1 The Basque language

The file $basque.dtx^1$ defines all the language definition macro's for the Basque language.

For this language the characters $\tilde{}$ and " are made active. In table 1 an overview is given of their purpose. These active accent characters behave according to their

- "| disable ligature at this position.
- "- an explicit hyphen sign, allowing hyphenation in the rest of the word.
- \- like the old \-, but allowing hyphenation in the rest of the word.
- "< for French left double quotes (similar to <<).
- "> for French right double quotes (similar to >>).
- "n a n with tilde. Works for uppercase too.

Table 1: The extra definitions made by basque.ldf

original definitions if not followed by one of the characters indicated in that table.

This option includes support for working with extended, 8-bit fonts, if available. Support is based on providing an appropriate definition for the accent macros on entry to the Basque language. This is automatically done by $\text{LATEX } 2_{\varepsilon}$ or NFSS2. If T1 encoding is chosen, and provided that adequate hyphenation patterns² are available. The easiest way to use the new encoding with $\text{LATEX } 2_{\varepsilon}$ is to load the package t1enc with \usepackage. This must be done before loading babel.

The macro \LdfInit takes care of preventing that this file is loaded more than once, checking the category code of the @ sign, etc.

 $1 \langle * \mathsf{code} \rangle$

2 \LdfInit{basque}\captionsbasque

When this file is read as an option, i.e. by the \usepackage command, basque could be an 'unknown' language in which case we have to make it known. So we check for the existence of \l@basque to see whether we have to do something here.

```
3 \ifx\l@basque\@undefined
4 \@nopatterns{Basque}
5 \adddialect\l@basque0
6 \fi
```

The next step consists of defining commands to switch to (and from) the Basque language.

\captionsbasque

The macro \captionsbasque defines all strings used in the four standard documentclasses provided with LATEX.

¹The file described in this section has version number v1.0f and was last revised on 2005/03/29. The original author is Juan M. Aguirregabiria, (wtpagagj@lg.ehu.es) and is based on the Spanish file by Julio Sánchez, (jsanchez@gmv.es).

²One source for such patterns is the archive at tp.lc.ehu.es that can be accessed by anonymous FTP or in http://tp.lc.ehu.es/jma/basque.html

```
7 \addto\captionsbasque{%
                      \def\prefacename{Hitzaurrea}%
                  8
                     \def\refname{Erreferentziak}%
                  9
                 10
                     \def\abstractname{Laburpena}%
                     \def\bibname{Bibliografia}%
                 11
                     \def\chaptername{Kapitulua}%
                 12
                      \def\appendixname{Eranskina}%
                 13
                      \def\contentsname{Gaien Aurkibidea}%
                 14
                      \def\listfigurename{Irudien Zerrenda}%
                 15
                      \def\listtablename{Taulen Zerrenda}%
                 16
                      \def\indexname{Kontzeptuen Aurkibidea}%
                 17
                      \def\figurename{Irudia}%
                 18
                      \def\tablename{Taula}%
                 19
                      \def\partname{Atala}%
                 20
                 21
                      \def\enclname{Erantsia}%
                      \def\ccname{Kopia}%
                 22
                      \def\headtoname{Nori}%
                 23
                      \def\pagename{Orria}%
                 24
                      \def\seename{Ikusi}%
                 25
                 26
                     \def\alsoname{Ikusi, halaber}%
                 27
                      \def\proofname{Frogapena}%
                     \def\glossaryname{Glosarioa}%
                 28
                 29
                     }%
    \datebasque
                 The macro \datebasque redefines the command \today to produce Basque
                 30 \def\datebasque{%
                     \def\today{\number\year.eko\space\ifcase\month\or
                 31
                        urtarrilaren\or otsailaren\or martxoaren\or apirilaren\or
                 32
                 33
                        maiatzaren\or ekainaren\or uztailaren\or abuztuaren\or
                 34
                        irailaren\or urriaren\or azaroaren\or
                        abenduaren\fi~\number\day}}
                 35
                 The macro \extrasbasque will perform all the extra definitions needed for the
 \extrasbasque
                 Basque language. The macro \noextrasbasque is used to cancel the actions of
\noextrasbasque
                 \extrasbasque. For Basque, some characters are made active or are redefined. In
                 particular, the " character and the \tilde{} character receive new meanings. Therefore
                 these characters have to be treated as 'special' characters.
                 36 \addto\extrasbasque{\languageshorthands{basque}}
                 37 \initiate@active@char{"}
                 38 \initiate@active@char{~}
                 39 \addto\extrasbasque{%
                 40
                     \bbl@activate{"}%
                     \bbl@activate{~}}
                 41
```

Don't forget to turn the shorthands off again.

43 \bbl@deactivate{"}\bbl@deactivate{~}}

Apart from the active characters some other macros get a new definition. Therefore we store the current one to be able to restore them later. 44 \addto\extrasbasque{%

- 45 \babel@save\"%
- 46 \babel@save\~%
- 47 \def\"{\protect\@umlaut}%
- 48 \def\~{\protect\@tilde}}
- \basquehyphenmins Basque hyphenation uses \lefthyphenmin and \righthyphenmin both set to 2.
 49 \providehyphenmins{\CurrentOption}{\tw@\tw@}

```
50 \let\dieresia\"
51 \let\texttilde\^
```

\@umlaut We check the encoding and if not using T1, we make the accents expand but \@tilde enabling hyphenation beyond the accent. If this is the case, not all break positions will be found in words that contain accents, but this is a limitation in T_EX . An unsolved problem here is that the encoding can change at any time. The definitions below are made in such a way that a change between two 256-char encodings are supported, but changes between a 128-char and a 256-char encoding are not properly supported. We check if T1 is in use. If not, we will give a warning and proceed redefining the accent macros so that T_EX at least finds the breaks that are not too close to the accent. The warning will only be printed to the log file.

```
52 \ifx\DeclareFontShape\@undefined
    \wlog{Warning: You are using an old LaTeX}
53
54
    \wlog{Some word breaks will not be found.}
55
    \def\@umlaut#1{\allowhyphens\dieresia{#1}\allowhyphens}
56
    \def\@tilde#1{\allowhyphens\texttilde{#1}\allowhyphens}
57 \else
58
    \edef\bbl@next{T1}
59
    \ifx\f@encoding\bbl@next
60
      \let\@umlaut\dieresia
      \let\@tilde\texttilde
61
    \else
62
63
      \wlog{Warning: You are using encoding \f@encoding\space
        instead of T1.}
64
      \wlog{Some word breaks will not be found.}
65
      \def\@umlaut#1{\allowhyphens\dieresia{#1}\allowhyphens}
66
      \def\@tilde#1{\allowhyphens\texttilde{#1}\allowhyphens}
67
68
    \fi
```

69 **\fi**

Now we can define our shorthands: the french quotes,

```
70 \declare@shorthand{basque}{"<}{%
71 \textormath{\guillemotleft}{\mbox{\guillemotleft}}}
72 \declare@shorthand{basque}{">}{%
73 \textormath{\guillemotright}{\mbox{\guillemotright}}}
ordinals<sup>3</sup>,
74 \declare@shorthand{basque}{''}{%
```

```
76 \declare@shorthand{basque}{"n}{\textormath{\"n}{\@tilde n}}
77 \declare@shorthand{basque}{"N}{\textormath{\"N}{\@tilde N}}
```

and some additional commands.

The shorthand "- should be used in places where a word contains an explicit hyphenation character. According to the Academy of the Basque language, when a word break occurs at an explicit hyphen it must appear *both* at the end of the first line *and* at the beginning of the second line.

```
78 \declare@shorthand{basque}{"-}{%
79 \nobreak\discretionary{-}{-}{-}\bbl@allowhyphens}
80 \declare@shorthand{basque}{"|}{%
81 \textormath{\nobreak\discretionary{-}{}{\kern.03em}%
82 \allowhyphens}{}
```

The macro \ldf@finish takes care of looking for a configuration file, setting the main language to be switched on at \begin{document} and resetting the category code of @ to its original value.

83 \ldf@finish{basque}

 $_{84} \ \langle / \mathsf{code} \rangle$

³The code for the ordinals was taken from the answer provided by Raymond Chen (raymond@math.berkeley.edu) to a question by Joseph Gil (yogi@cs.ubc.ca) in comp.text.tex.