The \texttt{chextras} Package *

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\footnote{This document corresponds to \texttt{chextras} v1.01, dated 2012/07/20.}
1 Introduction

The chextras package is a companion for the chletter document class and other classes. It is targeted at the Swiss typesetter.

It simplifies the preparation of documents and letters by loading and setting up font, linguistic and other common packages.

While it is linked to the chletter document class, it is not tied to it and may be used as a general purpose toolbox for casual writing.

This package is compatible with with \LaTeX, \texttt{Lua\TeX} and \texttt{Xe\TeX}, trying to take in account their specifics and setting things up accordingly.

A bunch of options are provided to easily alter the behaviour of loaded packages. Additional options allow for disabling unnecessary features.

2 Usage

Ideally, the chextras package is loaded just after the document class.

Please be aware that sources have to be utf8 (or ascii7) encoded!

```latex
\documentclass{chletter}
\usepackage[english]{chextras}
\begin{document}
Hello World!
\end{document}
```

2.1 Options

2.1.1 Font options

Fonts and encodings are always loaded. The following options are cumulative.

- **nomath** This option disables the Latin Modern T1 math fonts.
- **lighttt** This option is to select the light version of Latin Modern Mono at document level.
- **variablett** This option sets the proportional variant of Latin Modern Mono at document level.
- **oldstyle** This option activates the oldstyle figures at document level.

2.1.2 Linguistic options

Selecting one of these options will trigger the execution of a linguistic package, either babel under \LaTeX and \texttt{Lua\TeX}, or polyglossia under \texttt{Xe\TeX}. To have more than one language in the document, the appropriate commands supplied by the linguistic packages should be used.

2.1.3 Hyperlinks options

Choosing one of these options will prompt the loading of the hyperref package. The color will define how the links appear: black, gray or in the default hyperref colors.

Please note that no box is drawn around the links, they are directly colored.
2.1.4 Disable options

The default settings provided by the \texttt{chextras} package should be universal enough for everyday use. However, special cases could require to disable some settings.

\texttt{stdshape} \LaTeX{} doesn’t handle mixed shapes (\texttt{\textsc{textsc{Hello World!}}}). \texttt{chextras} provides a shape merging mechanism which can be cancelled by this option.

\texttt{stdspace} If loaded with the \texttt{french} option, the \texttt{chextras} package will alter the punctuation spacing set by the linguistic packages. This option resets the default spacing.

\texttt{stdfield} When the \texttt{hyperref} package is loaded, the pdf author, title and subject fields are filled according to document values. This option prevents this (for privacy).

\texttt{stdparis} The \texttt{chextras} package sets \texttt{\parindent} and \texttt{\parskip} to respectively 18pt and 9pt. This option is to use the values defined at class level.

\texttt{stddimen} Used with any class, \texttt{chextras} sets the dimensions of text to the values given by \texttt{chletter}. To prevent these changes, the \texttt{stddimen} option may be applied.

\texttt{stdmgpar} The margin paragraph layout is set to the \texttt{chletter} class values, which are absolute rather than linked to the font size. This option allows to retain the defaults.

\texttt{stddlable} List labels are set by the standard classes as a function of the point size. Unless this option is set, labels are set to fixed values, related to \texttt{\parindent}.

\texttt{stdlists} Lists are adjusted to a more compact layout. The vertical flow is better thanks to rubber lengths. This option reverts the lists to their class presets.

\texttt{stditems} Labels are lightened by using endashes at every level. If a combinasion of dashes, bullets, asterisks and periods is preferred, this option reverts to these defaults.

\texttt{stdskips} The package makes \texttt{\parskip} ‘stretchable’, thus enabling page and column bottom balancing. This option cancels the alteration of \texttt{\parskip}.

\texttt{stdnotes} The layout of the footnotes is deeply modified in an attempt to get something visually more pleasing. The standard footnotes are reset by this option.

\texttt{strules} This package sets thinner rules than the \LaTeX{} kernel or the standard classes (\texttt{.25pt} instead of \texttt{.4pt}). This option returns the rules to the standard value.

2.2 Font selection

The \texttt{chextras} package loads the \texttt{Latin Modern} fonts instead of the older \texttt{Computer Modern} fonts. Moreover, it always uses \texttt{utf8} as input encoding, hence requiring \texttt{utf8} (or \texttt{ascii7} which is a subset of \texttt{utf8}) encoded sources. At lower level, font mechanisms deeply depend on the engine (\LaTeX{}, \texttt{Lua\TeX} or \texttt{Xe\TeX}) and we have to manage this situation with additionnal font definition files. Finally, a little trick converts the \texttt{ALT+SPACE} character to a \texttt{\nobreakspace}, thus enabling correct formatting of text produced by common word processors.

\subsection*{2.2.1 Oldstyle numbers}

\texttt{\rmosfamily} These macros take advantage of features included in OpenType \texttt{Latin Modern} fonts.

\texttt{\sfosfamily} They don’t require the presence of any external package, but rely on specific \texttt{.fd} files packed with \texttt{chextras}. With \LaTeX{}, \texttt{Lua\TeX} and \texttt{Xe\TeX}, \texttt{clm} virtual fonts are used; with \texttt{Xe\TeX}, system fonts are called. \texttt{\rmosfamily}, \texttt{\sfosfamily} and \texttt{\ttosfamily} are the respective oldstyle numbers counterparts of \texttt{\rmfamily}, \texttt{\sffamily} and \texttt{\ttfamily}. The commands \texttt{\texttrmos}, \texttt{\texttsfos} and \texttt{\texttttoss} are also defined.
2.2.2 Slanted capitals
\sishape Slanted small capitals are available as a \sishape with the associated \textsi command. Example: \textsi{Hello World!}.

2.3 Additions

2.3.1 Compatibility layer for chletter
\conc The code overhaul between v1.0 and v2.0 of the chletter class has led to some incompatibilities which are remedied here (for example the frequently used \conc macro is not implemented in the new version of chletter.

2.3.2 Markup commands
\ccname These values are localized according to Swiss habits. They are used by the generic letter classes (standard letter and chletter of course).
\enclname These are shortcuts for \LaTeX internals \author, \title and \date (respectively set by \author, \title and \date). They are here to avoid an extraneous \makeatletter. Please note that \jobname is set by the kernel.

2.3.3 Formatting commands
\up These convenient macros are sometimes defined by linguistic or other packages.
\bsc \up is a shortcut for \textsuperscript. \bsc means ‘boxed small caps’ and is a non breaking version of \textsc. \no is the formal abreviation of french “numéro”.
\ier \ier is the formal abbreviation of french “premier”.
3 Compatibility

The *chextras* package acts as a wrapper for some \LaTeX{} characteristics and packages that are in constant evolution. It is therefore difficult to offer any warranty on the behaviour of the different package features within different \TeX{} environments.

3.1 With distributions

The *chextras* package is intended to be used with the full version of \TeX{}Live 2012. It may encounter trouble with earlier versions of \TeX{}Live or other distributions.

3.2 With engines

The *chextras* package is able to take advantage of \LaTeX{} (pdftex v1.40), Lua\TeX{} (luatex v0.70) and X\TeX{} (xetex v0.9997).

3.3 With regular classes

There should be no problem using *chextras* with any reasonably generic class. It is intended to be used with *chletter*, but perfectly adapts to other standard classes.

3.4 With other packages

The *chextras* package at least requires fontspec v1.99; respectively inputenc v1.1 (\LaTeX{}), luainputenc v0.973 (Lua\TeX{}) or xunicode v0.95 (X\TeX{}). For some additional features, *chextras* uses babel v3.8 or polyglossia v1.2.0 and hyperref v6.81. These packages would load another bunch of related packages when called (please look at their respective documentation). Older or newer versions of these packages could break *chextras* at some point.

*chextras* aims at avoiding packages overload. The minimum set of packages and font definitions is invoked by:

```
\usepackage[nomath]{chextras}
```

Please note that under X\TeX{}, the fonts package is not required nor loaded by the *chextras* package. This is a design decision which doesn’t prevent the user from adding a `\usepackage{fonts}` (or more generally a `\usepackage{xltxtra}`), preferably before the *chextras* call (in order to keep the oldstyle option relevant).

There is no known ‘unintentional’ macro clash. Please remember that some macros provided by the *chletter* class and the babel frenchb language are redefined and that some values (for example the document margins) are deliberately modified. A bunch of package options are present to cancel some unwanted alterations.

3.5 With text and font encodings

The *chextras* requires utf8 or asciil7 sources. There is no provision for any other encoding scheme. Latin Modern v2.004 fonts with the appropriate T1 (for \LaTeX{} and Lua\TeX{}) or EU1 (for X\TeX{}) encodings must be available. For oldstyle figures, the provided font definitions tilmros.fd, tilmsos.fd, tilmttos.fd, tilmvtos.fd, and eulmros.fd, eulmsos.fd, eulmmttos.fd, eulmvttos.fd, are needed. Please note that the cfr-lm v1.3 package, while not called by *chextras*, is required under \LaTeX{} and Lua\TeX{} because of the associated font definitions (clm virtual fonts, built upon lm fonts, are used in this case).
4 Implementation

The chextras code is mostly pure \LaTeX, with few \TeX primitives. It is however fairly compact. Its main parts are the selection and configuration of the input and font encodings (inputenc for \LaTeX, luainputenc for Lua\LaTeX or xunicode for XƎ\TeX, plus fontenc in any case), the linguistic packages (either babel or polyglossia), and finally the hyperref package. Another part of the code handles the document layout settings, taking into account some ‘disable’ package options. The last part provides a few convenient commands.

4.1 Initial code

1 (*chextras.sty)
2 \NeedsTeXFormat{LaTeX2e}[1996/06/01]
3 \ProvidesPackage{chextras}[2012/07/20 v1.01 Swiss companion package]

4.1.1 Declaring options

The following four options are font related and cumulative.

- **nomath**: The lmodern package takes care of this flag.

\begin{verbatim}
4 \DeclareOption{nomath}{\PassOptionsToPackage{nomath}{lmodern}}
\end{verbatim}

- **lighttt**: Both the lmodern package and chextras font definitions take care of this flag.

\begin{verbatim}
5 \DeclareOption{lighttt}{\PassOptionsToPackage{lighttt}{lmodern}}
\end{verbatim}

- **variablett**: Both the lmodern package and chextras font definitions take care of this flag.

\begin{verbatim}
6 \DeclareOption{variablett}{\PassOptionsToPackage{variablett}{lmodern}}
\end{verbatim}

- **oldstyle**: This option involves additional font definitions and is treated at chextras level.

\begin{verbatim}
7 \DeclareOption{oldstyle}{\old@style=\true}
\end{verbatim}

- **german**, **french**, **italian**, **english**: The language options are mutually exclusive. If none of these options is given, then the linguistic packages won’t be loaded. To use more than one language in the document, one should use the babel or polyglossia dedicated systems (either pass languages as global options or \setotherlanguages).

\begin{verbatim}
8 \DeclareOption{german}{\def\load@lang{german}}
9 \DeclareOption{french}{\def\load@lang{french}}
10 \DeclareOption{italian}{\def\load@lang{italian}}
11 \DeclareOption{english}{\def\load@lang{english}}
\end{verbatim}

- **black**, **gray**, **color**: The color options are mutually exclusive. If none of these options is given, then the hyperref package won’t be loaded (the ‘argument carrier’ is also a flag). Please note that the graphicx and color packages will be loaded as a side effect.

\begin{verbatim}
12 \DeclareOption{black}
13 {\def\load@href{}
14 {\linkcolor=black,\filecolor=black,\urlcolor=black}}
15 \DeclareOption{gray}
16 {\def\load@href{}
17 {\linkcolor=[gray]{0.5},\filecolor=[gray]{0.5},\urlcolor=[gray]{0.5}}}
18 \DeclareOption{color}
19 {\def\load@href{}
20 {}}
\end{verbatim}
These options simply alter the value of an associated boolean for later retrieval.

\begin{verbatim}
21 \DeclareOption{stdshape}{\std@shapetrue}
22 \DeclareOption{stdspace}{\std@spacetrue}
23 \DeclareOption{stdfield}{\std@fieldtrue}
24 \DeclareOption{stdparis}{\std@paristrue}
25 \DeclareOption{stddimen}{\std@dimentrue}
26 \DeclareOption{stdskips}{\std@skipstrue}
27 \DeclareOption{stdmgpar}{\std@mgpartrue}
28 \DeclareOption{stdlists}{\std@liststrue}
29 \DeclareOption{stdlabel}{\std@labeltrue}
30 \DeclareOption{stditems}{\std@itemstrue}
31 \DeclareOption{stdnotes}{\std@notestrue}
32 \DeclareOption{stdrules}{\std@rulestrue}
33 \newif\ifold@style
34 \newif\ifstd@shape
35 \newif\ifstd@space
36 \newif\ifstd@field
37 \newif\ifstd@paris
38 \newif\ifstd@dimen
39 \newif\ifstd@skips
40 \newif\ifstd@mgpar
41 \newif\ifstd@lists
42 \newif\ifstd@label
43 \newif\ifstd@items
44 \newif\ifstd@notes
45 \newif\ifstd@rules
4.1.2 Executing options
46 \ProcessOptions\relax
4.2 Package loading
4.2.1 Input and font encoding packages
Here we test for the engine. In \LaTeX{} and \texttt{Xe\LaTeX} cases, \texttt{T1} encoding is set for later call of \texttt{fontenc}, then the relevant \texttt{inputenc} (with \texttt{utf8}) is loaded. The last line trick converts the \texttt{0x00a0} character (\texttt{ALT + SPACE}) to something like \texttt{\nobreakspace}.
47 \expandafter\ifx\csname XeTeXrevision\endcsname\relax
48 \def\UTFencname{T1}
49 \expandafter\ifx\csname directlua\endcsname\relax
50 \RequirePackage[utf8]{inputenc}
51 \else
52 \RequirePackage[utf8]{luainputenc}
53 \fi
54 \DeclareUnicodeCharacter{00A0}{\nobreak\space}
55 \else
56 \def\UTFencname{EU1}
57 \RequirePackage{xunicode}
58 \catcode`"=\active\def``"a@={\nobreak\space}
59 \fi
\end{verbatim}

In the \texttt{Xe\LaTeX} case, \texttt{EU1} encoding is set for later call of \texttt{fontenc}. \texttt{fontspec} is bypassed by design decision. The last line is the non \texttt{inputenc} version of the \texttt{0x00a0} trick.
Finally the required packages are loaded.

```latex
\RequirePackage{fixltx2e}
\RequirePackage{UTFencoding}{fontenc}
\RequirePackage{lmodern}
```

We previously have set the Latin Modern fonts as the document’s default by loading the `lmodern` package. The font selection scheme for oldstyle figures is initialized according to the font definitions provided with this package. Under Xe\LaTeX{} things are straightforward: we just apply \texttt{otf} features; under \LaTeX{} or Lua\TeX{} we rely on the \texttt{clm} virtual fonts from \texttt{cfr-lm} package (see the \texttt{.fd} files below for a deeper sight into those things). The \texttt{variablett} option is cryptically treated here!

```latex
\DeclareRobustCommand\rmosfamily{\fontfamily{rmosdefault}\selectfont}
\DeclareRobustCommand\sfosfamily{\fontfamily{sfosdefault}\selectfont}
\DeclareRobustCommand\ttosfamily{\fontfamily{ttosdefault}\selectfont}
\DeclareTextFontCommand{\textrmos}{\rmosfamily}
\DeclareTextFontCommand{\textsfos}{\sfosfamily}
\DeclareTextFontCommand{\textttos}{\ttosfamily}
```

Remember that \texttt{\rmdefault}, \texttt{\sfdefault} and \texttt{\ttdefault} are the NFSS defaults.

```latex
\ifold@style
\renewcommand{\rmdefault}{\rmosdefault}
\renewcommand{\sfdefault}{\sfosdefault}
\renewcommand{\ttdefault}{\ttosdefault}
\fi
```

This code is borrowed from \texttt{fontspec v1.18}. Its purpose is to merge some font shapes in order to support constructs like \texttt{\textsc{\emph{Hello World!}}}.

```latex
\ifstd@shape\else
\def{\sidefault}{\scdefault\sldefault}
\DeclareRobustCommand{\sishape}{\not@math@alphabet{\sishape}\relax\fontshape{\sidefault}\selectfont}
\DeclareTextFontCommand{\textsi}{\sishape}
\newcommand*{\ch@mrg}{[3\edef{\@tempa}{#1}\edef{\@tempb}{#2}%\ifx{\f@shape}{\@tempb}\ifcsname{\f@encoding}/\f@family/{\f@series}/#3\endcsname\edef{\@tempa}{#3}\fi\fi\fontshape{\@tempa}\selectfont}
\DeclareRobustCommand{\itshape}{\not@math@alphabet{\itshape}\mathit{\ch@mrg}{\itdefault\scdefault\sldefault}}
\DeclareRobustCommand{\slshape}{\not@math@alphabet{\slshape}\relax{\ch@mrg}{\sldefault\scdefault\sldefault}}
\DeclareRobustCommand{\scshape}{\not@math@alphabet{\scshape}\relax{\ch@mrg}{\scdefault\itdefault\sidefault}}
\DeclareRobustCommand{\upshape}{\not@math@alphabet{\upshape}\relax{\ch@mrg}{\updefault\sidefault\scdefault}}
```

This code is borrowed from \texttt{fontspec v1.18}. Its purpose is to merge some font shapes in order to support constructs like \texttt{\textsc{\emph{Hello World!}}}. The macros \texttt{\sishape} and \texttt{\textsi} are defined for direct output of slanted small caps.
4.2.2 Linguistic packages

If no linguistic option was given, we do nothing.

\expandafter\ifx\csname load@lang\endcsname\relax
stdspace

Otherwise we test for \texttt{Xe\TeX} and load \texttt{babel} if false, with the selected language as package option. Please note that to load other languages, the user will have to rely on global options. Finally, we test for the \texttt{frenchb.1df} language and set up some of its options according to the boolean \texttt{std@space}.

\else
\expandafter\ifx\csname Xe\TeX\textregistered\revision\endcsname\relax
\RequirePackage[\load@lang]{babel}
\else
\frenchbsetup{og=«,fg=»,StandardLayout=true,FrenchSuperscripts=false}
\ifstd@space\else\frenchbsetup{ThinColonSpace=true}\fi
\fi

In the \texttt{Xe\TeX} case, we load \texttt{polyglossia} with a dirty trick to prevent it from calling \texttt{fontspec}. The default language is set with the dedicated command (the user can load alternate languages with \texttt{setotherlanguages}). Finally, we dispense a heavy patch to the \texttt{polyglossia gloss-french.1df}, taking in account \texttt{std@space}.

\else
\RequirePackage{etoolbox}
\RequirePackage{xkeyval}
\RequirePackage{makecmds}
\let\old@Require\RequirePackage
\let\old@ExplsyntaxOn\ExplSyntaxOn\let\old@ExplsyntaxOff\ExplSyntaxOff
\def\new@Require#1[#2]{}\def\new@ExplSyntax{}\let\RequirePackage\new@Require
\let\ExplSyntaxOn\new@ExplSyntax\let\ExplSyntaxOff\new@ExplSyntax
\old@Require[\nolocalmarks]{polyglossia}[2010/07/27]
\let\RequirePackage\old@Require\let\ExplSyntaxOn\old@ExplSyntaxOn\let\ExplSyntaxOff\old@ExplSyntaxOff
\setdefaultlanguage{\load@lang}
\def\ch@thn{\nobreak\hskip.166667em plus.083333em minus\z@\relax}
\def\ch@gll{\nobreak\hskip.25em plus\z@ minus.083333em\relax}
\ifstd@space\def\ch@thk{\nobreak\space\relax}\else\let\ch@thk\ch@thn\fi
\addto\french@punctuation
\{\Xe\TeX\interchartoks\z@\french@punctthin={\ch@thn}
\Xe\TeX\interchartoks\z@\french@punctthick={\ch@thk}
\Xe\TeX\interchartoks\z@\french@punctguillstart={\ch@gll}
\Xe\TeX\interchartoks\z@\french@punctguillend={\ch@thk}
\Xe\TeX\interchartoks\z@\french@punctguillend=\{\ch@thk\}
\Xe\TeX\interchartoks\z@\french@punctguillend={\ch@gll}\xpg@nospace
\Xe\TeX\interchartoks\z@\french@punctguillend={\ch@thn}\xpg@nospace
\Xe\TeX\interchartoks\z@\french@punctguillend=\{\ch@gll\}
\fi
The following lines are common to the two linguistic systems: \addto is implemented in polyglossia as a shortcut for the \etoolbox \gappto macro.

\addto\captionsgerman
{\def\ccname{\emph{Vert.}}\def\enclname{\emph{Anl.}}}  
\addto\captionsfrench
{\def\ccname{\emph{Cop.}}\def\enclname{\emph{Ann.}}}  
\addto\captionsitalian
{\def\ccname{\emph{e\,p.c.}}\def\enclname{\emph{All.}}}  
\addto\captionsenglish
{\def\ccname{\emph{c.c.}}\def\enclname{\emph{encl.}}}
\fi

4.2.3 The hyperref package

The package is only loaded if a color option is given.
\expandafter\ifx\csname load@href\endcsname\relax
Unless the \std@field boolean is set, the main pdf strings are filled with \@title, \@author and \jobname. Unwanted garbage in these strings is avoided.
\else
\ifstd@field\def\opts@href{colorlinks,unicode}\else
\def\opts@href{colorlinks,unicode,pdfusetitle,pdfsubject=\jobname}
\fi
\RequirePackage[\opts@href,\load@href]{hyperref}[2010/09/17]
\pdfstringdefDisableCommands{\def\up{}\def\no{}\def\bsc{}\def\ier{}\def\kern{}}
\fi

4.3 \LaTeX{} configuration

4.3.1 Glue code for \chletter

\conc The following code is intended for users of the document class \chletter v2.0 who wish to compile older letters. See \chletter documentation for more information.
\@ifclassloaded{chletter}{
{"\@ifc class later{chletter}{2010/01/01}
 {\newcommand{\conc}{\def\conc{}\def\kern{}\def\ier{}\def\bsc{}}
 {\def\fromheight{\titletopheight}\def\toheight{\titlemidheight}\def\stockheight{\titlebotheight}}
 }
 {\noindent\if#1l\hskip-\oddsidemargin\fi{\bfseries\object{#2}}}
 {\let\letterindent\parindent\let\letterskip\parskip\let\fromheight\titletopheight\let\toheight\titlemidheight\let\stockheight\titlebotheight}}}

4.3.2 Paragraphing

\stdparis Unless the \std@paris flag is true, these values are adjusted to ‘continental’ preferences. The same values are used in \chletter.
\@if\std@paris\else
{\parindent18\p@\parskip9\p@\fi

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4.3.3 Dimensions of text

\texttt{stddimen} The dimensions and margins of the \texttt{chletter} class are not modified. For other classes they are set here, unless the \texttt{std@dimen} flag is true.

\begin{verbatim}
\ifstd@dimen\else
  \topmargin\z@\headsep24\p@\footskip36\p@\footnotesep12\p@
  \skip\footins12\p@
  \textwidth\paperwidth\advance\textwidth-11895300sp\textheight\paperheight\advance\textheight-14093310sp\oddsidemargin36\p@\evensidemargin\z@
\fi
\end{verbatim}

4.3.4 Margin paragraphs

\texttt{stdmgpar} The above defined note mark relies on \texttt{\marginparsep}, which is adjusted here along with other margin paragraph settings.

\begin{verbatim}
\ifstd@mgpar\else
  \marginparwidth48\p@\marginparsep6\p@\marginparpush6\p@
\fi
\end{verbatim}

4.3.5 Lists

\texttt{stdlabel} List label width, margin and separation are set by the standard classes as functions of the point size. We make these values absolute here (if \texttt{std@label} is false).

\begin{verbatim}
\ifstd@label\else
  \labelsep6\p@\labelwidth12\p@\leftmargin18\p@
\fi}
\end{verbatim}

\texttt{stdlists} Default \LaTeX\ lists are well known to be space eating. A more compact layout is provided here, until the \texttt{std@lists} flag is set.

\begin{verbatim}
\ifstd@lists\else
  \topsep\z@ plus1\p@\partopsep\smallskipamount\itemsep\z@ plus1\p@
  \parsep\smallskipamount\fi
\end{verbatim}

\texttt{stditems} Default list items (as set with \texttt{std@items} true) are respectively a bullet, an endash, an asterisk and a period. We propose a lighter layout with endashes everywhere.

\begin{verbatim}
\ifstd@items\else
  \def\@listI{}\let\@listi\@listI\let\@listii\@listi\let\@listiii\@listi\let\@listiv\@listi\def\labelitemi{\textbf{\textendash}}\let\labelitemii\labelitemi\let\labelitemiii\labelitemi\let\labelitemiv\labelitemi\fi
\end{verbatim}

4.3.6 Vertical flow

\texttt{stdskips} Adding some stretch to \texttt{\parskip} enables easier vertical balancing of text across pages and columns. The absolute values are conserved.

\begin{verbatim}
\ifstd@skips\else
  \advance\parskip by\z@ plus3\p@\ifdim\parskip>3\p@ minus3\p@\fi
  \advance\skip\footins by\z@ plus6\p@\fi
\end{verbatim}
4.3.7 Notes

Footnotes are redefined unless the std@notes flag is set. The marker is put in the margin at a \marginparsep distance of the actual note.

\ifstd@notes\else
\let\std@footnotemark\@footnotemark
\def\alt@footnotemark{\unskip\thinspace\std@footnotemark}
\let\@footnotemark\alt@footnotemark
\long\def\@makefntext#1{\settowidth\@tempdima{.\kern\marginparsep}
\parindent\z@
\advance\parindent-\@tempdima
\rule\z@\footnotesep
\llap{\@thefnmark}.\kern\marginparsep#1}
\fi

4.3.8 Rules

All \TeX rules are redefined to be thinner than default (.25pt instead of .4pt). The \foldmark command is also tuned (see chletter class for more information).

\ifstd@rules\else
\arrayrulewidth.25\p@
\fboxrule.25\p@
\def\underbar#1{\vtop{\hbox{#1}\hrule\@height.25\p@\kern-.25\p@}}
\def\footnoterule{\kern-3\p@\hrule\@width.4\columnwidth\@height.25\p@\kern2.75\p@}
\fi

4.4 New commands

4.4.1 Markup

\titlename These shortcuts are here to avoid unnecessary \makeatletter when retrieving the values set by \author, \title and \date. Please note that an additional value \jobname is available at kernel level.
\def\titlename{\@title}
\def\authorname{\@author}
\def\datename{\@date}

4.4.2 Formatting

\up These commands are present in the babel package frenchb. The polyglossia package doesn’t provide comparable commands, so they are defined here. The babel frenchb definitions are overridden for the sake of straightforwardness and consistency within documents typeset in multiple languages.
\let\up\textsuperscript
\let\no\up{o}\}
\def\bsc#1{(\hyphenpenalty\@M\textsc{#1}}
\def\ier{\up{er}}

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5 Font definitions

Appart from the chextras package itself, eight files are provided to enable oldstyle numbers in T1 encoded Latin Modern fonts (for \LaTeX{} and \texttt{LuaLaTeX}).

```
1 (*t1lmros.fd)
2 \ProvidesFile{t1lmros.fd}[2012/07/20 v1.01 Font defs for Latin Modern]
3 \DeclareFontFamily{T1}{lmros}{}
4 \DeclareFontShape{T1}{lmros}{m}{n}{<5.5> clmrj8t5
5 6 <5.5-6.5> clmrj8t6
6 7 <6.5-7.5> clmrj8t7
7 8 <7.5-8.5> clmrj8t8
8 9 <8.5-9.5> clmrj8t9
9 10 <9.5-11> clmrj8t10
10 11 <11-15> clmrj8t12
11 12 <15-> clmrj8t17}
12 \DeclareFontShape{T1}{lmros}{m}{sl}{<8.5> clmrjo8t8
13 14 <8.5-9.5> clmrjo8t9
14 15 <9.5-11> clmrjo8t10
15 16 <11-15> clmrjo8t12
16 17 <15-> clmrjo8t17}
17 \DeclareFontShape{T1}{lmros}{m}{it}{<-7.5> clmrji8t7
18 19 <7.5-8.5> clmrji8t8
19 20 <8.5-9.5> clmrji8t9
20 21 <9.5-11> clmrji8t10
21 22 <11-> clmrji8t12}
22 \DeclareFontShape{T1}{lmros}{sc}{<-> clmcscj8t10}{
23 24 \DeclareFontShape{T1}{lmros}{scsl}{<-> clmcscjo8t10}{}
24 25 \DeclareFontShape{T1}{lmros}{scsl}{<-> sub * lmros/b/sl}{
25 26 \DeclareFontShape{T1}{lmros}{sc}{<-> clmcscj8t10}{
26 27 \DeclareFontShape{T1}{lmros}{ui}{<-> clmuj8t10}{
27 28 \DeclareFontShape{T1}{lmros}{sca}{<-> clmucj8t10}{
28 29 \DeclareFontShape{T1}{lmros}{sca}{<-> clmucj8t10}{
29 30 \DeclareFontShape{T1}{lmros}{bx}{<-> clmbj8t10}{
30 31 \DeclareFontShape{T1}{lmros}{b}{<-> clmbj8t10}{
31 32 \DeclareFontShape{T1}{lmros}{bx}{<-> clmbxj8t5}{
32 33 \DeclareFontShape{T1}{lmros}{bx}{<-> clmbxj8t5}{
33 34 \DeclareFontShape{T1}{lmros}{bx}{<-> clmbxj8t5}{
34 35 \DeclareFontShape{T1}{lmros}{bx}{<-> clmbxj8t5}{
35 36 \DeclareFontShape{T1}{lmros}{bx}{<-> sub * lmros/b/sl}{}
\ProvidesFile{t1lmvttos.fd}[2012/07/20 v1.01 Font defs for Latin Modern]
\DeclareFontFamily{T1}{lmvttos}{}
\ifx\lmtt@use@light@as@normal\@empty
\DeclareFontShape{T1}{lmvttos}{sb}{n}{<-> clmvttj8t10}{}
\DeclareFontShape{T1}{lmvttos}{sb}{it}{<-> clmvttjo8t10}{}
\DeclareFontShape{T1}{lmvttos}{sb}{sl}{<-> sub * lmvttos/sb/it}{}
\else
\DeclareFontShape{T1}{lmvttos}{m}{n}{<-> clmvttj8t10}{}
\DeclareFontShape{T1}{lmvttos}{m}{it}{<-> clmvttjo8t10}{}
\DeclareFontShape{T1}{lmvttos}{m}{sl}{<-> sub * lmvttos/m/it}{}
\fi
\DeclareFontShape{T1}{lmvttos}{m}{n}{<-> clmvttj8t10}{}
\DeclareFontShape{T1}{lmvttos}{m}{it}{<-> clmvttjo8t10}{}
\DeclareFontShape{T1}{lmvttos}{m}{sl}{<-> sub * lmvttos/m/it}{}
\DeclareFontShape{T1}{lmvttos}{l}{n}{<-> clmvtlj8t10}{}
\DeclareFontShape{T1}{lmvttos}{l}{it}{<-> clmvtljo8t10}{}
\DeclareFontShape{T1}{lmvttos}{l}{sl}{<-> sub * lmvttos/l/it}{}
\fi
\DeclareFontShape{T1}{lmvttos}{bx}{n}{<-> sub * lmvttos/bx/n}{}
\DeclareFontShape{T1}{lmvttos}{bx}{it}{<-> ssub * lmvttos/bx/it}{}
\DeclareFontShape{T1}{lmvttos}{bx}{sl}{<-> ssub * lmvttos/bx/sl}{}
\endinput
\ProvidesFile{eu1lmros.fd}[2012/07/20 v1.01 Font defs for Latin Modern]
\DeclareFontFamily{EU1}{lmros}{}
\DeclareFontShape{EU1}{lmros}{m}{n}{<5.5> \[lmroman5-regular\]:+onum,+tnum,mapping=tex-text}
\<5.5-6.5> \[lmroman6-regular\]:+onum,+tnum,mapping=tex-text
\6<6.5-7.5> \[lmroman7-regular\]:+onum,+tnum,mapping=tex-text
\7<7.5-8.5> \[lmroman8-regular\]:+onum,+tnum,mapping=tex-text
\8<8.5-9.5> \[lmroman9-regular\]:+onum,+tnum,mapping=tex-text
\9<9.5-11> \[lmroman10-regular\]:+onum,+tnum,mapping=tex-text
\11<11-15> \[lmroman12-regular\]:+onum,+tnum,mapping=tex-text
\12<15-> \[lmroman17-regular\]:+onum,+tnum,mapping=tex-text}{}
\DeclareFontShape{EU1}{lmros}{m}{sl}{<8.5> \[lmroman8sl-regular\]:+onum,+tnum,mapping=tex-text}
\<8.5-9.5> \[lmroman9sl-regular\]:+onum,+tnum,mapping=tex-text
\9<9.5-11> \[lmroman10sl-regular\]:+onum,+tnum,mapping=tex-text
\11<11-15> \[lmroman12sl-regular\]:+onum,+tnum,mapping=tex-text
\12<15-> \[lmroman17sl-regular\]:+onum,+tnum,mapping=tex-text}{}
\DeclareFontShape{EU1}{lmros}{m}{it}{<7.5> \[lmroman7-italic\]:+onum,+tnum,mapping=tex-text}
\7<7.5-8.5> \[lmroman8-italic\]:+onum,+tnum,mapping=tex-text
\8<8.5-9.5> \[lmroman9-italic\]:+onum,+tnum,mapping=tex-text
\9<9.5-11> \[lmroman10-italic\]:+onum,+tnum,mapping=tex-text
\11<11-> \[lmroman12-italic\]:+onum,+tnum,mapping=tex-text}{}
\DeclareFontShape{EU1}{lmros}{m}{sc}{<-> \[lmroman10caps-regular\]:+onum,+tnum,mapping=tex-text}
\DeclareFontShape{EU1}{lmros}{m}{ui}{<-> \[lmroman10unsc-regular\]:+onum,+tnum,mapping=tex-text}
\DeclareFontShape{EU1}{lmros}{m}{scsl}{<-> \[lmroman10caps-slant-regular\]:+onum,+tnum,mapping=tex-text}
\DeclareFontShape{EU1}{lmros}{m}{b}{n}{<-5.5> \[lmroman5-bold\]:+onum,+tnum,mapping=tex-text}
\<5.5-6.5> \[lmroman6-bold\]:+onum,+tnum,mapping=tex-text
\6<6.5-7.5> \[lmroman7-bold\]:+onum,+tnum,mapping=tex-text
\7<7.5-8.5> \[lmroman8-bold\]:+onum,+tnum,mapping=tex-text
\8<8.5-9.5> \[lmroman9-bold\]:+onum,+tnum,mapping=tex-text
\9<9.5-11> \[lmroman10-bold\]:+onum,+tnum,mapping=tex-text
\11<11-15> \[lmroman12-bold\]:+onum,+tnum,mapping=tex-text}
\DeclareFontShape{EU1}{lmros}{m}{bx}{n}{<-> \[lmroman10caps-bold\]:+onum,+tnum,mapping=tex-text}
\DeclareFontShape{EU1}{lmros}{m}{bx}{it}{<-> \[lmroman10caps-bold-italic\]:+onum,+tnum,mapping=tex-text}
\DeclareFontShape{EU1}{lmros}{m}{bx}{sl}{<-> \[lmroman10caps-bold-slant\]:+onum,+tnum,mapping=tex-text}
\DeclareFontShape{EU1}{lmros}{m}{bx}{it}{<-> sub * rmnih/b/sl}{
\ProvidesFile{eu1lmvttos.fd}[2012/07/20 v1.01 Font defs for Latin Modern]
\DeclareFontFamily{EU1}{lmvttos}{}
\ifx\lmtt@use@light@as@normal\@empty
\DeclareFontShape{EU1}{lmvttos}{sb}{n}{<-> "[lmmonoprop10-regular]:+onum,+tnum,mapping=tex-text"}{}
\DeclareFontShape{EU1}{lmvttos}{sb}{sl}{<-> "[lmmonoprop10-oblique]:+onum,+tnum,mapping=tex-text"}{}
\DeclareFontShape{EU1}{lmvttos}{sb}{it}{<-> sub * lmvttos/sb/sl}{}
\DeclareFontShape{EU1}{lmvttos}{m}{n}{<-> "[lmmonoproplt10-regular]:+onum,+tnum,mapping=tex-text"}{}
\DeclareFontShape{EU1}{lmvttos}{m}{sl}{<-> "[lmmonoproplt10-oblique]:+onum,+tnum,mapping=tex-text"}{}
\DeclareFontShape{EU1}{lmvttos}{m}{it}{<-> sub * lmvttos/m/sl}{}
\ElseIf{\lmtt@use@light@as@normal\@empty}
\DeclareFontShape{EU1}{lmvttos}{m}{n}{<-> "[lmmonoproplt10-regular]:+onum,+tnum,mapping=tex-text"}{}
\DeclareFontShape{EU1}{lmvttos}{m}{sl}{<-> "[lmmonoproplt10-oblique]:+onum,+tnum,mapping=tex-text"}{}
\DeclareFontShape{EU1}{lmvttos}{m}{it}{<-> sub * lmvttos/m/sl}{}
\DeclareFontShape{EU1}{lmvttos}{l}{n}{<-> "[lmmonoprop10-bold]:+onum,+tnum,mapping=tex-text"}{}
\DeclareFontShape{EU1}{lmvttos}{l}{sl}{<-> "[lmmonoproplt10-boldoblique]:+onum,+tnum,mapping=tex-text"}{}
\DeclareFontShape{EU1}{lmvttos}{l}{it}{<-> sub * lmvttos/b/sl}{}
\DeclareFontShape{EU1}{lmvttos}{l}{n}{<-> sub * lmvttos/l/n}{}
\DeclareFontShape{EU1}{lmvttos}{l}{sl}{<-> ssub * lmvttos/b/sl}{}
\DeclareFontShape{EU1}{lmvttos}{l}{it}{<-> ssub * lmvttos/b/sl}{}
\fi
\DeclareFontShape{EU1}{lmvttos}{b}{n}{<-> "[lmmonoprop10-bold]:+onum,+tnum,mapping=tex-text"}{}
\DeclareFontShape{EU1}{lmvttos}{b}{sl}{<-> "[lmmonoproplt10-boldoblique]:+onum,+tnum,mapping=tex-text"}{}
\DeclareFontShape{EU1}{lmvttos}{b}{it}{<-> sub * lmvttos/b/sl}{}
\DeclareFontShape{EU1}{lmvttos}{bx}{n}{<-> sub * lmvttos/b/x}{}
\DeclareFontShape{EU1}{lmvttos}{bx}{sl}{<-> sub * lmvttos/b/xl}{}
\DeclareFontShape{EU1}{lmvttos}{bx}{it}{<-> sub * lmvttos/b/xt}{}
\fi
\ProvideFontFamily{EU1}{lmvttos}{n}
Change History

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General: LuaTeX compatibility ... 1
stdspace: ExplSyntaxOff trick ... 10

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