# A Babel language definition file for French

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# 1 The French language

The file frenchb.dtx<sup>1</sup>, defines all the language definition macros for the French language.

Customisation for the French language is achieved following the book "Lexique des règles typographiques en usage à l'Imprimerie nationale" troisième édition (1994), ISBN-2-11-081075-0.

First version released: 1.1 (1996/05/31) as part of babel-3.6beta.

frenchb has been improved using helpful suggestions from many people, mainly from Jacques André, Michel Bovani, Thierry Bouche, and Vincent Jalby. Thanks to all of them!

This new version (2.x) has been designed to be used with  $\LaTeX$   $2_{\varepsilon}$  and PlainTeX formats only.  $\LaTeX$  2.09 is no longer supported. Changes between version 1.6 and v2.6e are listed in subsection 1.4 p. 7.

An extensive documentation is available in French here:

http://daniel.flipo.free.fr/frenchb

### 1.1 Basic interface

In a multilingual document, some typographic rules are language dependent, i.e. spaces before 'double punctuation' (:;!?) in French, others concern the general layout (i.e. layout of lists, footnotes, indentation of first paragraphs of sections) and should apply to the whole document.

Starting with version 2.2, frenchb behaves differently according to babel's main language defined as the last option<sup>2</sup> at babel's loading. When French is not babel's main language, frenchb no longer alters the global layout of the document (even in parts where French is the current language): the layout of lists, footnotes, indentation of first paragraphs of sections are not customised by frenchb.

When French is loaded as the last option of babel, frenchb makes the following changes to the global layout, both in French and in all other languages<sup>3</sup>:

- 1. the first paragraph of each section is indented (LATEX only);
- 2. the default items in itemize environment are set to '—' instead of '•', and all vertical spacing and glue is deleted; it is possible to change '—' to something else ('—' for instance) using \frenchbsetup{};
- 3. vertical spacing in general LATEX lists is shortened;
- 4. footnotes are displayed "à la française".

 $<sup>^1\</sup>mathrm{The}$  file described in this section has version number v2.6e and was last revised on 2013/07/06.

<sup>&</sup>lt;sup>2</sup>Its name is kept in \bbl@main@language.

<sup>&</sup>lt;sup>3</sup> For each item, hooks are provided to reset standard LATEX settings or to emulate the behavior of former versions of frenchb (see command \frenchbsetup{}, section 1.2).

Regarding local typography, the command \selectlanguage{french} switches to the French language<sup>4</sup>, with the following effects:

- 1. French hyphenation patterns are made active;
- 2. 'double punctuation' (: ; ! ?) is made active<sup>5</sup> for correct spacing in French;
- 3. \today prints the date in French;
- 4. the caption names are translated into French (IATEX only). The separator following the table or figure number in captions is printed as '-' in French instead of ': ', this setting can be changed by redefining \CaptionSeparator for French and \CaptionSeparatorORI for other languages.
- 5. the space after \dots is removed in French.

Some commands are provided in frenchb to make typesetting easier:

- 1. French quotation marks can be entered using the commands  $\log$  and fg which work in LATEX  $2_{\varepsilon}$  and PlainTEX, their appearance depending on what is available to draw them; even if you use LATEX  $2_{\varepsilon}$  and T1-encoding, you should refrain from entering them as << French quotation marks >>:  $\log$  and fg provide better horizontal spacing.  $\log$  and fg can be used outside French, they typeset then English quotes "and".
- A command \up is provided to typeset superscripts like M\up{me} (abbreviation for "Madame"), 1\up{er} (for "premier"). Other commands are also provided for ordinals: \ier, \iere, \iere, \iere, \iene, \ieme, \iemes (3\iemes prints 3<sup>es</sup>).
- 3. Family names should be typeset in small capitals and never be hyphenated, the macro \bsc (boxed small caps) does this, e.g., Leslie~\bsc{Lamport} will produce Leslie LAMPORT. Note that composed names (such as Dupont-Durant) may now be hyphenated on explicit hyphens, this differs from frenchb v. 1.x.
- 4. Commands \primo, \secundo, \tertio and \quarto print  $1^{\rm o}, 2^{\rm o}, 3^{\rm o}, 4^{\rm o}$ . \FrenchEnumerate{6} prints  $6^{\rm o}$ .
- 5. Abbreviations for "Numéro(s)" and "numéro(s)" (No Nos no and nos ) are obtained via the commands  $\No, \Nos, \no, \nos.$
- 6. Two commands are provided to typeset the symbol for "degré": \degre prints the raw character and \degres should be used to typeset temperatures (e.g., "20~\degres C" with an unbreakable space), or for alcohols" strengths (e.g., "45\degres" with no space in French).
- 7. In math mode the comma has to be surrounded with braces to avoid a spurious space being inserted after it, in decimal numbers for instance (see the TeXbook p. 134). The command \DecimalMathComma makes the comma

<sup>4 \</sup>selectlanguage{francais} and \selectlanguage{frenchb} are kept for backward compatibility but should no longer be used.

<sup>&</sup>lt;sup>5</sup>Actually, they are active in the whole document, only their expansions differ in French and outside French.

be an ordinary character in French only (no space added); as a counterpart, if \DecimalMathComma is active, an explicit space has to be added in lists and intervals: \$[0,\ 1]\$, \$(x,\ y)\$. \StandardMathComma switches back to the standard behaviour of the comma.

- 8. A command \nombre was provided in 1.x versions to easily format numbers in slices of three digits separated either by a comma in English or with a space in French; \nombre is now mapped to \numprint from numprint.sty, see numprint.pdf for more information.
- 9. frenchb has been designed to take advantage of the xspace package if present: adding \usepackage{xspace} in the preamble will force macros like \fg, \ier, \ieme, \dots, ..., to respect the spaces you type after them, for instance typing '1\ier juin' will print '1er juin' (no need for a forced space after 1\ier).

### 1.2 Customisation

Up to version 1.6, customisation of frenchb was achieved by entering commands in frenchb.cfg. Version 2.0 introduced a new command \frenchbsetup{} using the keyval syntax which should make it easier to choose among the many options available. The command \frenchbsetup{} is to appear in the preamble only (after loading babel). Usage of a frenchb.cfg file for customisation should definitely be avoided.

\frenchbsetup{ShowOptions} prints all available options to the .log file, it is just meant as a remainder of the list of offered options. As usual with keyval syntax, boolean options (as ShowOptions) can be entered as ShowOptions=true or just ShowOptions, the '=true' part can be omitted.

The other options are listed below. Their default value is shown between brackets, sometimes followed be a '\*'. The '\*' means that the default shown applies when frenchb is loaded as the *last* option of babel —babel's main language—, and is toggled otherwise:

- StandardLayout=true [false\*] forces frenchb not to interfere with the layout: no action on any kind of lists, first paragraphs of sections are not indented (as in English), no action on footnotes. This option replaces the former command \StandardLayout. It might be used to avoid conflicts with classes or packages which customise lists or footnotes.
- GlobalLayoutFrench=false [true\*] can be used, when French is the main language, to emulate what prior versions of frenchb (pre-2.2) did: lists, and first paragraphs of sections will be displayed the standard way in other languages than French, and "à la française" in French. Note that the layout of footnotes is language independent anyway (see below FrenchFootnotes and AutoSpaceFootnotes). This option replaces the former command \FrenchLayout.
- ReduceListSpacing=false [true\*]; frenchb reduces the values of the vertical spaces used in the *all* list environments in French (this includes itemize, enumerate, description, but also abstract, quote, quotation and verse and possibly others). Setting this option to false reverts to the

- standard settings of list. This option replaces the former command \FrenchListSpacingfalse.
- ListOldLayout=true [false]; starting with version 2.6a, the layout of lists has changed regarding leftmargins' sizes and default itemize label ('—' instead of '–' up to 2.5k). This option, provided for backward compatibility, displays lists as they were up to version 2.5k.
- CompactItemize=false [true\*]; should no longer be used (kept only for backward compatibility).
- StandardItemizeEnv=true [false\*]; frenchb redefines the itemize environment to suppress any vertical space between items of itemize lists in French and customise leftmargins. Setting this option to false reverts to the standard definition of itemize.
- StandardEnumerateEnv=true [false\*]; starting with version 2.6 frenchb redefines the enumerate and description environments to make leftmargins match those of the French version of itemize lists. Setting this option to false reverts to the standard definition of enumerate and description.
- StandardItemLabels=true [false\*] when set to true this option stops frenchb from changing the labels in itemize lists in French.
- ItemLabels=\textendash, \textbullet, \ding{43}, ..., [\textemdash\*]; when StandardItemLabels=false (the default), this option enables to choose the label used in itemize lists for all levels. The next three options do the same but each one for one level only. Note that the example \ding{43} requires \usepackage{pifont}.
- ItemLabeli=\textendash, \textbullet, \ding{43}, ..., [\textemdash\*]
- ItemLabelii=\textendash, \textbullet, \ding{43}, ..., [\textemdash\*]
- ItemLabeliii=\textendash, \textbullet, \ding{43}, ..., [\textemdash\*]
- ItemLabeliv=\textendash, \textbullet, \ding{43}, ..., [\textemdash\*]
- StandardLists=true [false\*] forbids frenchb to customise any kind of list. Try the option StandardLists in case of conflicts with classes or packages that customise lists too. This option is just a shorthand for all four options ReduceListSpacing=false, StandardItemizeEnv=true, StandardEnumerateEnv=true and StandardItemLabels=true.
- IndentFirst=false [true\*]; frenchb normally forces indentation of the first paragraph of sections. When this option is set to false, the first paragraph of will look the same in French and in English (not indented).
- FrenchFootnotes=false [true\*] reverts to the standard layout of footnotes. By default frenchb typesets leading numbers as '1. ' instead of '1', but has no effect on footnotes numbered with symbols (as in the \thanks command). The former commands \StandardFootnotes and \FrenchFootnotes are still there, \StandardFootnotes can be useful when some footnotes are numbered with letters (inside minipages for instance).

- AutoSpaceFootnotes=false [true\*]; by default frenchb adds a thin space in the running text before the number or symbol calling the footnote. Making this option false reverts to the standard setting (no space added).
- FrenchSuperscripts=false [true]; then \up=\textsuperscript (option added in version 2.1). Should only be made false to recompile older documents. By default \up now relies on \fup designed to produce better looking superscripts.
- AutoSpacePunctuation=false [true]; in French, the user should input a space before the four characters ':;!?' but as many people forget about it (even among native French writers!), the default behaviour of frenchb is to automatically add a \thinspace before ';' '!' '?' and a normal (unbreakable) space before ':' (this is recommended by the French Imprimerie nationale). This is convenient in most cases but can lead to addition of spurious spaces in URLs or in MS-DOS paths but only if they are no typed using \texttt or verbatim mode. When the current font is a monospaced (typewriter) font, AutoSpacePunctuation is locally switched to false, no spurious space is added in that case, so the default behaviour of of frenchb in that area should be fine in most circumstances.

Choosing AutoSpacePunctuation=false will ensure that a proper space will be added before ':;!?' if and only if a (normal) space has been typed in. Those who are unsure about their typing in this area should stick to the default option and type \string; \string: \string! \string? instead of; :!? in case an unwanted space is added by frenchb.

- ThinColonSpace=true [false] changes the normal (unbreakable) space added before the colon ':' to a thin space, so that the same amount of space is added before any of the four double punctuation characters. The default setting is supported by the French Imprimerie nationale.
- LowercaseSuperscripts=false [true]; by default frenchb inhibits the uppercasing of superscripts (for instance when they are moved to page headers). Making this option false will disable this behaviour (not recommended).
- PartNameFull=false [true]; when true, frenchb numbers the title of \part{} commands as "Première partie", "Deuxième partie" and so on. With some classes which change the\part{} command (AMS and SMF classes do so), you will get "Première partie I", "Deuxième partie II" instead; when this occurs, this option should be set to false, part titles will then be printed as "Partie I", "Partie II".
- SuppressWarning=true [false]; when true frenchb issues no warnings if \@makecaption has been redefined or if the bigfoot package is in use.
- og=«, fg=»; when guillemets characters are available on the keyboard (through a compose key for instance), it is nice to use them instead of typing \og and \fg. This option tells frenchb which characters are opening and closing French guillemets (they depend on the input encoding), then you can type either « guillemets », or «guillemets» (with or without spaces), to

get properly typeset French quotes. This option requires inputenc to be loaded with the proper encoding, it works with 8-bits encodings (latin1, latin9, ansinew, applemac,...) and multi-byte encodings (utf8 and utf8x).

# 1.3 Hyphenation checks

Once you have built your format, a good precaution would be to perform some basic tests about hyphenation in French. For LATEX  $2_{\varepsilon}$  I suggest this:

• run the following file, with the encoding suitable for your machine (*my-encoding* will be latin1 for UNIX machines, ansinew for PCs running Windows, applemac or latin1 for Macintoshs, or utf8...

```
%%% Test file for French hyphenation.
\documentclass{article}
\usepackage[my-encoding]{inputenc}
\usepackage[T1]{fontenc} % Use LM fonts
\usepackage{lmodern} % for French
\usepackage[frenchb]{babel}
\begin{document}
\showhyphens{signal container \'ev\'enement alg\'ebre}
\showhyphens{signal container événement algèbre}
\end{document}
```

• check the hyphenations proposed by TEX in your log-file; in French you should get with both 7-bit and 8-bit encodings si-gnal contai-ner évé-ne-ment al-gèbre.

Do not care about how accented characters are displayed in the log-file, what matters is the position of the '-' hyphen signs only.

If they are all correct, your installation (probably) works fine, if one (or more) is (are) wrong, ask a local wizard to see what's going wrong and perform the test again (or e-mail me about what happens). Frequent mismatches:

- you get sig-nal con-tainer, this probably means that the hyphenation patterns you are using are for US-English, not for French;
- you get no hyphen at all in évé-ne-ment, this probably means that you are using CM fonts and the macro \accent to produce accented characters. Using 8-bits fonts with built-in accented characters avoids this kind of mismatch.

Options' order – Please remember that options are read in the order they appear inside the \frenchbsetup command. Someone wishing that frenchb leaves the layout of lists and footnotes untouched but caring for indentation of first paragraph of sections could choose \frenchbsetup{StandardLayout,IndentFirst} and get the expected layout. Choosing \frenchbsetup{IndentFirst,StandardLayout} would not lead to the expected result: option IndentFirst would be overwritten by StandardLayout.

# 1.4 Changes

### What's new in version 2.0?

Here is the list of all changes:

- Support for IΔTEX-2.09 and for IΔTEX 2ε in compatibility mode has been dropped. This version is meant for IΔTEX 2ε and Plain based formats (like bplain). IΔTEX 2ε formats based on mlTEX are no longer supported either (plenty of good 8-bits fonts are available now, so T1 encoding should be preferred for typesetting in French). A warning is issued when OT1 encoding is in use at the \begin{document}.
- Customisation should now be handled only by command \frenchbsetup{}, frenchb.cfg (kept for compatibility) should no longer be used. See section 1.2 for the list of available options.
- Captions in figures and table have changed in French: former abbreviations "Fig." and "Tab." have been replaced by full names "Figure" and "Table". If this leads to formatting problems in captions, you can add the following two commands to your preamble (after loading babel) to get the former captions

```
\addto\captionsfrench{\def\figurename{{\scshape Fig.}}}
\addto\captionsfrench{\def\tablename{{\scshape Tab.}}}.
```

- The \nombre command is now provided by the numprint package which has to be loaded *after* babel with the option autolanguage if number formatting should depend on the current language.
- The \bsc command no longer uses an \hbox to stop hyphenation of names but a \kern0pt instead. This change enables microtype to fine tune the length of the argument of \bsc; as a side-effect, compound names like Dupont-Durand can now be hyphenated on explicit hyphens. You can get back to the former behaviour of \bsc by adding \renewcommand\*{\bsc}[1]{\leavevmode\hbox{\schape #1}}
  - \renewcommand\*{\bsc}[1]{\leavevmode\hbox{\scshape #1}}\to the preamble of your document.
- Footnotes are now displayed "à la française" for the whole document, except with an explicit

\frenchbsetup{AutoSpaceFootnotes=false,FrenchFootnotes=false}. Add this command if you want standard footnotes. It is still possible to revert locally to the standard layout of footnotes by adding \StandardFootnotes (inside a minipage environment for instance).

### What's new in version 2.1?

New command \fup to typeset better looking superscripts. Former command \up is now defined as \fup, an option \frenchbsetup{FrenchSuperscripts=false} is provided for backward compatibility. \fup was designed using ideas from Jacques André, Thierry Bouche and René Fritz, thanks to them!

### What's new in version 2.2?

Starting with version 2.2a, frenchb alters the layout of lists, footnotes, and the indentation of first paragraphs of sections) only if French is the "main language" (i.e. babel's last language option). The layout is global for the whole document: lists, etc. look the same in French and in other languages, everything is typeset "à la française" if French is the "main language", otherwise frenchb doesn't change anything regarding lists, footnotes, and indentation of paragraphs.

### What's new in version 2.3?

Starting with version 2.3a, frenchb no longer inserts spaces automatically before ':;!?' when a typewriter font is in use; this was suggested by Yannis Haralambous to prevent spurious spaces in computer source code or expressions like C:/foo, http://foo.bar, etc. An option (OriginalTypewriter) is provided to get back to the former behaviour of frenchb.

Another probably invisible change: lowercase conversion in \up{} is now achieved by the LATEX command \MakeLowercase instead of TeX's \lowercase command. This prevents error messages when diacritics are used inside \up{} (diacritics should never be used in superscripts though!).

### What's new in version 2.4?

A new option SuppressWarning has been added (desactivated by default) to suppress warnings if \@makecaption has been redefined or if the bigfoot package is in use.

French hyphenation patterns are now coded in Unicode, see file hyph-fr.tex. Extra code has been added to deal with hyphenation of the French "apostrophe" with XeTeX and LuaTeX engines.

Better compatibility with the enumitem package.

When typewriter fonts are in use (hence in verbatim mode) no space is added after '«' and before '»' when they are entered as characters (see \frenchbsetup).

### What's new in version 2.5?

The main change is that active characters are no longer used in French with (recent) XeTeX-based engines (they still are with TeX-based engines). All the functionalities (automatic insertion of missing spaces before :;!? or bare replacement of typed spaces with suitable unbreabable ones, tuning of the spaces width) remain available and the user interface is unchanged. The use of active characters is replaced by the \XeTeXinterchartoks mechanism (as in package polyglossia). A new command \NoAutoSpacing has been added. It should be used <code>inside a group</code> instead of \shorthandofff{;:!?} whenever active characters or automatic spacing of French punctuation or quote characters conflict with other packages; it is designed to work with TeX- and XeTeX-based engines.

Bug corrections: \frenchspacing and \nonfrenchspacing are no longer messed up by frenchb.ldf.

### What's new in version 2.6?

The way frenchb handles list environments has been completely redesigned in version 2.6 due to a long standing bug affecting enumerate lists inside itemize lists. Horizontal indentation of itemize, enumerate and description lists differs now from previous versions, an option for backward compatibility is provided: \frenchbsetup{ListOldLayout}.

frenchb is now compatible with the paralist package.

Regarding the layout of figures' and tables' captions, version 2.6c is now fully compatible with AMS and koma-script classes and with caption and floatrow packages. Starting with version 2.6c, the frenchb.cfg file is no longer generated from frenchb.dtx, but it is still loaded (if found) for backward compatibility.

# 2 The code

# 2.1 Initial setup

While this file was read through the option frenchb we make it behave as if french was specified.

1 \def\CurrentOption{french}

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

2 \LdfInit\CurrentOption\datefrench

\ifLaTeXe No support is provided for late LATeX-2.09: issue a warning and exit if LATeX-2.09 is in use. Plain is still supported.

```
3 \newif\ifLaTeXe
4 \let\bbl@tempa\relax
5 \ifx\magnification\@undefined
     \ifx\@compatibilitytrue\@undefined
7
       \PackageError{frenchb.ldf}
          {LaTeX-2.09 format is no longer supported.\MessageBreak
8
           Aborting here}
9
          {Please upgrade to LaTeX2e!}
10
       \let\bbl@tempa\endinput
11
     \else
12
       \LaTeXetrue
13
14
     \fi
15 \fi
16 \bbl@tempa
```

Check if hyphenation patterns for the French language have been loaded in language.dat; we allow for the names 'french', 'francais', 'canadien' or 'acadian'. The latter two are both names used in Canada for variants of French that are in use in that country.

```
17 \ifx\l@french\@undefined
18 \ifx\l@francais\@undefined
19 \ifx\l@canadien\@undefined
20 \ifx\l@acadian\@undefined
21 \@nopatterns{French}
```

```
\adddialect\l@french0
22
         \else
23
           \let\l@french\l@acadian
24
         \fi
25
26
       \else
         \let\l@french\l@canadien
27
28
     \else
29
       \let\l@french\l@francais
30
    \fi
31
32 \fi
```

Now \l@french is always defined.

The internal name for the French language is french; francais and frenchb are synonymous for french: first let both names use the same hyphenation patterns. Later we will have to set aliases for \captionsfrench, \datefrench, \extrasfrench and \noextrasfrench. As French uses the standard values of \lefthyphenmin (2) and \righthyphenmin (3), no special setting is required here.

```
33 \ifx\l@francais\@undefined
34 \let\l@francais\l@french
35 \fi
36 \ifx\l@frenchb\@undefined
37 \let\l@frenchb\l@french
38 \fi
```

When this language definition file was loaded for one of the Canadian versions of French we need to make sure that a suitable hyphenation pattern register will be found by T<sub>E</sub>X.

```
39 \ifx\l@canadien\@undefined
40 \let\l@canadien\l@french
41 \fi
42 \ifx\l@acadian\@undefined
43 \let\l@acadian\l@french
44 \fi
```

This language definition can be loaded for different variants of the French language. The 'key' babel macros are only defined once, using 'french' as the language name, but frenchb and francais are synonymous.

```
45 \def\datefrancais{\datefrench}
46 \def\datefrenchb{\datefrench}
47 \def\extrasfrancais{\extrasfrench}
48 \def\extrasfrenchb{\extrasfrench}
49 \def\noextrasfrancais{\noextrasfrench}
50 \def\noextrasfrenchb{\noextrasfrench}
```

# \extrasfrench \noextrasfrench

The macro \extrasfrench will perform all the extra definitions needed for the French language. The macro \noextrasfrench is used to cancel the actions of \extrasfrench.

In French, character "apostrophe" is a letter in expressions like 1'ambulance (French hyphenation patterns provide entries for this kind of words). This means that the \lccode of "apostrophe" has to be non null in French for proper hyphenation of those expressions, and has to be reset to null when exiting French.

\ifFBunicode \ifFLuaTeX \ifFXeTeX French hyphenation patterns are now coded in Unicode, see file hyph-fr.tex. Xe-TeX and LuaTeX engines require some extra code to deal with the French "apostrophe". Let's define three new 'if': \iffBLuaTeX, \iffBXeTeX and \iffBunicode which will be true for XeTeX and LuaTeX engines and false for 8-bits engines.

```
51 \newif\iffBunicode
52 \newif\iffBLuaTeX
53 \newif\iffBXeTeX
54 \begingroup\expandafter\expandafter\endgroup
55 \expandafter\ifx\csname luatexversion\endcsname\relax
56 \else
57 \fBunicodetrue \fBLuaTeXtrue
58 \fi
59 \begingroup\expandafter\expandafter\expandafter\endgroup
60 \expandafter\ifx\csname XeTeXrevision\endcsname\relax
61 \else
62 \fBunicodetrue \fBXeTeXtrue
63 \fi
```

These \lccode changes will ensure correct hyphenation of words like d'aventure, l'utopie, with all TeX engines (XeTeX, LuaTeX, pdfTeX) using hyph-fr.tex patterns.

```
64 \@namedef{extras\CurrentOption}{\lccode'\'='\'
65 \iffBLuaTeX \lccode'\'="2019 \fi
66 \iffBXeTeX \lccode"2019='\' \fi}
67 \@namedef{noextras\CurrentOption}{\lccode'\'=0
68 \iffBXeTeX \lccode"2019=0 \fi}
```

One more thing \extrasfrench needs to do is to make sure that "Frenchspacing" is in effect. \noextrasfrench will switch "Frenchspacing" off again if necessary.

- 69 \addto\extrasfrench{\bbl@frenchspacing}
- 70 \addto\noextrasfrench{\bbl@nonfrenchspacing}

### 2.2 Punctuation

As long as no better solution is available, the 'double punctuation' characters (; ! ? and :) have to be made \active for an automatic control of the amount of space to insert before them. XeTeX provides an alternative to active characters and LuaTeX will hopefully do so as well in the (near?) future.

Before doing so, we have to save the standard definition of \@makecaption (which includes two ':') to compare it later to its definition at the \begin{document}.

```
71 \long\def\STD@makecaption#1#2{%
    \vskip\abovecaptionskip
72
    \sbox\@tempboxa{#1: #2}%
73
    \ifdim \wd\@tempboxa >\hsize
74
      #1: #2\par
75
76
      \global \@minipagefalse
77
      \hb@xt@\hsize{\hfil\box\@tempboxa\hfil}%
78
79
    \vskip\belowcaptionskip}
```

According to the I.N. specifications, the ':' requires a normal space before it, but some people prefer a \thinspace (just like the other three). We define

\FBcolonspace to hold the required amount of space (user customisable). In case some users are not satisfied with \thinspace's width, it is also customisable.

```
81 \newcommand*{\FBcolonspace}{\space}
82 \newcommand*{\FBthinspace}{\thinspace}
```

\ifF@active@punct \ifF@xetex@punct Check the availability of \XeTeXinterchartokenstate and decide whether the 'double punctuation' characters (; ! ? and :) have to be made \active or not.

```
83 \newif\iffB@active@punct \FB@active@puncttrue
84 \newif\iffB@xetex@punct
85 \begingroup\expandafter\expandafter\endgroup
86 \expandafter\ifx\csname XeTeXinterchartokenstate\endcsname\relax
87 \else
88 \FB@xetex@puncttrue\FB@active@punctfalse
89 \fi
```

If \XeTeXinterchartokenstate is available, we use the "inter char" mechanism (as in polyglossia, see gloss-french.ldf) to provide correct spacing in French before the four characters; ! ? and :. We use the same mechanism for French quotes (« and »), when automatic spacing for quotes is required by options og= and fg= in \frenchbsetup{} (see section 2.13).

For every character used in French text-mode (except spaces), **\XeTeXcharclass** value must be 0. **\XeTeXcharclass** value for spaces is assumed to be 255. Otherwise, the spacing before the 'double punctuation' characters and inside quotes might not be correct.

We switch XeTeXinterchartokenstate to 1 and change the XeTeXcharclass values of; !?: (] « and » when entering French. Special care is taken to restore them to their inital values when leaving French.

```
90 \newif\ifFBAutoSpaceGuill \FBAutoSpaceGuilltrue
91 \newif\ifFBguillo@addspace
92 \newif\ifFBguillf@addspace
93 \verb|\newif\ifFBog@addspace||
                               \FBog@addspacetrue
94 \newif\ifFBfg@addspace
                               \FBfg@addspacetrue
95 \newcount\FB@interchartokenstateORI
96 \ifFB@xetex@punct
97
      \ifLaTeXe
98
       \PackageInfo{frenchb.ldf}{No need for active punctuation characters
99
                        \MessageBreak with this version of XeTeX! reported}
100
```

We will need the following code (borrowed from zhsusefulmacros.sty) for loops:

```
\@ifundefined{@for}{%
101
102
         \def\@nnil{\@nil}%
103
        \def\@empty{}%
        \def\@fornoop#1\@@#2#3{}%
104
        \label{longdef} $$  \log\left(\frac{0}{0}\right) := #2\do#3{\%}
105
           \expandafter\def\expandafter\@fortmp\expandafter{#2}%
106
           \ifx\@fortmp\@empty \else
107
             \expandafter\@forloop#2,\@nil,\@nil\@@#1{#3}\fi}%
108
         \long\def\@forloop#1,#2,#3\@@#4#5{\def#4{#1}\ifx #4\@nnil \else
109
           #5\def#4{#2}\ifx #4\@nnil \else#5\@iforloop #3\@@#4{#5}\fi\fi}%
110
         \long\def\@iforloop#1,#2\@@#3#4{\def#3{#1}\ifx #3\@nnil
111
112
                 \expandafter\@fornoop \else
```

```
#4\relax\expandafter\@iforloop\fi#2\@@#3{#4}}%
113
         \def\@tfor#1:={\@tf@r#1 }%
114
         \label{longdef} $$  \log\left(\frac{\pi}{\pi}2\right)^{\pi/2}\left(\frac{\pi}{\pi}\right)^{\pi/2} . $$
115
              \@tforloop#2\@nil\@nil\@@#1{#3}\fi}%
116
         \long\def\@tforloop#1#2\@@#3#4{\def#3{#1}\ifx #3\@nnil
117
                 \expandafter\@fornoop \else
118
                #4\relax\expandafter\@tforloop\fi#2\@@#3{#4}}%
119
         }{}%
120
```

Five new character classes are defined for frenchb.

```
121 \newXeTeXintercharclass\FB@punctthick
122 \newXeTeXintercharclass\FB@punctthin
123 \newXeTeXintercharclass\FB@punctnul
124 \newXeTeXintercharclass\FB@punctguilo
125 \newXeTeXintercharclass\FB@punctguilf
```

We define a command to store the **\XeTeXcharclass** values which will be modified for French (as a comma separated list) and a command to retrieve them.

```
126 \def\FB@charclassesORI{}
127 \def\empty{}
128 \def\FB@parse#1,#2\endparse{\def\FB@class{#1}%
129 \def\FB@charclassesORI{#2}}%
```

\FB@xetex@punct@french

The following command will be executed when entering French, it first saves the values to be modified, then fits them to our needs. It also redefines \shorthandoff and \shorthandon (locally) to avoid error messages with XeTeX-based engines.

# 130 \newcommand\*{\FB@xetex@punct@french}{%

Saving must not be repeated if saved values are already in.

```
\ifx\FB@charclassesORI\empty
131
          \FB@interchartokenstateORI=\XeTeXinterchartokenstate
132
          \@for\FB@char:={'\:,'\;,'\!,'\?,"AB,"BB,'\(,'\[,'\{,'\,,'\.,%
133
                           '\-,'\),'\],'\\,,"22,"27,"60,"2019}\do
134
               {\edef\FB@charclassesORI{\FB@charclassesORI%
135
                                        \the\XeTeXcharclass\FB@char,}}%
136
          \let\shorthandonORI\shorthandon
137
          \let\shorthandoffORI\shorthandoff
138
139
```

Set the classes and interactions between classes.

```
\XeTeXinterchartokenstate=1
140
        \XeTeXcharclass '\: = \FB@punctthick
141
        \XeTeXinterchartoks \z@ \FB@punctthick = {%
142
                         \ifhmode\FDP@colonspace\fi}%
143
        \XeTeXinterchartoks \FB@punctguilf \FB@punctthick = {%
144
145
                         \FDP@colonspace}%
146
        \XeTeXinterchartoks 255 \FB@punctthick = {%
                         \ifhmode\unskip\penalty\@M\FBcolonspace\fi}%
147
        \@for\FB@char:={'\;,'\!,'\?}\do
148
             {\XeTeXcharclass\FB@char=\FB@punctthin}%
149
        \XeTeXinterchartoks \z@ \FB@punctthin = {%
150
                         \ifhmode\FDP@thinspace\fi}%
151
        \XeTeXinterchartoks \FB@punctguilf \FB@punctthin = {%
152
                         \FDP@thinspace}%
153
        \XeTeXinterchartoks 255 \FB@punctthin = {%
154
```

```
\ifhmode\unskip\penalty\@M\FBthinspace\fi}%
155
        \XeTeXinterchartoks \FB@punctguilo \z@ = {%
156
                   \ifFBAutoSpaceGuill\FBguill@spacing\fi}%
157
        \XeTeXinterchartoks \FB@punctguilo 255 = {%
158
                   \ifFBAutoSpaceGuill\FBguill@spacing\ignorespaces\fi}%
159
        \XeTeXinterchartoks \z@ \FB@punctguilf = {%
160
                   \ifFBAutoSpaceGuill\FBguill@spacing\fi}%
161
        \XeTeXinterchartoks \FB@punctthin \FB@punctguilf = {%
162
                   \ifFBAutoSpaceGuill\FBguill@spacing\fi}%
163
        \XeTeXinterchartoks 255 \FB@punctguilf = {%
164
                   \ifFBAutoSpaceGuill\unskip\FBguill@spacing\fi}%
165
This avoids spurious spaces in (!), [?], etc.
        \@for\FB@char:={'\[,'\(}\do
166
             {\XeTeXcharclass\FB@char=\FB@punctnul}%
167
These characters have their class changed by xeCJK.sty, let's reset them to 0 in
French.
168
        \Ofor\FBOchar:={'\{,'\,,'\.,'\-,'\),'\],'\},'\%,%
                         "22,"27,"60,"2019}\do
169
             {\XeTeXcharclass\FB@char=\z@}%
170
With Xe(La)TeX, French defines no active shorthands.
171
         \def\shorthandoff##1{%
172
           \@ifundefined{PackageWarning}%
173
            {\let\PackageWarning\undefined}%
            {\PackageWarning{frenchb.ldf}{\protect\shorthandoff{;:!?} is
174
             helpless with XeTeX,\MessageBreak use \protect\NoAutoSpacing
175
             \space *inside a group* instead;\MessageBreak reported}%
176
177
            }%
178
           }%
         \def\shorthandon##1{}%
179
      }
180
```

\FB@xetex@punct@nonfrench

The following command will be executed when leaving French for restoring classes and commands modified in French. When French is not the main language, \noextrasfrench is executed 'AtBeginDocument', so the test on \FB@charclassesORI is mandatory.

```
\newcommand*{\FB@xetex@punct@nonfrench}{%
181
        \ifx\FB@charclassesORI\empty
182
        \else
183
          \@for\FB@char:={'\:,'\;,'\!,'\?,"AB,"BB,'\(,'\[,'\{,'\,,'\.,%
184
                           '\-,'\),'\],'\},"22,"25,"27,"60,"2019}\do
185
                {\expandafter\FB@parse\FB@charclassesORI\endparse
186
                 \XeTeXcharclass\FB@char=\FB@class}%
187
          \def\FB@charclassesORI{}%
188
          \XeTeXinterchartokenstate=\FB@interchartokenstateORI
189
190
          \let\shorthandon\shorthandonORI
191
          \let\shorthandoff\shorthandoffORI
192
193
      \addto\extrasfrench{\FB@xetex@punct@french}
194
      \addto\noextrasfrench{\FB@xetex@punct@nonfrench}
195
196 \fi
```

Otherwise we need to make the four characters; !? and: 'active' and provide their definitions.

```
197 \iffB@active@punct
198 \initiate@active@char{:}%
199 \initiate@active@char{;}%
200 \initiate@active@char{!}%
201 \initiate@active@char{?}%
```

202

\declare@shorthand{french}{;}{%

We first tune the amount of space before ; ! ? and :. This should only happen in horizontal mode, hence the test \ifhmode.

In horizontal mode, if a space has been typed before ';' we remove it and put an unbreakable \thinspace instead. If no space has been typed, we add \FDP@thinspace which will be defined, up to the user's wishes, as an automatic added thin space, or as \@empty.

```
203
          \ifhmode
          \ifdim\lastskip>\z@
204
              \unskip\penalty\@M\FBthinspace
205
              \else
206
207
                \FDP@thinspace
208
            \fi
          \fi
209
Now we can insert a ; character.
          \string;}
The next three definitions are very similar.
     \declare@shorthand{french}{!}{%
212
          \ifhmode
            \ifdim\lastskip>\z@
213
              \unskip\penalty\@M\FBthinspace
214
            \else
215
              \FDP@thinspace
216
            \fi
217
          \fi
218
          \string!}
219
     \declare@shorthand{french}{?}{%
220
221
          \ifhmode
222
            \ifdim\lastskip>\z@
              \unskip\penalty\@M\FBthinspace
223
224
            \else
              \FDP@thinspace
225
            \fi
226
          \fi
227
          \string?}
228
     \declare@shorthand{french}{:}{%
229
          \ifhmode
230
231
            \ifdim\lastskip>\z@
232
              \unskip\penalty\@M\FBcolonspace
233
            \else
              \FDP@colonspace
234
            \fi
235
          \fi
236
          \string:}
237
```

When the active characters appear in an environment where their French behaviour is not wanted they should give an 'expected' result. Therefore we define shorthands at system level as well.

```
238 \declare@shorthand{system}{:}{\string:}
239 \declare@shorthand{system}{!}{\string!}
240 \declare@shorthand{system}{?}{\string?}
241 \declare@shorthand{system}{;}{\string;}
242 %}
```

We specify that the French group of shorthands should be used when switching to French.

```
243 \addto\extrasfrench{%
244 \languageshorthands{french}%
```

These characters are 'turned on' once, later their definition may vary. Don't misunderstand the following code: they keep being active all along the document, even when leaving French.

```
245 \bbl@activate{:}\bbl@activate{;}%
246 \bbl@activate{!}\bbl@activate{?}%
247 }
248 \addto\noextrasfrench{%
249 \bbl@deactivate{:}\bbl@deactivate{;}%
250 \bbl@deactivate{!}\bbl@deactivate{?}}
251 \fi
```

A new 'if' \FBAutoSpacePunctuation needs to be defined now.

252 \newif\ifFBAutoSpacePunctuation \FBAutoSpacePunctuationtrue

\AutoSpaceBeforeFDP \NoAutoSpaceBeforeFDP

\FDP@thinspace and \FDP@colonspace are defined as unbreakable spaces by \autospace@beforeFDP or as \@empty by \noautospace@beforeFDP (internal commands), user commands \AutoSpaceBeforeFDP and \NoAutoSpaceBeforeFDP do the same and take care of the flag \iffBAutoSpacePunctuation in LATEX. Set the default now for Plain (done later for LATEX).

```
253 \def\autospace@beforeFDP{%
              \def\FDP@thinspace{\penalty\@M\FBthinspace}%
254
              \def\FDP@colonspace{\penalty\@M\FBcolonspace}}
255
256 \def\noautospace@beforeFDP{\let\FDP@thinspace\@empty
                                 \let\FDP@colonspace\@empty}
257
258 \ \text{ifLaTeXe}
       \def\AutoSpaceBeforeFDP{\autospace@beforeFDP
259
260
                                 \FBAutoSpacePunctuationtrue}
       \def\NoAutoSpaceBeforeFDP{\noautospace@beforeFDP
261
                                   \FBAutoSpacePunctuationfalse}
262
263 \else
264
       \let\AutoSpaceBeforeFDP\autospace@beforeFDP
265
       \let\NoAutoSpaceBeforeFDP\noautospace@beforeFDP
266
267 \AutoSpaceBeforeFDP
```

In IATEX  $2_{\varepsilon}$  \ttfamily (and hence \texttt) will be redefined 'AtBeginDocument' as \ttfamilyFB so that no space is added before the four; :! ? characters, even if AutoSpacePunctuation is true. \rmfamily and \sffamily need to be redefined also (\ttfamily is not always used inside a group, its effect can be cancelled by \rmfamily or \sffamily).

These redefinitions can be canceled if necessary, for instance to recompile older documents, see option OriginalTypewriter below.

To be consistent with what is done for the ; :!? characters, \ttfamilyFB also switches off insertion of spaces inside French guillemets when they are typed in as characters with the 'og'/'fg' options in \frenchbsetup{}. This is also a workaround for the weird behaviour of these characters in verbatim mode.

#### 268 \ifLaTeXe \let\ttfamilyORI\ttfamily 269 \let\rmfamilyORI\rmfamily 270 \let\sffamilyORI\sffamily 271 \DeclareRobustCommand\ttfamilyFB{% 272 273 \FBAutoSpaceGuillfalse \FBfg@addspacetrue 274 \FBog@addspacetrue \noautospace@beforeFDP\ttfamilyORI}% 275 \DeclareRobustCommand\rmfamilyFB{% 276 \FBAutoSpaceGuilltrue 277 \ifFBguillo@addspace\FBog@addspacefalse\fi 278 279 \ifFBguillf@addspace\FBfg@addspacefalse\fi \ifFBAutoSpacePunctuation 280 281 \autospace@beforeFDP 282 \noautospace@beforeFDP 283 284 \fi \rmfamilyORI}% 285 \DeclareRobustCommand\sffamilyFB{% 286 \FBAutoSpaceGuilltrue 287 \ifFBguillo@addspace\FBog@addspacefalse\fi 288 \ifFBguillf@addspace\FBfg@addspacefalse\fi 289 \ifFBAutoSpacePunctuation 290 291 \autospace@beforeFDP 292 \else 293 \noautospace@beforeFDP 294 \fi \sffamilyORI}% 295 296 \fi

\NoAutoSpacing

The following command will switch off active punctuation characters (if any) and disable automatic spacing for French quote characters. It is engine independent (works for TeX and XeTeX based engines) and is meant to be used inside a group.

```
297 \newcommand*{\NoAutoSpacing}{\FBAutoSpaceGuillfalse}
298 \FBog@addspacetrue \FBfg@addspacetrue
299 \ifFB@active@punct\shorthandoff{;:!?}\fi
300 \ifFB@xetex@punct\XeTeXinterchartokenstate=0\fi
301 }
```

# 2.3 Commands for French quotation marks

\og The top macros for quotation marks will be called \og ("ouvrez guillemets") and \fg ("fermez guillemets"). Another option for typesetting quotes in multilingual texts is to use the package csquotes.sty and its command \enquote.

```
302 \newcommand*{\og}{\@empty} 303 \newcommand*{\fg}{\@empty}
```

\guillemotleft
\guillemotright
\textquoteddblleft
\textquoteddblright

IATEX users are supposed to use 8-bit output encodings (T1, LY1,...) to typeset French, those who still stick to OT1 should call aeguill.sty or a similar package. In both cases the commands \guillemotleft and \guillemotright will print the French opening and closing quote characters from the output font. For XeLaTeX, \guillemotleft and \guillemotright are defined by package xunicode.sty. We will check 'AtBeginDocument' that the proper output encodings are in use (see end of section 2.13).

We give the following definitions for non-LaTeX users only as a fall-back, they are welcome to change them for anything better.

```
304 \ifLaTeXe
305 \ensuremath{\setminus} \texttt{else}
306
      \ifFBunicode
         \def\guillemotleft{{\char"00AB}}
307
308
         \def\guillemotright{{\char"00BB}}
309
         \def\textquotedblleft{{\char"201C}}
310
         \def\textquotedblright{{\char"201D}}
311
312
        \def\guillemotleft{\leavevmode\raise0.25ex
313
                              \hbox{$\scriptscriptstyle\11$}}
314
        \def\guillemotright{\raise0.25ex
                               \hbox{$\scriptscriptstyle\gg$}}
315
        \def\textquotedblleft{''}
316
        \def\textquotedblright{''}
317
318
      \fi
319
     \let\xspace\relax
```

The next step is to provide correct spacing after \guillemotleft and before \guillemotright: a space precedes and follows quotation marks but no line break is allowed neither after the opening one, nor before the closing one. \FBguill@spacing which does the spacing, has been fine tuned by Thierry Bouche. French quotes (including spacing) are printed by \FB@og and \FB@fg, the expansion of the top level commands \og and \og is different in and outside French. We'll try to be smart to users of David Carlisle's xspace package: if this package is loaded there will be no need for \{\} or \ to get a space after \fg, otherwise \xspace will be defined as \relax (done at the end of this file).

The top level definitions for French quotation marks are switched on and off through the \extrasfrench \noextrasfrench mechanism. Outside French, \og and \fg will typeset standard English opening and closing double quotes.

```
329 \ifLaTeXe
330 \def\bbl@frenchguillemets{\renewcommand*{\og}{\FB@og}%
331 \renewcommand*{\fg}{\FB@fg}}
332 \def\bbl@nonfrenchguillemets{\renewcommand*{\og}{\textquotedblleft}%
```

```
\verb|\renewcommand*{\fg}{\ifdim\lastskip}\z@\unskip\fi|
333
                                        \textquotedblright}}
334
335 \else
     \def\bbl@frenchguillemets{\let\og\FB@og
336
                                 \let\fg\FB@fg}
337
     \def\bbl@nonfrenchguillemets{\def\og{\textquotedblleft}%
338
                  \def\fg{\ifdim\lastskip>\z@\unskip\fi\textquotedblright}}
339
340 \fi
341 \addto\extrasfrench{\bbl@frenchguillemets}
342 \addto\noextrasfrench{\bbl@nonfrenchguillemets}
```

# 2.4 Date in French

\datefrench The macro \datefrench redefines the command \today to produce French dates.

```
343 \@namedef{date\CurrentOption}{%
344 \def\today{{\number\day}\ifnum1=\day {\ier}\fi \space
345 \ifcase\month
346 \or janvier\or f{\FBeacute}vrier\or mars\or avril\or mai\or
347 juin\or juillet\or ao{\FBucirconflexe}t\or septembre\or
348 octobre\or novembre\or d{\FBeacute}cembre\fi
349 \space \number\year}}
```

### 2.5 Extra utilities

Let's provide the French user with some extra utilities.

\up \up eases the typesetting of superscripts like '1er'. Up to version 2.0 of frenchb \up was just a shortcut for \textsuperscript in  $\LaTeX$  2 $\varepsilon$ , but several users complained that \textsuperscript typesets superscripts too high and too big, so we now define \fup as an attempt to produce better looking superscripts. \up is defined as \fup but \frenchbsetup{FrenchSuperscripts=false} redefines \up as \textsuperscript for compatibility with previous versions.

When a font has built-in superscripts, the best thing to do is to just use them, otherwise \fup has to simulate superscripts by scaling and raising ordinary letters. Scaling is done using package scalefnt which will be loaded at the end of babel's loading (frenchb being an option of babel, it cannot load a package while being read).

```
350 \newif\ifFB@poorman
351 \newdimen\FB@Mht
352 \ifLaTeXe
353 \AtEndOfPackage{\RequirePackage{scalefnt}}
```

\FB@up@fake holds the definition of fake superscripts. The scaling ratio is 0.65, raising is computed to put the top of lower case letters (like 'm') just under the top of upper case letters (like 'M'), precisely 12% down. The chosen settings look correct for most fonts, but can be tuned by the end-user if necessary by changing \FBsupR and \FBsupS commands.

\FB@lc is defined as \MakeLowercase to inhibit the uppercasing of superscripts (this may happen in page headers with the standard classes but is wrong); \FB@lc can be redefined to do nothing by option LowercaseSuperscripts=false of \frenchbsetup{}.

```
354 \newcommand*{FBsupR}{-0.12}
```

```
355 \newcommand*{\FBsupS}{0.65}
356 \newcommand*{\FB@lc}[1]{\MakeLowercase{#1}}
357 \DeclareRobustCommand*{\FB@up@fake}[1]{%
358 \settoheight{\FB@Mht}{M}%
359 \addtolength{\FB@Mht}{\FBsupR \FB@Mht}%
360 \addtolength{\FB@Mht}{-\FBsupS ex}%
361 \raisebox{\FB@Mht}{\scalefont{\FBsupS}{\FB@lc{#1}}}%
362 }
```

The only packages I currently know to take advantage of real superscripts are a) xltxtra used in conjunction with XeLaTeX and OpenType fonts having the font feature 'VerticalPosition=Superior' (xltxtra defines \realsuperscript and \fakesuperscript) and b) fourier (from version 1.6) when Expert Utopia fonts are available.

\FB@up checks whether the current font is a Type1 'Expert' (or 'Pro') font with real superscripts or not (the code works currently only with fourier-1.6 but could work with any Expert Type1 font with built-in superscripts, see below), and decides to use real or fake superscripts. It works as follows: the content of \f@family (family name of the current font) is split by \FB@split into two pieces, the first three characters ('fut' for Fourier, 'ppl' for Adobe's Palatino, ...) stored in \FB@firstthree and the rest stored in \FB@suffix which is expected to be 'x' or 'j' for expert fonts.

```
363 \def\FB@split#1#2#3#4\@nil{\def\FB@firstthree{#1#2#3}%
364 \def\FB@suffix{#4}}
365 \def\FB@x{x}
366 \def\FB@j{j}
367 \DeclareRobustCommand*{\FB@up}[1]{%
368 \bgroup \FB@poormantrue
369 \expandafter\FB@split\f@family\@nil
```

Then \FB@up looks for a .fd file named t1fut-sup.fd (Fourier) or t1ppl-sup.fd (Palatino), etc. supposed to define the subfamily (fut-sup or ppl-sup, etc.) giving access to the built-in superscripts. If the .fd file is not found by \IfFileExists, \FB@up falls back on fake superscripts, otherwise \FB@suffix is checked to decide whether to use fake or real superscripts.

```
\edef\reserved@a{\lowercase{%
370
             \noexpand\IfFileExists{\f@encoding\FB@firstthree -sup.fd}}}%
371
372
         \reserved@a
373
           {\ifx\FB@suffix\FB@x \FB@poormanfalse\fi
374
            \ifx\FB@suffix\FB@j \FB@poormanfalse\fi
375
            \ifFB@poorman \FB@up@fake{#1}%
            \else
                           \FB@up@real{#1}%
376
            \fi}%
377
           {\FB@up@fake{#1}}%
378
379
       \egroup}
```

\FB@up@real just picks up the superscripts from the subfamily (and forces lower-case).

```
380 \newcommand*{\FB@up@real}[1]{\bgroup
381 \fontfamily{\FB@firstthree -sup}\selectfont \FB@lc{#1}\egroup}
```

\fup is now defined as \FB@up unless \realsuperscript is defined (occurs with XeLaTeX calling xltxtra.sty).

```
382 \DeclareRobustCommand*{\fup}[1]{%
```

```
\@ifundefined{realsuperscript}%
         383
                  {\FB@up{#1}\let\realsuperscript\undefined}%
         384
                  {\bgroup\let\fakesuperscript\FB@up@fake
         385
                         \realsuperscript{\FB@lc{#1}}\egroup}}
         386
          Let's provide a temporary definition for \up (redefined 'AtBeginDocument' as
          \fup or \textsuperscript according to \frenchbsetup{} options).
              \providecommand*{\up}{\relax}
          Poor man's definition of \up for Plain.
         388 \else
              \providecommand*{\up}[1]{\leavevmode\raise1ex\hbox{\sevenrm #1}}
         389
         390 \fi
  \ieme Some handy macros for those who don't know how to abbreviate ordinals:
   \ier 391 \def\ieme{\up{\lowercase{e}}\xspace}
  \iere 392 \def\iemes{\up{\lowercase{es}}\xspace}
  \iemes 393 \def\ier{\up{\lowercase{er}}\xspace}
  \iers 394 \def\iers{\up{\lowercase{ers}}\xspace}
  \ieres 395 \def\iere{\up{\lowercase{re}}\xspace}
         396 \def\ieres{\up{\lowercase{res}}\xspace}
         And some more macros relying on \up for numbering, first two support macros.
     \No
     \no _{397} \rightarrow _{11}{\%}
    \Nos 398
                                    #1\up{\lowercase{o}}\kern+.3em}
    \nos 399 \newcommand*{\FrenchPopularEnumerate}[1]{%
                                    #1\up{\lowercase{o}})\kern+.3em}
  \primo 400
\fprimo)
         Typing \primo should result in '1°',
         401 \def\primo{\FrenchEnumerate1}
         402 \def\secundo{\FrenchEnumerate2}
         403 \def\tertio{\FrenchEnumerate3}
         404 \def\quarto{\FrenchEnumerate4}
          while typing \fprimo) gives '1°).
         405 \def\fprimo) {\FrenchPopularEnumerate1}
         406 \def\fsecundo){\FrenchPopularEnumerate2}
         407 \def\ftertio) {\FrenchPopularEnumerate3}
         408 \def\fquarto) {\FrenchPopularEnumerate4}
          Let's provide four macros for the common abbreviations of "Numéro".
         409 \DeclareRobustCommand*{\No}{N\up{\lowercase{o}}\kern+.2em}
         410 \DeclareRobustCommand*{\no}{n\up{\lowercase{o}}\kern+.2em}
         411 \DeclareRobustCommand*{\Nos}{N\up{\lowercase{os}}\kern+.2em}
         412 \DeclareRobustCommand*{\nos}{n\up{\lowercase{os}}\kern+.2em}
   \bsc As family names should be written in small capitals and never be hyphenated, we
          provide a command (its name comes from Boxed Small Caps) to input them easily.
          Note that this command has changed with version 2 of frenchb: a \kernOpt is
          used instead of hbox because hbox would break microtype's font expansion; as
          a (positive?) side effect, composed names (such as Dupont-Durand) can now be
          hyphenated on explicit hyphens. Usage: Jean~\bsc{Duchemin}.
         413 \DeclareRobustCommand*{\bsc}[1]{\leavevmode\begingroup\kernOpt
                                                        \scshape #1\endgroup}
         415 \ifLaTeXe\else\let\scshape\relax\fi
```

Some definitions for special characters. We won't define \tilde as a Text Symbol not to conflict with the macro \tilde for math mode and use the name \tild instead. Note that \boi may not be used in math mode, its name in math mode is \backslash. \degre can be accessed by the command \r{} for ring accent.

```
416 \ifFBunicode
       \newcommand*{\at}{{\char"0040}}
417
       \newcommand*{\circonflexe}{{\char"005E}}
418
419
       \newcommand*{\tild}{{\char"007E}}
420
       \newcommand*{\boi}{\textbackslash}
421
       \newcommand*{\degre}{{\char"00B0}}
422 \else
     \ifLaTeXe
423
424
       \DeclareTextSymbol{\at}{T1}{64}
425
       \DeclareTextSymbol{\circonflexe}{T1}{94}
       \DeclareTextSymbol{\tild}{T1}{126}
426
       \DeclareTextSymbolDefault{\at}{T1}
427
       \DeclareTextSymbolDefault{\circonflexe}{T1}
428
       \DeclareTextSymbolDefault{\tild}{T1}
429
       \DeclareRobustCommand*{\boi}{\textbackslash}
430
       \DeclareRobustCommand*{\degre}{\r{}}
431
432
     \else
433
       \def\T@one\{T1\}
434
       \ifx\f@encoding\T@one
435
         \newcommand*{\degre}{{\char6}}
436
       \else
         \newcommand*{\degre}{{\char23}}
437
       \fi
438
       \newcommand*{\at}{{\char64}}
439
       \newcommand*{\circonflexe}{{\char94}}
440
       \newcommand*{\tild}{{\char126}}
441
442
       \newcommand*{\boi}{$\backslash$}
     \fi
443
444 \fi
French dates and captions make use of four non-ascii characters (à, è, é and û).
This is fine except for (plain) XeTeX (\accent commands are not implemented),
so we define four new commands to deal with this issue.
445 \newcommand*{\FBagrave}{\'a}
446 \newcommand*{\FBegrave}{\'e}
447 \newcommand*{\FBeacute}{\'e}
448 \newcommand*{\FBucirconflexe}{\^u}
449 \ifFBunicode
     \ifLaTeXe
450
451
     \else
       \def\FBagrave{{\char"00E0}}
452
453
       \def\FBegrave{{\char"00E8}}
       \def\FBeacute{{\char"00E9}}
454
       \def\FBucirconflexe{{\char"00FB}}
    \fi
456
457 \fi
```

We now define a macro \degrees for typesetting the abbreviation for 'degrees' (as in 'degrees Celsius'). As the bounding box of the character 'degree' has very different widths in CM/EC and PostScript fonts, we fix the width of the bounding

box of \degres to 0.3 em, this lets the symbol 'degree' stick to the preceding (e.g., 45\degres) or following character (e.g., 20~\degres C).

If TEX Companion fonts are available (textcomp.sty), we pick up \textdegree from them instead of emulating 'degrees' from the \r{} accent. Otherwise we advise the user (once only) to use TS1-encoding.

```
458 \ifLaTeXe
     \newcommand*{\degres}{\degre}
459
460
     \ifFBunicode
       \DeclareRobustCommand*{\degres}{\degre}
461
462
       \def\Warning@degree@TSone{%
463
              \PackageWarning{frenchb.ldf}{%
464
                 Degrees would look better in TS1-encoding:
465
                 \MessageBreak add \protect
466
                 \usepackage{textcomp} to the preamble.
467
                 \MessageBreak Degrees used}}
468
469
       \AtBeginDocument{\@ifundefined{DeclareEncodingSubset}%
                           {\DeclareRobustCommand*{\degres}{%
470
                               \leavevmode\hbox to 0.3em{\hss\degre\hss}%
471
                               \Warning@degree@TSone
472
                               \global\let\Warning@degree@TSone\relax}}%
473
                            {\DeclareRobustCommand*{\degres}{%
474
                               \hbox{\UseTextSymbol{TS1}{\textdegree}}}}%
475
476
     \fi
477
478 \else
     \newcommand*{\degres}{%
479
480
       \leavevmode\hbox to 0.3em{\hss\degre\hss}}
481 \fi
```

# 2.6 Formatting numbers

\DecimalMathComma \StandardMathComma As mentioned in the TEXbook p. 134, the comma is of type \mathpunct in math mode: it is automatically followed by a space. This is convenient in lists and intervals but unpleasant when the comma is used as a decimal separator in French: it has to be entered as {,}. \DecimalMathComma makes the comma be an ordinary character (of type \mathord) in French only (no space added); \StandardMathComma switches back to the standard behaviour of the comma.

\nombre

The command \nombre is now borrowed from numprint.sty for LaTeX  $2_{\varepsilon}$ . There is no point to maintain the former tricky code when a package is dedicated to do the same job and more. For Plain based formats, \nombre no longer formats numbers, it prints them as is and issues a warning about the change.

Fake command \nombre for Plain based formats, warning users of frenchb v. 1.x. of the change.

```
496 \newcommand*{\nombre}[1]{{#1}\message{%}
497 *** \noexpand\nombre no longer formats numbers\string! ***}}%
```

The next definitions only make sense for  $\text{ET}_{E}X 2_{\varepsilon}$ . Let's cleanup and exit if the format in Plain based.

```
498 \let\FBstop@here\relax
499 \def\FBclean@on@exit{\let\ifLaTeXe\undefined
500 \let\LaTeXetrue\undefined
501 \let\LaTeXefalse\undefined}
502 \ifx\magnification\@undefined
503 \else
504 \def\FBstop@here{\let\STD@makecaption\relax
505 \FBclean@on@exit
506 \ldf@quit\CurrentOption\endinput}
507 \fi
508 \FBstop@here
```

What follows now is for  $\LaTeX$   $Z_{\mathcal{E}}$  only. We redefine \nombre for  $\LaTeX$   $Z_{\mathcal{E}}$ . A warning is issued at the first call of \nombre if \numprint is not defined, suggesting what to do. The package numprint is *not* loaded automatically by frenchb because of possible options conflict.

```
509 \renewcommand*{\nombre}[1]{\Warning@nombre\numprint{#1}}
510 \newcommand*{\Warning@nombre}{%
      \@ifundefined{numprint}%
511
         {\PackageWarning{frenchb.ldf}{%
512
             \protect\nombre\space now relies on package numprint.sty,
513
514
             \MessageBreak add \protect
515
             \usepackage[autolanguage] {numprint} \MessageBreak
            to your preamble *after* loading babel, \MessageBreak
516
            see file numprint.pdf for more options.\MessageBreak
517
518
             \protect\nombre\space called}%
519
          \global\let\Warning@nombre\relax
          \global\let\numprint\undefined
520
         }{}%
521
522 }
523 \newcommand*{\ThinSpaceInFrenchNumbers}{%
524
      \PackageWarning{frenchb.ldf}{%
            Type \protect\frenchbsetup{ThinSpaceInFrenchNumbers}
525
             \MessageBreak Command \protect\ThinSpaceInFrenchNumbers\space
526
            is no longer\MessageBreak defined in frenchb v.~2,}}
527
```

# 2.7 Caption names

The next step consists of defining the French equivalents for the LATEX caption names.

\captionsfrench Let's first define \captionsfrench which sets all strings used in the four standard document classes provided with LATEX.

```
528 \@namedef{captions\CurrentOption}{%
      \def\refname{R{\FBeacute}f{\FBeacute}rences}%
529
530
      \def\abstractname{R{\FBeacute}sum{\FBeacute}}%
531
      \def\bibname{Bibliographie}%
      \def\prefacename{Pr{\FBeacute}face}%
532
      \def\chaptername{Chapitre}%
533
534
      \def\appendixname{Annexe}%
      \def\contentsname{Table des mati{\FBegrave}res}%
535
      \def\listfigurename{Table des figures}%
536
      \def\listtablename{Liste des tableaux}%
537
      \def\indexname{Index}%
538
      \def\figurename{{\scshape Figure}}%
539
      \def\tablename{{\scshape Table}}%
540
"Première partie" instead of "Part I".
      \def\partname{\protect\@Fpt partie}%
541
      \def\@Fpt{{\ifcase\value{part}\or Premi{\FBegrave}re\or
542
          Deuxi{\FBegrave}me\or Troisi{\FBegrave}me\or
543
          Quatri{\FBegrave}me\or Cinqui{\FBegrave}me\or
544
          Sixi{\FBegrave}me\or Septi{\FBegrave}me\or Huiti{\FBegrave}me\or
545
546
          Neuvi{\FBegrave}me\or Dixi{\FBegrave}me\or Onzi{\FBegrave}me\or
547
          Douzi{\FBegrave}me\or Treizi{\FBegrave}me\or
548
          Quatorzi{\FBegrave}me\or Quinzi{\FBegrave}me\or
          Seizi{\FBegrave}me\or Dix-septi{\FBegrave}me\or
549
          Dix-huiti{\FBegrave}me\or Dix-neuvi{\FBegrave}me\or
550
          Vingti{\FBegrave}me\fi}\space\def\thepart{}}%
551
552
      \def\pagename{page}%
      \def\seename{voir}%
553
      \def\alsoname{voir aussi}%
554
      \def\enclname{P.~J. }%
555
      \def\ccname{Copie {\FBagrave} }%
556
557
      \def\headtoname{}%
      \def\proofname{D{\FBeacute}monstration}%
558
      \def\glossaryname{Glossaire}%
559
560
```

As some users who choose frenchb or francais as option of babel, might customise \captionsfrenchb or \captionsfrancais in the preamble, we merge their changes at the \begin{document} when they do so. The other variants of French (canadien, acadian) are defined by checking if the relevant option was used and then adding one extra level of expansion.

```
561 \AtBeginDocument{\let\captions@French\captionsfrench
                    \@ifundefined{captionsfrenchb}%
562
                        {\let\captions@Frenchb\relax}%
563
                        {\let\captions@Frenchb\captionsfrenchb}%
564
565
                    \@ifundefined{captionsfrancais}%
566
                        {\let\captions@Francais\relax}%
567
                        {\let\captions@Francais\captionsfrancais}%
568
                    \def\captionsfrench{\captions@French
569
                            \captions@Francais\captions@Frenchb}%
570
                    \def\captionsfrancais{\captionsfrench}%
```

```
571
                     \def\captionsfrenchb{\captionsfrench}%
572
573 \@ifpackagewith{babel}{canadien}{%
     \def\captionscanadien{\captionsfrench}%
574
     \def\datecanadien{\datefrench}%
575
     \def\extrascanadien{\extrasfrench}%
     \def\noextrascanadien{\noextrasfrench}%
577
     }{}
578
579 \@ifpackagewith{babel}{acadian}{%
     \def\captionsacadian{\captionsfrench}%
580
     \def\dateacadian{\datefrench}%
581
     \def\extrasacadian{\extrasfrench}%
582
     \def\noextrasacadian{\noextrasfrench}%
583
     }{}
584
```

\CaptionSeparator \CaptionSeparatorORI Let's consider now captions in figures and tables. In French, captions in figures and tables should be printed with the number followed by endash (' – '), never as 'Figure 1:' which is the default in standard LATEX  $2_{\mathcal{E}}$  classes.

The standard definition of  $\mathbb{C}_{\mathbb{C}}$ , the one provided in article.cls, report.cls, book.cls which is frozen for  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to Frank Mittelbach), has been saved in  $\mathbb{C}_{\mathbb{C}}$  according to  $\mathbb{C}_{\mathbb{C}}$ 

No warning is issued for AMS classes as their layout of captions is compatible with French typographic standards.

With koma-script classes, frenchb customises \captionformat in French and issues no warning.

When \@makecaption has been changed by another class or package, a warning is printed in the .log file.

```
585 \newif\if@FBwarning@capsep
586 \@FBwarning@capseptrue
587 \newcommand{\FBWarning}[2]{\PackageWarning{#1}{#2}}
588 \newcommand*{\CaptionSeparatorORI}{\string:\space}
589 \newcommand*{\CaptionSeparator}{\space\textendash\space}
590 \def\FBCaption@Separator{\CaptionSeparatorORI}
591 \long\def\FB@makecaption#1#2{%
     \vskip\abovecaptionskip
592
     \sbox\@tempboxa{#1\FBCaption@Separator #2}%
593
     \ifdim \wd\@tempboxa >\hsize
594
595
       #1\FBCaption@Separator #2\par
596
       \global \@minipagefalse
597
       \hb@xt@\hsize{\hfil\box\@tempboxa\hfil}%
598
599
     \vskip\belowcaptionskip}
600
```

```
Disable the standard warning with AMS classes.
601 \@ifclassloaded{amsart}{\@FBwarning@capsepfalse}{}
602 \@ifclassloaded{amsbook}{\@FBwarning@capsepfalse}{}
603 \@ifclassloaded{amsdtx}{\@FBwarning@capsepfalse}{}
604 \verb|\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{amsldoc}{\classloaded{a
605 \@ifclassloaded{amproc}{\@FBwarning@capsepfalse}{}
 No warning with koma-script classes: they change \makecaption but we will
 manage to customise \captionformat in French later on (see below after executing
 \FBprocess@options).
606 \AtBeginDocument{%
          \@ifundefined{captionformat}%
               {\let\captionformat\undefined}%
608
               {\@FBwarning@capsepfalse}%
609
610 }
 Check if package caption is loaded now (before babel/frenchb), then issue a warn-
 ing advising to load it after babel/frenchb and disable the standard warning.
611 \@ifpackageloaded{caption}
612
               {\FBWarning{frenchb.ldf}%
                       {Please load the "caption" package\MessageBreak
613
                         AFTER babel/frenchb; reported}%
614
                \@FBwarning@capsepfalse}%
615
                {}
616
 Same for package floatrow.
617 \@ifpackageloaded{floatrow}
618
               {\FBWarning{frenchb.ldf}%
                       {Please load the "floatrow" package\MessageBreak
619
                         AFTER babel/frenchb; reported}%
620
621
                \@FBwarning@capsepfalse}%
622
 Check the definition of \@makecaption, change it or issue a warning in case it has
 been changed by a class or package not (yet) compatible with frenchb.
623 \AtBeginDocument{%
          \ifx\@makecaption\STD@makecaption
625
                   \global\let\@makecaption\FB@makecaption
626
                   \@FBwarning@capsepfalse
627
          \fi
          \if@FBwarning@capsep
628
              \FBWarning{frenchb.ldf}%
629
                     {The definition of \protect\@makecaption\space
630
631
                       has been changed,\MessageBreak
                       frenchb will NOT customise it;\MessageBreak reported}%
632
633
          \let\FB@makecaption\relax
634
635
          \let\STD@makecaption\relax
636 }
 \FB@makecaption uses \CaptionSeparator (default '-') in French, \CaptionSeparatorORI
 (default ': ') for other languages.
637 \addto\extrasfrench{%
            \def\FBCaption@Separator{\CaptionSeparator}}
639 \addto\noextrasfrench{%
            \def\FBCaption@Separator{\CaptionSeparatorORI}}
640
```

### 2.8 French lists

\listFB \listORI \FB@listVsettings Vertical spacing in lists should be shorter in French texts than the defaults provided by IATEX. Note that the easy way, just changing values of vertical spacing parameters when entering French and restoring them to their defaults on exit would not work; so we define the command \FB@listVsettings to hold the settings to be used by the French variant \listFB of \list. Note that switching to \listFB reduces vertical spacing in all environments built on \list: itemize, enumerate, description, but also abstract, quotation, quote and verse...

The amount of vertical space before and after a list is given by \topsep + \parskip (+ \partopsep if the list starts a new paragraph). IMHO, \parskip should be added only when the list starts a new paragraph, so I subtract \parskip from \topsep and add it back to \partopsep; this will normally make no difference because \parskip's default value is Opt, but will be noticeable when \parskip is not null.

\endlist is not redefined, but \endlistORI and \endlistFB will be defined as \endlist 'AtBeginDocument' for users who define their own lists using \listORI or \listFB.

```
641 \let\listORI\list
642 \def\FB@listVsettings{%
643 \setlength{\itemsep}{0.4ex plus 0.2ex minus 0.2ex}%
644 \setlength{\parsep}{0.4ex plus 0.2ex minus 0.2ex}%
645 \setlength{\topsep}{0.8ex plus 0.4ex minus 0.4ex}%
646 \setlength{\partopsep}{0.4ex plus 0.2ex minus 0.2ex}%
```

\parskip is of type 'skip', its mean value only (not the glue) should be subtracted from \topsep and added to \partopsep, so convert \parskip to a 'dimen' using \@tempdima.

```
647 \@tempdima=\parskip
648 \addtolength{\topsep}{-\@tempdima}%
649 \addtolength{\partopsep}{\@tempdima}%
650 }
651 \def\listFB#1#2{\listORI{#1}{\FB@listVsettings #2}}
```

Let's now consider French itemize-lists. They differ from those provided by the standard LATEX  $2\varepsilon$  classes:

- The '•' is never used in French itemize-lists, an emdash '—' or an endash '—' is preferred for all levels. The item label to be used in French is stored in \FrenchLabelItem}, it defaults to '—' and can be changed using \frenchbsetup{} (see section 2.13).
- Vertical spacing between items, before and after the list, should be *null* with *no glue* added;
- In French the labels of itemize-lists are vertically aligned as follows:

```
Text starting at 'parindent'

← Leftmargin

– first item...

– first second level item

– next one...

– second item...
```

```
\FrenchLabelItem Default labels for French itemize-lists (same label for all levels):
\Frlabelitemii 652 \newcommand*{\FrenchLabelItem}{\textemdash}
\Frlabelitemiii 653 \newcommand*{\Frlabelitemii}{\FrenchLabelItem}
\Frlabelitemiii 655 \newcommand*{\Frlabelitemiii}{\FrenchLabelItem}
\Frlabelitemiv 655 \newcommand*{\Frlabelitemiii}{\FrenchLabelItem}

656 \newcommand*{\Frlabelitemiv}{\FrenchLabelItem}
```

\bbl@frenchlabelitems \bbl@nonfrenchlabelitems

\bbl@frenchlabelitems saves current itemize labels and changes them to their value in French. This code should never be executed twice in a row, so we need a new flag that will be set and reset by \bbl@nonfrenchlabelitems and \bbl@frenchlabelitems. \bbl@frenchlabelitems also sets reasonable default values for lengths \labelwidthFB and \listindentFB to be defined below, but these lengths can still be customised in the preamble.

```
657 \newif\ifFB@enterFrench \FB@enterFrenchtrue
658 \def\bbl@frenchlabelitems{%
     \ifFR@enterFrench
659
       \let\@ltiORI\labelitemi
660
       \let\@ltiiORI\labelitemii
661
       \let\@ltiiiORI\labelitemiii
662
       \let\@ltivORI\labelitemiv
663
664
       \let\labelitemi\Frlabelitemi
665
       \let\labelitemii\Frlabelitemii
666
       \let\labelitemiii\Frlabelitemiii
667
       \let\labelitemiv\Frlabelitemiv
668
       \ifdim\labelwidthFB<\z@
         \settowidth{\labelwidthFB}{\FrenchLabelItem}%
669
       \fi
670
       \ifdim\listindentFB<\z@
671
         \ifdim\parindent=\z0
672
            \setlength{\listindentFB}{1.5em}%
673
674
         \else
            \setlength{\listindentFB}{\parindent}%
675
         \fi
676
677
       \fi
678
       \FB@enterFrenchfalse
679
     \fi
680 }
681 \def\bbl@nonfrenchlabelitems{%
     \ifFB@enterFrench
682
     \else
683
          \let\Frlabelitemi\labelitemi
684
         \let\Frlabelitemii\labelitemii
685
         \let\Frlabelitemiii\labelitemiii
686
         \let\Frlabelitemiv\labelitemiv
687
688
         \let\labelitemi\@ltiORI
689
         \let\labelitemii\@ltiiORI
         \let\labelitemiii\@ltiiiORI
690
         \let\labelitemiv\@ltivORI
691
          \FB@enterFrenchtrue
692
     \fi
693
694 }
```

\listindentFB Let's define two lengths \listindentFB and \labelwidthFB to customise lists' \labelwidthFB horizontal indentations. They are given silly values here  $(-1\,\mathrm{pt})$  in order to eventu-

ally enable their customisation in the preamble. They will get reasonnable defaults later when entering French (see **\bbl@frenchlabelitems**) unless they have been customised.

```
695 \newlength\listindentFB
696 \setlength{\listindentFB}{-1pt}
697 \newlength\labelwidthFB
698 \setlength{\labelwidthFB}{-1pt}
```

# \FB@listHsettings \leftmarginFB

\FB@listHsettings holds the new horizontal settings chosen for French lists itemize and enumerate starting with version 2.6a. They are based on the look resquested in French for itemize-lists.

```
699 \newlength\leftmarginFB
700 \def\FB@listHsettings{%
      \leftmarginFB\labelwidthFB
701
702
      \advance\leftmarginFB \labelsep
703
      \leftmargini\leftmarginFB
704
      \advance\leftmargini \listindentFB
      \leftmarginii\leftmarginFB
705
      \leftmarginiii\leftmarginFB
706
      \leftmarginiv\leftmarginFB
707
708
      \leftmargin\csname leftmargin\romannumeral\the\@listdepth\endcsname
709 }
```

### \itemizeFB

New environment for French itemize-lists.

\FB@itemizesettings

\FB@itemizesettings does two things: first suppress all vertical spaces including glue, then set horizontal indentations according to \FB@listHsettings unless option ListOldLayout is true (compatibility with lists up to v. 2.5k).

```
710 \def\FB@itemizesettings{%
711 \setlength{\itemsep}{\z@}%
```

```
\setlength{\parsep}{\z@}%
 712
                                                                                            \left\langle \right\}_{\z0}%
713
                                                                                            \setlength{\partopsep}{\z@}%
714
 715
                                                                                            \@tempdima=\parskip
                                                                                            \addtolength{\topsep}{-\@tempdima}%
 716
 717
                                                                                            \addtolength{\partopsep}{\@tempdima}%
 718
                                                                                            \ifFBListOldLayout
                                                                                                               \settowidth{\labelwidth}{\csname\@itemitem\endcsname}%
 719
                                                                                                             \setlength{\leftmargin}{\labelwidth}%
 720
 721
                                                                                                             \label{leftmargin} $$ \addtolength{\left\langle \right\rangle } % $$ is $(addtolength{\left\langle \right\rangle } % $$). $$ is $(addtolength{\left\langle \right\rangle } % $$) is $(addtol
  722
                                                                                                             \addtolength{\leftmargin}{\parindent}%
 723
                                                                                            \else
                                                                                                             \FB@listHsettings
 724
                                                                                            \fi
  725
  726 }
```

The definition of \itemizeFB follows the one of \itemize in standard LATEX  $2\varepsilon$  classes (see ltlists.dtx), spaces are customised by \FB@itemizesettings. \enditemizeFB will be defined as \endlist=\endlistORI 'AtBeginDocument'.

```
727 \def\itemizeFB{%
728 \ifnum \@itemdepth >\thr@@\@toodeep\else
729 \advance\@itemdepth\@ne
730 \edef\@itemitem{labelitem\romannumeral\the\@itemdepth}%
731 \expandafter
```

```
732 \listORI
733 \csname\@itemitem\endcsname
734 \FB@itemizesettings
735 \fi}
```

\enumerateFF

The definition of \enumerateFB, new to version 2.6a, follows the one of \enumerate in standard IATEX  $2\varepsilon$  classes (see ltlists.dtx), vertical spaces are customised (or not) via \list (=\listFB or \listORI) and horizontal spaces (leftmargins) are borrowed from itemize lists via \FB@listHsettings.

\endenumerateFB will be defined as \endlist=\endlistORI 'AtBeginDocument'.

```
736 \def\enumerateFB{%
     \ifnum \@enumdepth >\thr@@\@toodeep\else
       \advance\@enumdepth\@ne
738
       \edef\@enumctr{enum\romannumeral\the\@enumdepth}%
739
       \expandafter
740
       \list
741
         \csname label\@enumctr\endcsname
742
         {\FB@listHsettings
743
          \usecounter\@enumctr\def\makelabel##1{\hss\llap{##1}}}%
744
745
     \fi}
```

\descriptionFB Same tuning for the description environment (see the original definition in classes.dtx).

```
746 \def\descriptionFB{%
747 \list{}{\FB@listHsettings
748 \labelwidth\z@ \itemindent-\leftmargin
749 \let\makelabel\descriptionlabel}}
```

# 2.9 French indentation of sections

\bbl@frenchindent \bbl@nonfrenchindent

In French the first paragraph of each section should be indented, this is another difference with US-English. This is controlled by the flag \if@afterindent.

We will need to save the value of the flag \if@afterindent 'AtBeginDocument' before eventually changing its value.

```
750 \def\bbl@frenchindent{\let\@afterindentfalse\@afterindenttrue}
751 \@afterindenttrue}
752 \def\bbl@nonfrenchindent{\let\@afterindentfalse\@aifORI
753 \@afterindentfalse}
```

## 2.10 Formatting footnotes

The bigfoot package deeply changes the way footnotes are handled. When bigfoot is loaded, we just warn the user that frenchb will drop the customisation of footnotes.

The layout of footnotes is controlled by two flags \iffBAutoSpaceFootnotes and \iffBFrenchFootnotes which are set by options of \frenchbsetup{} (see section 2.13). Notice that the layout of footnotes does not depend on the current language (just think of two footnotes on the same page looking different because one was called in a French part, the other one in English!).

When \iffBAutoSpaceFootnotes is true, \Offootnotemark (whose definition is saved at the \begin{document} in order to include any customisation that packages might have done) is redefined to add a thin space before the number or symbol

calling a footnote (any space typed in is removed first). This has no effect on the layout of the footnote itself.

```
754 \AtBeginDocument{\@ifpackageloaded{bigfoot}%
755
                       {\FBWarning{frenchb.ldf}%
756
                         {bigfoot package in use.\MessageBreak
                          frenchb will NOT customise footnotes; \MessageBreak
757
758
                          reported}}%
                       {\let\@footnotemarkORI\@footnotemark
759
760
                        \def\@footnotemarkFB{\leavevmode\unskip\unkern
761
                                              \,\@footnotemarkORI}%
                        \ifFBAutoSpaceFootnotes
762
                          \let\@footnotemark\@footnotemarkFB
763
                        \fi}%
764
765
```

We then define \@makefntextFB, a variant of \@makefntext which is responsible for the layout of footnotes, to match the specifications of the French 'Imprimerie Nationale': footnotes will be indented by \parindentFFN, numbers (if any) typeset on the baseline (instead of superscripts) and followed by a dot and an half quad space. Whenever symbols are used to number footnotes (as in \tanks for instance), we switch back to the standard layout (the French layout of footnotes is meant for footnotes numbered by Arabic or Roman digits).

The value of \parindentFFN will be redefined at the \begin{document}, as the maximum of \parindent and 1.5em unless it has been set in the preamble (the weird value 10in is just for testing whether \parindentFFN has been set or not).

```
766 \newcommand*{\dotFFN}{.}
767 \newcommand*{\kernFFN}{\kern .5em}
768 \newdimen\parindentFFN
769 \parindentFFN=10in
770 \def\ftnISsymbol{\@fnsymbol\c@footnote}
771 \long\def\@makefntextFB#1{\ifx\thefootnote\ftnISsymbol
772
                                 \@makefntextORI{#1}%
                               \else
773
774
                                 \parindent=\parindentFFN
775
                                 \rule\z@\footnotesep
                                 \setbox\@tempboxa\hbox{\@thefnmark}%
776
777
                                 \ifdim\wd\@tempboxa>\z@
                                   \llap{\@thefnmark}\dotFFN\kernFFN
778
                                 \fi #1
779
                               fi}%
```

We save the standard definition of \@makefntext at the \begin{document}, and then redefine \@makefntext according to the value of flag \iffBFrenchFootnotes (true or false).

```
781 \AtBeginDocument{\@ifpackageloaded{bigfoot}{}%
782 {\ifdim\parindentFFN<10in
783 \else
784 \parindentFFN=\parindent
785 \ifdim\parindentFFN<1.5em\parindentFFN=1.5em\fi
786 \fi
787 \let\@makefntextORI\@makefntext
788 \long\def\@makefntext#1{%
789 \iffBFrenchFootnotes
```

```
790 \@makefntextFB{#1}%
791 \else
792 \@makefntextORI{#1}%
793 \fi}%
794 }%
795 }
```

For compatibility reasons, we provide definitions for the commands dealing with the layout of footnotes in frenchb version 1.6. \frenchbsetup{} (see in section 2.13) should be preferred for setting these options. \StandardFootnotes may still be used locally (in minipages for instance), that's why the test \iffBFrenchFootnotes is done inside \@makefntext.

```
796 \newcommand*{\AddThinSpaceBeforeFootnotes}{\FBAutoSpaceFootnotestrue}
797 \newcommand*{\FrenchFootnotes}{\FBFrenchFootnotestrue}
798 \newcommand*{\StandardFootnotes}{\FBFrenchFootnotesfalse}
```

# 2.11 Global layout

In multilingual documents, some typographic rules must depend on the current language (e.g., hyphenation, typesetting of numbers, spacing before double punctuation...), others should, IMHO, be kept global to the document: especially the layout of lists (see 2.8) and footnotes (see 2.10), and the indentation of the first paragraph of sections (see 2.9).

From version 2.2 on, if frenchb is babel's "main language" (i.e. last language option at babel's loading), frenchb customises the layout (i.e. lists, indentation of the first paragraphs of sections and footnotes) in the whole document regardless the current language. On the other hand, if frenchb is not babel's "main language", it leaves the layout unchanged both in French and in other languages.

\FrenchLayout \StandardLayout

The former commands \FrenchLayout and \StandardLayout are kept for compatibility reasons but should no longer be used.

```
799 \newcommand*{\FrenchLayout}{%
       \FBGlobalLayoutFrenchtrue
800
       \PackageWarning{frenchb.ldf}%
801
802
       {\protect\FrenchLayout\space is obsolete. Please use\MessageBreak
803
        \protect\frenchbsetup{GlobalLayoutFrench} instead.}%
804 }
805 \newcommand*{\StandardLayout}{%
     \FBReduceListSpacingfalse
806
     \FBCompactItemizefalse
807
     \FBStandardItemLabelstrue
808
     \FBIndentFirstfalse
809
810
     \FBFrenchFootnotesfalse
     \FBAutoSpaceFootnotesfalse
     \PackageWarning{frenchb.ldf}%
812
       {\protect\StandardLayout\space is obsolete. Please use\MessageBreak
813
       \protect\frenchbsetup{StandardLayout} instead.}%
814
815 }
816 \@onlypreamble\FrenchLayout
817 \@onlypreamble\StandardLayout
```

### 2.12 Dots...

\FBtextellipsis

IATEX  $2_{\varepsilon}$ 's standard definition of \dots in text-mode is \textellipsis which includes a \kern at the end; this space is not wanted in some cases (before a closing brace for instance) and \kern breaks hyphenation of the next word. We define \FBtextellipsis for French (in IATEX  $2_{\varepsilon}$  only).

The \if construction in the  $\LaTeX$   $2\varepsilon$  definition of \dots doesn't allow the use of xspace (xspace is always followed by a \fi), so we use the AMS- $\LaTeX$  construction of \dots; this has to be done 'AtBeginDocument' not to be overwritten when amsmath.sty is loaded after babel.

LY1 has a ready made character for \textellipsis, it should be used in French too. The same is true for Unicode fonts in use with XeTeX and LuaTeX.

```
818 \iffBunicode
819 \let\FBtextellipsis\textellipsis
820 \else
821 \DeclareTextSymbol{\FBtextellipsis}{LY1}{133}
822 \DeclareTextCommandDefault{\FBtextellipsis}{%
823 .\kern\fontdimen3\font.\kern\fontdimen3\font.\xspace}
824 \fi
```

\Mdots@ and \Tdots@ORI hold the definitions of \dots in Math and Text mode. They default to those of amsmath-2.0, and will revert to standard LATEX definitions 'AtBeginDocument', if amsmath has not been loaded. \Mdots@ doesn't change when switching from/to French, while \Tdots@ is \FBtextellipsis in French and \Tdots@ORI otherwise.

```
825 \newcommand*{\Tdots@ORI}{\@xp\textellipsis}
826 \newcommand*{\Tdots@}{\Tdots@ORI}
827 \newcommand*{\Mdots@}{\@xp\mdots@}
828 \AtBeginDocument{\DeclareRobustCommand*{\dots}{\relax
829
                    \csname\ifmmode M\else T\fi dots@\endcsname}%
830
                    \@ifundefined{@xp}{\let\@xp\relax}{}%
                    \@ifundefined{mdots@}{\let\Tdots@ORI\textellipsis
831
                                           \let\Mdots@\mathellipsis
832
                                           \let\mdots@\undefined}{}}
833
834 \def\bbl@frenchdots{\let\Tdots@\FBtextellipsis}
835 \def\bbl@nonfrenchdots{\let\Tdots@\Tdots@ORI}
836 \addto\extrasfrench{\bbl@frenchdots}
837 \addto\noextrasfrench{\bbl@nonfrenchdots}
```

# 2.13 Setup options: keyval stuff

We first define a collection of conditionals with their defaults (true or false).

```
838 \newif\ifFBStandardLayout
                                        \FBStandardLayouttrue
839 \newif\ifFBGlobalLayoutFrench
                                        \FBGlobalLayoutFrenchfalse
840 \newif\ifFBReduceListSpacing
                                        \FBReduceListSpacingfalse
                                        \FBListOldLayouttrue
841 \newif\ifFBListOldLayout
842 \newif\ifFBCompactItemize
                                         \FBCompactItemizefalse
843 \newif\ifFBStandardItemizeEnv
                                         \FBStandardItemizeEnvtrue
844 \newif\ifFBStandardEnumerateEnv
                                         \FBStandardEnumerateEnvtrue
845 \newif\ifFBStandardItemLabels
                                        \FBStandardItemLabelstrue
846 \newif\ifFBStandardLists
                                         \FBStandardListstrue
847 \newif\ifFBIndentFirst
                                        \FBIndentFirstfalse
```

```
\FBFrenchFootnotesfalse
848 \newif\ifFBFrenchFootnotes
849 \newif\ifFBAutoSpaceFootnotes
                                        \FBAutoSpaceFootnotesfalse
850 \newif\ifFBOriginalTypewriter
                                        \FB0riginalTypewriterfalse
851 \newif\ifFBThinColonSpace
                                        \FBThinColonSpacefalse
852 \newif\ifFBThinSpaceInFrenchNumbers
                                        \FBThinSpaceInFrenchNumbersfalse
853 \newif\ifFBFrenchSuperscripts
                                        \FBFrenchSuperscriptstrue
854 \newif\ifFBLowercaseSuperscripts
                                        \FBLowercaseSuperscriptstrue
855 \newif\ifFBPartNameFull
                                        \FBPartNameFulltrue
856 \newif\ifFBSuppressWarning
                                        \FBSuppressWarningfalse
857 \newif\ifFBShowOptions
                                        \FBShowOptionsfalse
```

The defaults values of these flags have been set so that frenchb does not change anything regarding the global layout. \bbl@main@language, set by the last option of babel, controls the global layout of the document. 'AtEndOfPackage' we check the main language in \bbl@main@language; if it is French, the values of some flags have to be changed to ensure a French looking layout for the whole document (even in parts written in languages other than French); the end-user will then be able to customise the values of all these flags with \frenchbsetup{}.

```
858 \def\FB@french{french}
859 \AtEndOfPackage{%
     \ifx\bbl@main@language\FB@french
860
       \FBReduceListSpacingtrue
861
       \FBListOldLayoutfalse
862
       \FBCompactItemizetrue
863
       \FBStandardItemizeEnvfalse
864
       \FBStandardEnumerateEnvfalse
865
       \FBStandardItemLabelsfalse
866
       \FBIndentFirsttrue
867
868
       \FBFrenchFootnotestrue
869
       \FBAutoSpaceFootnotestrue
       \FBGlobalLayoutFrenchtrue
870
     \fi
871
872 }
```

### \frenchbsetup

From version 2.0 on, all setup options are handled by *one* command \frenchbsetup using the keyval syntax. Let's now define this command which reads and sets the options to be processed later (at \begin{document}) by \FBprocess@options. It can only be called in the preamble.

```
873 \newcommand*{\frenchbsetup}[1]{%
874 \setkeys{FB}{#1}%
875 }%
876 \@onlypreamble\frenchbsetup
```

frenchb being an option of babel, it cannot load a package (keyval) while frenchb.ldf is read, so we defer the loading of keyval and the options setup at the end of babel's loading.

StandardLayout resets the layout in French to the standard layout defined par the LATEX class and packages loaded. It deals with lists, indentation of first paragraphs of sections and footnotes. Other keys, entered *after* StandardLayout in \frenchbsetup, can overrule some of the StandardLayout settings.

When French is the main language, GlobalLayoutFrench forces the layout in French and (as far as possible) outside French to meet the French typographic standards.

```
877 \AtEndOfPackage{%
       \RequirePackage{keyval}%
878
       \define@key{FB}{StandardLayout}[true]%
879
                          {\csname FBStandardLayout#1\endcsname
880
                            \ifFBStandardLayout
881
                              \FBReduceListSpacingfalse
882
                              \FBStandardItemizeEnvtrue
883
884
                              \FBStandardEnumerateEnvtrue
885
                              \FBStandardItemLabelstrue
                              \FBIndentFirstfalse
886
                              \FBFrenchFootnotesfalse
887
                              \FBAutoSpaceFootnotesfalse
888
                              \FBGlobalLayoutFrenchfalse
889
                            \else
890
891
                              \FBReduceListSpacingtrue
                              \FBStandardItemizeEnvfalse
892
                              \FBStandardEnumerateEnvfalse
893
894
                              \FBStandardItemLabelsfalse
895
                              \FBIndentFirsttrue
896
                              \FBFrenchFootnotestrue
                              \FBAutoSpaceFootnotestrue
897
                           fi}%
898
       \define@key{FB}{GlobalLayoutFrench}[true]%
899
900
                          {\csname FBGlobalLayoutFrench#1\endcsname
901
                            \ifFBGlobalLayoutFrench
                              \ifx\bbl@main@language\FB@french
902
                                 \FBReduceListSpacingtrue
903
                                 \FBStandardItemizeEnvfalse
904
905
                                 \FBStandardEnumerateEnvfalse
                                 \FBStandardItemLabelsfalse
906
                                 \FBIndentFirsttrue
907
                                 \FBFrenchFootnotestrue
908
                                 \FBAutoSpaceFootnotestrue
909
                             \else
910
                                 \PackageWarning{frenchb.ldf}%
911
912
                                   {Option 'GlobalLayoutFrench' skipped:
913
                                    \MessageBreak French is *not*
914
                                    babel's last option.\MessageBreak}%
915
                             \fi
                           fi}%
916
       \define@key{FB}{ReduceListSpacing}[true]%
917
918
                          {\csname FBReduceListSpacing#1\endcsname}%
       \define@key{FB}{ListOldLayout}[true]%
919
                          {\csname FBListOldLayout#1\endcsname
920
                            \ifFBListOldLayout
921
                              \renewcommand*{\FrenchLabelItem}{\textendash}%
922
                           fi}%
923
       \define@key{FB}{CompactItemize}[true]%
924
                          {\csname FBCompactItemize#1\endcsname
925
926
                            \ifFBCompactItemize
927
                              \FBStandardItemizeEnvfalse
928
                              \FBStandardEnumerateEnvfalse
                            \else
929
                              \FBStandardItemizeEnvtrue
930
```

```
\FBStandardEnumerateEnvtrue
931
932
                           \fi}%
       \define@key{FB}{StandardItemizeEnv}[true]%
933
                         {\csname FBStandardItemizeEnv#1\endcsname}%
934
       \define@key{FB}{StandardEnumerateEnv}[true]%
935
                         {\csname FBStandardEnumerateEnv#1\endcsname}%
936
       \define@key{FB}{StandardItemLabels}[true]%
937
                          {\csname FBStandardItemLabels#1\endcsname}%
938
       \define@key{FB}{ItemLabels}{%
939
           \renewcommand*{\FrenchLabelItem}{#1}}%
940
       \define@key{FB}{ItemLabeli}{%
941
           \renewcommand*{\Frlabelitemi}{#1}}%
942
       \define@key{FB}{ItemLabelii}{%
943
           \renewcommand*{\Frlabelitemii}{#1}}%
944
945
       \define@key{FB}{ItemLabeliii}{%
           \renewcommand*{\Frlabelitemiii}{#1}}%
946
       \define@key{FB}{ItemLabeliv}{%
947
           \renewcommand*{\Frlabelitemiv}{#1}}%
948
949
       \define@key{FB}{StandardLists}[true]%
                          {\csname FBStandardLists#1\endcsname
950
                           \ifFBStandardLists
951
                             \FBReduceListSpacingfalse
952
                             \FBCompactItemizefalse
953
                             \FBStandardItemizeEnvtrue
954
955
                             \FBStandardEnumerateEnvtrue
                             \FBStandardItemLabelstrue
956
957
                             \FBReduceListSpacingtrue
958
                             \FBCompactItemizetrue
959
                             \FBStandardItemizeEnvfalse
960
                             \FBStandardEnumerateEnvfalse
961
                             \FBStandardItemLabelsfalse
962
                           \fi}%
963
       \define@key{FB}{IndentFirst}[true]%
964
                          {\csname FBIndentFirst#1\endcsname}%
965
966
       \define@key{FB}{FrenchFootnotes}[true]%
967
                          {\csname FBFrenchFootnotes#1\endcsname}%
968
       \define@key{FB}{AutoSpaceFootnotes}[true]%
969
                          {\csname FBAutoSpaceFootnotes#1\endcsname}%
       \define@key{FB}{AutoSpacePunctuation}[true]%
970
971
                          {\csname FBAutoSpacePunctuation#1\endcsname}%
972
       \define@key{FB}{OriginalTypewriter}[true]%
                          {\csname FBOriginalTypewriter#1\endcsname}%
973
       \define@key{FB}{ThinColonSpace}[true]%
974
                          {\csname FBThinColonSpace#1\endcsname}%
975
       \define@key{FB}{ThinSpaceInFrenchNumbers}[true]%
976
                          {\csname FBThinSpaceInFrenchNumbers#1\endcsname}%
977
       \define@key{FB}{FrenchSuperscripts}[true]%
978
                          {\csname FBFrenchSuperscripts#1\endcsname}
979
980
       \define@key{FB}{LowercaseSuperscripts}[true]%
981
                          {\csname FBLowercaseSuperscripts#1\endcsname}
982
       \define@key{FB}{PartNameFull}[true]%
                          {\csname FBPartNameFull#1\endcsname}%
983
       \define@key{FB}{SuppressWarning}[true]%
984
```

```
{\csname FBSuppressWarning#1\endcsname
985
986
                            \ifFBSuppressWarning
                              \renewcommand{\FBWarning}[2]{\relax}%
987
                            \else
988
                              \renewcommand{\FBWarning}[2]{%
989
                                                \PackageWarning{##1}{##2}}%
990
                            \fi}
991
992
       \define@key{FB}{ShowOptions}[true]%
                          {\csname FBShowOptions#1\endcsname}%
993
```

Inputing French quotes as single characters when they are available on the keyboard (through a compose key for instance) is more comfortable than typing \og and \fg. The purpose of the following code is to map the French quote characters to \og\ignorespaces and {\fg} respectively when the current language is French, and to \guillemotleft and \guillemotright otherwise (think of German quotes); thus correct unbreakable spaces will be added automatically to French quotes. The quote characters typed in depend on the input encoding, it can be single-byte (latin1, latin9, applemac,...) or multi-bytes (utf-8, utf8x). We first check whether XeTeX or LuaTeX engines are used, if not the inputenc package has to be loaded before the \begin{document} with the proper coding option, so we check if \DeclareInputText is defined.

```
\define@key{FB}{og}{%
 994
           \newcommand*{\FB@@og}{%
995
996
              \iflanguage{french}%
                  {\ifFBAutoSpaceGuill\FB@og\ignorespaces
997
998
                   \else\guillemotleft
                   fi}%
999
                  {\guillemotleft}}%
1000
           \ifFBunicode
1001
 LuaTeX or XeTeX in use,
             \ifFB@xetex@punct
```

\XeTeXinterchartokenstate is defined, we just need to set \XeTeXcharclass to \FB@punctguilo for the French opening quote (see subsection 2.2) and to switch \ifFBog@addspace to false, otherwise commands \og and \fg would produce a double space; the \ifFBguillo@addspace flag is needed when switching from \ttfamily back to \sf or \rm.

```
1003 \XeTeXcharclass"00AB = \FB@punctguilo
1004 \FBguillo@addspacetrue \FBog@addspacefalse
1005 \else
```

then LuaTeX or an old XeTeX in use, the following trick for defining the active quote character is borrowed from inputenc.dtx.

```
\catcode'#1=\active
1006
                     \bgroup
1007
                       \uccode'\~'#1%
1008
1009
                       \uppercase{%
1010
                     \egroup
                     \ensuremath{\mbox{def}^{\mbox{``}}}
1011
                    }{\FB@@og}%
1012
                  \fi
1013
1014
               \else
```

```
This is for conventional TeX engines:
```

```
\AtBeginDocument
1015
1016
               {\@ifundefined{DeclareInputText}%
1017
                  {\PackageWarning{frenchb.ldf}%
1018
                    {Option 'og' requires package inputenc.\MessageBreak}%
1019
                   \let\DeclareInputText\undefined
1020
                  {\@ifundefined{uc@dclc}%
1021
 if \uc@dclc is undefined, utf8x is not loaded...
                    {\@ifundefined{DeclareUnicodeCharacter}%
1022
 if \DeclareUnicodeCharacter is undefined, utf8 is not loaded either, we as-
 sume 8-bit character input encoding. Package MULEenc.sty (from CJK) defines
 \mule@def to map characters to control sequences.
                       {\@tempcnta'#1\relax
1023
                          \@ifundefined{mule@def}%
1024
                            {\DeclareInputText{\the\@tempcnta}{\FB@@og}%
1025
                             1026
1027
                            {\mule@def{11}{{\FB@@og}}}%
1028
                        \let\DeclareUnicodeCharacter\undefined
1029
 utf8 loaded, use \DeclareUnicodeCharacter,
1030
                       {\DeclareUnicodeCharacter{00AB}{\FB@@og}}%
                     \let\uc@dclc\undefined
1031
1032
                    }%
 utf8x loaded, use \uc@dclc,
1033
                    {\color{171}{default}{\FB@@og}}%
1034
                  }%
1035
               }%
           \fi
1036
        }%
1037
 Same code for the closing quote.
        \define@key{FB}{fg}{%
1038
1039
           \newcommand*{\FB@@fg}{%
1040
               \iflanguage{french}%
                  {\tt \{\fbMutoSpaceGuill\FB@fg}
1041
                   \else\guillemotright
1042
                   fi}%
1043
1044
                  {\guillemotright}}%
           \ifFBunicode
1045
1046
              \ifFB@xetex@punct
               \XeTeXcharclass"00BB = \FB@punctguilf
1047
                \FBguillf@addspacetrue \FBfg@addspacefalse
1048
             \else
1049
1050
                 \catcode'#1=\active
1051
                 \bgroup
                   \uccode'\~'#1%
1052
1053
                   \uppercase{%
1054
                 \egroup
                 \ensuremath{\mbox{def}^{\mbox{``}}}
1055
                }{{\FB@@fg}}%
1056
```

1057

\fi

```
\else
1058
                                                       \AtBeginDocument
1059
                                                               {\@ifundefined{DeclareInputText}%
1060
                                                                       {\PackageWarning{frenchb.ldf}%
1061
                                                                                {Option 'fg' requires package inputenc.\MessageBreak}%
1062
                                                                           \let\DeclareInputText\undefined
1063
                                                                       }%
1064
                                                                        {\@ifundefined{uc@dclc}%
1065
                                                                                {\@ifundefined{DeclareUnicodeCharacter}%
1066
                                                                                             {\@tempcnta'#1\relax
1067
                                                                                                         \@ifundefined{mule@def}%
1068
                                                                                                                  {\DeclareInputText{\the\@tempcnta}{{\FB@@fg}}%
1069
                                                                                                                      \let\mule@def\undefined
1070
                                                                                                                  }%
1071
                                                                                                                  {\mule@def{27}{{\FB@@fg}}}%
1072
                                                                                                 \let\DeclareUnicodeCharacter\undefined
1073
1074
1075
                                                                                             {\DeclareUnicodeCharacter{00BB}{{\FB@@fg}}%
1076
                                                                                            }%
1077
                                                                                    \let\uc@dclc\undefined
                                                                               }%
1078
                                                                                \ {\colored c \cluster \clus
1079
                                                                      }%
1080
                                                              }%
1081
                                              \fi
1082
                                 }%
1083
1084 }
```

\FBprocess@options \FBprocess@options processes the options, it is called *once* at \begin{document}.

1085 \newcommand\*{\FBprocess@options}{%

Nothing has to be done here for StandardLayout and StandardLists (the involved flags have already been set in \frenchbsetup{} or before (at babel's End-OfPackage).

The next three options deal with the layout of lists in French.

ReduceListSpacing reduces the vertical spaces in lists in French (done by changing \list to \listFB). When GlobalLayoutFrench is true (the default), the same is done outside French except for languages that force a different setting.

```
\ifFBReduceListSpacing
1086
1087
        \addto\extrasfrench{\let\list\listFB
                              \let\endlist\endlistFB}%
1088
        \addto\noextrasfrench{\ifFBGlobalLayoutFrench
1089
                                  \let\list\listFB
1090
1091
                                  \let\endlist\endlistFB
1092
                                  \let\list\listORI
1093
                                  \let\endlist\endlistORI
1094
                                \fi}%
1095
1096
        \addto\extrasfrench{\let\list\listORI
1097
1098
                              \let\endlist\endlistORI
1099
        \addto\noextrasfrench{\let\list\listORI
1100
1101
                                \let\endlist\endlistORI
```

```
1102
1103 \fi
```

When ListOldLayout=true, set StandardEnumerateEnv=true (before v. 2.6a enumerate was not redefined).

```
1104 \iffBListOldLayout
1105 \FBStandardEnumerateEnvtrue
1106 \fi
```

To ensure compatibility with the enumitem package, when enumitem is loaded, force flags StandardItemizeEnv and StandardEnumerateEnv to true.

```
\@ifpackageloaded{enumitem}{%
1107
1108
         \ifFBStandardItemizeEnv
1109
         \else
1110
            \FBWarning{frenchb.ldf}%
1111
              {Setting StandardItemizeEnv=true for\MessageBreak
1112
               compatibility with enumitem package,\MessageBreak}%
1113
            \FBStandardItemizeEnvtrue
         \fi
1114
         \ifFBStandardEnumerateEnv
1115
         \else
1116
            \FBWarning{frenchb.ldf}%
1117
              {Setting StandardEnumerateEnv=true for\MessageBreak
1118
1119
               compatibility with enumitem package,\MessageBreak}%
            \FBStandardEnumerateEnvtrue
1120
1121
         \fi}%
1122
        {}%
```

To ensure compatibility with the paralist package, when paralist is loaded; force flags StandardItemizeEnv and StandardEnumerateEnv to true.

```
\@ifpackageloaded{paralist}{%
1123
         \ifFBStandardItemizeEnv
1124
         \else
1125
1126
            \FBWarning{frenchb.ldf}%
              {Setting StandardItemizeEnv=true for\MessageBreak
1127
               compatibility with paralist package,\MessageBreak}%
1128
            \FBStandardItemizeEnvtrue
1129
1130
         \fi
1131
         \ifFBStandardEnumerateEnv
         \else
1132
            \FBWarning{frenchb.ldf}%
1133
              {Setting StandardEnumerateEnv=true for\MessageBreak
1134
1135
               compatibility with paralist package,\MessageBreak}%
1136
            \FBStandardEnumerateEnvtrue
         \fi}%
1137
```

To ensure compatibility with the enumerate package, when enumerate is loaded, force flag StandardEnumerateEnv to true.

```
1139 \@ifpackageloaded{enumerate}{%
1140 \iffBStandardEnumerateEnv
1141 \else
1142 \FBWarning{frenchb.ldf}%
1143 {Setting StandardEnumerateEnv=true for\MessageBreak
1144 compatibility with enumerate package,\MessageBreak}%
```

```
1145 \FBStandardEnumerateEnvtrue
1146 \fi}%
1147 {}%
```

Let's now process flags StandardItemizeEnv and StandardEnumerateEnv. Mind that StandardEnumerateEnv's value decides for both environments enumerate and description).

```
\ifFBStandardItemizeEnv
1148
         \addto\extrasfrench{\let\itemize\itemizeORI}%
1149
         \addto\noextrasfrench{\let\itemize\itemizeORI}%
1150
1151
        \addto\extrasfrench{\let\itemize\itemizeFB}%
1152
1153
        \addto\noextrasfrench{\ifFBGlobalLayoutFrench
                                   \let\itemize\itemizeFB
1154
1155
1156
                                   \let\itemize\itemizeORI
1157
                                \fi}%
1158
      \fi
      \ifFBStandardEnumerateEnv
1159
         \addto\extrasfrench{\let\enumerate\enumerateORI
1160
                              \let\description\descriptionORI}%
1161
         \addto\noextrasfrench{\let\enumerate\enumerateORI
1162
1163
                                \let\description\descriptionORI}%
1164
1165
        \addto\extrasfrench{\let\enumerate\enumerateFB
1166
                             \let\description\descriptionFB}%
1167
        \addto\noextrasfrench{\ifFBGlobalLayoutFrench
                                   \let\enumerate\enumerateFB
1168
                                   \let\description\descriptionFB
1169
1170
                                \else
1171
                                   \let\enumerate\enumerateORI
1172
                                   \let\description\descriptionORI
1173
                               fi}%
1174
```

StandardItemLabels resets labelitems in French to their standard values set by the IATEX class and packages loaded. When GlobalLayoutFrench is true, labelitems are identical whether the current language is French or not.

```
\ifFBStandardItemLabels
1175
        \addto\extrasfrench{\bbl@nonfrenchlabelitems}%
1176
        \addto\noextrasfrench{\bbl@nonfrenchlabelitems}%
1177
1178
        \addto\extrasfrench{\bbl@frenchlabelitems}%
1179
        \addto\noextrasfrench{\ifFBGlobalLayoutFrench
1180
                                  \bbl@frenchlabelitems
1181
1182
                                \else
                                  \bbl@nonfrenchlabelitems
1183
                                \fi}%
1184
      \fi
1185
```

IndentFirst forces the first paragraphs of sections to be indented just like the other ones in French. When GlobalLayoutFrench is true, the same is done outside French except for languages that force a different setting. \bbl@nonfrenchindent has been designed to be smart with other languages (like Spanish) who also indent every first paragraphs of sections (see section 2.9).

```
\ifFBIndentFirst
1186
        \addto\extrasfrench{\bbl@frenchindent}%
1187
        \addto\noextrasfrench{\ifFBGlobalLayoutFrench
1188
                                  \bbl@frenchindent
1189
1190
                                  \bbl@nonfrenchindent
1191
                                fi}%
1192
      \else
1193
        \addto\extrasfrench{\bbl@nonfrenchindent}%
1194
        \addto\noextrasfrench{\bbl@nonfrenchindent}%
1195
1196
```

The layout of footnotes is handled at the \begin{document} depending on the values of flags FrenchFootnotes and AutoSpaceFootnotes (see section 2.10), nothing has to be done here for footnotes.

AutoSpacePunctuation adds an unbreakable space (in French only) before the four active characters (:;!?) even if none has been typed before them.

```
1197 \iffBAutoSpacePunctuation
1198 \autospace@beforeFDP
1199 \else
1200 \noautospace@beforeFDP
1201 \fi
```

When OriginalTypewriter is set to false (the default), \ttfamily, \rmfamily and \sffamily are redefined as \ttfamilyFB, \rmfamilyFB and \sffamilyFB respectively to prevent addition of automatic spaces before the four active characters in computer code.

```
1202 \iffBOriginalTypewriter
1203 \else
1204 \let\ttfamily\ttfamilyFB
1205 \let\rmfamily\rmfamilyFB
1206 \let\sffamily\sffamilyFB
1207 \fi
```

ThinColonSpace changes the normal unbreakable space typeset in French before ':' to a thin space.

```
208 \ifFBThinColonSpace\renewcommand*{\FBcolonspace}{\FBthinspace}\fi
```

When true, ThinSpaceInFrenchNumbers redefines numprint.sty's command \npstylefrench to set \npthousandsep to \, (thinspace) instead of ~ (default). This option has no effect if package numprint.sty is not loaded with 'autolanguage'. As old versions of numprint.sty did not define \npstylefrench, we have to provide this command.

```
\@ifpackageloaded{numprint}%
1209
1210
      {\ifnprt@autolanguage
         \providecommand*{\npstylefrench}{}%
1211
         \ifFBThinSpaceInFrenchNumbers
1212
1213
           \renewcommand*\npstylefrench{%
1214
              \n \n \n
1215
              \npdecimalsign{,}%
              \npproductsign{\cdot}%
1216
              \npunitseparator{\,}%
1217
              \npdegreeseparator{}%
1218
              \nppercentseparator{\nprt@unitsep}%
1219
1220
```

```
\else
1221
            \renewcommand*\npstylefrench{%
1222
               \npthousandsep{~}%
1223
               \npdecimalsign{,}%
1224
               \npproductsign{\cdot}%
1225
               \npunitseparator{\,}%
1226
               \npdegreeseparator{}%
1227
               \nppercentseparator{\nprt@unitsep}%
1228
1229
               }%
         \fi
1230
         \npaddtolanguage{french}{french}%
1231
       \fi}{}%
1232
```

FrenchSuperscripts: if true \up=\fup, else \up=\textsuperscript. Anyway \up\*=\FB@up@fake. The star-form \up\*{} is provided for fonts that lack some superior letters: Adobe Jenson Pro and Utopia Expert have no "g superior" for instance.

```
\ifFBFrenchSuperscripts
1233
        \DeclareRobustCommand*{\up}{\@ifstar{\FB@up@fake}{\fup}}%
1234
1235
      \else
1236
        \DeclareRobustCommand*{\up}{\@ifstar{\FB@up@fake}%
1237
                                              {\textsuperscript}}%
1238
```

LowercaseSuperscripts: if true let \FB@lc be \lowercase, else \FB@lc is redefined to do nothing.

```
\verb|\iffBLowercaseSuperscripts| \\
1240
       \else
         \renewcommand*{\FB@lc}[1]{##1}%
1241
1242
```

PartNameFull: if false, redefine \partname.

```
1243
      \ifFBPartNameFull
```

\else\addto\captionsfrench{\def\partname{Partie}}\fi 1244

ShowOptions: if true, print the list of all options to the .log file.

```
\ifFBShowOptions
1245
1246
        \GenericWarning{* }{%
         * **** List of possible options for frenchb **** Message Break
1247
         [Default values between brackets when frenchb is loaded *LAST*]%
1248
         \MessageBreak
1249
         ShowOptions=true [false]\MessageBreak
1250
         StandardLayout=true [false]\MessageBreak
1251
1252
         GlobalLayoutFrench=false [true]\MessageBreak
         StandardLists=true [false]\MessageBreak
1253
         IndentFirst=false [true]\MessageBreak
1254
         ReduceListSpacing=false [true]\MessageBreak
1255
1256
         ListOldLayout=true [false]\MessageBreak
1257
         StandardItemizeEnv=true [false]\MessageBreak
1258
         StandardEnumerateEnv=true [false]\MessageBreak
         StandardItemLabels=true [false]\MessageBreak
1259
         ItemLabels=\textemdash, \textbullet,
1260
            \protect\ding{43},... [\textendash]\MessageBreak
1261
         ItemLabeli=\textemdash, \textbullet,
1262
            \protect\ding{43},... [\textendash]\MessageBreak
1263
```

```
ItemLabelii=\textemdash, \textbullet,
1264
            \protect\ding{43},... [\textendash]\MessageBreak
1265
         ItemLabeliii=\textemdash, \textbullet,
1266
            \protect\ding{43},... [\textendash]\MessageBreak
1267
         ItemLabeliv=\textemdash, \textbullet,
1268
            \protect\ding{43},... [\textendash]\MessageBreak
1269
         FrenchFootnotes=false [true]\MessageBreak
         AutoSpaceFootnotes=false [true]\MessageBreak
1271
1272
         AutoSpacePunctuation=false [true]\MessageBreak
         OriginalTypewriter=true [false]\MessageBreak
1273
1274
         ThinColonSpace=true [false]\MessageBreak
         ThinSpaceInFrenchNumbers=true [false]\MessageBreak
1275
         FrenchSuperscripts=false [true]\MessageBreak
1276
         LowercaseSuperscripts=false [true]\MessageBreak
1277
1278
         PartNameFull=false [true]\MessageBreak
         SuppressWarning=true [false]\MessageBreak
1279
         og= <left quote character>, fg= <right quote character>
         \MessageBreak
1281
1282
         ***************
1283
         \MessageBreak\protect\frenchbsetup{ShowOptions}}
      \fi
1284
1285 }
```

At \begin{document} we save again the value of \if@afterindent, definitions of the list environments and the values of labelitems so that all changes made in the preamble are taken into account in languages other than French and in French with the StandardLayout option. We also have to provide an \xspace command in case the xspace.sty package is not loaded.

```
1286 \AtBeginDocument{%
       \ifx\@afterindentfalse\@afterindenttrue
1287
             \let\@aifORI\@afterindenttrue
1288
       \else \let\@aifORI\@afterindentfalse
1289
1290
       \fi
       \let\listORI\list
1291
       \let\endlistORI\endlist
1292
1293
       \let\endlistFB\endlist
1294
       \let\itemizeORI\itemize
1295
       \let\enditemizeORI\endlist
       \let\enditemizeFB\endlist
1296
       \let\enumerateORT\enumerate
1297
       \let\endenumerateORI\endlist
1298
       \let\endenumerateFB\endlist
1299
1300
       \let\descriptionORI\description
1301
       \let\enddescriptionORI\endlist
       \let\enddescriptionFB\endlist
1302
1303
       \let\@ltiORI\labelitemi
1304
       \let\@ltiiORI\labelitemii
1305
       \let\@ltiiiORI\labelitemiii
       \let\@ltivORI\labelitemiv
1306
1307
       \providecommand*{\xspace}{\relax}%
 Let's redefine some commands in hyperref's bookmarks.
1308
       \@ifundefined{pdfstringdefDisableCommands}%
```

1309

{\let\pdfstringdefDisableCommands\undefined}%

```
{\pdfstringdefDisableCommands{%
1310
            \let\up\relax
1311
            \let\fup\relax
1312
            \let\degre\textdegree
1313
            \let\degres\textdegree
1314
            \def\ieme{e\xspace}%
1315
            \def\iemes{es\xspace}%
1316
            \def\ier{er\xspace}%
1317
1318
            \def\iers{ers\xspace}%
1319
            \def\iere{re\xspace}%
            \def\ieres{res\xspace}%
1320
            \def\FrenchEnumerate#1{#1\degre\space}%
1321
            \def\FrenchPopularEnumerate#1{#1\degre)\space}%
1322
            \def\No{N\degre\space}%
1323
            \def\no{n\degre\space}%
1324
            \def\Nos{N\degre\space}%
1325
1326
            \def\nos{n\degre\space}%
            \def\FB@og{\guillemotleft\space}%
1327
            \def\FB@fg{\space\guillemotright}%
1328
1329
            \def\circonflexe{\string^}%
1330
            \def\tild{\string^}%
1331
            \let\bsc\textsc
1332
1333
            }%
         }%
1334
```

It is time to process the options set with \frenchboptions{}. Then we need to execute either \extrasfrench and \captionsfrench or \noextrasfrench according to the current language at the \begin{document} (these three commands have been updated by \FBprocess@options). But, when French is the main language, \extrasfrench is executed again now (French has been switched on 'AtBeginDocument' some time before). This is harmless, except for \bbl@frenchspacing which will redefine \bbl@nonfrenchspacing to \relax, this will be wrong if the user switches to English. When French is not the main language, \noextrasfrench executes \bbl@nonfrenchspacing (=\nonfrenchspacing), thus eventually overwriting a \frenchspacing command issued by the main language (German, Spanish, etc.). So we have to define \bbl@nonfrenchspacing as \relax here and restore it's meaning afterwards. It is also the right time, when a koma-script class is in use, to save the value of \captionformat in \CaptionSeparatorORI\} and to add the redefinitions of \captionformat to \((no)\)extrasfrench.

```
\FBprocess@options
1335
1336
       \let\bbl@nonfrenchspacingORI\bbl@nonfrenchspacing
1337
       \let\bbl@nonfrenchspacing\relax
       \@ifundefined{captionformat}%
1338
         {\let\captionformat\undefined}%
1339
         {\let\CaptionSeparatorORI\captionformat
1340
          \addto\extrasfrench{%
1341
            \renewcommand*{\captionformat}{\CaptionSeparator}}%
1342
          \addto\noextrasfrench{%
1343
1344
            \renewcommand*{\captionformat}{\CaptionSeparatorORI}}%
1345
1346
       \ifx\bbl@main@language\FB@french
```

```
1347 \extrasfrench\captionsfrench
1348 \else
1349 \noextrasfrench
1350 \fi
1351 \let\bbl@nonfrenchspacing\bbl@nonfrenchspacingORI
```

Some warnings are issued when output font encodings are not properly set. With XeLaTeX, fontspec.sty and xunicode.sty should be loaded; with (pdf)LATeX, a warning is issued when OT1 encoding is in use at the \begin{document}. Mind that \encodingdefault is defined as 'long', defining \FBOTone with \newcommand\* would fail!

```
1352
       \ifFBXeTeX
1353
          \@ifundefined{DeclareUTFcharacter}%
            {\PackageWarning{frenchb.ldf}%
1354
               {Add \protect\usepackage{xltxtra} to the\MessageBreak
1355
1356
               preamble of your document,}%
1357
             \let\DeclareUTFcharacter\undefined}%
1358
            {}%
1359
        \else
          \begingroup \newcommand{\FBOTone}{OT1}%
1360
          \ifx\encodingdefault\FBOTone
1361
            \PackageWarning{frenchb.ldf}%
1362
                {OT1 encoding should not be used for French.
1363
                 \MessageBreak
1364
                 Add \protect\usepackage[T1]{fontenc} to the
1365
1366
                preamble\MessageBreak of your document,}%
1367
          \fi
1368
          \endgroup
       \fi
1369
1370 }
```

## 2.14 Clean up and exit

Load frenchb.cfg (kept just for backward compatibility).
1371 \loadlocalcfg{frenchb}

Final cleaning. The macro \ldfQquit takes care for setting the main language to be switched on at \begin{document} and resetting the category code of @ to its original value. The config file searched for has to be frenchb.cfg, and \CurrentOption has been set to 'french', so \ldfQfinish\CurrentOption cannot be used: we first load frenchb.cfg, then call \ldfQquit\CurrentOption.

```
1372 \FBclean@on@exit
1373 \ldf@quit\CurrentOption
```

## Change History

v2.0	v2.0d
General: \parindentFFN not	General: Options og and fg
changed if already defined (re-	changed: limit the definition to
quired by JA for cah-gut.cls). 32	French so that quote characters
Added warning for OT1 encod-	can be used in German 34
ing 45	v2.0e
AtBeginDocument, save again	General: New option: Standard-
the definitions of the 'list' and	Lists
'itemize' environments and the	v2.0f
values of labelitems. As of	
frenchb v. 1.6, 'ORI' values were	General: StandardLayout op-
set when reading frenchb.ldf,	tion had no effect on
later changes were ignored 45	lists. Test moved to
Footnotes are now printed by	\FBprocess@options 34
default 'à la française' for the	Two typos corrected in option
whole document	StandardLists: [false] $\rightarrow$ [true]
New command \frenchbsetup	and StandardLayout → Stan-
added for global customisation. 34	dardLists
\bsc: \hbox dropped, replaced by	v2.0g
\kernOpt 21	General: Revert previous change
\captionsfrench: 'Fig.' changed	to StandardLayout. This op-
to 'Figure' and 'Tab.' to 'Ta-	tion must set the three flags
ble'	$\verb \FBReduceListSpacingfalse ,$
Set \CaptionSeparator in	\FBCompactItemizefalse, and
\extrasfrench now instead of	\FBStandardItemLabeltrue in-
\captionsfrench because it	stead of \FBStandardListstrue,
has to be reset when leaving	so that later options can still
French	change their value before ex-
\datefrench: 2 '\relax' added in	ecuting \FBprocess@options.
\today's definition 19	Same thing for option Stan-
\FBtextellipsis: Added special	dardLists
case for LY1 encoding, see	\StandardLayout: Flag \ifFBStandardLayout
bug report from Bruno Voisin	not checked by \FBprocess@options,
(2004/05/18)	low-level flags have to be set one
\nombre: \nombre requires now	by one
numprint.sty 24	v2.1a
v2.0b	General: Command \fup added
General: Footnotes: Just do noth-	to produce better superscripts
ing (except warning) when the	than \textsuperscript 19
bigfoot package is loaded 31	New option: FrenchSuperscripts
v2.0c	to define \up as \fup or as
General: \ThinSpaceInFrenchNumbers	\textsuperscript $34$
added for compatibility with	New option: LowercaseSuper-
frenchb-1.x 24	scripts
Option ThinSpaceInFrenchNum-	$\del{def:cor-def} \del{def:cor-def} \del{def:cor-def} \del{def:cor-def}$
bers added	rection in 2.0 was wrong:
There is no need to define	\today was printed without
here numprint's command	spaces in toc) 19
\npstylefrench, it will be re-	v2.1b
defined 'AtBeginDocument' by	General: Disable some commands in
\FBprocess@options 24	bookmarks 45

\fup: Command \fup changed	and <b>\AutoSpaceBeforeFDP</b> now
to use real superscripts from	$\operatorname{set} \operatorname{the} \operatorname{flag} \$
fourier v. 1.6 19	accordingly (LaTeX only) 16
v2.1c	In LaTeX, frenchb no longer adds
General: Added commands \Nos	spaces before 'double punctu-
and \nos 21	ation' characters in computer
\degres: Provide a temporary	code. Suggested by Yannis Har-
	alambous 16
definition (hyperref safe) of	
\degres in case it has to be	New option: OriginalType-
expanded in the preamble (by	writer. Now frenchb switches to
beamer's \title command for	\noautospace@beforeFDP when
instance) 23	a tt-font is in use. When Orig-
\up: Provide a temporary definition	inalTypewriter is set to true,
(hyperref safe) of $\up$ in case	frenchb behaves as in pre-2.3
it has to be expanded in the	versions
preamble (by beamer's \title	\fup: \lowercase changed to
command for instance) 19	\MakeLowercase as the former
v2.1d	doesn't work for non ASCII
General: Argument of \ProvidesLanguage	characters in encodings like ap-
changed above from 'french'	plemac, utf-8, 19
_	2.3b
\listfiles prints no	General: New commands \dotFFN
date/version information). The	and \kernFFN for more flexibil-
	ity (suggested by JA) 32
real name of current language	2.3c
()	
fore calling \LdfInit 9	General: Commands \ttfamily,
Avoid warning "\end occurred	\rmfamily and \sffamily have
when \ifx incomplete" with	to be robust. Bug introduced
LaTeX-2.09 9	in 2.3a, pointed out by Manuel
v2.2a	Pégourié-Gonnard 16
8	2.3d
the document is no longer	\bbl@nonfrenchindent: Bug cor-
changed when frenchb is	rection: previous versions
not the last option of babel	of frenchb set the flag
$(\blue{longuage}).$ Sug-	\if@afterindent to false out-
gested by Ulrike Fischer 34	side French which is correct for
Values of flags \ifFBReduceListSpacing,	English but wrong for some lan-
\ifFBCompactItemize, \ifFBStandard	ItemLagueles like Spanish. Pointed
\ifFBIndentFirst, \ifFBFrenchFootno	otes, out by Juan José Torrens 31
\ifFBAutoSpaceFootnotes	\frenchbsetup: Warning added
changed: default now means	to \GlobalLayoutFrench when
'StandardLayout', it will be	French is not the main lan-
changed to 'FrenchLayout'	guage 35
	2.3e
is \bbl@main@language 34	General: Execute \AutoSpaceBeforeFDP
When frenchb is babel's last op-	also in LaTeX to define
tion, French becomes the docu-	\FDP@colonspace: needed for
	_
ment's main language, so GlobalLayoutFrench applies 34 v:	tex4ht, pointed out by MPG 16
	2.4a
\fup: \newif and \newdimen moved	General: \PackageWarning changed
before \ifLaTeXe to avoid an	to \FBWarning (in case
error with plainTeX 19	\@makecaption has been cus-
v2.3a	tomised). \FBWarning is de-
General: \NoAutoSpaceBeforeFDP	$\operatorname{fined}$ as $\operatorname{\mathtt{NPackageWarning}}$ by

default but can be made silent using \frenchbsetup, (suggested by MPG) \PackageWarning changed to \FBWarning (when bigfoot	26	New definitions needed for Xe- TeX/LuaTeX to properly print some dates and captions: using c.s. like \'e do not work with XeTeX (OK with XeLaTeX) 22
package in use)	32	Punctation is no longer made ac-
New option SuppressWarning.	34	tive with XeTeX-based engines. 11
\iffXeTeX: Added a new 'if'		Test \@ifundefined leaves the
\FBunicode and some \lccode		tested control sequence de-
definitions to \extrasfrench	11	fined as \relax when TRUE.
and \noextrasfrench v2.4b	11	Changed \relax to \undefined
\FBprocess@options: Warning and		when testing \numprint 24
set flag CompactItemize false		Test \@ifundefined leaves
when the enumitem package is		the tested control sequence
loaded (ensures compatibility).	41	defined as \relax when
v2.4c		TRUE. Changed \relax to \undefined when testing
General: In \ttfamilyFB, also		\pdfstringdefDisableCommands
cancel automatic spaces in-		AtBeginDocument 45
side French guillemets en-		\captionsfrench: \emph deleted in
tered as characters (see		\seename and \alsoname to
$\frac{\temp{frenchbsetup}}{\tem}$	17	match what is done for the
\frenchbsetup: In \ttfamilyFB,		other languages. Suggested by
also cancel automatic spaces		Marc Baudoin 25
inside French guillemets		Replaced \'e, \'e and \'a by c.s.
coded as characters (see	20	to work with XeTeX 25
\frenchbsetup)v2.4d	30	\datefrench: Replaced \'e and \^u
\up: Command \up defined with		by c.s. to work with XeTeX and
\providecommand instead of		LuaTeX 19
\newcommand as \up may be		\frenchbsetup: Test \@ifundefined
defined elsewhere (catalan.ldf).		leaves the tested control se-
Bug pointed out by Felip Manyé		quence defined as \relax
i Ballester	19	when TRUE. Changed
v2.5a		\relax to \undefined when
General: \og and \fg do not print		testing \XeTeXrevision,
correctly in English when us-		\DeclareInputText, \uc@dclc,
ing XeTeX or LuaTeX, fixed		\DeclareUnicodeCharacter,
by using \textquotedblleft		\mule@def in \og and \fg 38
and \textquotedblright de-	10	\textquoteddblright: Change
fined above.	18	\guillemotleft and \guillemotright definitions for Unicode
Define \bbl@nonfrenchspacing locally as \relax, other-		anf provide definitions for
wise the \bbl@frenchspacing		\textquotedblleft and
command included in ger-		\textquotedbright. Insures
manb.ldf is overwritten here by		correct printing of quotes by
\noextrasfrench. Bug pointed		\og and \fg in French and out-
out by Ulrike Fischer	46	side
Define \Fthinspace for those		\up: Test \@ifundefined leaves
who want to customise the		the tested control sequence
width of the space before ; and		defined as \relax when
?	11	TRUE. Changed \relax to
New command \NoAutoSpacing,		\undefined when testing
suggested by MPG	17	\realsuperscript 19

v2.5b	\at, \circonflexe, \tild,	
General: \captionsfrench will be	\boi and \degre for Unicode	
executed 'AtBeginDocument'	based engines	22
after \FBprocess@options, no	\FBtextellipsis: Unicode fonts	
need to add it here	also provide a ready made char-	
Do not use the test	acter for \textellipsis, let's	
\iflanguage{french} to check	just use it (reported by Maxime	
whether French is the main lan-	Chupin, 2011/06/04)	34
guage or not, as it might be	m v2.5g	
be erroneously positive when	General: \FBguill@spacing needs	
English is the main language	to be skipped in commands	
and no hyphenation patterns	\FB@og and \FB@fg only when	
are available for French. In this	XeTeX's "inter char" mecha-	
$\operatorname{case} \ \ \operatorname{l@french} \ \operatorname{and} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	nism is triggered for quotes, see	
are 0. Pointed out by Günter	\frenchbsetup	18
Milde 35,	- 16 · · · · · · · · · · · · · · · · · ·	10
\frenchbsetup: Do not use the test	Add four \newif to control spac-	
\iflanguage{french} to check	ing of quotes (characters and control sequences)	19
whether French is the main lan-		12
guage or not, as it might be	Redefine \degre, \degres \at	
be erroneously positive when	\circonflexe and \tild for	45
English is the main language	bookmarks. Add \fup also	45
and no hyphenation patterns	Skip the message in Plain,	
are available for French. In this	\PackageInfo undefined for	10
$\operatorname{case} \ \ \operatorname{l@french} \ \operatorname{and} \ \ \ \operatorname{l@english} \ \ $		12
are 0. Pointed out by Günter	Switch flags \ifFBog@addspace	
Milde	and \ifFBfg@addspace to true,	
v2.5c	otherwise \og and \fg provide	
\frenchbsetup: The code meant for	no spacing in XeLaTeX with op-	
XeTeX also works for LuaTeX,	tions 'og' and 'fg' activated in	
we just need to change the test.		17
v2.5d	\FB@xetex@punct@french: XeTeX-	
General: Moved the \newcount	charclass(es) for French quotes	
command outside \ifFB@xetex@		
\fi (it broke Plain formats).		
\ifFXeTeX: Added two new 'if'	'og' and 'fg' in \frenchbsetup.	
\FBXeTeX and \FBLuaTeX as Xe-	French quotes should behave as	
TeX and behave differently re-	normal characters by default in	1.0
garding the status of the French	XeLaTeX as in LaTeX	
"apostrophe"		
v2.5e	is true, 'og' and 'fg' options now	
General: \pdfstringdefDisableCom		
should redefine \FB@og and	characters to \FB@punctguilo	
\FB@fg instead of \og and \fg	and \FB@punctguilf. Other-	
so that it works also when	wise French quotes behave as	
quotes are entered as charac-	normal characters (their Xe-	00
ters. Reported by Sébastien	TeXcharclass is 0)	38
Gouezel		
The redefinition of \pdfstringdet		
from \relax to \undefined	\ifFBfg@addspace to true, oth-	
was misplaced. Reported by	erwise \og and \fg provide no	
Sébastien Gouezel	-F	
v2.5f	tions 'og' and 'fg' activated in	1.7
General: Changed definitions of	\frenchbsetup (bug v. $2.5a-f$ ).	1 (

v2.5h	merate packages 41
\degres: textcomp.sty has	Flag CompactItemize depre-
changed. The test about	cated. Set flags StandardItem-
\M@TS1 is no longer relevant,	izeEnv and StandardEnumer-
let's change it 23	ateEnv to true when the enu-
v2.5i	mitem package is loaded 41
General: Temporary fix: as long	\FrenchLabelItem: defaults to
as xeCJK.sty will not use	\textemdash instead of
\newXeTeXintercharclass to	\textendash up to v. 2.5k 29
allocate its classes, we will have	v2.6b
to define 3 fake classes 13	\descriptionFB: Settings of
\FB@xetex@punct@french: xeCJK.sty	\FB@listHsettings should ap-
changes the \XeTeXcharclass	ply to description lists too 31
of ASCII chars '-' ',' '.' ')' ']'	v2.6c
'}' '{' '%' opening and closing	General: Dummy file frenchb.cfg
single and double quotes. We	is no longer generated from
set their class to 0 in French and	frenchb.dtx 9
reset their class to their original	Former \CaptionSeparator
value when leaving French. See	has been renamed as
\FB@xetex@punct@nonfrench	\FBCaption@Separator;
below	\CaptionSeparator and
v2.5j	\CaptionSeparatorORI are
General: Previous fix removed: bug	available for customisation.
fixed in xeCJK.sty version 3.0.4	Newif \if@FBwarning@capsep
(06-May-2012) 13	added 26
v2.5k	No warning about \@makecaption
\FBprocess@options: No warning	for AMS classes 27
if flag CompactItemize already	No warning about \@makecaption
set to false by user 41	for koma-script classes.
v2.6a	\captionformat customised in
General: Bug correction: changing	French
\leftmargin cannot be done	Warning added when the caption
only for itemize-lists: it messes	or floatrow package is loaded
up embedded enumerate lists.	before babel/frenchb 27
Pointed out by Denis Bitouzé.	With koma-script classes, save
Lists have been completely re-	the value of \captionformat
designed in frenchb v. 2.6a. An	in \CaptionSeparatorORI
option for backward compatibil-	NOW, then add the redefi-
ity is provided 28	nitions of \captionformat to
New options ListOldLayout,	\(no)extrasfrench 46
StandardItemizeEnv and Stan-	v2.6d
dardEnumerateEnv (Com-	General: Rename \Fthinspace
pactItemize is deprecated) 34	to \FBthinspace and
\bbl@frenchlabelitems: It	\Fcolonspace to \FBcolonspace
now sets default values	to avoid a conflict with
for \labelwidthFB and	fournier.sty 11
\listindentFB and re-	v2.6e
sets \FrenchLabelItem to	\degres: Refrain from redefining
\textendash when compatibil-	\textdegree from latin1.def,
ity with former versions is re-	applemac.def, etc. as \degres
quested 29	because it loops in hyperref's
\FBprocess@options: Ensure com-	bookmarks. Pointed out by
patibility with paralist and enu-	Eddy Flas on fctt 23