of a string (Lazarides, 2010):

```
33 \def\LFupcase#1{%

34 \def\x##1##2{%

35 \MakeUppercase{##1}{##2}}\x#1%

36 }
```

The following macro, \LF@name, creates a string to provide a label and number for an output. Analogous to the \fnum@table macro in the longtable package, it contains the capitalized version of the counter name and the counter number (for example, Figure~3).

```
37 \def\LF@name{\expandafter\LFupcase%
38 \expandafter{\LFcounter}~%
39 \expandafter\csname the\LFcounter\endcsname}%
```

The remainder of this package follows the longtable package almost identically, except that macros, skips, counters, and so on use an \LF prefix instead of the \LT prefix that the longtable package uses.

```
40 \def\LF@err{\PackageError{longfigure}}
41 \def\LF@warn{\PackageWarning{longfigure}}
42 \def\LF@final@warn{%
   \AtEndDocument{%
      \LF@warn{\LFcounter \@width s have changed. Rerun \LaTeX\.\@gobbletwo}}%
    \global\let\LF@final@warn\relax}
45
46 %
47 \newskip\LFleft
                         \LFleft=\fill
48 \newskip\LFright
                         \LFright=\fill
49 \newskip\LFpre
                         \LFpre=\bigskipamount
                         \LFpost=\bigskipamount
50 \newskip\LFpost
51 \newcount\LFchunksize \LFchunksize=20
52 \let\c@LFchunksize\LFchunksize
53 \newdimen\LFcapwidth \LFcapwidth=4in
54 \newbox\LF@head
55 \newbox\LF@firsthead
56 \newbox\LF@foot
57 \newbox\LF@lastfoot
58 \newcount\LF@cols
59 \newcount\LF@rows
60 \newcounter{LF@tables}
61 \newcounter{LF@chunks}[LF@tables]
63 \newtoks\LF@p@ftn
64 \mbox{mathchardef\LF@end@pen=30000}
65 \def\longfigure{%
66
    \par
67
    \ifx\multicols\@undefined
68
    \else
       \ifnum\col@number>\@ne
69
         \@twocolumntrue
70
71
       \fi
72
73
    \if@twocolumn
      \LF@err{longfigure not in 1-column mode}\@ehc
74
    \fi
75
76
    \begingroup
    \@ifnextchar[\LF@array{\LF@array[x]}}
77
78 \def\LF@array[#1]#2{%
    \refstepcounter{\LFcounter}\stepcounter{LF@tables}%
80
    \if l#1%
      \LFleft\z@ \LFright\fill
81
   \left| \right| r#1%
82
      \LFleft\fill \LFright\z@
83
84
   \else\if c#1%
```

\LFleft\fill \LFright\fill

```
\fi\fi\fi
86
     \let\LF@mcol\multicolumn
87
     \let\LF@@tabarray\@tabarray
88
     \let\LF@@hl\hline
89
90
     \def\@tabarray{%
91
       \let\hline\LF@@hl
92
       \LF@@tabarray}%
     \let\\\LF@tabularcr\let\tabularnewline\\%
93
     \def\newpage{\noalign{\break}}%
94
     95
     \def\nopagebreak{\noalign{\ifnum'}=0\fi\@testopt\LF@no@pgbk4}%
97
     \let\hline\LF@hline \let\kill\LF@kill\let\caption\LF@caption
     \@tempdima\ht\strutbox
     \let\@endpbox\LF@endpbox
     \ifx\extrarowheight\@undefined
100
       \let\@acol\@tabacol
101
       \let\@classz\@tabclassz \let\@classiv\@tabclassiv
102
       \def\@startpbox{\vtop\LF@startpbox}%
103
104
       \let\@@startpbox\@startpbox
105
       \let\@@endpbox\@endpbox
       \let\LF@LL@FM@cr\@tabularcr
106
107
     \else
       \advance\@tempdima\extrarowheight
108
       \col@sep\tabcolsep
109
       \let\@startpbox\LF@startpbox\let\LF@LL@FM@cr\@arraycr
110
111
     \setbox\@arstrutbox\hbox{\vrule
112
113
       \@height \arraystretch \@tempdima
       \@depth \arraystretch \dp \strutbox
114
       \width \z0%
115
     \let\@sharp##\let\protect\relax
116
117
      \begingroup
118
       \@mkpream{#2}%
       \xdef\LF@bchunk{%
119
120
          \global\advance\c@LF@chunks\@ne
121
          \global\LF@rows\z@\setbox\z@\vbox\bgroup
122
          \LF@setprevdepth
          \tabskip\LFleft \noexpand\halign to\hsize\bgroup
123
124
         \tabskip\z@ \@arstrut \@preamble \tabskip\LFright \cr}%
     \endgroup
125
126
     \expandafter\LF@nofcols\LF@bchunk&\LF@nofcols
127
     \LF@make@row
     \m@th\let\par\@empty
128
     \everycr{}\lineskip\z@\baselineskip\z@
129
     \LF@bchunk}
131 \def\LF@no@pgbk#1[#2]{\penalty #1\@getpen{#2}\ifnum'{=0\fi}}
132 \def\LF@start{%
133
     \let\LF@start\endgraf
     \endgraf\penalty\z@\vskip\LFpre
134
135
     \dimen@\pagetotal
```

```
136
    137
    \verb|\advance|dimen@ \ht\LF@foot|
138
    \dimen@ii\vfuzz
139
    \vfuzz\maxdimen
140
141
      \setbox\tw@\copy\z@
142
      \setbox\tw@\vsplit\tw@ to \ht\@arstrutbox
      \setbox\tw@\vbox{\unvbox\tw@}%
143
    \vfuzz\dimen@ii
144
    \advance\dimen@ \ht
145
          \ifdim\ht\@arstrutbox>\ht\tw@\@arstrutbox\else\tw@\fi
146
147
    \advance\dimen@\dp
          \ifdim\dp\@arstrutbox>\dp\tw@\@arstrutbox\else\tw@\fi
148
    \advance\dimen@ -\pagegoal
149
    \ifdim \dimen@>\z@\vfil\break\fi
150
        \global\@colroom\@colht
151
    \ifvoid\LF@foot\else
152
      \verb|\advance| vsize-\ht\LF@foot|
153
154
      \global\advance\@colroom-\ht\LF@foot
155
      \dimen@\pagegoal\advance\dimen@-\ht\LF@foot\pagegoal\dimen@
156
      \maxdepth\z@
    \fi
157
    158
    \output{\LF@output}}
159
160 \def\endlongfigure{%
161
    \crcr
    \noalign{%
162
      \let\LF@entry\LF@entry@chop
163
      \xdef\LF@save@row{\LF@save@row}}%
164
    \LF@echunk
165
    \LF@start
166
167
    168
    \LF@get@widths
169
    \if@filesw
170
      {\let\LF@entry\LF@entry@write\immediate\write\@auxout{%
        \gdef\expandafter\noexpand
171
          \csname LF@\romannumeral\c@LF@tables\endcsname
172
            {\LF@save@row}}}%
173
174
    \fi
    \ifx\LF@save@row\LF@@save@row
175
176
      \LF@warn{Column \@width s have changed\MessageBreak
177
              in table \thetable}%
178
      \LF@final@warn
179
180
    \fi
181
    \endgraf\penalty -\LF@end@pen
182
    \endgroup
    \verb|\global@mparbottom|z@|\\
183
    \pagegoal\vsize
184
    \endgraf\penalty\z@\addvspace\LFpost
185
```

```
\ifvoid\footins\else\insert\footins{}\fi}
187 \def\LF@nofcols#1&{%
     \futurelet\@let@token\LF@n@fcols}
188
189 \def\LF@n@fcols{%
     \advance\LF@cols\@ne
190
191
     \verb|\frac{let@token\LF@nofcols}| \\
192
       \expandafter\@gobble
193
     \else
       \expandafter\LF@nofcols
194
     \fi}
195
196 \def\LF@tabularcr{%
     \relax\iffalse{\fi\ifnum0='}\fi
197
198
     \@ifstar
       {\def\crcr{\LF@crcr\noalign{\nobreak}}\let\cr\crcr
199
200
        \LF@t@bularcr}%
       {\LF@t@bularcr}}
201
202 \let\LF@crcr\crcr
203 \left( \text{LF@setprevdepth} \right)
204 \def\LF@t@bularcr{%
205
     \global\advance\LF@rows\@ne
     \ifnum\LF@rows=\LFchunksize
206
207
       \gdef\LF@setprevdepth{%
         \prevdepth\z@\global
208
         \global\let\LF@setprevdepth\relax}%
209
210
       \expandafter\LF@xtabularcr
211
     \else
       \ifnumO='{}\fi
212
       \expandafter\LF@LL@FM@cr
213
     \fi}
214
215 \def\LF@xtabularcr{%
    \@ifnextchar[\LF@argtabularcr\LF@ntabularcr}
217 \def\LF@ntabularcr{%
218
     \ifnumO='{}\fi
     \LF@echunk
219
220
     \LF@start
221
     \LF@get@widths
222
223
     \LF@bchunk}
224 \def\LF@argtabularcr[#1]{%
225
     \ifnumO='{}\fi
226
     \int d^{1} d^{2} d^{2}
227
       \unskip\@xargarraycr{#1}%
     \else
228
       \@yargarraycr{#1}%
229
230
     \fi
231
     \LF@echunk
232
    \LF@start
233
     234
     \LF@get@widths
     \LF@bchunk}
235
```

```
236 \def\LF@echunk{%
     \crcr\LF@save@row\cr\egroup
237
     \verb|\global\setbox|@ne\lastbox|
238
239
       \unskip
     \egroup}
^{240}
241 \def\LF@entry#1#2{%
242
     \ifhmode\@firstofone{&}\fi\omit
     \ifnum#1=\c@LF@chunks
243
     \else
244
       \kern#2\relax
245
     \fi}
^{246}
247 \def\LF@entry@chop#1#2{%
     \noexpand\LF@entry
       {\ifnum#1>\c@LF@chunks
249
250
           1}{0pt%
        \else
251
          #1}{#2%
252
        fi}
253
254 \def\LF@entry@write{%
255
     \noexpand\LF@entry^^J%
     \@spaces}
256
257 \def\LF@kill{%
     \LF@echunk
258
     \LF@get@widths
259
     \expandafter\LF@rebox\LF@bchunk}
260
261 \def\LF@rebox#1\bgroup{%
     #1\bgroup
262
     \unvbox\z@
263
     \unskip
264
     \startle{1} \operatorname{setbox}_{2}(\astbox)
265
266 \def\LF@blank@row{%
     \xdef\LF@save@row{\expandafter\LF@build@blank
268
       \romannumeral\number\LF@cols 001 }}
269 \def\LF@build@blank#1{%
270
     \if#1m%
271
       \noexpand\LF@entry{1}{0pt}%
       \expandafter\LF@build@blank
272
     \fi}
273
274 \ensuremath{\mbox{LF@make@row}{\%}}
275
     \global\expandafter\let\expandafter\LF@save@row
276
       \csname LF@\romannumeral\c@LF@tables\endcsname
277
     \ifx\LF@save@row\relax
       \LF@blank@row
278
     \else
279
280
       {\let\LF@entry\or
281
        \if!%
282
             \ifcase\expandafter\expandafter\LF@cols
             \expandafter\@gobble\LF@save@row
283
284
             \or
             \else
285
```

```
286
                                               \relax
                                        \fi
287
                                     !%
288
                           \else
289
                                  \aftergroup\LF@blank@row
290
291
                           fi}%
292
                 \fi}
293 \let\setlongfigures\relax
294 \def\LF@get@widths{%
                 \setbox\tw@\hbox{%
295
                        \unhbox\@ne
296
                        \let\LF@old@row\LF@save@row
297
298
                        \global\let\LF@save@row\@empty
299
                        \count@\LF@cols
300
                        \loop
301
                              \unskip
                              \setbox\tw@\lastbox
302
                        \ifhbox\tw@
303
304
                              \LF@def@row
305
                              \advance\count@\m@ne
                        \repeat}%
306
                 \ifx\LF@@save@row\@undefined
307
                        \let\LF@@save@row\LF@save@row
308
                 \fi}
309
310 \ensuremath{\mbox{\sc 3}}10 \ensuremath{\mbox{\sc 10}}\ensuremath{\mbox{\sc 10}}\ensuremat
311
                 \let\LF@entry\or
312
                 \edef\@tempa{%
                        \ifcase\expandafter\count@\LF@old@row
313
                        \else
314
                              {1}{0pt}%
315
                        fi}%
316
317
                 \let\LF@entry\relax
318
                 \xdef\LF@save@row{%
                        \LF@entry
319
320
                        \expandafter\LF@max@sel\@tempa
321
                        \LF@save@row}}
322 \left( \frac{1}{2} \right)
                 { = wd\tw0}
323
324
                           #1%
325
                    \else
326
                           \number\c@LF@chunks
                    \fi}%
327
                 {\theta \setminus d \in \mathbb{N}}
328
329 \left\{ \text{Mef}\right\}
330
                 \noalign{\ifnum0='}\fi
331
                        \penalty\@M
332
                        \futurelet\@let@token\LF@@hline}
333 \def\LF@@hline{%
334
                 \ifx\@let@token\hline
                        \verb|\global| let|@gtempa|@gobble|
335
```

```
\gdef\LF@sep{\penalty-\@medpenalty\vskip\doublerulesep}%
336
     \else
337
       \global\let\@gtempa\@empty
338
       \gdef\LF@sep{\penalty-\@lowpenalty\vskip-\arrayrulewidth}%
339
340
     \fi
     \infnum0='{\{fi}}%
341
342
     \multispan\LF@cols
        \unskip\leaders\hrule\@height\arrayrulewidth\hfill\cr
343
     \noalign{\LF@sep}%
344
     \multispan\LF@cols
345
        \unskip\leaders\hrule\@height\arrayrulewidth\hfill\cr
346
347
     \noalign{\penalty\@M}%
     \@gtempa}
```

2.3 Captioning

You can easily change how a long figure is captioned by redefining the \LF@makecaption macro after loading the longfigure package. The following statements show the default definition of the \LF@makecaption:

```
349 \def\LF@caption{%
350 \noalign\bgroup
351 \@ifnextchar[{\egroup\LF@c@ption\@firstofone}\LF@capti@n}
```

The \LF@caption command begins the process. If it includes an optional argument, it calls \LF@c@ption; otherwise it calls \LF@caption, which then calls \LF@c@ption.

```
352 \def\LF@c@ption#1[#2]#3{%
353 \LF@makecaption#1\LF@name{#3}%
354 \def\@tempa{#2}%
355 \ifx\@tempa\@empty\else
```

If a list of long figures is requested, the following code uses the previously defined \strcfstr macro and \ifLF@same boolean to determine the name of the counter and set the output file to contain the longfigure information.

The code writes to one of the following files.

- If the counter is figure, write to the lof file.
- If the counter is table, write to the lot file.
- Otherwise, write to lft, a file created here for this purpose.

```
{\let\\\space
356
        \strcfstr{\LFcounter}{figure}
357
          \ifLF@same\def\LFoutfile{lof}\else
358
            \strcfstr{\LFcounter}{table}
359
               \ifLF@same\def\LFoutfile{lot}\else
360
361
                \def\LFoutfile{lft}\fi\fi
        \addcontentsline{\LFoutfile}{\LFcounter}
362
        {\expandafter\protect\expandafter\numberline\expandafter%
363
```

```
364 {\expandafter\csname the\LFcounter\endcsname}{#2}}}%
365 \fi
366 }
```

The \LF@c@ption macro ends the process when it calls the \LF@makecaption macro, which typesets the caption.

If you want to redefine how the longfigure is captioned, you need to override the following macro. The first argument is the name of the counter (for example, Figure), the second argument is the number of the counter, and the third argument is the caption itself.

```
\LF@mcol\LF@cols c{\hbox to\z@{\hss\parbox[t]\LFcapwidth{%
       \sbox\@tempboxa{#1{#2: }#3}%
373
       \ifdim\wd\@tempboxa>\hsize
374
         #1{#2: }#3%
375
       \else
376
         \hbox to\hsize{\hfil\box\@tempboxa\hfil}%
377
378
       \endgraf\vskip\baselineskip}%
379
     hss}
381 \def\LF@output{%
     \ifnum\outputpenalty <-\@Mi
382
       \ifnum\outputpenalty > -\LF@end@pen
383
         \LF@err{floats and marginpars not allowed in a longfigure}\@ehc
384
385
       \else
         \setbox\z@\vbox{\unvbox\@cclv}%
386
         \ifdim \ht\LF@lastfoot>\ht\LF@foot
387
           \dimen@\pagegoal
388
           \advance\dimen@-\ht\LF@lastfoot
389
           \ifdim\dimen@<\ht\z@
390
             \setbox\@cclv\vbox{\unvbox\z@\copy\LF@foot\vss}%
391
392
             \@makecol
             \@outputpage
394
             \setbox\z@\vbox{\box\LF@head}%
           \fi
395
         \fi
396
         \global\@colroom\@colht
397
         \global\vsize\@colht
398
         \vbox
399
           {\unvbox\z@\box\ifvoid\LF@lastfoot\LF@foot\else
400
            \LF@lastfoot\fi}%
401
402
       \fi
403
       \setbox\@cclv\vbox{\unvbox\@cclv\copy\LF@foot\vss}%
404
405
       \@makecol
```

```
\@outputpage
406
         \global\vsize\@colroom
407
       \copy\LF@head\nobreak
408
     \fi}
409
410 \end@hd@ft#1{%}
     \LF@echunk
412
     \ifx\LF@start\endgraf
413
       \LF@err
        {Longfigure head or foot not at start of table}%
414
        {Increase LFchunksize}%
415
     \fi
416
     \start1\box\z@
417
     \LF@get@widths
     \LF@bchunk}
419
The following four macros do not have an \LT prefix in the longtable package,
but they must be redefined to have an \LF prefix in order to avoid a namespace
clash;
420 \def\endLFfirsthead{\LF@end@hd@ft\LF@firsthead}
421 \def\endLFhead{\LF@end@hd@ft\LF@head}
422 \def\endLFfoot{\LF@end@hd@ft\LF@foot}
423 \def\endLFlastfoot{\LF@end@hd@ft\LF@lastfoot}
424 %
425 \def\LF@startpbox#1{%
     \bgroup
426
       \let\@footnotetext\LF@p@ftntext
427
428
       \setlength\hsize{#1}%
       \@arrayparboxrestore
429
       \vrule \@height \ht\@arstrutbox \@width \z@}
430
431 \def\LF@endpbox{%
     \@finalstrut\@arstrutbox
432
     \egroup
433
     \the\LF@p@ftn
434
     \global\LF@p@ftn{}%
435
     \hfil}
436
437 \def\LF@p@ftntext#1{%
     \edef\@tempa{\the\LF@p@ftn\noexpand\footnotetext[\the\c@footnote]}%
     \global\LF@p@ftn\expandafter{\@tempa{#1}}}%
```

2.4 References

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Wilson, Peter. 2001. Glisterings in TUGboat 22(4), 339–340. $^{440} \left< / \mathsf{longfigure} \right>$