The **basque-book** document class*

Edorta Ibarra

gautegiz@yahoo.es

2014-01-25

Abstract

The class is derived from the `\LaTeX` **book** document class. The extensions solve grammatical and numeration issues that occur when book-type documents are written in Basque. The class is useful for writing books, PhD Theses, etc. in Basque.

Contents

1 Basque Language and `\LaTeX`
   1.1 Introduction ........................................... 1
   1.2 The basque-book document class ..................... 1

2 Calling the document class ................................ 2

3 Acknowledgements .......................................... 2

References ................................................................ 2

A Appendices
   A.1 License .................................................... 2
   A.2 Version history .......................................... 2
   A.3 Implementation .......................................... 3

1 Basque Language and `\LaTeX`

1.1 Introduction

`\LaTeX` is primarily intended for English and English-like languages. Basque does not have an English-like structure nor numeration rules and, for that reason, writing grammatically correct documents in Basque using \LaTeX is not always straightforward.

---

*This file (basque-book.dtx) has version v1.24 last revised 2014-01-25.
This issues are well known for Basque \LaTeX users. Most non-advanced Basque \LaTeX users do not have the ability to modify the document classes themselves. As stated in [1], one of the possible solutions to address this problems is to redefine \LaTeX document classes for Basque.

1.2 The basque-book document class

One of the most common class used in \LaTeX is the book document class. In this sense, a derived class called basque-book is provided. This class allows to write grammatically correct books in Basque without the need of performing manual corrections or redefinitions on the document class code. The class is useful for writing books, PhD Theses, etc. in Basque.

2 Calling the document class

The document class basque-book is called using the \texttt{\documentclass} command:

\documentclass[\textit{<options>}]\{basque-book\}.

The class basque-book provides the same options provided by the standard book document class.

The document class basque-book requires the package basque-date. This package prints the current date in Basque following the recommendations of the Basque Language Academy. This package and its documentation are available online from CTAN\footnote{\url{http://ctan.org/tex-archive/macros/latex/contrib/basque-date}}.

Due to incompatibility reasons, the package babel should not be used when the document class basque-book is called (refer to appendix A.3 for more details).

3 Acknowledgements

I would like to thank Jose Ramon Etxebarria, who tested the package basque-book and made suggestions that helped to improve it.

References


A Appendices

A.1 License

Copyright 2012-2014 Edorta Ibarra.
This program can be redistributed and/or modified under the terms of the \LaTeX Project Public License Distributed from CTAN archives in directory macros/latex/basee/lppl.txt; either version 1.2 of the License, or any later version.

A.2 Version history

- **Version v1.00 (2012/05/03).** Initial non-public version for development.

- **Version v1.05 (2012/05/22).** First public version. This version included most of the current features.

- **Version v1.20 (2012/07/06).** Second public version.
  
  (a) Captions for tables and figures were redefined in order to improve the readability of the document.

  (b) A minor bug was corrected (a missing \texttt{\textbackslash RequirePackage}).

  (c) Some minor changes were performed in the documentation.

  
  (a) Documentation in Basque was provided in the \texttt{.dtx} file.

  (b) A bug related with equation numbering was fixed.

A.3 Implementation

No changes from the standard \texttt{book} document class are implemented at the beginning of the code.

\begin{verbatim}
1 \newcommand{\optsize{}}
2 \newif{\restonecol}
3 \newif{\@titlepage}
4 \@titlepagetrue
5 \newif{\openright}
6 \newif{\@mainmatter \@mainmattertrue}
7 \if@compatibility\else
8 \DeclareOption{a4paper}
9 \setlength{\paperheight}{297mm}%
10 \setlength{\paperwidth}{210mm}
11 \DeclareOption{a5paper}
12 \setlength{\paperheight}{210mm}%
13 \setlength{\paperwidth}{148mm}
14 \DeclareOption{b5paper}
15 \setlength{\paperheight}{250mm}%
16 \setlength{\paperwidth}{176mm}
17 \DeclareOption{letterpaper}
18 \setlength{\paperheight}{11in}%
19 \setlength{\paperwidth}{8.5in}
20 \DeclareOption{legalpaper}
\end{verbatim}

3
The order of the elements of the document headings are redefined in order to comply with the Basque grammatical rules:

\def\ps@headings{\
\let\@oddfoot\@empty\let\@evenfoot\@empty
\def\@evenhead{{\slshape\rightmark}\hfil\thepage}\
\def\@oddhead{{\slshape\leftmark}\hfil\thepage}\
\let\@mkboth\markboth
\def\chaptermark##1{&\markboth{{\ifnum\c@secnumdepth > \m@ne\if@mainmatter\thechapter \@chapapp .\ %\fi\fi}{} \hfil\thepage}}\
\def\sectionmark##1{&\markright{{\ifnum\c@secnumdepth > \z@ \thesection \ %\fi}{} \hfil\thepage}}
\else
\def\ps@headings{\
\let\@oddfoot\@empty
\def\@oddhead{{\slshape\rightmark}\hfil\thepage}\
\let\@mkboth\markboth
\def\chaptermark##1{&\markboth{{\ifnum\c@secnumdepth > \m@ne\if@mainmatter\thechapter \@chapapp .\ %\fi\fi}{} \hfil\thepage}}\
\def\sectionmark##1{&\markright{{\ifnum\c@secnumdepth > \z@ \thesection \ %\fi}{} \hfil\thepage}}
\fi
}
\markright {{
118    \ifnum \c@secnumdepth >\m@ne
119        \if@mainmatter
120            \thechapter \chapapp \ %
121        \fi
122    \fi
123    \fi
124    #1)}}}
125 \fi
126 \def\ps@myheadings{%
127    \let\@oddfoot\@empty\let\@evenfoot\@empty
128    \def\@evenhead{{\slshape \rightmark}\hfil\thepage}\
129    \def\@oddhead{{\slshape \leftmark}\hfil\thepage}\
130    \let\@mkboth\@gobbletwo
131    \let\chaptermark\@gobble
132    \let\sectionmark\@gobble
133    }
134 \if@titlepage
135 \newcommand\maketitle{\begin{titlepage}\%
136 \let\footnotesize\small
137 \let\footnoterule\relax
138 \let\footnote\thanks
139 \null\vfil
140 \vskip 60\p@
141 \begin{center}{\LARGE \@title \par}\
142 \vskip 3em\%
143 \begin{tabular}{c}\
144 \@author\%
145 \end{tabular}\par
146 \vskip 1.5em\%
147 \@date \par}\%
148 \end{center}\par
149 \@thanks\%
150 \vfil\null
151 \end{titlepage}\%
152 \begin{center}\%
153 \LARGE \@title \par\%
154 \vskip 3em\%
155 \lineskip .75em\%
156 \begin{tabular}{tc}\
157 \@author\%
158 \end{tabular}\par\%
159 \vskip 1.5em\%
160 \@date \par\%
161 \end{center}\par
162 \@thanks\%
163 \vfil\null
164 \end{titlepage}\%
165 \setcounter{footnote}{0}\%
166 \global\let\thanks\relax
167 \global\let\maketitle\relax
168 \global\let\@thanks\@empty
169 \global\let\@author\@empty
170 \global\let\@date\@empty
171 \global\let\title\relax
172 \global\let\author\relax
173 \global\let\and\relax
174 \}
175 \else
176 \fi
The commands that are responsible for numbering the different parts, chapters, sections, etc. of the document are redefined in order to comply with the Basque numeration rules:

```latex
\renewcommand\thepart {\Roman{part}.}
\renewcommand\thechapter {\arabic{chapter}.}
\renewcommand\thesection {\thechapter \arabic{section}.}
\renewcommand\thesubsection {\thesection \arabic{subsection}.}
\renewcommand\thesubsubsection {\thesubsection \arabic{subsubsection}.}
\renewcommand\theparagraph {\thesubsubsection \arabic{paragraph}.}
\renewcommand\thesubparagraph {\theparagraph \arabic{subparagraph}.}
```

The \@chapapp command is defined as \chaptername, and \frontmatter, \mainmatter, and \backmatter commands are defined to switch between different numbering systems.
The `part` environment is modified changing the order of `\partname` and `\thepart`. Moreover, the extra dot is eliminated:

```latex
\def\@part[#1]#2{\ifnum \c@secnumdepth >-2\relax \refstepcounter{part} \addcontentsline{toc}{part}{\thepart\hspace{1em}#1} \else \addcontentsline{toc}{part}{#1}\fi \markboth{}{} \centering \interlinepenalty \@M \normalfont \ifnum \c@secnumdepth >-2\relax \huge\bfseries \thepart
\par \vskip 20\p@ \fi \Huge \bfseries #2\par} \@endpart
```

Similarly, the `chapter` environment is modified changing the order of `\@chapapp` and `\thechapter`. As done before, the extra dot is eliminated:

```latex
\def\@chapter[#1]#2{\ifnum \c@secnumdepth >-2\relax \refstepcounter{chapter} \addcontentsline{toc}{chapter}{\@chapapp\thechapter\hspace{1em}#1}\else \addcontentsline{toc}{chapter}{#1}\fi \markboth{}{} \centering \interlinepenalty \@M \normalfont \Huge \bfseries #2\par} \@endchapter
```
In order to correctly modify the appendix environment, an extra dot is added to the `\gdef\thechapter{\Alph{\c@chapter}}` code line:

\appendix

\renewcommand\appendix{
\setcounter{chapter}{0}
\setcounter{section}{0}
\gdef\@chapapp{appendixname}
\gdef\thechapter{\Alph{\c@chapter}.}
\setlength{\arraycolsep}{5\p@}
\setlength{\tabcolsep}{6\p@}
\setlength{\arrayrulewidth}{.4\p@}
\setlength{\doublerulesep}{2\p@}
\setlength{\tabbingsep}{\labelsep}
\setlength{\skip\@mpfootins}{\skip\footins}
\setlength{\fboxsep}{3\p@}
\setlength{\fboxrule}{.4\p@}
\setcounter{equation}{0}
\renewcommand\theequation{\ifnum \c@chapter>0 \thechapter\fi \@arabic{\c@equation}}
\newcounter{figure}[chapter]
\setlength{\fboxsep}{3\p@}
\setlength{\fboxrule}{.4\p@}
\renewcommand\fnum@figure{	extbf{\thefigure} \figurename}

\begin{figure}
\end{figure}
\newenvironment{figure*}{
\begin{figure}
}{\end{figure}}

\end{document}
The same changes as in `\thefigure` and `\fnum@figure` are applied to `\thetable` and `\fnum@table`:

```
\begin{table}
\end{table}
```

The length of `\belowcaptionskip` is changed from `0p@` to `10p@` in order to improve the readability of the captions of figures and tables:

```
\setlength{\belowcaptionskip}{10\p@}
```

For the same reason, the width for table and figure captions is redefined:

```
\setlength{\captionwidth}{0.85\textwidth}
```

The "." is changed by `\textbf{.}` in the caption environment. Moreover, the font size of the caption is changed to `\small` and the new caption width is applied:

```
\long\def\@makecaption#1#2{\centering
  \parbox{\captionwidth}{\vskip\abovecaptionskip
    \sbox\@tempboxa{\small #1\textbf{.} #2}
    \ifdim \wd\@tempboxa >\hsize
      \small #1\textbf{.} #2\par
    \else
      \global \@minipagefalse
      \hb@xt@\hsize{\hfil\box\@tempboxa\hfil}
    \fi
  }%end parbox
}%end @makecaption
```

2Changes applied in the caption environment are the main changes from version v1.05 to version v1.20.
The names for the table of contents, list of figures, list of tables, bibliography, etc. are defined in Basque taking into account the uppercase and lowercase letters:

3 Uppercase and lowercase letters are not correctly addressed by the basque babel package. For this reason, the use of this package is not recommended.
Finally, the current date is defined using the command `\eusdata` provided by the package `basque-date` (available from CTAN):

\def\today{\eusdata}
\setlength\columnsep{10\p@}
\setlength\columnseprule{0\p@}
\pagestyle{headings}
\pagenumbering{arabic}
\if@twoside
\else
  \raggedbottom
\fi
\if@twocolumn
\twocolumn
\sloppy
\flushbottom
\else
  \onecolumn
\fi