## kuthesis.dtx\*

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#### Abstract

Kuthesis.dtx is a style file for the Kettering University Thesis Format for L<sup>A</sup>T<sub>E</sub>X. It is designed to cover most needs that Kettering thesis students have.

### **Preface**

Usage of other styles. You will find traces of other style files sucked in whole-sale by this file. This is not to offend the original owners of those files; I figure that a student adventurous enough to try this file out ought to have all the help they can get. The most flagrant use of this is in the endnote section. Due to the multitude of available files for to do it, I have not added APA-style citing.

**Special note.** This style does not attempt to provide APA-style citing. There are a number of packages out there, of which the most comprehensive is apacite (which has both a LATEX style and a BIBTEX style). However, you'll have to \renewcommand the keyword \bibname, because they define it to have lowercase and use addcontentsline to get around any provisions I may make.

Arthur's thanks. There are three people I wish to thank for help on creating this file. First, Professor Mark Wicks of Kettering University, who answered a good number of my headscratchers. Second, Professor James McDonald of Kettering University, who encouraged me to use IATEX to create my thesis. Finally, my fianceé, Stephanie Rybicki, who was kind enough to give me the kick I needed to get this file documented. It is still somewhat of a crawling horror, though.

Alison's thanks. I'd like to thank Mark Wicks for digging up Arthur's work over a decade after the fact, and Arthur for not thinking it creepy that I contacted him out of the blue regarding this project, and for permitting me to host it on Github and update it for the current thesis specifications.

<sup>\*</sup>This file has version v0.5 last revised 2015/04/15

## 1 Getting Started

#### 1.1 Requirements

This style file requires the setspace, times, helvet, ifthen, and calc packages. With the possible exception of setspace, all of these should be in your TEX distribution.

#### 1.2 Installation

- 1. Make sure the files are in your current working directory and run kuthesis.ins through T<sub>F</sub>X.
- 2. Move the generated files to someplace you'd like them to be. I'm sure there's an official spot.
- 3. If your T<sub>E</sub>X implementation uses a filename database, update it.

#### 1.3 Usage

The use of this file is actually fairly simple, as it acts almost exactly like the report style. Just add the following to your file:

\documentclass[12pt]{kuthesis} % Specifies the document class

Of course, in order to completely make a file fit the Kettering Thesis manual, there is more to do than that. First off, in addition to \title{} and \author{}, you are to define other things. To start with, you must define your department with \department{Computer Engineering}. Then, define your employer with \employer{MAXIMUM WIDGETS}. Finally, define your graduation year with \gdate{2015}. This way, when you use \maketitle, not only will your title page be generated but your disclaimer page will be generated as well.

Next, enclose your preface in the preface environment with \begin{preface} and \end{preface}.

In order to produce the table of contents, list of illustrations, and list of tables, you'll need to do the following.

\singlespacing \tableofcontents\ \listofillustrations

Finally, when it is time to begin the body of your thesis, use \begincontent. Enter chapters as you would for a report. Note that footnotes are not permitted; use \endnote with a \theendnotes at the end of each chapter.

Creating a glossary will require you to \setcounter{secnumdepth}{-1} before the glossary and \setcounter{secnumdepth}{0} afterwards. Declare appendicies with \appendix before chapter names, but note that a single appendix will have to be done by hand.

### 1.4 Using apacite with kuthesis.cls

Just use the following code, and do citations as normal. Naturally, don't forget to use the apacite package in your preamble.

```
\begin{singlespace}
\bibliographystyle{apacite}
\bibliography{thesis}
\end{singlespace}
```

### 2 Source Code Examination and Discussion

This source code is based heavily on the report style source code. Therefore, I will focus more on commenting on changes and interesting properties.

```
1 \NeedsTeXFormat{LaTeX2e}[1995/12/01]
```

2 \ProvidesClass{kuthesis}[2015/04/15 Kettering University Thesis class definition]

We must double space almost everything and put it in 12 pt Times New Roman. In certain cases, Helvetica may be needed. Since we will still occasionally need to single space things, we simply use the setspace package.

```
3 \RequirePackage{setspace}
4 \RequirePackage{times}
5 \RequirePackage{helvet}
6 \RequirePackage{ifthen}
7 \RequirePackage{calc}
8 \RequirePackage{etoolbox}
```

There are spots in this file where options remain that aren't useful. Paper sizes are one of these things. One of these days perhaps someone will rip it out, but I'm not too willing to risk yet another style change.

```
9 \newcommand\@ptsize{}
10 \newif\if@restonecol
11 \newif\if@titlepage
12 \@titlepagetrue
13 \newif\if@openright
14 \if@compatibility\else
15 \DeclareOption{a4paper}
     {\setlength\paperheight {297mm}%
16
      \setlength\paperwidth {210mm}}
17
18 \DeclareOption{a5paper}
     {\setlength\paperheight {210mm}%
19
      \setlength\paperwidth {148mm}}
20
21 \DeclareOption{b5paper}
     {\setlength\paperheight {250mm}%
22
      \setlength\paperwidth {176mm}}
23
24 \DeclareOption{letterpaper}
25
     {\setlength\paperheight {11in}%
      \setlength\paperwidth {8.5in}}
```

```
27 \DeclareOption{legalpaper}
            {\setlength\paperheight {14in}%
28
               \setlength\paperwidth {8.5in}}
29
30 \DeclareOption{executivepaper}
            {\setlength\paperheight {10.5in}%
31
              \setlength\paperwidth {7.25in}}
33 \DeclareOption{landscape}
            {\setlength\@tempdima
34
                                                                      {\paperheight}%
               \setlength\paperheight {\paperwidth}%
35
               \setlength\paperwidth {\@tempdima}}
36
37 \fi
38 \if@compatibility
         \renewcommand\@ptsize{0}
40 \ensuremath{\setminus} else
41 \DeclareOption{10pt}{\renewcommand\@ptsize{0}}
42 \fi
43 \DeclareOption{11pt}{\renewcommand\@ptsize{1}}
44 \DeclareOption{12pt}{\renewcommand\@ptsize{2}}
45 \if@compatibility\else
46 \DeclareOption{oneside}{\@twosidefalse \@mparswitchfalse}
48 \DeclareOption{twoside}{\@twosidetrue \@mparswitchtrue}
49 \DeclareOption{draft}{\setlength\overfullrule{5pt}}
50 \if@compatibility\else
51 \DeclareOption{final}{\setlength\overfullrule{Opt}}
52 \fi
53 \DeclareOption{titlepage}{\@titlepagetrue}
54 \if@compatibility\else
55 \label{lem:condition} \begin{tabular}{l} 155 \label{l} \begin{tabular}{l} \begin{ta
56 \fi
57 \if@compatibility
58 \ensuremath{\setminus} \texttt{else}
59 \DeclareOption{openright}{\@openrighttrue}
60 \DeclareOption{openany}{\@openrightfalse}
61 \fi
62 \if@compatibility\else
63 \DeclareOption{onecolumn}{\@twocolumnfalse}
64 \fi
65 \DeclareOption{twocolumn}{\@twocolumntrue}
66 \DeclareOption{leqno}{\input{leqno.clo}}
67 \DeclareOption{fleqn}{\input{fleqn.clo}}
68 \DeclareOption{openbib}{%
          \AtEndOfPackage{%
69
            \renewcommand\@openbib@code{%
70
71
                   \advance\leftmargin\bibindent
72
                   \itemindent -\bibindent
73
                   \listparindent \itemindent
74
                   \parsep \z@
                   }%
75
            \renewcommand\newblock{\par}}%
76
```

```
77 }
```

The following options are what you get if you do not specify any options in the class definition. It is designed to produce a thesis the way the university wants to see it.

```
78 \ExecuteOptions{letterpaper,12pt,oneside,onecolumn,final,openany}
 79 \ProcessOptions
 80 \input{size1\@ptsize.clo}
 To produce output with the desired line spacing, the argument of \spacing should
 be multiplied by 5/6 = 0.8333, so that 1\frac{1}{2} spacing corresponds to \spacing{1.5}
 and double spaced is \spacing{1.66}.
 81 \def \normalspacing{1.25} % default line spacing
 82 \setlength\lineskip{1\p0}
 83 \setlength\normallineskip\{1\p0\}
 84 \renewcommand\baselinestretch{}
 85 \setlength\parskip{0\p0 \@plus \p0}
 86 \@lowpenalty
                   51
 87 \@medpenalty 151
 88 \@highpenalty 301
 89 \setcounter{topnumber}{2}
 90 \renewcommand\topfraction{.7}
 91 \setcounter{bottomnumber}{1}
 92 \renewcommand\bottomfraction{.3}
 93 \setcounter{totalnumber}{3}
 94 \renewcommand\textfraction{.2}
 95 \renewcommand\floatpagefraction{.5}
 96 \setcounter{dbltopnumber}{2}
 97 \renewcommand\dbltopfraction{.7}
 98 \renewcommand\dblfloatpagefraction{.5}
 99 \if@twoside
100
     \def\ps@headings{%
101
         \let\@oddfoot\@empty\let\@evenfoot\@empty
102
         \def\@evenhead{\thepage\hfil\slshape\leftmark}%
         \def\@oddhead{{\slshape\rightmark}\hfil\thepage}%
103
         \let\@mkboth\markboth
104
       \def\chaptermark##1{%
105
         \markboth {\MakeUppercase{%
106
            \ifnum \c@secnumdepth >\m@ne
107
                \@chapapp\ \thechapter. \ %
108
            \fi
109
           ##1}}{}}%
110
       \def\sectionmark##1{%
111
112
         \markright {\MakeUppercase{%
            \ifnum \c@secnumdepth >\z@
113
              \thesection. \ %
114
            \fi
115
           ##1}}}
116
117 \else
     \def\ps@headings{%
```

```
\let\@oddfoot\@empty
119
       \def\@oddhead{{\slshape\rightmark}\hfil\thepage}%
120
       \let\@mkboth\markboth
121
       \def\chaptermark##1{%
122
         \markright {\MakeUppercase{%
123
124
           \ifnum \c@secnumdepth >\m@ne
125
               \@chapapp\ \thechapter. \ %
126
           \fi
127
           ##1}}}
128 \fi
129 \def\ps@myheadings{%
       \let\@oddfoot\@empty\let\@evenfoot\@empty
130
       \def\@evenhead{\thepage\hfil\slshape\leftmark}%
131
       \def\@oddhead{{\slshape\rightmark}\hfil\thepage}%
132
       \let\@mkboth\@gobbletwo
133
       \let\chaptermark\@gobble
134
       \let\sectionmark\@gobble
135
       }
136
Items required for the title page.
137 \newcommand{\employer}[1]{\ifx\empty#1\else\gdef\@employer{#1}\fi}
139 \renewcommand{\author}[1]{\ifx\empty#1\else\gdef\@author{#1}\fi}
140 \renewcommand{\title}[1]{\ifx\empty#1\else\gdef\0title{#1}\fi}
141 \end{\gdate} [1] {\ifx\neq pty#1\leq gdef @gdate{#1}\fi}
142
143 \global\def\@employer{\mbox{}}
144 \global\def\@degree{\mbox{}}
145 \global\def\@author{\mbox{}}
146 \global\def\@title{\mbox{}}
147 \global\def\@gdate{\number\date} % Default date is current date
Here \maketitle is changed to follow the KU guidelines. It includes its own
disclaimer page. The \maketitle command takes one argument to specify what
type of title page to generate.
148 \newcommand{\maketitle}[1][coop]
149 {
150 \begin{titlepage}
151
      \setcounter{page}{1}
Set the line spacing to 1 for the title page.
      \begin{spacing}{1}
152
      \begin{center}
153
154
         \mathbb{m} 
         \textbf{\MakeUppercase{\@title}}\\
155
         \vspace{2em}
156
         \ifstrequal{#1}{coop}
157
         {A Co-op Thesis written for \\
158
          \vspace{1em}
159
160
          \textbf{\@employer} \\}
161
         {}
```

```
162
        \ifstrequal{#1}{research}
        {A Research Thesis written for \
163
         \vspace{1em}
164
         \textbf{KETTERING UNIVERSITY} \\}
165
        {}
166
167
        \ifstrequal{#1}{pp}
168
        {A Professional Practice Thesis written for \
         \vspace{1em}
169
         \textbf{\@employer} \\}
170
        {}
171
        \ifstrequal{#1}{eship}
172
        {An E-Ship Thesis written by \
173
174
         \vspace{1em}
         \textbf{\MakeUppercase{{\@author}}} \\}
175
176
        \vspace{1em}
177
        and submitted to \
178
        \vspace{1em}
179
180
        \textbf{KETTERING UNIVERSITY} \\
181
        \vspace{3em}
        in partial fulfillment \\
182
        of the requirements for the \
183
        degree of \
184
        \vspace{1em}
185
        \textbf{BACHELOR OF SCIENCE IN \MakeUppercase{\@department}} \\
186
187
        \vspace{3em}
        \ifstrequal{#1}{eship}
188
189
        {}
        {by \\
190
         \vspace{1em}
191
         \label{thm:linear_case} $$ \operatorname{\mathbb{M}}(\mathcal{L}^{2}) = \mathbb{C}^{0}. $$
192
193
        }
194
        \vspace{1em}
        {\@gdate} \\
195
196
        \vfill
197
     \end{center}
198
     \begin{flushright}
199
200
201
202
     \begin{tabular}{0{}1}
     \\ \hline
203
     Student
                11
204
205
     11
206
     207
208 \ \texttt{faculty Thesis Advisor} \\
209 \ifstrequal{#1}{pp}{Company Liaison~~~~~~~~~}{}%
210 \ifstrequal{#1}{eship}{Faculty Thesis Advisor $\mathbb{Z}_{20} \to \mathbb{Z}_{20}  \\
211
     //
```

```
\\ \hline
212
            \ifstrequal{#1}{coop}{Faculty Thesis Advisor}{}%
213
214 \ifstrequal{#1}{research}{Committee Member}{}%
215 \ifstrequal{#1}{pp}{Faculty Thesis Advisor}{}%
216 \ifstrequal{#1}{eship}{Committee Member}{} \\
217
            \end{tabular}
218
219
220
            \end{flushright}
            \end{spacing}
221
            \end{titlepage}
222
223
             \setcounter{page}{2}
             \setcounter{secnumdepth}{-1}
224
225
226
            \chapter{DISCLAIMER}
227
            \begin{doublespace}
             \par
228
              This thesis is being submitted as partial fulfillment of the
229
230
              graduation requirements of Kettering University needed
231
              to obtain a Bachelor of Science in {\@department} Degree.
232
              The conclusions and opinions expressed in this thesis are those
233
              of the student author and do not necessarily represent the position
234
               of Kettering University or anyone else affiliated with this
235
236
               culminating undergraduate experience.
237
             \end{doublespace}
238 }%\maketitle
240 \newcommand*\chaptermark[1]{}
 Chapters are the only numbered objects, and they use Roman numerals. Roman
 numerals are set below.
241 \setcounter{secnumdepth}{0}
242 \setcounter{secnumdepth}{0}
243 \newcounter {part}
244 \newcounter {chapter}
245 \newcounter {section}[chapter]
246 \newcounter {subsection}[section]
247 \newcounter {subsubsection}[subsection]
248 \newcounter {paragraph}[subsubsection]
249 \newcounter {subparagraph}[paragraph]
250 \renewcommand \thepart {\@Roman\c@part}
251 \renewcommand \thechapter {\@Roman\c@chapter}
253 \renewcommand \the subsection {\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\colored{\c
254 \renewcommand\thesubsubsection{\thesubsection .\@arabic\c@subsubsection}
255 \renewcommand\theparagraph
                                                                {\thesubsubsection.\@arabic\c@paragraph}
257 \newcommand\@chapapp{\chaptername}
258 \newcommand\part{%
```

```
259
                \if@openright
                       \cleardoublepage
260
                \else
261
                      \clearpage
262
                \fi
263
264
                \thispagestyle{plain}%
265
                \if@twocolumn
                       \onecolumn
266
267
                       \@tempswatrue
                \else
268
                       \@tempswafalse
269
                \fi
270
271
                \left\langle \right\rangle 
272
                \secdef\@part\@spart}
273
274 \left[ 1] #2 %
                      \ifnum \c@secnumdepth >-2\relax
275
                             \refstepcounter{part}%
276
                             \addcontentsline{toc}{part}{\thepart\hspace{1em}#1}%
277
278
                             \addcontentsline{toc}{part}{#1}%
279
                       \fi
280
                       \markboth{}{}%
281
                       {\centering
282
                         \interlinepenalty \@M
283
284
                          \normalfont
285
                          \ifnum \c@secnumdepth >-2\relax
                                 \huge\bfseries \partname~\thepart
286
                                \par
287
                                \vskip 20\p0
288
                          \fi
289
290
                          \Huge \bfseries #2\par}%
291
                       \@endpart}
292 \def\@spart#1{%
293
                       {\centering
                          \interlinepenalty \@M
294
                          \normalfont
295
                          \Huge \bfseries #1\par}%
296
297
                       \@endpart}
298
           \def\@endpart{\vfil\newpage
299
                                                       \if@twoside
300
                                                             \null
                                                             \t \
301
                                                             \newpage
302
303
                                                       \fi
304
                                                       \if@tempswa
305
                                                            \twocolumn
                                                      \fi}
306
307 \verb|\command\chapter{\clear} double page\else\clear page\fine the command command compared to the 
                                                                         \thispagestyle{plain}%
308
```

```
\global\@topnum\z@
309
                        \@afterindentfalse
310
                        \secdef\@chapter\@schapter}
311
 We put a period after the chapter number in the table of contents. (e.g. I.
INTRODUCTION)
312 \def\@chapter[#1]#2{\ifnum \c@secnumdepth >\m@ne
                             \refstepcounter{chapter}%
313
314
                             \typeout{\@chapapp\space\thechapter.}%
315
                             \addcontentsline{toc}{chapter}%
                                        {\protect\numberline{\thechapter\@.}\MakeUppercase{#1}}%
316
317
                        \else
                          \addcontentsline{toc}{chapter}{\MakeUppercase{#1}}%
318
319
                        \fi
                        \chaptermark{#1}%
320
                        \if@twocolumn
321
                          \@topnewpage[\@makechapterhead{#2}]%
322
                        \else
323
                          \@makechapterhead{#2}%
324
325
                          \@afterheading
326
 We do simplistic Chapter Headers. Note that these fix the table of contents as
 well.
327 \def\@makechapterhead#1{%
328
     {\parindent \z@ \centering \normalfont
329
       \ifnum \c@secnumdepth >\m@ne
330
            \bfseries \thechapter.\enspace
331
332
       \bfseries\MakeUppercase{#1}\par\nobreak
       \wedge 40\p0
333
     }}
334
335 \def\@makeschapterhead#1{%
     {\parindent \z@ \centering
336
337
       \normalfont
338
       \interlinepenalty\@M
       \bfseries\MakeUppercase{#1}\par\nobreak
339
       \wedge 40\p0
340
341
     }}
342 \def\@schapter#1{\if@twocolumn
                       \@topnewpage[\@makeschapterhead{#1}]%
343
344
                       \@makeschapterhead{#1}%
345
                       \@afterheading
346
347
                     \fi}
 The format requires underlined section headers.
348 \newcommand\section{\@startsection{section}{1}{0mm}\%
                                         {3.5ex \@plus 1ex \@minus .2ex}%
349
350
                                         {2.3ex \@plus.2ex}%
351
                                         {\raggedright\normalsize\bfseries\underline}}%
```

```
352 \newcommand\subsection{\Qstartsection{subsection}{2}\{0mm\}%
                                          {3.25ex\plus 1ex \plus .2ex}%
353
                                          {1.5ex \mathbb{Q}plus .2ex}%
354
                                          {\normalfont\normalsize\bfseries\underline}}%
355
356 \mbox{\command\subsubsection}{3}{0mm}\%
357
                                          {3.25ex\plus 1ex \plus .2ex}%
358
                                          {1.5ex \@plus .2ex}%
                                          {\normalfont\normalsize\bfseries\underline}}%
359
360 \newcommand\paragraph{\Qstartsection{paragraph}{4}{\zQ}\%
                                         {3.25ex \@plus1ex \@minus.2ex}%
361
                                         {-1em}%
362
                                         {\normalfont\normalsize\bfseries}}
363
364 \newcommand\subparagraph{\@startsection{subparagraph}{5}{\parindent}%
                                             {3.25ex \@plus1ex \@minus .2ex}%
365
                                             {-1em}%
366
                                           {\normalfont\normalsize\bfseries}}
367
368 \if@twocolumn
     \setlength\leftmargini {2em}
370 \else
371
     \setlength\leftmargini {2.5em}
372 \fi
373 \leftmargin \leftmargini
374 \setlength\leftmarginii {2.2em}
375 \setlength\leftmarginiii {1.87em}
376 \setlength\leftmarginiv {1.7em}
377 \if@twocolumn
     \setlength\leftmarginv {.5em}
378
     \setlength\leftmarginvi {.5em}
379
380 \ensuremath{\setminus} \texttt{else}
     \setlength\leftmarginv {1em}
381
     \setlength\leftmarginvi {1em}
382
383 \fi
384 \setlength \labelsep {.5em}
385 \setlength \labelwidth{\leftmargini}
386 \addtolength\labelwidth{-\labelsep}
387 \ensuremath{\,^{\circ}}\xspace \@beginparpenalty -\@lowpenalty
                      -\@lowpenalty
388 \@endparpenalty
                      -\@lowpenalty
389 \@itempenalty
390 \renewcommand\theenumi{\@arabic\c@enumi}
391 \renewcommand\theenumii{\@alph\c@enumii}
392 \renewcommand\theenumiii{\@roman\c@enumiii}
393 \renewcommand\theenumiv{\@Alph\c@enumiv}
394 \newcommand\labelenumi{\theenumi.}
395 \newcommand\labelenumii{(\theenumii)}
396 \newcommand\labelenumiii{\theenumiii.}
397 \newcommand\labelenumiv{\theenumiv.}
398 \renewcommand\p@enumii{\theenumi}
399 \renewcommand\p@enumiii{\theenumi(\theenumii)}
400 \renewcommand\p@enumiv{\p@enumiii\theenumiii}
```

401 \newcommand\labelitemi{\textbullet}

```
402 \newcommand\labelitemii{\normalfont\bfseries \textendash}
403 \newcommand\labelitemiii{\textasteriskcentered}
404 \verb|\newcommand\labelitemiv{\textperiodcentered}|
405 \newenvironment{description}
                   {\simeq \sum_{s\in S}}{
406
407
                    \renewcommand{\makelabel}[1]{\normalfont ##1:\hfil}%
408
                    \setlength{\labelwidth}{1.5 in}%
                    \setlength{\leftmargin}{\labelwidth+\labelsep}}}
409
                   {\end{list}\doublespacing}
410
   \newcommand*\descriptionlabel[1]{\hspace\labelsep
411
                                      \normalfont #1:\hfil}
412
413 \newenvironment{preface}
414 {
415 \setcounter{secnumdepth}{-1}
416 \chapter{\prefacename}\begin{doublespacing}
417 }
418 {\end{doublespacing}\setcounter{secnumdepth}{0}}
419 \newenvironment{verse}
420
                   {\let\\\@centercr
421
                    \list{}{\itemsep
                                           \z@
                                           -1.5em\%
422
                            \itemindent
                            \listparindent\itemindent
423
                            \rightmargin \leftmargin
424
                            \advance\leftmargin 1.5em}%
425
                    \item\relax}
426
427
                   {\endlist}
428 \newenvironment{quotation}
                   {\list{}{\listparindent 1.5em%
429
                            \itemindent
                                            \listparindent
430
                                            \leftmargin
                            \rightmargin
431
                            \parsep
                                            \z@ \@plus\p@}%
432
433
                    \item\relax}
434
                   {\endlist}
435 \newenvironment{quote}
                   {\list{}{\rightmargin\leftmargin}%
436
437
                    \item\relax}
                   {\endlist}
438
439 \if@compatibility
440 \newenvironment{titlepage}
441
442
         \if@twocolumn
443
           \@restonecoltrue\onecolumn
         \else
444
           \@restonecolfalse\newpage
445
446
447
         \thispagestyle{empty}%
448
         \setcounter{page}\z0
449
450
       {\if@restonecol\twocolumn \else \newpage \fi
       }
451
```

```
452 \ensuremath{\setminus} else
453 \newenvironment{titlepage}
454
        {%
          \if@twocolumn
455
             \@restonecoltrue\onecolumn
456
457
          \else
458
             \@restonecolfalse\newpage
459
          \thispagestyle{empty}%
460
          \setcounter{page}\@ne
461
462
        {\if@restonecol\twocolumn \else \newpage \fi
463
464
         \if@twoside\else
             \setcounter{page}\@ne
465
466
         \fi
        }
467
468 \fi
```

The appendix command has many tasks. Note that right now, if you have only one appendix, you're on your own. A lot of this was ripped from Peter Wilson's appendix class. The only reason I ripped it was because his system provides no facility for telling it whether chapter or section starts an appendix for a non-standard class. Since this needs to be fairly easy for fellow students (E.g. no editing other packages if I can help it), I rewrote and inserted it here.

```
469 \newcommand\appendix{\par
470
     \thispagestyle{plain}%
     \if@twocolumn\onecolumn\@tempswatrue\else\@tempswafalse\fi
471
     \markboth{}{}%
472
     {\setcounter{secnumdepth}{-1}
473
474
     \chapter{\appendixtocname}
     \setcounter{secnumdepth}{0}}%
475
476
     \vfil\newpage
     \if@twoside
477
        \if@openright
478
          \null
479
480
          \thispagestyle{empty}%
481
          \newpage
482
     \fi
483
     \if@tempswa
484
        \twocolumn
485
     \fi
486
487
     \setcounter{section}{0}
488
     \setcounter{chapter}{0}
489
     \renewcommand\@chapapp{\appendixname}
490
     \renewcommand\thechapter{\@Alph\c@chapter}
491
     \let\oldacl@pp=\addcontentsline
492
493
     \def\addcontentsline##1##2##3{%
494
        \left\{ \left( \frac{\#1}{toc} \right) \right\}
```

```
495 \ifthenelse{\equal{\pmatrix}{\chapter}}{\chapter}}{\delta}
496 \addtocontents{\pmatrix}{\protect\contentsline{\pmatrix}{\thepage}}}{\delta}
497 \quad \{\appendixname\space \pmatrix}{\thepage}}}{\delta}
498 \quad \{\oldacl@pp{\pmatrix}{\pmatrix}}{\pmatrix}}{\delta}
499 \quad \{\oldacl@pp{\pmatrix}{\pmatrix}}{\pmatrix}}
```

Note: Still in \appendix.

Note we have that darned colon in for appendicies in the TOC. Also note the ugly kludge being used to remove vertical spacing between appendix names.

```
500 \def\@chapter[##1]##2{\ifnum \c@secnumdepth >\m@ne
501
                             \refstepcounter{chapter}%
                             \typeout{\@chapapp\space\thechapter}%
502
503
                             \addcontentsline{toc}{section}%
504
                                        {\@chapapp\space\thechapter: ##1}%
                        \else
505
                          \addcontentsline{toc}{chapter}{##1}%
506
507
                        \chaptermark{##1}%
508
                          \if@twocolumn
509
                          \@topnewpage[\@makechapterhead{##2}]%
510
511
                          \@makechapterhead{##2}%
512
                          \@afterheading
513
514
                        \fi}
```

Now things are redefined a special page just for the chapter heading.

```
515 \def\@makechapterhead##1{%
     \vspace*{1in}%
517
     {\parindent \z@ \centering \normalfont
       \ifnum \c@secnumdepth >\m@ne
518
           \bfseries \@chapapp\ \thechapter\@\par
519
       \fi
520
       \vskip 40\p@
521
522
       \bfseries \MakeUppercase##1\par\nobreak
523
       \clearpage
524
     }}
525 }
526 \sline 1500
527 \setlength\tabcolsep{6\p0}
528 \verb|\setlength\arrayrulewidth{.4\p@}|
529 \setlength\doublerulesep{2\p0}
530 \setlength\tabbingsep{\labelsep}
531 \skip\@mpfootins = \skip\footins
532 \setlength\fboxsep{3\p0}
533 \setlength\fboxrule{.4\p0}
534 \@addtoreset {equation}{chapter}
535 \renewcommand\theequation
     {\ifnum \c@chapter>\z@ \thechapter.\fi \@arabic\c@equation}
```

Here we reconfigure lists of figures and tables to appear in table of contents. Also, parts of report.cls were removed to reconfigure figure counter to number for the

```
entire document rather than per chapter.
537 \newcounter{figure}
538 \def\fps@figure{tbp}
539 \def\ftype@figure{1}
540 \def\ext@figure{lof}
541 \def\fnum@figure{\underline{\figurename~\thefigure.}}
542 \newenvironment{figure}
                  {\@float{figure}}
543
                  {\end@float}
544
545 \newenvironment{figure*}
                  {\@dblfloat{figure}}
546
                  {\end@dblfloat}
547
Reconfigured table counter to number for the entire document, not per chapter.
(Bits of report.cls removed)
548 \newcounter{table}
549 \def\fps@table{tbp}
550 \def\ftype@table{2}
551 \def\ext@table{lot}
552 \def\fnum@table{\underline{\tablename~\thetable.}}
553 \newenvironment{table}
                  {\@float{table}}
554
                  {\end@float}
555
556 \newenvironment{table*}
                  {\@dblfloat{table}}
557
                  {\end@dblfloat}
558
559 \newlength\abovecaptionskip
560 \newlength\belowcaptionskip
561 \setlength\abovecaptionskip{10\p@}
562 \setlength\belowcaptionskip{0\p0}
563 \long\def\@makecaption#1#2{%
     \vskip\abovecaptionskip
564
565
     \sbox\@tempboxa{#1 #2}%
     \ifdim \wd\@tempboxa >\hsize
566
       #1 #2\par
567
     \else
568
       \global \@minipagefalse
569
       \hb@xt@\hsize{\hfil\box\@tempboxa\hfil}%
570
571
     \vskip\belowcaptionskip}
573 \DeclareOldFontCommand{\rm}{\normalfont\rmfamily}{\mathrm}
574 \DeclareOldFontCommand{\sf}{\normalfont\sffamily}{\mathsf}
575 \end{\text{\command}\tt}{\command}\ttfamily}{\command}
576 \DeclareOldFontCommand{\bf}{\normalfont\bfseries}{\mathbf}
577 \DeclareOldFontCommand{\it}{\normalfont\itshape}{\mathit}
578 \end{$\tt S1}{\bf S1}{\bf S1}{\bf S1}{\bf S1}
579 \DeclareOldFontCommand{\sc}{\normalfont\scshape}{\Qnomath\sc}
580 \DeclareRobustCommand*\cal{\@fontswitch\relax\mathcal}
581 \DeclareRobustCommand*\mit{\@fontswitch\relax\mathnormal}
582 \newcommand\@pnumwidth{1.55em}
```

```
583 \newcommand\@tocrmarg{2.55em}
584 \newcommand\@dotsep{4.5}
585 \setcounter{tocdepth}{2}
586 \newcommand\tableofcontents{%
                          \if@twocolumn
587
588
                                 \@restonecoltrue\onecolumn
589
                          \else
                                 \@restonecolfalse
590
                          \fi
591
                          \chapter*{\contentsname
592
                                        \@mkboth{%
593
                                                   \MakeUppercase\contentsname}{\MakeUppercase\contentsname}}%
594
                          \@starttoc{toc}%
595
                          \if@restonecol\twocolumn\fi
596
597
598 \newcommand*\l@part[2]{%
                  \ifnum \c@tocdepth >-2\relax
599
                          \addpenalty{-\@highpenalty}%
600
601
                          \addvspace{2.25em \@plus\p@}%
602
                          \begingroup
                                 \parindent \z@ \rightskip \@pnumwidth
603
604
                                 \parfillskip -\@pnumwidth
605
                                 {\leavevmode
                                     \large \bfseries #1\hfil \hb@xt@\@pnumwidth{\hss #2}}\par
606
607
                                     \nobreak
608
                                            \global\@nobreaktrue
                                            \everypar{\global\@nobreakfalse\everypar{}}%
609
610
                          \endgroup
                  \fi}
611
  Here we setup table of contents.
612 \mbox{ l@chapter{\vspace{1em}\@dottedtocline{0}{0em}{4em}}}
613 \newcommand*\l@section{\@dottedtocline{1}{5.5em}{2.3em}}
614 \mbox{ } 10subsection{\dottedtocline{2}{7.8em}{3.2em}}
615 \ensuremath{\mbox{\mbox{$15$}}} 11.0em \ensuremath{\mbox{\mbox{$4.1em$}$}} \\
616 \mbox{ } \mbox{0} \mbox{
617 \end{*}\label{loss_command*} $$ 617 \end{*}\label{loss_command*} $$ 600 \end{*} $$ 1600 \end{*} $$ 6000 \end{*} $$ 1000 
  List of illustrations modified to appear in the table of contents.
618 \newcommand\listofillustrations{%
                          \setcounter{secnumdepth}{-1}
619
620
                          \chapter{\listillusname%
                                 \@mkboth{\MakeUppercase\listillusname}%
621
622
                                                              {\MakeUppercase\listillusname}}%
623 \begin{doublespace}%
624 \begin{raggedright}%
625 \textbf{\underline{Figures}\hfill\underline{Page}}%
626 \end{raggedright}%
627 \@starttoc{lof}%
628 \vspace{2em}
629 \begin{raggedright}%
```

```
630 \textbf{\underline{Tables}\hfill\underline{Page}}%
631 \end{raggedright}%
632 \@starttoc{lot}%
633 \end{doublespace}
634 \setcounter{secnumdepth}{0}
636 \newcommand*\l@figure{\@dottedtocline{1}{0em}{2.3em}}
637 \let\l@table\l@figure
638 \newdimen\bibindent
639 \setlength\bibindent{1.5em}
640 \newenvironment{thebibliography}[1]
641
        {\chapter*{\bibname
           642
         \list{\@biblabel{\@arabic\c@enumiv}}%
643
               {\settowidth\labelwidth{\@biblabel{#1}}%
644
                \leftmargin\labelwidth
645
                \advance\leftmargin\labelsep
646
                \@openbib@code
647
648
                \usecounter{enumiv}%
649
                \let\p@enumiv\@empty
                \renewcommand\theenumiv{\@arabic\c@enumiv}}%
650
         \sloppy
651
         \clubpenalty4000
652
         \@clubpenalty \clubpenalty
653
654
         \widowpenalty4000%
         \sfcode'\.\@m}
655
        {\def\@noitemerr
656
          {\@latex@warning{Empty 'thebibliography' environment}}%
657
         \endlist}
658
659 \mbox{\mbox{\mbox{newcommand\mbox{\mbox{newblock{\hskip}}}}}.11em\mbox{\mbox{\mbox{gplus.33em}\mbox{\mbox{\mbox{\mbox{$m$inus.07em}}}}}
660 \let\@openbib@code\@empty
661 \newenvironment{theindex}
662
                   {\if@twocolumn
                      \@restonecolfalse
663
664
                    \else
                      \@restonecoltrue
665
                    \fi
666
                    \columnseprule \z@
667
                    \columnsep 35\p@
668
                    \twocolumn[\@makeschapterhead{\indexname}]%
669
670
                    \@mkboth{\MakeUppercase\indexname}%
                            {\MakeUppercase\indexname}%
671
                    \thispagestyle{plain}\parindent\z@
672
                    \parskip\z0 \plus .3\p0\relax
673
674
                    \let\item\@idxitem}
                   {\if@restonecol\onecolumn\else\clearpage\fi}
676 \newcommand\@idxitem{\par\hangindent 40\p@}
677 \newcommand\subitem{\@idxitem \hspace*{20\p@}}
678 \newcommand\subsubitem{\@idxitem \hspace*{30\p@}}
679 \newcommand\indexspace{\par \vskip 10\p@ \@plus5\p@ \@minus3\p@\relax}
```

```
680 \renewcommand\footnoterule{%
     \mbox{kern-3}p0
681
     \hrule\@width.4\columnwidth
682
     \mbox{kern2.6}p0
683
684 \@addtoreset{footnote}{chapter}
685 \newcommand\@makefntext[1]{%
686
       \parindent 1em%
687
       \noindent
       \hb@xt@1.8em{\hss\@makefnmark}#1}
688
 Kettering requires that these be all caps. While we do have automatic uppercasing
in spots, it's best to cover all the bases.
689 \newcommand\contentsname{TABLE OF CONTENTS}
690 \newcommand\listillusname{LIST OF ILLUSTRATIONS}
691 \newcommand\bibname{REFERENCES}
                                                 % APA format!
692 \newcommand\indexname{INDEX}
693 \newcommand\figurename{Figure}
694 \newcommand\tablename{Table}
695 \newcommand\partname{PART}
696 \newcommand\chaptername{Chapter}
697 \newcommand\appendixname{APPENDIX}
698 \newcommand\appendixtocname{APPENDICES}
699 \newcommand\prefacename{PREFACE}
700 \def\today{\ifcase\month\or
     January\or February\or March\or April\or May\or June\or
     July\or August\or September\or October\or November\or December\fi
     \space\number\day, \number\year}
704 \setlength\columnsep{10\p0}
705 \setlength\columnseprule{0\p0}
706 \pagestyle{plain}
The thesis begins with Roman page numerals, and continues with Arabic. Some
 sections in the front are double-spaced.
707 \pagenumbering{roman}
708 \newcommand\begincontent{
709 \clearpage
710 \pagenumbering{arabic}
711 \doublespacing
712 }
Margin Setup
713 \setlength{\oddsidemargin}{.5 in}
714 \setlength{\footskip}{.5 in}
715 \setlength{\textheight}{9 in}
716 \setlength{\textwidth}{6 in}
717 \setlength{\topmargin}{Opt}
718 \setlength{\headheight}{Opt}
719 \setlength{\headsep}{0pt}
720 \setlength{\voffset}{0pt}
721 \setlength{\hoffset}{0pt}
722 \setlength{\textheight}{9in}
```

```
723
724
725 \if@twoside
726 \else
     \raggedbottom
727
728 \fi
729 \if@twocolumn
730
     \twocolumn
731
     \sloppy
     \flushbottom
732
733 \else
734 \onecolumn
735 \fi
```

Rather than stomp on the documentation, I'll simply indicate that it's right below. Note that I have altered the file somewhat. If I was less lazy, I'd pull out the unneccesary bits.

```
736 %
737 % Save file as: ENDNOTES.STY
738 % modified by --bg (B.Gaulle) 09/14/94 for:
                 1) replace (why a 8bit char here?) by ^ as a default.
739 %
740 %
                 2) force \catcode of > to be 12 (implied by \@doanenot).
            by --bg again 03/22/95 for:
741 %
742 %
                 3) reseting appropriate catcode of > in case it were
743 %
                    used as an active char before \@endanenote (was
                    pointed by Ch. Pallier).
745 %%% free to distribute by John_Lavagnino@Brown.edu on Thu, 23 Mar 1995
747 %
748 %
          ***********
749 %
                       ENDNOTES
750 %
          ***********
751 %
752 % Date of this version: 24 September 1991.
753 %
754 % Based on the FOOTNOTES section of
755 % LATEX.TEX (VERSION 2.09 - RELEASE OF 19 April 1986), with
756 % "footnote" changed to "endnote" and "fn" changed to "en" (where
757 %
     appropriate), with all the minipage stuff pulled out, and with
758 %
     some small changes for the different operation of endnotes.
759 %
760\,\% Uses an extra external file, with .ENT extension, to hold the
     text of the endnotes. This may be deleted after the run; a new
761 %
762 %
     version is generated each time.
763 %
     This code does not obey \nofiles. Perhaps it should.
764 %
765 %
766 %
      John Lavagnino (lav@brandeis.bitnet), 9/23/88
767 %
      Department of English and American Literature,
         Brandeis University
768 %
```

```
769 %
770 % To turn all the footnotes in your documents into endnotes, say
771 %
        \let\footnote=\endnote
772 %
773 %
774 \% in your preamble, and then add something like
775 %
776 %
         \newpage
777 %
         \begingroup
         \parindent Opt
778 %
779 %
         \parskip 2ex
         \def\enotesize{\normalsize}
780 %
781 %
         \theendnotes
782 %
        \endgroup
783 %
784\ \% as the last thing in your document.
785 %
786 %
          ***************
787 %
                       CHANGE LOG
788 %
          ***********
789 %
790 % JL Modified to include \addtoendnotes. JL, 10/22/89.
791 %
792\;\text{\%} JK Modification by J"org Knappen 25. 2. 1991:
793 % JK
794 % JK Introduced \notesname in the spirit of international \LaTeX.
795 % JK \notesname is set per default to be {Notes}, but can easily
796 % JK be redifined, e.g. for german language
797 % JK \renewcommand{\notesname}{Anmerkungen}
798 %
799 % DW Modification by Dominik Wujastyk, London, 19 September 1991:
800 % DW
801\ \% DW Moved the line
               \edef\@currentlabel{\csname p@endnote\endcsname\@theenmark}
803 % DW out of the definition of \@endnotetext and into the definition
804\ \% DW of \@doanenote so that \label and \ref commands work correctly in
805\ \% DW endnotes. Otherwise, the \label just pointed to the last section
806 \% DW heading (or whatever) preceding the \theendnotes command.
807 %
808 % JL Revised documentation and macros. 24 Sept 1991.
809 %
810 %
          ***********
                   ENDNOTE COMMANDS
811 %
812 %
          **********
813 %
814 %
815 %
       \endnote{NOTE}
                           : User command to insert a endnote.
816 %
817 %
       \endnote[NUM]{NOTE} : User command to insert a endnote numbered
                              NUM, where NUM is a number -- 1, 2,
818 %
```

```
819 %
                               etc. For example, if endnotes are numbered
820 %
                               *, **, etc. within pages, then \ensuremath{\mbox{\mbox{end}note}[2]\{\ldots\}}
821 %
                               produces endnote '**'. This command does not
822 %
                               step the endnote counter.
823 %
824 %
       \endnotemark[NUM]
                            : Command to produce just the endnote mark in
825 %
                               the text, but no endnote. With no argument,
                               it steps the endnote counter before generating
826 %
827 %
                               the mark.
828 %
       \endnotetext[NUM]{TEXT} : Command to produce the endnote but no
829 %
830 %
                                  mark. \endnote is equivalent to
831 %
                                  \endnotemark \endnotetext .
832 %
833 %
       \addtoendnotes{TEXT} : Command to add text or commands to current
                                  endnotes file: for inserting headings,
834 %
835 %
                                  pagebreaks, and the like into endnotes
836 %
                                  sections. TEXT a moving argument:
837 %
                                  \protect required for fragile commands.
838 %
839 %
840 %
                    ENDNOTE USER COMMANDS
841 %
           ***********
842 %
843 %
       Endnotes use the following parameters, similar to those relating
844 %
       to footnotes:
845 %
       \enotesize : Size-changing command for endnotes.
846 %
847 %
848 %
       \theendnote : In usual LaTeX style, produces the endnote number.
849 %
850 %
       \Othermark: Holds the current endnote's mark--e.g., \dag or '1' or 'a'.
851 %
       \@makeenmark : A macro to generate the endnote marker from \@theenmark
852 %
853 %
                      The default definition is \hbox{$^\@theenmark$}.
854 %
       \Omakeentext{NOTE} :
855 %
            Must produce the actual endnote, using \Otheenmark as the mark
856 %
857 %
            of the endnote and NOTE as the text. It is called when effectively
858 %
            inside a \parbox, with \hsize = \columnwidth. For example, it might
            be as simple as
859 %
860 %
                   $^{\@theenmark}$ NOTE
861 %
862 %
863 %
           ************
864 %
                    ENDNOTE PSEUDOCODE
865 %
866 %
867 % \endnote{NOTE} ==
868 % BEGIN
```

```
869 %
        \stepcounter{endnote}
870 %
        \@theenmark :=G eval (\theendnote)
871 %
        \@endnotemark
872 %
        \@endnotetext{NOTE}
873 % END
874 %
875 % \endnote[NUM]{NOTE} ==
876 % BEGIN
877 %
        begingroup
            counter endnote :=L NUM
878 %
            \@theenmark :=G eval (\theendnote)
879 %
880 %
        endgroup
881 %
        \@endnotemark
882 %
        \@endnotetext{NOTE}
883 % END
884 %
885 % \@endnotetext{NOTE} ==
886 % BEGIN
        write to \ensuremath{\verb{Qenotes file: "Qdoanenote{ENDNOTE MARK}"}}
887 %
888 %
        begingroup
           \next := NOTE
889 %
           set \newlinechar for \write to \space
890 %
891 %
           write to \@enotes file: \meaning\next
                    (that is, "macro:->NOTE)
892 %
893 %
        endgroup
894 %
      END
895 %
896 % \addtoendnotes{TEXT} ==
897 % BEGIN
898 %
        open endnotes file if not already open
899 %
        {\tt begingroup}
900 %
            let \protect to \string
901 %
            set \newlinechar for \write to \space
902 %
            write TEXT to \@enotes file
903 %
        endgroup
904 % END
905 %
906 % \endnotemark
                        ==
907 %
      BEGIN \stepcounter{endnote}
908 %
             \@theenmark :=G eval(\theendnote)
909 %
             \@endnotemark
910 % END
911 %
912 % \endnotemark[NUM] ==
913 %
      BEGIN
914 %
           begingroup
915 %
             endnote counter :=L NUM
             \@theenmark :=G eval(\theendnote)
916 %
917 %
            endgroup
918 %
            \@endnotemark
```

```
919 %
                  END
920 %
921 % \@endnotemark ==
                 BEGIN
922 %
                    \leavevmode
923 %
924 %
                     IF hmode THEN \@x@sf := \the\spacefactor FI
925 %
                     \@makeenmark
                                                                              % put number in main text
                    IF hmode THEN \spacefactor := \@x@sf FI
926 %
927 %
928 %
929 % \endnotetext
                                                            ==
                    BEGIN \Othernmark :=G eval (\theendnote)
930 %
931 %
                                    \@endnotetext
932 %
                     END
933 %
934 % \endnotetext[NUM] ==
                    {\tt BEGIN\ begingroup\ counter\ endnote\ :=L\ NUM}
935 %
                                                                    \Otheenmark :=G eval (\theendnote)
936 %
937 %
                                     endgroup
938 %
                                     \@endnotetext
939 %
940 %
941 %
                             ***********
                                                            ENDNOTE MACROS
942 %
943 %
                             ************
944 %
946 \@definecounter{endnote}
947 \def\theendnote{\arabic{endnote}}
948
949 % Default definition
950 \end{constraint} $$950 \end{constraint} $$100 \end{constraint}
951
952 \newdimen\endnotesep
953
954 \def\endnote{\@ifnextchar[{\@xendnote}{\stepcounter}
                955
956
957 \def\@xendnote[#1]{\begingroup \c@endnote=#1\relax
               \xdef\@theenmark{\theendnote}\endgroup
958
959
                \@endnotemark\@endnotetext}
960
961\,\% Here begins endnote code that's really different from the footnote
962 \% code of LaTeX.
963
964 \let\@doanenote=0
965 \let\@endanenote=0
967 \newwrite\@enotes
968 \newif\if@enotesopen \global\@enotesopenfalse
```

```
970\ \end{20} openenotes{\end{20} openenotes=\jobname.ent} ent\end{20} openenotes open
 971
                     \global\@enotesopentrue}
 972
 973 \% The stuff with \next and \meaning is a trick from the TeXbook, 382,
 974 % there intended for setting verbatim text, but here used to avoid
 975 % macro expansion when the footnote text is written. \next will have
 976 % the entire text of the footnote as one long line, which might well
 977 % overflow limits on output line length; the business with \newlinechar
 978\,\% makes every space become a newline in the \@enotes file, so that all
 979 \% of the lines wind up being quite short.
 980
 981 \long\def\@endnotetext#1{%
                   \if@enotesopen \else \@openenotes \fi
 982
                   \immediate\write\@enotes{\@doanenote{\@theenmark}}%
 983
                   \begingroup
 984
                         \def\next{#1}%
 985
                         \newlinechar='40
 986
 987
                         \immediate\write\@enotes{\meaning\next}%
 988
                   \endgroup
 989
                   \immediate\write\@enotes{\@endanenote}}
 990
 991 % \addtoendnotes works the way the other endnote macros probably should
 992 % have, requiring the use of \protect for fragile commands.
 994 \long\def\addtoendnotes#1{%
                   \if@enotesopen \else \@openenotes \fi
 995
 996
                   \begingroup
                         \newlinechar='40
 997
                         \let\protect\string
 998
                         \immediate\write\@enotes{#1}%
 999
1000
                   \endgroup}
1001
1002 % End of unique endnote code
1003
1004 \def\endnotemark{\@ifnextchar[{\@xendnotemark
                }{\stepcounter{endnote}\xdef\Otheenmark{\theendnote}\Oendnotemark}}
1005
1006
1007 \def\@xendnotemark[#1]{\begingroup \c@endnote #1\relax
              \xdef\@theenmark{\theendnote}\endgroup \@endnotemark}
1008
1009
1010 \def\@endnotemark{\leavevmode\ifhmode
            \edef\@x@sf{\the\spacefactor}\fi \@makeenmark
1011
              \ifhmode\spacefactor\@x@sf\fi\relax}
1012
1013
1014 \end{outer}
1015
                 [{\@xendnotenext}{\xdef\@theenmark{\theendnote}\@endnotetext}}
1016
1017 \def\@xendnotenext[#1]{\begingroup \c@endnote=#1\relax
              \xdef\@theenmark{\theendnote}\endgroup \@endnotetext}
1018
```

```
1019
1020
1021 % \theendnotes actually prints out the endnotes.
1022
1023 % Endnotes auto-renumber at the end of each chapter (or actually, when
1024 % they're printed...)
1025 % \enoteformat is provided so user can specify some special formatting
1026\ \% for the endnotes. It needs to set up the paragraph parameters, start
1027\,\% the paragraph, and print the label. The \leavemode stuff is to make
1028\,\% and undo a dummy paragraph, to get around the games \section*
1029 % plays with paragraph indenting.
1030
1031 \def\notesname{NOTES}% <---- AE
1032 \def\enoteheading{\chapter*{\notesname
                 \label{thm:linear_label} $$ \operatorname{\operatorname{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}}_{\label{lnotesname}_{\label{lnotesname}}_{\label{lnotesname}_{\label{lnotesname}}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{lnotesname}_{\label{ln
                          \leavevmode\par\vskip-\baselineskip}
1034
1035
1036 \def\enoteformat{\vspace{\baselineskip}\rightskip\z@ \leftskip\z@ \parindent=1.8em
1037
                          \label{lap{\hbox{$^{\c}}}} \\
1038
1039 \def\enotesize{\normalsize}
1040
1041\ \mbox{\%} The definition of \ETC. is needed only for versions of TeX prior
1042\,\% to 2.992. Those versions limited \meaning expansions to 1000
1043\ \% characters; in 2.992 and beyond there is no limit. At Brandeis the
1044~\% BIGLATEX program changed the code in the token_show procedure of
1045~\% TeX to eliminate this problem, but most "big" versions of TeX
1046\ \% will not solve this problem.
1047
1048 \def\theendnotes{\immediate\closeout\@enotes \global\@enotesopenfalse
1049
                 \begingroup
1050
                        \makeatletter
1051 % the following is to save catcode of "'>" and restore it in \@endanenote
1052 \edef\@tempa{'\string >}%
1053 \ifnum\catcode\@tempa=11\let\@ResetGT\relax% accepts also that > were active
                 \verb|\else| edef| @ResetGT{\noexpand\catcode} @tempa=\\ the\catcode \@tempa=\\ % and catcode \end{area} % and catcode \end{a
1055 \fi%
                        \catcode'>=12% char > will be read as char so force it to \catcode 12 --bg\edef\GOfrench{'\
1056
1057
                        \def\@doanenote##1##2>{\def\@theenmark{##1}\par\begingroup
                                   \@ResetGT%\catcode'>=13
1058
1059
                                   \edef\@currentlabel{\csname p@endnote\endcsname\@theenmark} %DW
                                   \enoteformat}
1060
                        \def\@endanenote{\par\endgroup}%
1061
                        \def\ETC.{\errmessage{Some long endnotes will be truncated; %
1062
1063
                                                                                              use BIGLATEX to avoid this}%
1064
                                         \def\ETC.{\relax}}
1065
                        \clearpage
1066
                        \enoteheading
                        \enotesize
1067
```

1068

\begin{singlespacing}

```
1069 \input{\jobname.ent}%
1070 \end{singlespacing}
1071 \endgroup
1072 \setcounter{endnote}{0}}
1073 \endinput
```