

A Babel language definition file for French

frenchb.dtx v3.5a, 2018/07/06

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Contents

1 The French language	2
1.1 Basic interface	2
1.2 Customisation	5
1.2.1 <code>\frenchsetup</code>	5
1.2.2 Caption names	9
1.2.3 Figure and table captions	10
1.3 Hyphenation checks	10
1.4 Changes	11
2 The code	14
2.1 Initial setup	14
2.2 Punctuation	17
2.2.1 Punctuation with LuaTeX	20
2.2.2 Punctuation with XeTeX	30
2.2.3 Punctuation with standard (pdf)TeX	33
2.2.4 Punctuation switches common to all engines	35
2.3 Commands for French quotation marks	36
2.4 Date in French	40
2.5 Extra utilities	41
2.6 Formatting numbers	45
2.7 Caption names	47
2.8 Figure and table captions	48
2.9 Dots...	51
2.10 More checks about packages' loading order	52
2.11 Setup options: keyval stuff	53
2.12 French lists	67
2.13 French indentation of sections	72
2.14 Formatting footnotes	72
2.15 Clean up and exit	76
2.16 Files frenchb.ldf, francais.ldf, canadien.ldf and acadian.ldf	76
3 Change History	79

1 The French language

The file `frenchb.dtx`¹, 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 (May 1996) as part of babel-3.6beta. Version 2.0a was released in February 2007 and version 3.0a in February 2014.

babel-french has been improved using helpful suggestions from many people, mainly from Jacques André, Michel Bovani, Thierry Bouche, Vincent Jalby, Denis Bitouzé and Ulrike Fisher. Thanks to all of them!

LaTeX-2.09 is no longer supported. This new version (3.x) has been designed to be used only with LaTeX2e and Plain formats based on TeX, pdfTeX, LuaTeX or XeTeX engines.

Changes between version 3.0 and v3.5a are listed in subsection 1.4 p. 11.

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 ‘high punctuation’ (: ; ! ?) in French, others modify the general layout (i.e. layout of lists, footnotes, indentation of first paragraphs of sections) and should apply to the whole document.

The French language can be loaded with babel by a command like:

```
\usepackage[german,spanish,french,british]{babel}
```

²

babel-french takes account of babel’s *main language* defined as the *last* option at babel’s loading. When French is not babel’s main language, babel-french does not alter the general 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 babel-french.

When French is loaded as the last option of babel, babel-french makes the following changes to the global layout, *both in French and in all other languages*³:

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 `\frenchsetup{}` (see section 1.2 p. 5);
3. vertical spacing in general LaTeX lists is shortened;
4. footnotes are displayed “à la française”.

¹The file described in this section has version number v3.5a and was last revised on 2018/07/06.

²Always use `french` as option name for the French language, former aliases `frenchb` or `français` are *deprecated*; expect them to be removed sooner or later!

³For each item, hooks are provided to reset standard LaTeX settings or to emulate the behavior of former versions of babel-french (see command `\frenchsetup{}`, section 1.2 p. 5).

5. the separator following the table or figure number in captions is printed as ‘ – ’ instead of ‘: ’; for changing this see [1.2.3 p. 10](#).

Regarding local typography, the command `\selectlanguage{french}` switches to the French language⁴, with the following effects:

1. French hyphenation patterns are made active;
2. ‘high punctuation’ characters (: ; ! ?) automatically add correct spacing⁵ in French; this is achieved using callbacks in Lua(La)TeX or ‘XeTeXinterchar’ mechanism in Xe(La)TeX; with TeX’82 and pdf(La)TeX these four characters are made active in the whole document;
3. `\today` prints the date in French;
4. the caption names are translated into French (LaTeX only). For customisation of caption names see section [1.2.2 p. 9](#).
5. the space after `\dots` is removed in French.

Some commands are provided by `babel-french` to make typesetting easier:

1. French quotation marks can be entered using the commands `\og` and `\fg` which work in LaTeX2e and PlainTeX, their appearance depending on what is available to draw them; even if you use LaTeX2e *and* T1-encoding, you should refrain from entering them as `<<~French quotation~>>`: `\og` and `\fg` provide better horizontal spacing (controlled by `\FBguillspace`). If French quote characters are available on your keyboard, you can use them, to get proper spacing in LaTeX2e see option `og=«, fg=»` p. 8.

`\og` and `\fg` can be used outside French, they typeset then English quotes “ and ”.

A new command `\frquote{}` has been added in version 3.1 to enter French quotations. `\frquote{texte}` is equivalent to `\og texte \fg{}` for short quotations. For quotations spreading over more than one paragraph, `\frquote` will add at the beginning of every paragraph of the quotation either an opening French guillemet («), or a closing one (») or nothing depending on option `EveryParGuill=open` or `=close` or `=none`, see p. 8.

`\frquote` is recommended to enter embedded quotations “à la française”, several variants are provided through options.

- with all engines: the inner quotation is surrounded by double quotes (“*texte*”) unless option `InnerGuillSingle=true`, then a) the inner quotation is printed as `< texte >` and b) if the inner quotation spreads over more than one paragraph, every paragraph included in the inner quotation starts with a `<` or a `>` or nothing, depending on option `EveryParGuill=open` (default) or `=close` or `=none`.

⁴ `\selectlanguage{français}` and `\selectlanguage{frenchb}` are no longer supported.

⁵ Well, the automatic insertion may add unwanted spaces in some cases, for correction see `AutoSpacePunctuation` option and `\NoAutoSpacing` command p. 7.

- with LuaTeX based engines, it is possible to add a French opening or closing guillemet (« or ») at the beginning of every line of the inner quotation using option `EveryLineGuill=open` or `=close`; note that with any of these options, the inner quotation is surrounded by French guillemets (« and ») regardless option `InnerGuillSingle`; the default is `EveryLineGuill=none` so that `\frquote{}` behaves as with non-LuaTeX engines.

A starred variant `\frquote*` is meant for inner quotations which end together with the outer one: using `\frquote*` for the inner quotation will print only one closing quote character (the outer one) as recommended by the French ‘Imprimerie Nationale’.

2. `\frenchdate{<year>}{<month>}{<day>}` helps typesetting dates in French: `\frenchdate{2001}{01}{01}` will print 1^{er} janvier 2001 in a box without any linebreak.
3. 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`, `\iers`, `\ieres`, `\ieme`, `\iemes` (`3\iemes` prints 3^{es}). All these commands take advantage of real superscript letters when they are available in the current font.
4. Family names should be typeset in small capitals and never be hyphenated, the macro `\bsc` (boxed small caps) does this, e.g., `L.\bsc{Lamport}` will print the same as `L.\mbox{\textsc{Lamport}}`. Note that composed names (such as Dupont-Durant) may now be hyphenated on explicit hyphens, this differs from babel-french v. 1.x.
5. Commands `\primo`, `\secundo`, `\tertio` and `\quarto` print 1^o, 2^o, 3^o, 4^o. `\FrenchEnumerate{6}` prints 6^o.
6. Abbreviations for “Numéro(s)” and “numéro(s)” (N^o N^{os} n^o and n^{os}) are obtained via the commands `\No`, `\Nos`, `\no`, `\nos`.
7. 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 a non-breaking space), or for alcohols” strengths (e.g., “45\degres” with *no* space in French).
8. 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 T_EXbook p. 134). The command `\DecimalMathComma` makes the comma behave as an ordinary character *when the current language is French* (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 in French.
The `icomma` package is an alternative workaround.
9. 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.

10. `babel-french` 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 '1^{er} juin' (no need for a forced space after `1\ier`).

1.2 Customisation

Customisation of `babel-french` relies on command `\frenchsetup{}` (formerly called `\frenchbsetup{}`, the latter name will be kept for ever to ensure backwards compatibility), options are entered using the `keyval` syntax. The command `\frenchsetup{}` is to appear in the preamble only (after loading `babel`).

1.2.1 `\frenchsetup{options}`

`\frenchsetup{}` and `\frenchbsetup{}` are synonymous; the latter should be preferred as the language name for French in `babel` is no longer `frenchb` but `french`.

`\frenchsetup{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 braces, sometimes followed by a `'*'`. The `'*'` means that the default shown applies when `babel-french` is loaded as the *last* option of `babel` —`babel`'s *main language*—, and is toggled otherwise.

`StandardLayout=true (false*)` forces `babel-french` 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 can be used to avoid conflicts with classes or packages which customise lists or footnotes.

When French is not the main language, `StandardLayout=false` can be misused to ensure French typography (in French only). This is a *bad practice*: the document layout should not be altered by language switches.

`GlobalLayoutFrench=false (true*)` should no longer be used; it was intended to emulate, when French is the main language, what prior versions of `babel-french` (pre-2.2) did: lists, and first paragraphs of sections would 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`).

`IndentFirst=false (true*)` ; set this option to `false` if you do not want `babel-french` to force indentation of the first paragraph of sections. When French is the main language, this option applies to all languages.

`PartNameFull=false (true)` ; when true, babel-french numbers the title of `\part{}` commands as “Première partie”, “Deuxième partie” and so on. With some classes which change the `\part{}` command (AMS classes do so), you could get “Première partie 1”, “Deuxième partie 2” in the toc; when this occurs, this option should be set to `false`, part titles will then be printed as “Partie I”, “Partie II”.

`ListItemsAsPar=true (false)` setting this option to `true` is recommended: list items will be displayed as paragraphs with indented labels (in the “Imprimerie Nationale” way) instead of having labels hanging into the left margin. How these two layouts differ is shown below:

Text starting at ‘parindent’
 \leq Leftmargin

- first item running on two lines or more. . .
- first second level item on two lines. . .
- next one. . .
- second item. . .

Default French layout

Text starting at ‘parindent’
 \leq Leftmargin

- first item running on two lines or more. . .
- first second level item on two lines. . .
- next one. . .
- second item. . .

With `ListItemsAsPar=true`

`ReduceListSpacing=false (true*)` ; babel-french 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 the `list` environment.

`StandardItemizeEnv=true (false*)` ; babel-french redefines the `itemize` environment to suppress any vertical space between items of `itemize` lists in French and customises left margins. Setting this option to `true` reverts to the standard definition of `itemize`.

`StandardEnumerateEnv=true (false*)` ; starting with version 2.6 babel-french redefines the `enumerate` and `description` environments to make left margins match those of the French version of `itemize` lists. Setting this option to `true` reverts to the standard definition of `enumerate` and `description`.

`StandardItemLabels=true (false*)` when set to `true` this option prevents babel-french from changing the labels in `itemize` lists in French.

`ItemLabels=\textbullet, \textendash, \ding{43},...(\textemdash*)` ; when `StandardItemLabels=false` (the default), this option enables to choose the label used in French `itemize` lists for all levels. The next four options do the same but each one for a specific level only. Note that the example `\ding{43}` requires `\usepackage{pifont}`.

`ItemLabeli=\textbullet, \textendash, \ding{43},...(\textemdash*)`

`ItemLabelii=\textbullet, \textendash, \ding{43},...(\textemdash*)`

`ItemLabeliii=\textbullet, \textendash, \ding{43},...(\textemdash*)`

`ItemLabeliv=\textbullet, \textendash, \ding{43},...(\textemdash*)`

`StandardLists=true (false*)` forbids babel-french 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 setting all four options `ReduceListSpacing=false`, `StandardItemizeEnv=true`, `StandardEnumerateEnv=true` and `StandardItemLabels=true`.

`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*)` ; is kept only for backward compatibility, it is replaced by `StandardItemizeEnv` and `StandardEnumerateEnv`.

`FrenchFootnotes=false (true*)` reverts to the standard layout of footnotes. By default babel-french typesets leading numbers as '1. ' instead of '1', but has no effect on footnotes numbered with symbols (as in the `\thanks` command). Two commands `\StandardFootnotes` and `\FrenchFootnotes` are available to change the layout of footnotes locally; `\StandardFootnotes` can help when some footnotes are numbered with letters (inside minipages for instance).

`AutoSpaceFootnotes=false (true*)` ; by default babel-french 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).

`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 babel-french is to automatically typeset non-breaking spaces the width of which is either `\FBthinspace` (defaults to a thin space) before ' ; ' ! ' ? ' or `\FBcolonspace` (defaults to `\space`) before ' : ' ; the defaults follow the French 'Imprimerie Nationale's recommendations. This is convenient in most cases but can lead to addition of spurious spaces in URLs, in MS-DOS paths or in timetables (10:55) —this no longer occurs with LuaTeX—, except if they are typed in `\texttt` or verbatim mode. When the current font is a monospaced (typewriter) font, no spurious space is added in that case ⁶, so the default behaviour of of babel-french in that area should be fine in most circumstances.

Choosing `AutoSpacePunctuation=false` will ensure that a proper space is added before ' : ; ! ? ' *if and only if* a (normal) space has been typed in. This option gives full control on space insertion before ' : ; ! ? '. Those who are unsure about their typing in this area should stick to the default option and use the provided `\NoAutoSpacing` command inside a group in case an unwanted space is added by babel-french (i.e.

⁶Unless option `OriginalTypewriter` is set, `\ttfamily` is redefined in French to switch off space tuning, see below.

`{\NoAutoSpacing http://mysite}`⁷ or `{\NoAutoSpacing ???}` (needed for pdfTeX only).

`ThinColonSpace=true (false)` changes the inter-word non-breaking space added before the colon ‘:’ to a thin space, so that the same amount of space is added before any of the four ‘high punctuation’ characters. The default setting is supported by the French ‘Imprimerie Nationale’.

`OriginalTypewriter=true (false)` prevents any customisation of `\ttfamily` and `\texttt{}` in French. This option should only be used to ensure backward compatibility. The current default behaviour is to switch off any addition of space before high punctuation with typewriter fonts (e.g. verbatim).

`UnicodeNoBreakSpaces=true (false)` ; (experimental) this option should be set to `true` *only while converting LuaLaTeX files* to HTML. It ensures that non-breaking spaces added by babel-french are inserted in the PDF file as U+A0 or U+202F (thin) instead of penalties and glues. Note that `lwarp` (v. 0.37 and up) is fully compatible with babel-french for translating PDFLaTeX or XeLaTeX files to HTML.

`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 babel-french 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 works with LuaLaTeX and XeLaTeX; with pdfLaTeX it requires `inputenc` to be loaded with a proper encoding: 8-bits encoding (latin1, latin9, ansinew, applemac, ...) or multi-byte encoding (utf8, utf8x).

`INGuillSpace=true (false)` resets the dimensions of spaces after opening French quotes and before closing French quotes to the French ‘Imprimerie Nationale’ standards (inter-word space). babel-french’s default setting produces slightly narrower spaces with less stretchability.

`EveryParGuill=open, close, none (open)` ; sets whether an opening quote (`«`) or a closing one (`»`) or nothing should be printed by `\frquote{}` at the beginning of every paragraph included in a level 1 (outer) quotation. This option is also considered for level 2 (inner) quotations to decide between `<` and `>` when `InnerGuillSingle=true` (see below).

`EveryLineGuill=open, close, none (none)` ; with LuaTeX based engines *only*, it is possible to set this option to `open` [resp. `close`]; this ensures that a ‘`«`’ [resp. ‘`»`’] followed by a proper space will be inserted at the beginning of every line of embedded (inner) quotations spreading over more than one line (provided that both outer and inner quotations are entered with `\frquote{}`). When `EveryLineGuill=open` or `=close` the inner quotation is always surrounded by `«` and `»`, the next option is ineffective.

⁷Actually, this is needed only with the XeTeX and pdfTeX engines. LuaTeX no longer inserts any space in strings like `http://mysite, C:\Foo, 10:55...`

`InnerGuillSingle=true (false)` ; if `InnerGuillSingle=false` (default), inner quotations entered with `\frquote{}` start with “ and end with ”. If `InnerGuillSingle=true`, < and > are used instead of British double quotes; moreover if option `EveryParGuill=open` (or `close`) is set, a < (or >) is added at the beginning of every paragrah included in the inner quotation.

`ThinSpaceInFrenchNumbers=true (false)` ; if `numprint` has been loaded with the `autolanguage` option, while typesetting numbers with the `\numprint{}` command, `\npthousandsep` is defined as a non-breaking space (~) ⁸ in French; when set to true, this option redefines `\npthousandsep` as a thin space (`\,`).

`SmallCapsFigTabCaptions=false (true*)` ; when set to `false`, `\figurename` and `\tablename` will be printed in French captions as “Figure” and “Table” instead of being printed in small caps (the default).

`CustomiseFigTabCaptions=false (true*)` ; when `false` the default separator (colon) is used instead of `\CaptionSeparator`. Anyway, `babel-french` tries hard to insert a proper space before it and warns if it fails to do so.

`OldFigTabCaptions=true (false)` is to be used when figures’ and tables’ captions must be typeset as with pre 3.0 versions of `babel-french` (with `\CaptionSeparator` in French and colon otherwise). Intended for standard LaTeX classes only.

`FrenchSuperscripts=false (true)` ; then `\up=\textsuperscript`. (option added in version 2.1). Should only be made `false` to recompile documents written before 2008 without changes: by default `\up` now relies on `\fup` designed to produce better looking superscripts.

`LowercaseSuperscripts=false (true)` ; by default `babel-french` inhibits the uppercasing of superscripts (for instance when they are moved to page headers). Making this option `false` will disable this behaviour (not recommended).

`SuppressWarning=true (false)` ; can be turned to `true` if you are bored with `babel-french`’s warnings; use this option as *first* option of `\frenchsetup{}` to cancel warnings launched by other options.

Options’ order – Please remember that options are read in the order they appear in the `\frenchsetup{}` command. Someone wishing that `babel-french` leaves the layout of lists and footnotes untouched but caring for indentation of first paragraph of sections should choose `\frenchsetup{StandardLayout,IndentFirst}` to get the expected layout. The reverse order `\frenchsetup{IndentFirst,StandardLayout}` would lead to option `IndentFirst` being overwritten by `StandardLayout`.

1.2.2 Caption names

All caption names can easily be customised in French using the simplified syntax introduced by `babel 3.9`, for instance `\def\frenchproofname{Preuve}` or

⁸Actually without stretch nor shrink.

`\def\acadianproofname{Preuve}` for the acadian dialect. The older syntax `\addto\captionsfrench{\def\proofname{Preuve}}` still works. Keep in mind that *only* french can be used to redefine captions, even if babel's option was entered as frenchb or francais.

1.2.3 Figure and table captions

In French, captions in figures and tables should never be printed as 'Figure 1: ' which is the default in standard LaTeX2e classes (a space should *always* precede a colon in French), anyway 'Figure 1 – ' is preferred.

When French is the main language, the default behaviour of babel-french is to change the separator (colon) used in figures' and tables' captions *for all languages* to `\CaptionSeparator` which defaults to ' – ' and can be redefined in the preamble with `\renewcommand*{\CaptionSeparator}{...}`. This works for the standard LaTeX2e classes, for the memoir and koma-script classes. In case this procedure fails a warning is issued.

When French is not the main language, the colon is preserved for all languages including French but babel-french tries hard to insert a proper space before it and warns if it fails to do so.

Three options are provided to customise figure and table captions:

- if `CustomiseFigTabCaptions` is set to `false` the colon will be used as separator in all languages, with a proper space before the colon in French (if possible);
- the second option, `OldFigTabCaptions`, can be set to `true` to print figures' and tables' captions as they were with versions pre 3.0 of babel-french (using `\CaptionSeparator` in French and colon in other languages); this option only makes sense with the standard LaTeX classes article, report and book;
- the last option, `SmallCapsFigTabCaptions`, can be set to `false` to typeset `\figurename` and `\tablename` in French as "Figure" and "Table" rather than in small caps (the default).

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 LaTeX2e I suggest this:

- run pdfLaTeX on 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 Macintoshes, or utf8...

```
%%% Test file for French hyphenation.
\documentclass[french]{article}
\usepackage[my-encoding]{inputenc}
\usepackage[T1]{fontenc} % Use LM fonts
\usepackage{lmodern}      % for French
\usepackage{babel}
\begin{document}
```

```
\showhyphens{signal container \’ev\’enement alg\’ebre}
\showhyphens{signal container événement algèbre}
\end{document}
```

- check the hyphenations proposed by T_EX 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.

1.4 Changes

What’s new in version 3.5?

Version 3.5a offers a new option `ListItemsAsPar`. The default layout of lists is unchanged (for backward compatibility), but users should try this new option which ensures a layout of lists closer to French typographic standards: see f.i. how lists are typeset in the book “Lexique des règles typographiques en usage à l’Imprimerie Nationale”.

What’s new in version 3.4?

Version 3.4a adds a new command `\frenchdate` (see p. 40) and slightly changes number formatting: `\FBthousandsep` is now a *kern* instead of a rubber length. `\renewcommand*{\FBthousandsep}{~}` will switch back to the former (wrong) behaviour.

Both options `french` and `acadian` can now be used simultaneously in a document; currently `french` and `acadian` are identical, it is up to the user to customise `acadian` in terms of hyphenation patterns, captionnames, date format or high punctuation and quotes spacing if he/she needs a variant for French.

A new command `\FBsetspaces` has been added for easy customising of spacing before high punctuation and inside quotes independently for `french` and `acadian`, see p. 18.

Version 3.4 requires eT_EX and LuaT_EX 1.0.4 or newer.

What’s new in version 3.3?

In version 3.3d the automatic insertion of non-breaking spaces before the colon character has been improved *with engine LuaT_EX only*: a spurious space is no

longer inserted in strings like `http://mysite`, `C:\Program Files` or `10:55`. Unfortunately, my attempts to do the same with XeTeX or pdfTeX were unsuccessful.

A few internal changes have been made in version 3.3c to improve the conversion into HTML of non-breaking spaces added by babel-french. Usage of `lwarp` (v.0.37 and up) is recommended for HTML output, it works fine on files compiled with XeLaTeX or pdfLaTeX formats. A new experimental option `UnicodeNoBreakSpaces` has been added for LuaLaTeX in version 3.3c, see p. 8.

According to current babel's standards, every dialect should have its own `.ldf` file; starting with version 3.3b, the main support for French is in `french.ldf`, portmanteau files `frenchb.ldf`, `francais.ldf`, `acadian.ldf` and `canadien.ldf` have been added. Recommended options are `french` or `acadian`, all other are deprecated. BTW, options `french` and `acadian` are currently strictly identical.

Release 3.3a is compatible with LuaTeX v. 0.95 (TL2016) and up. Former skips `\FBcolonskip`, `\FBthinskip` and `\FBguillskip` controlling punctuation spacings in LuaTeX have been removed; all three engines now rely on the same commands `\FBcolonspace`, `\FBthinspace` and `\FBguillspace`.

An alias `\frenchsetup{}` for `\frenchbsetup{}` has been added in version 3.3a, it might appear more relevant in the future as the language name `frenchb` should vanish.

Further customisation of the `\part{}` command is provided via three new commands `\frenchpartfirst`, `\frenchpartsecond` and `\frenchpartnameord`.

What's new in version 3.2?

Version 3.2g changes the default behaviour of `\frquote{}` with LuaTeX based engines, the output is now the same with all engines; to recover the former behaviour, add option `EveryLineGuill=open`.

The handling of footnotes has been redesigned for the beamer, memoir and koma-script classes. The layout of footnotes "à la française" should be unchanged but footnotes' customisations offered by these classes (i.e. font or color changes) are now available even when option `FrenchFootnotes` is `true`.

A long standing bug regarding the `xspace` package has been fixed: `\xspace` has been moved up from the internal command `\FB@fg` to `\fg`; `\frquote{}` now works properly when the `xspace` package is loaded.

Version 3.2b is the first one designed to work with LuaTeX v. 0.95 as included in TeXLive 2016 (LuaTeX's new glue node structure is not compatible with previous versions).

Warning to Lua(La)TeX users: starting with version 3.2b the lua code included in `frenchb.lua` will *not work* on older installations (TL2015 f.i.), so babel-french reverts to active characters while handling high punctuation with LuaTeX engines older than 0.95! The best way to go is to upgrade to TL2016 or equivalent asap. Xe(La)TeX and pdf(La)TeX users can safely use babel-french v. 3.2b and later on older installations too.

The internals of commands `\NoAutoSpacing`, `\ttfamilyFB`, `\rmfamilyFB` and `\sffamilyFB` have been completely redesigned in version 3.2c, they behave now consistently with all engines.

What's new in version 3.1?

New command `\frquote{}` meant to enter French quotations, especially long ones (spreading over several paragraphs) and/or embedded ones. see p. 3 for details.

What's new in version 3.0?

Many deep changes lead me to step babel-french's version number to 3.0a:

- babel 3.9 is required now to process `frenchb.ldf`, this change allows for cleaner definitions of dates and captions for the Unicode engines LuaTeX and XeTeX and also provides a simpler syntax for end-users, see section 1.2.2 p.9.
- `\frenchsetup{}` options management has been completely reworked; two new options added.
- Canadian French didn't work as a normal babel's dialect, it should now; btw. the French language should now be loaded as `french`, *not as* `frenchb` or `français` and preferably as a *global* option of `\documentclass`. Some tolerance still exists in v3.0, but do not rely on it.
- babel-french no longer loads `frenchb.cfg`: customisation should definitely be done using `\frenchsetup{}` options.
- Description lists labels are now indented; try setting `\descindentFB=0pt` (or `\listindentFB=0pt` for all lists) in the preamble if you don't like it.
- The last but not least change affects the (recent) LuaTeX-based engines, (this means version 0.76 as included in TL2013 and up): active characters are no longer used in French for 'high punctuation'⁹. Functionalities and user interface are unchanged.

Many thanks to Paul Isambert who provided the basis for the lua code (see his presentation at GUT'2010) and kindly reviewed my first drafts suggesting significant improvements.

Please note that this code, still experimental, is likely to change until LuaTeX itself has reached version 1.0.

Starting with version 3.0c, babel-french no longer customises lists with the beamer class and offers a new option (`INGuillSpace`) to follow French 'Imprimerie Nationale' recommendations regarding quotes' spacing.

⁹The current babel-french version requires LuaTeX v. 1.0.4 as included in TL2017, see above.

2 The code

2.1 Initial setup

The macro `\LdfInit` takes care of preventing that this file is loaded more than once (even if both options `french` and `acadian` are used in the same document), checking the category code of the `@` sign, etc.

```
1 <*french>
2 \LdfInit\CurrentOption{FBclean@on@exit}
```

Let's provide a substitute for `\PackageError`, `\PackageWarning` and `\PackageInfo` not defined in Plain:

```
3 \def\fb@error#1#2{%
4   \begingroup
5     \newlinechar='\^^J
6     \def\{\^^J(french.ldf) }%
7     \errhelp{#2}\errmessage{\#\1^^J}%
8   \endgroup}
9 \def\fb@warning#1{%
10  \begingroup
11    \newlinechar='\^^J
12    \def\{\^^J(french.ldf) }%
13    \message{\#\1^^J}%
14  \endgroup}
15 \def\fb@info#1{%
16  \begingroup
17    \newlinechar='\^^J
18    \def\{\^^J}%
19    \wlog{#1}%
20  \endgroup}
```

Quit if eTeX is not available.

```
21 \let\bbl@tempa\relax
22 \begingroup\expandafter\expandafter\expandafter\endgroup
23 \expandafter\ifx\csname eTeXversion\endcsname\relax
24   \let\bbl@tempa\endinput
25   \fb@error{babel-french requires eTeX.\\
26             Aborting here}
27             {Original PlainTeX is not supported,\\
28             please use LuaTeX or XeTeX engines.}
29 \fi
30 \bbl@tempa
```

Quit if babel's version is less than 3.9i.

```
31 \let\bbl@tempa\relax
32 \ifdefined\babeltags
33 \else
34   \let\bbl@tempa\endinput
35   \ifdefined\PackageError
36     \PackageError{french.ldf}
37     {babel-french requires babel v.3.16.\MessageBreak
```

```

38         Aborting here}
39         {Please upgrade Babel!}
40     \else
41         \fb@error{babel-french requires babel v.3.16.\\
42             Aborting here}
43         {Please upgrade Babel!}
44     \fi
45 \fi
46 \bbl@tempa

```

Make sure that `\l@french` is defined (fallbacks are `\l@nohyphenation` if available or 0). `babel.def` (3.9i and up) defines `\l@<language>` also for eTeX, LuaTeX and XeTeX formats which set `\lang@<language>`.

```

47 \def\FB@nopatterns{%
48     \ifdefined\l@nohyphenation
49         \addialect\l@french\l@nohyphenation
50         \edef\bbl@nulllanguage{\string\language=nohyphenation}%
51     \else
52         \edef\bbl@nulllanguage{\string\language=0}%
53         \addialect\l@french0
54     \fi
55     \@nopatterns{French}}
56 \ifdefined\l@french \else \FB@nopatterns \fi

```

Babel's French language can be loaded with option `acadian` which stands for Canadian French. If no specific hyphenation patterns are available, Canadian French will use the French ones.

```

57 \ifdefined\l@acadian \else \addialect\l@acadian\l@french \fi

```

French uses the standard values of `\lefthyphenmin` (2) and `\righthyphenmin` (3); let's provide their values though, as required by babel.

```

58 \providehyphenmins{french}{\tw@\thr@@}
59 \providehyphenmins{acadian}{\tw@\thr@@}

```

\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.

```

60 \newif\ifLaTeXe
61 \let\bbl@tempa\relax
62 \ifdefined\magnification
63 \else
64     \ifdefined\@compatibilitytrue
65         \LaTeXtrue
66     \else
67         \PackageError{french.ldf}
68             {LaTeX-2.09 format is no longer supported.\MessageBreak
69             Aborting here}
70         {Please upgrade to LaTeX2e!}
71     \let\bbl@tempa\endinput
72 \fi
73 \fi
74 \bbl@tempa

```

\ifFBunicode French hyphenation patterns are now coded in Unicode, see file `hyph-fr.tex`. XeTeX and LuaTeX engines require some extra code to deal with the French “apostrophe”.
\ifBLaTeX Let’s define three new ‘if’: `\ifBLaTeX`, `\ifBTeX` and `\ifBUnicode` which will be true for XeTeX and LuaTeX engines and false for 8-bits engines.

```

75 \newif\ifBUnicode
76 \newif\ifBLaTeX
77 \newif\ifBTeX
78 \begingroup\expandafter\expandafter\expandafter\endgroup
79 \expandafter\ifx\csname luatexversion\endcsname\relax
80 \else
81   \BUnicodetrue \BLaTeXtrue
82 \fi
83 \begingroup\expandafter\expandafter\expandafter\endgroup
84 \expandafter\ifx\csname XeTeXrevision\endcsname\relax
85 \else
86   \BUnicodetrue \BTeXtrue
87 \fi

```

\ifBFrench True when the current language is French or any of its dialects; will be set to true by `\extrasfrench` and to false by `\noextrasfrench`. Used in `\DecimalMathComma` and `frenchsetup{og=«, fg=»}`.

```

88 \newif\ifBFrench

```

\extrasfrench 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 *l’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.

The following code ensures correct hyphenation of words like *d’aventure*, *l’utopie*, with all TeX engines (XeTeX, LuaTeX, pdfTeX) using `hyph-fr.tex` patterns.

```

89 \def\extrasfrench{%
90   \BFrenchtrue
91   \babel@savevariable{\lccode'\'}%
92   \ifBUnicode
93     \babel@savevariable{\lccode"2019}%
94     \lccode'\'"2019\lccode"2019="2019
95   \else
96     \lccode'\'"'\
97   \fi
98 }
99 \def\noextrasfrench{\BFrenchfalse}

```

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

```

100 \addto\extrasfrench{\bbl@frenchspacing}
101 \addto\noextrasfrench{\bbl@nonfrenchspacing}

```


2.2 Punctuation

As long as no better solution is available, the ‘high punctuation’ characters (; ! ? and :) have to be made \active for an automatic control of the amount of space to be inserted before them. Both XeTeX and LuaTeX provide an alternative to active characters (‘XeTeXinterchar’ mechanism and LuaTeX’s callbacks).

\ifFB@active@punct Three internal flags are needed for the three different techniques used for ‘high punctuation’ management.

```
102 \newif\ifFB@active@punct \FB@active@puncttrue
```

\ifFB@luatex@punct With LuaTeX, starting with version 1.0.4, callbacks are used to get rid of active punctuation. With previous versions, ‘high punctuation’ characters remain active (see below).

```
103 \newif\ifFB@luatex@punct
104 \ifBLaTeX
105   \ifnum\luatexversion<100
106     \ifx\PackageWarning\@undefined
107       \fb@warning{Please upgrade LuaTeX to version 1.0.4 or above!\\%
108         babel-french will make high punctuation characters (;!?)\\%
109         active with LuaTeX < 1.0.4.}%
110     \else
111       \PackageWarning{french.ldf}{Please upgrade LuaTeX
112         to version 1.0.4 or above!\MessageBreak
113         babel-french will make high punctuation characters%
114         \MessageBreak (;!?) active with LuaTeX < 1.0.4;%
115         \MessageBreak reported}%
116     \fi
117   \else
118     \FB@luatex@puncttrue\FB@active@punctfalse
119   \fi
120 \fi
```

\ifFB@xetex@punct For XeTeX, the availability of \XeTeXinterchartokenstate decides whether the ‘high punctuation’ characters (; ! ? and :) have to be made \active or not. The number of available character classes has been increased from 256 to 4096 in XeTeX v. 0.99994, the class for non-characters is now 4095 instead of 255.

```
121 \newcount\FB@nonchar
122 \newif\ifFB@xetex@punct
123 \ifdefined\XeTeXinterchartokenstate
124   \FB@xetex@puncttrue\FB@active@punctfalse
125   \ifdim\the\XeTeXversion\XeTeXrevision pt<0.99994pt
126     \FB@nonchar=255 \relax
127   \else
128     \FB@nonchar=4095 \relax
129   \fi
130 \fi
```

\FBguillspace These three commands are meant for basic French. Other French dialects can use
\FBcolonspace different settings, see below. According to the I.N. specifications, the ‘:’ requires
\FBthinspace

an inter-word space before it, the other three require just a thin space. We define `\FBcolonspace` as `\space` (inter-word space) and `\FBthinspace` as an half inter-word space with no shrink nor stretch. `\FBguillspace` is defined btw. as spacing for French quotes is handled together with high punctuation for LuaTeX and XeTeX. `\FBguillspace` has been fine tuned by Thierry Bouche to 80% of an inter-word space with reduced stretchability. All three are user customisable in the preamble, best using the `\FBsetspaces` command described below. A penalty will be added before these spaces to prevent line breaking.

```

131 \newcommand*{\FBguillspace}{\hskip .8\fontdimen2\font
132                               plus .3\fontdimen3\font
133                               minus .8\fontdimen4\font \relax}
134 \newcommand*{\FBcolonspace}{\space}
135 \newcommand*{\FBthinspace}{\hskip .5\fontdimen2\font \relax}

```

\FBsetspaces This command makes it easy to fine tune `\FBguillspace`, `\FBcolonspace` and `\FBthinspace` in French (default) or independently in a French dialect using the optional argument. They are meant for LaTeX2e *only* and can only be used in the preamble. Four mandatory arguments are expected besides the optional one: the first one is a *string* either "guill", "colon", or "thin", the last four are decimal numbers specifying *width*, *stretch* and *shrink* relative to *fontdimens*. For instance `\FBsetspaces[acadian]{colon}{0.5}{0}{0}` defines `\acadianFBcolonspace` as a thinspace which will be used for the Acadian dialect only. When used without optional argument or with argument 'french', the same command would tune the basic `\FBcolonspace` command.

```

136 \ifLaTeXe
137   \newcommand*{\FBsetspaces}[5][french]{%
138     \def\bbl@tempa{french}\def\bbl@tempb{#1}%
139     \ifx\bbl@tempa\bbl@tempb \def\bbl@tempb{}\fi
140     \@namedef{\bbl@tempb FB#2space}{\hskip #3\fontdimen2\font
141                                     plus #4\fontdimen3\font
142                                     minus #5\fontdimen4\font \relax}%

```

With option "acadian", fill the corresponding LuaTeX table. All unset values in the "acadian" subtables will be filled 'AtBeginDocument' by `\set@glue@table` with the value available for "french".

```

143   \ifFB@luatex@punct
144     \ifx\bbl@tempb\FB@acadian
145       \directlua{
146         FBsp.#2.gl.ac[1] = #3
147         FBsp.#2.gl.ac[2] = #4
148         FBsp.#2.gl.ac[3] = #5
149         if #3 > 0.6 then
150           FBsp.#2.ch.ac = 0xA0
151         elseif #3 > 0.2 then
152           FBsp.#2.ch.ac = 0x202F
153         else
154           FBsp.#2.ch.ac = 0x200B
155         end
156       }%

```

```

157     \fi
158     \fi
159   }
160   \@onlypreamble\FBsetspace
161 \fi

```

Remember that the *same* `\extrasfrench` command is executed when switching to French or to a French dialect (Acadian). Acadian and French may share the same patterns (or not), and may use different spacing for high punctuation and/or quotes. Basically, for pdfLaTeX and XeLaTeX, the spacing is set for French, then potentially tuned differently for Acadian. LuaTeX relies on an attribute `\FB@dialect` to decide what spacing is needed for French or Acadian (see LuaTeX table `FBsp`). As a rough test on `\language` would be unreliable to set the value of `\FB@dialect` (see `babel.pdf`), we use a trick based on `\detokenize`; another option would be to use the `\IfLanguageName` command from Oberdiek's package `iflang`.

```

162 \ifLaTeXe
163   \addto\extrasfrench{%
164     \ifFB@luatex@punct
165       \edef\bbl@tempa{\detokenize\expandafter{\language}}%
166       \edef\bbl@tempb{\detokenize{french}}%
167       \ifx\bbl@tempa\bbl@tempb \FB@dialect=0 \relax
168       \else                    \FB@dialect=1 \relax
169     \fi

```

The first time we enter French, we have to set the LuaTeX tables for French (`\FB@dialect=0`) *before* any dialect redefines any `\FB...` space command. Doing this 'AtBeginDocument' would be too late: if French or a French dialect is the main language, `\extrasfrench` has been executed before!

```

170     \ifdefined\FB@once\else
171       \set@glue@table{colon}%
172       \set@glue@table{thin}%
173       \set@glue@table{guill}%
174       \def\FB@once{}%
175     \fi
176   \fi

```

Any dialect dependent customisation done using `\FBsetspace[dialect]` command or alike is now taken into account: the value of `\FBthinspace` (meant for French, i.e. `\FB@dialect=0`) is first saved then changed (for Acadian).

```

177   \ifcsname\language FBthinspace\endcsname
178     \babel@save\FBthinspace
179     \renewcommand*{\FBthinspace}{%
180       \csname\language FBthinspace\endcsname}%
181   \fi

```

Same for `\FBcolonspace`:

```

182   \ifcsname\language FBcolonspace\endcsname
183     \babel@save\FBcolonspace
184     \renewcommand*{\FBcolonspace}{%
185       \csname\language FBcolonspace\endcsname}%
186   \fi

```

And for `\FBguillspace`:

```
187 \ifcslname\language FBguillspace\endcsname
188 \babel@save\FBguillspace
189 \renewcommand*{\FBguillspace}{%
190     \cslname\language FBguillspace\endcsname}%
191 \fi
192 }
193 \fi
```

The conditional `\ifFB@spacing` will be used by pdfTeX and XeTeX engines to switch on or off space tuning before high punctuation and inside French quotes. A matching attribute will be defined later for LuaTeX.

```
194 \newif\ifFB@spacing \FB@spacingtrue
```

`\FB@spacing@off` Two internal commands to switch on and off all space tuning for all six characters
`\FB@spacing@on` ‘;:!?«»’. They will be triggered by user command `\NoAutoSpacing` and by font family switching commands `\ttfamilyFB` `\rmfamilyFB` and `\sffamilyFB`. These four commands will now behave the same with any engine (up to version 3.2b, results were engine dependent).

```
195 \newcommand*{\FB@spacing@on}{%
196     \ifFB@luatex@punct
197         \FB@spacing=1 \relax
198     \else
199         \FB@spacingtrue
200     \fi}
201 \newcommand*{\FB@spacing@off}{%
202     \ifFB@luatex@punct
203         \FB@spacing=0 \relax
204     \else
205         \FB@spacingfalse
206     \fi}
```

2.2.1 Punctuation with LuaTeX

The following part holds specific code for punctuation with modern LuaTeX engines, i.e. version 1.0.4 (included in TL2017) or newer.

```
207 \ifFB@luatex@punct
208     \ifdefined\newluafunction\else
```

This code is for Plain: load `ltxluatex.tex` if it hasn’t been loaded before babel.

```
209     \input ltxluatex.tex
210 \fi
```

We define five LuaTeX attributes to control spacing in French and/or Acadian for ‘high punctuation’ and quotes, making sure that `\newattribute` is defined.

`\FB@spacing=0` switches off any space tuning both before high punctuation characters and inside French quotes (i.e. function `french_punctuation` doesn’t alter the node list at all).

`\FB@addDPspace=0` switches off automatic insertion of spaces before high punctuation characters (but typed spaces are still turned into non-breaking thin- or word-spaces).

\FB@addGUILspace will be set to 1 by option `og=«`, `fg=»`, thus enabling automatic insertion of proper spaces after ‘«’ and before ‘»’.

\FB@ucsNBSP triggers the replacement of glues by characters, it is controlled by option `UnicodeNoBreakSpaces`.

\FB@dialect is 0 for French and 1 for Acadian; its value controls which parts of the glue table (`.fr` or `.ac`) are taken into account.

```

211 \newattribute\FB@spacing      \FB@spacing=1 \relax
212 \newattribute\FB@addDPspace  \FB@addDPspace=1 \relax
213 \newattribute\FB@addGUILspace \FB@addGUILspace=0 \relax
214 \newattribute\FB@ucsNBSP     \FB@ucsNBSP=0 \relax
215 \newattribute\FB@dialect     \FB@dialect=0 \relax
216 \ifLaTeXe
217   \PackageInfo{french.ldf}{No need for active punctuation
218     characters\MessageBreak with this version
219     of LuaTeX!\MessageBreak reported}
220 \else
221   \fb@info{No need for active punctuation characters\
222     with this version of LuaTeX!}
223 \fi

```

The next command will be used in the first call of `\extrasfrench` to convert `\FBcolonspace`, `\FBthinspace` and `\FBguillspace` into a table usable by LuaTeX. This way, any customisation done in the preamble (by `\frenchsetup{}`, redefinitions or `\FBsetspace` commands) are taken into account. Values not explicitly set for Acadian by `\FBsetspace[acadian]` commands are copied from the French ones. In case parsing by the Lua function `FBget_glue` (defined in file `frenchb.lua`) fails due to unexpected syntax in `\FB...space` the table remains unchanged and a warning is issued. The matching space characters for option `UnicodeNoBreakSpaces` are set as word space, thin space or null space according to the *width* parameter.

```

224 \newcommand*{\set@glue@table}[1]{%
225   \directlua {
226     local s = token.get_meaning("FB#1space")
227     local t = FBget_glue(s)
228     if t then
229       FBsp.#1.gl.fr = t
230       if not FBsp.#1.gl.ac[1] then
231         FBsp.#1.gl.ac = t
232       end
233       if FBsp.#1.gl.fr[1] > 0.6 then
234         FBsp.#1.ch.fr = 0xA0
235       elseif FBsp.#1.gl.fr[1] > 0.2 then
236         FBsp.#1.ch.fr = 0x202F
237       else
238         FBsp.#1.ch.fr = 0x200B
239       end
240       if not FBsp.#1.ch.ac then
241         FBsp.#1.ch.ac = FBsp.#1.ch.fr
242       end
243     else
244       texio.write_nl('term and log', '')

```

```

245 texio.write_nl('term and log',
246   '*** french.ldf warning: Unexpected syntax in FB#lspace,')
247 texio.write_nl('term and log',
248   '*** french.ldf warning: LuaTeX table FBsp unchanged.')
```

```

249 texio.write_nl('term and log',
250   '*** french.ldf warning: Consider using FBsetspace to ')
251 texio.write('term and log', 'customise FB#lspace.')
```

```

252 texio.write_nl('term and log', '')
253 end
254 }%
255 }
256 \fi
257 </french>
```

frenchb.lua This is frenchb.lua. It holds Lua code to deal with ‘high punctuation’ and quotes. This code is based on suggestions from Paul Isambert. First we define two flags to control spacing before French ‘high punctuation’ (thin space or inter-word space).

```

258 <lua>
259 local FB_punct_thin =
260   {[string.byte("!")] = true,
261    [string.byte("?")] = true,
262    [string.byte(";")] = true}
263 local FB_punct_thick =
264   {[string.byte(":")] = true}
```

Managing spacing after ‘«’ (U+00AB) and before ‘»’ (U+00BB) can be done by the way; we define two flags, FB_punct_left for characters requiring some space before them and FB_punct_right for ‘«’ which must be followed by some space. In case LuaTeX is used to output T1-encoded fonts instead of OpenType fonts, codes 0x13 and 0x14 have to be added for ‘«’ and ‘»’.

```

265 local FB_punct_left =
266   {[string.byte("!")] = true,
267    [string.byte("?")] = true,
268    [string.byte(";")] = true,
269    [string.byte(":")] = true,
270    [0x14] = true,
271    [0xBB] = true}
272 local FB_punct_right =
273   {[0x13] = true,
274    [0xAB] = true}
```

Two more flags will be needed to avoid spurious spaces in strings like !! ?? or (?)

```

275 local FB_punct_null =
276   {[string.byte("!")] = true,
277    [string.byte("?")] = true,
278    [string.byte("(")] = true,
279    [string.byte("(")] = true,
```

or if the user has typed a non-breaking space U+00A0 or U+202F (thin) before a ‘high punctuation’ character: no space should be added by babel-french. Same is true inside French quotes.

```

280    [0xA0]          = true,
281    [0x202F]        = true}
282 local FB_guil_null =
283    {[0xA0]          = true,
284     [0x202F]        = true}

```

Local definitions for nodes:

```

285 local new_node     = node.new
286 local copy_node    = node.copy
287 local node_id      = node.id
288 local HLIST        = node_id("hlist")
289 local TEMP          = node_id("temp")
290 local KERN          = node_id("kern")
291 local GLUE          = node_id("glue")
292 local GLYPH         = node_id("glyph")
293 local PENALTY       = node_id("penalty")
294 local nobreak       = new_node(PENALTY)
295 nobreak.penalty     = 10000
296 local insert_node_before = node.insert_before
297 local insert_node_after  = node.insert_after
298 local remove_node       = node.remove

```

Commands `\FBthinspace`, `\FBcolonspace` and `\FBguillspace` are converted 'At-BeginDocument' by the next function `FBget_glue` into tables of three values which are fractions of `\fontdimen2`, `\fontdimen3` and `\fontdimen4`. If parsing fails due to unexpected syntax, the function returns *nil* instead of a table.

```

299 function FBget_glue(toks)
300   local t = nil
301   local f = string.match(toks,
302     "[^%w]hskip%s*([%d%.]*)%s*[^%w]fontdimen 2")
303   if f == "" then f = 1 end
304   if tonumber(f) then
305     t = {tonumber(f), 0, 0}
306     f = string.match(toks, "plus%s*([%d%.]*)%s*[^%w]fontdimen 3")
307     if f == "" then f = 1 end
308     if tonumber(f) then
309       t[2] = tonumber(f)
310       f = string.match(toks, "minus%s*([%d%.]*)%s*[^%w]fontdimen 4")
311       if f == "" then f = 1 end
312       if tonumber(f) then
313         t[3] = tonumber(f)
314       end
315     end
316   elseif string.match(toks, "[^%w]F?B?thinspace") then
317     t = {0.5, 0, 0}
318   elseif string.match(toks, "[^%w]space") then
319     t = {1, 1, 1}
320   end
321   return t
322 end

```

Let's initialize the global LuaTeX table `FBsp`: it holds the characteristics of the glues

used in French and Acadian for high punctuation and quotes and the corresponding no-breaking space characters for option [UnicodeNoBreakSpaces](#).

```

323 FBsp = {}
324 FBsp.thin = {}
325 FBsp.thin.gl = {}
326 FBsp.thin.gl.fr = {.5, 0, 0} ; FBsp.thin.gl.ac = {}
327 FBsp.thin.ch = {}
328 FBsp.thin.ch.fr = 0x202F ; FBsp.thin.ch.ac = nil
329 FBsp.colon = {}
330 FBsp.colon.gl = {}
331 FBsp.colon.gl.fr = { 1, 1, 1} ; FBsp.colon.gl.ac = {}
332 FBsp.colon.ch = {}
333 FBsp.colon.ch.fr = 0xA0 ; FBsp.colon.ch.ac = nil
334 FBsp.guill = {}
335 FBsp.guill.gl = {}
336 FBsp.guill.gl.fr = {.8, .3, .8} ; FBsp.guill.gl.ac = {}
337 FBsp.guill.ch = {}
338 FBsp.guill.ch.fr = 0xA0 ; FBsp.guill.ch.ac = nil

```

The next function converts the glue table returned by function `FBget_glue` into `sp` for the current font; beware of null values for `fid`, see `\nullfont` in TikZ, and of special fonts like `lcircle1.pfb` for which `font.getfont(fid)` does not return a proper font table, in such cases the function returns `nil`.

```

339 local font_table = {}
340 local function new_glue_scaled (fid,table)
341   if fid > 0 and table[1] then
342     local fp = font_table[fid]
343     if not fp then
344       local ft = font.getfont(fid)
345       if ft then
346         font_table[fid] = ft.parameters
347         fp = font_table[fid]
348       end
349     end
350     local gl = new_node(GLUE,0)
351     if fp then
352       node.setglue(gl, table[1]*fp.space,
353                     table[2]*fp.space_stretch,
354                     table[3]*fp.space_shrink)
355       return gl
356     else
357       return nil
358     end
359   else
360     return nil
361   end
362 end

```

Let's catch LuaTeX attributes `\FB@spacing`, `\FB@addDPspace` and `\FB@addGUILspace`.

```

363 local FBspacing = luatexbase.attributes['FB@spacing']
364 local addDPspace = luatexbase.attributes['FB@addDPspace']

```



```

365 local addGUILspace = luatexbase.attributes['FB@addGUILspace']
366 local FBucsNBSP    = luatexbase.attributes['FB@ucsNBSP']
367 local FBdialect    = luatexbase.attributes['FB@dialect']
368 local has_attribute = node.has_attribute

```

The following function will be added to kerning callback. It catches all nodes of type GLYPH in the list starting at head and checks the language attributes of the current glyph: nothing is done if the current language is not French and only specific punctuation characters (those for which FB_punct_left or FB_punct_right is true) need a special treatment. In French, local variables are defined to hold the properties of the current glyph (item) and of the previous one (prev) or the next one (next). Constants FR_fr (french) and FR_ca (acadian) are defined by command \activate@luatexpunct.

```

369 local function french_punctuation (head)
370   for item in node.traverse_id(GLYPH, head) do
371     local lang = item.lang
372     local char = item.char
373     local fid  = item.font
374     local FRspacing = has_attribute(item, FBspacing)
375     FRspacing = FRspacing and FRspacing > 0
376     local FRucsNBSP = has_attribute(item, FBucsNBSP)
377     FRucsNBSP = FRucsNBSP and FRucsNBSP > 0
378     local FRdialect = has_attribute(item, FBdialect)
379     FRdialect = FRdialect and FRdialect > 0
380     local SIG = has_attribute(item, addGUILspace)
381     SIG = SIG and SIG > 0
382     if lang ~= FR_fr and lang ~= FR_ca then
383       FRspacing = nil
384     end
385     local nbspace = new_node("glyph")
386     if FRspacing and FB_punct_left[char] and fid > 0 then
387       local prev = item.prev
388       local prev_id, prev_subtype, prev_char
389       if prev then
390         prev_id = prev.id
391         prev_subtype = prev.subtype
392         if prev_id == GLYPH then
393           prev_char = prev.char
394         end
395       end

```

If the previous node is a glue, check its natural width, only positive glues (actually glues > 1 sp, for tabular 'l' columns) are to be replaced by a non-breaking space.

```

396       local is_glue = prev_id == GLUE
397       local glue_wd
398       if is_glue then
399         glue_wd = prev.width
400       end
401       local realglue = is_glue and glue_wd > 1

```

For characters for which FB_punct_thin or FB_punct_thick is *true*, the amount of spacing to be typeset before them is controlled by commands \FBthinspace

and `\FBcolonspace` respectively. Two options: if a space has been typed in before (turned into *glue* in the node list), we remove the *glue* and add a nobreak penalty and the required *glue*. Otherwise (auto option), the penalty and the required *glue* are inserted if attribute `\FB@addDPspace` is set, unless any of these four conditions is met: a) node is ‘:’ and the next one is of type GLYPH (avoids spurious spaces in `http://mysite`, `C:\` or `10:35`); b) the previous character is part of type `FB_punct_null` (avoids spurious spaces in strings like `(!)` or `??`); c) a null glue (actually glues ≤ 1 sp for tabulars) preceeds the punctuation character (for tabulars and listings); d) the punctuation character starts a paragraph or an `\hbox{}`.

When option `UnicodeNoBreakSpaces` is set to `true`, a Unicode character U+00A0 or U+202F is inserted instead of penalty and glue.

```

402     if FB_punct_thin[char] or FB_punct_thick[char] then
403         local SBDP = has_attribute(item, addDPspace)
404         local auto = SBDP and SBDP > 0
405         if FB_punct_thick[char] and auto then
406             local next = item.next
407             local next_id
408             if next then
409                 next_id = next.id
410             end
411             if next_id and next_id == GLYPH then
412                 auto = false
413             end
414         end
415         if auto then
416             if (prev_char and FB_punct_null[prev_char]) or
417                (is_glue and glue_wd <= 1) or
418                (prev_id == HLIST and prev_subtype == 3) or
419                (prev_id == TEMP) then
420                 auto = false
421             end
422         end
423         local fbglue
424         local t
425         if FB_punct_thick[char] then
426             if FRdialect then
427                 t = FBsp.colon.gl.ac
428                 nbspace.char = FBsp.colon.ch.ac
429             else
430                 t = FBsp.colon.gl.fr
431                 nbspace.char = FBsp.colon.ch.fr
432             end
433         else
434             if FRdialect then
435                 t = FBsp.thin.gl.ac
436                 nbspace.char = FBsp.thin.ch.ac
437             else
438                 t = FBsp.thin.gl.fr
439                 nbspace.char = FBsp.thin.ch.fr
440             end

```

```

441         end
442         fbglue = new_glue_scaled(fid, t)

```

In case `new_glue_scaled` fails (returns nil) the node list remains unchanged.

```

443         if (realglue or auto) and fbglue then
444             if realglue then
445                 head = remove_node(head,prev,true)
446             end
447             if (FRucsNBSP) then
448                 nbspace.font = fid
449                 insert_node_before(head, item, copy_node(nbspace))
450             else
451                 insert_node_before(head, item, copy_node(nobreak))
452                 insert_node_before(head, item, copy_node(fbglue))
453             end
454         end

```

Let's consider '»' now (the only remaining glyph of `FB_punct_left` class): we just have to remove any *glue* possibly preceeding '»', then to insert the nobreak penalty and the proper *glue* (controlled by `\FBguillspace`). This is done only if French quotes have been 'activated' by options `og=«`, `fg=»` in `\frenchsetup{}` and can be denied locally with `\NoAutoSpacing` (this is controlled by the SIG flag). If either a) the preceding glyph is member of `FB_guill_null`, or b) '»' is the first glyph of an `\hbox{}` or a paragraph, nothing is done, this is controlled by the `addgl` flag.

```

455         elseif SIG then
456             local addgl = (prev_char and not FB_guill_null[prev_char]) or
457                           (not prev_char and
458                             prev_id ~= TEMP and
459                             not (prev_id == HLIST and prev_subtype == 3)
460                           )

```

Correction for tabular 'c' (glue 0 plus 1 fil) and 'l' (glue 1sp) columns:

```

461         if is_glue and glue_wd <= 1 then
462             addgl = false
463         end
464         local t = FBsp.guill.gl.fr
465         nbspace.char = FBsp.guill.ch.fr
466         if FRdialect then
467             t = FBsp.guill.gl.ac
468             nbspace.char = FBsp.guill.ch.ac
469         end
470         local fbglue = new_glue_scaled(fid, t)
471         if addgl and fbglue then
472             if is_glue then
473                 head = remove_node(head,prev,true)
474             end
475             if (FRucsNBSP) then
476                 nbspace.font = fid
477                 insert_node_before(head, item, copy_node(nbspace))
478             else
479                 insert_node_before(head, item, copy_node(nobreak))

```

```

480             insert_node_before(head, item, copy_node(fbg glue))
481         end
482     end
483 end
484 end

```

Similarly, for '«' (unique member of the FB_punct_right class): unless either a) the next glyph is member of FB_guil_null, or b) '«' is the last glyph of an \hbox{} or a paragraph (then the addgl flag is false, nothing is done), we remove any *glue* possibly following it and insert first the proper *glue* then a nobreak penalty so that finally the penalty preceeds the *glue*.

```

485     if FRspacing and FB_punct_right[char]
486         and fid > 0 and SIG then
487         local next = item.next
488         local next_id, next_subtype, next_char, nextnext, kern_wd
489         if next then
490             next_id = next.id
491             next_subtype = next.subtype
492             if next_id == GLYPH then
493                 next_char = next.char

```

A kern0 might hide a glue, so look ahead if next is a kern (this occurs with « \texttt{a} »):

```

494         elseif next_id == KERN then
495             kern_wd = next.kern
496             if kern_wd == 0 then
497                 nextnext = next.next
498                 if nextnext then
499                     next = nextnext
500                     next_id = nextnext.id
501                     next_subtype = nextnext.subtype
502                     if next_id == GLYPH then
503                         next_char = nextnext.char
504                     end
505                 end
506             end
507         end
508     end
509     local is_glue = next_id == GLUE
510     if is_glue then
511         glue_wd = next.width
512     end
513     local addgl = (next_char and not FB_guil_null[next_char]) or
514                 (next and not next_char)

```

Correction for tabular 'c' columns. For 'r' columns, a final '«' character needs to be coded as \mbox{«} for proper spacing (\NoAutoSpacing is another option).

```

515     if is_glue and glue_wd == 0 then
516         addgl = false
517     end
518     local fid = item.font

```

```

519     local t = FBsp.guill.gl.fr
520     nbspace.char = FBsp.guill.ch.fr
521     if FRdialect then
522         t = FBsp.guill.gl.ac
523         nbspace.char = FBsp.guill.ch.ac
524     end
525     local fbglue = new_glue_scaled(fid, t)
526     if addgl and fbglue then
527         if is_glue then
528             head = remove_node(head,next,true)
529         end
530         if (FRucsNBSP) then
531             nbspace.font = fid
532             insert_node_after(head, item, copy_node(nbspace))
533         else
534             insert_node_after(head, item, copy_node(fbglue))
535             insert_node_after(head, item, copy_node(nobreak))
536         end
537     end
538 end
539 end
540 return head
541 end
542 return french_punctuation
543 </lua>

```

`\FB@luatex@punct@french` As a language tag is part of glyph nodes in LuaTeX, no more switching has to be done in `\extrasfrench`, setting the dialect attribute has already been done (see above, p. 19). We will just redefine `\shorthandoff` and `\shorthandon` in French to issue a warning reminding the user that active characters are no longer used in French with recent LuaTeX engines.

```

544 < *french>
545 \ifFB@luatex@punct
546   \newcommand*{\FB@luatex@punct@french}{%
547     \babel@save\shorthandon
548     \babel@save\shorthandoff
549     \def\shorthandoff##1{%
550       \ifx\PackageWarning\@undefined
551         \fb@warning{\noexpand\shorthandoff{;:!?} is helpless with
552           LuaTeX,\, use \noexpand\NoAutoSpacing
553           *inside a group* instead.}%
554       \else
555         \PackageWarning{french.lda}{\protect\shorthandoff{;:!?} is
556           helpless with LuaTeX,\MessageBreak use \protect\NoAutoSpacing
557           \space *inside a group* instead;\MessageBreak reported}%
558       \fi}%
559     \def\shorthandon##1{%
560     }
561   \addto\extrasfrench{\FB@luatex@punct@french}

```

The next definition will be used to activate Lua punctuation: it loads `frenchb.lua` and adds function `french_punctuation` at the end of the kerning callback (no priority).

```

562 \def\activate@luatexpunct{%
563   \directlua{%
564     FR_fr = \the\l@french ; FR_ca = \the\l@acadian ;
565     local path = kpse.find_file("frenchb.lua", "lua")
566     if path then
567       local f = dofile(path)
568       luatexbase.add_to_callback("kerning",
569         f, "frenchb.french_punctuation")
570     else
571       texio.write_nl('')
572       texio.write_nl('*****')
573       texio.write_nl('Error: frenchb.lua not found.')
574       texio.write_nl('*****')
575       texio.write_nl('')
576     end
577   }%
578 }
579 \fi

```

End of specific code for punctuation with LuaTeX engines.

2.2.2 Punctuation with XeTeX

If `\XeTeXinterchartokenstate` is available, we use the “inter char” mechanism to provide correct spacing in French before the four characters `;` `!` `?` and `:`. The basis of the following code was borrowed from the `polyglossia` package, see `gloss-french.ldf`. We use the same mechanism for French quotes (`«` and `»`), when automatic spacing for quotes is required by options `og=«` and `fg=»` in `\frenchsetup{}` (see section 2.11).

The default value for `\XeTeXcharclass` is 0 for characters tokens and `\FB@nonchar` for all other tokens (glues, kerns, math and box boundaries, etc.). These defaults should not be changed otherwise the spacing before the ‘high 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 initial values when leaving French.

The following part holds specific code for punctuation with XeTeX engines.

```

580 \ifFB@xetex@punct
581   \ifLaTeXe
582     \PackageInfo{french.ldf}{No need for active punctuation characters%
583       \MessageBreak with this version of XeTeX!%
584       \MessageBreak reported}
585   \else
586     \fb@info{No need for active punctuation characters\
587       with this version of XeTeX!}
588   \fi

```

Six new character classes are defined for `babel-french`.

```

589 \newXeTeXintercharclass\FB@punctthick
590 \newXeTeXintercharclass\FB@punctthin
591 \newXeTeXintercharclass\FB@punctnul
592 \newXeTeXintercharclass\FB@guilo
593 \newXeTeXintercharclass\FB@guilf
594 \newXeTeXintercharclass\FB@guilnul

```

As `\babel@savevariable` doesn't work inside a `\bbl@for` loop, we define a variant to save the `\XeTeXcharclass` values which will be modified in French.

```

595 \def\FBsavevariable@loop#1#2{\begingroup
596   \toks@{\expandafter{\originalTeX #1}%
597   \edef\x{\endgroup
598     \def\noexpand\originalTeX{\the\toks@ #2=\the#1#2\relax}}%
599   \x}

```

`\FB@charlist` holds the all list of characters which have their `\XeTeXcharclass` value modified in French: the first set includes high punctuation, French quotes, opening delimiters and no-break spaces

"21	"3A	"3B	"3F	"AB	"BB	"28	"5B	"A0	"202F
!	:	;	?	«	»	([

the second one holds those which need resetting in French when `xeCJK.sty` is in use

"29	"5D	"7B	"7D	"2C	"2D	"2E	"22	"25	"27	"60	"2019
)]	{	}	,	-	.	"	%	'	'	'

```

600 \def\FB@charlist{"21,"3A,"3B,"3F,"AB,"BB,"28,"5B,"A0,"202F,%
601                  "29,"5D,"7B,"7D,"2C,"2D,"2E,"22,"25,"27,"60,"2019}

```

`\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.

```

602 \newcommand*{\FB@xetex@punct@french}{%
603   \babel@savevariable{\XeTeXinterchartokenstate}%
604   \babel@save{\shorthandon}%
605   \babel@save{\shorthandoff}%
606   \bbl@for\FB@char\FB@charlist
607     {\FBsavevariable@loop{\XeTeXcharclass}{\FB@char}}%
608   \def\shorthandoff##1{%
609     \ifx\PackageWarning\@undefined
610       \fb@warning{\noexpand\shorthandoff{;:!?} is helpless with
611         XeTeX,\ use \noexpand\NoAutoSpacing
612         *inside a group* instead.}%
613     \else
614       \PackageWarning{french.ldf}{\protect\shorthandoff{;:!?} is
615         helpless with XeTeX,\MessageBreak use \protect\NoAutoSpacing
616         \space *inside a group* instead;\MessageBreak reported}%
617     \fi}%
618   \def\shorthandon##1{%

```

Let's now set the classes and interactions between classes. When false, the flag `\ifFB@spacing` switches off any interaction between classes (this flag is controlled by

user-level command `\NoAutoSpacing`; this flag is also set to false when the current font is a typewriter font).

```

619 \XeTeXinterchartokenstate=1
620 \XeTeXcharclass '\: = \FB@punctthick
621 \XeTeXinterchartoks \z@ \FB@punctthick = {%
622   \ifFB@spacing\ifhmode\FDP@colonspace\fi\fi}%
623 \XeTeXinterchartoks \FB@guilf \FB@punctthick = {%
624   \ifFB@spacing\FDP@colonspace\fi}%

```

Small glues such as “glue 1sp” in tabular ‘l’ columns or “glue 0 plus 1 fil” in tabular ‘c’ columns or `lstlisting` environment should not trigger any extra space; they will still do when `AutoSpacePunctuation` is true: unfortunately `\XeTeXcharclass=\FB@nonchar` isn’t specific to glue tokens (this class includes box and math boundaries f.i.), so the `\else` part cannot be omitted.

```

625 \XeTeXinterchartoks \FB@nonchar \FB@punctthick = {%
626   \ifFB@spacing
627     \ifhmode
628       \ifdim\lastskip>1sp
629         \unskip\penalty\@M\FBcolonspace
630       \else
631         \FDP@colonspace
632       \fi
633     \fi
634   \fi}%
635 \bbl@for\FB@char
636   {\‘\;,\‘!\,\‘?}%
637   {\XeTeXcharclass\FB@char=\FB@punctthin}%
638 \XeTeXinterchartoks \z@ \FB@punctthin = {%
639   \ifFB@spacing\ifhmode\FDP@thinspace\fi\fi}%
640 \XeTeXinterchartoks \FB@guilf \FB@punctthin = {%
641   \ifFB@spacing\FDP@thinspace\fi}%
642 \XeTeXinterchartoks \FB@nonchar \FB@punctthin = {%
643   \ifFB@spacing
644     \ifhmode
645       \ifdim\lastskip>1sp
646         \unskip\penalty\@M\FBthinspace
647       \else
648         \FDP@thinspace
649       \fi
650     \fi
651   \fi}%
652 \XeTeXinterchartoks \FB@guilo \z@ = {%
653   \ifFB@spacing\FB@guillspace\fi}%
654 \XeTeXinterchartoks \FB@guilo \FB@nonchar = {%
655   \ifFB@spacing\FB@guillspace\ignorespaces\fi}%
656 \XeTeXinterchartoks \z@ \FB@guilf = {%
657   \ifFB@spacing\FB@guillspace\fi}%
658 \XeTeXinterchartoks \FB@punctthin \FB@guilf = {%
659   \ifFB@spacing\FB@guillspace\fi}%
660 \XeTeXinterchartoks \FB@nonchar \FB@guilf = {%
661   \ifFB@spacing\unskip\FB@guillspace\fi}%

```


This will avoid spurious spaces in (!), [?] and with Unicode non-breaking spaces (U+00A0, U+202F):

```
662 \bbl@for\FB@char
663 {'\[, '\[, "A0, "202F}%
664 {\XeTeXcharclass\FB@char=\FB@punctnul}%
```

These characters have their class changed by `xeCJK.sty`, let's reset them to 0 in French.

```
665 \bbl@for\FB@char
666 {\{, '\, , '\., '\-, '\), '\], '\}, '\%, "22, "27, "60, "2019}%
667 {\XeTeXcharclass\FB@char=\z@}%
668 }
669 \addto\extrasfrench{\FB@xetex@punct@french}
```

End of specific code for punctuation with modern XeTeX engines.

```
670 \fi
```

2.2.3 Punctuation with standard (pdf)TeX

In standard (pdf)TeX we need to make the four characters ; ! ? and : 'active' and provide their definitions.

```
671 \ifFB@active@punct
672 \initiate@active@char{:}%
673 \initiate@active@char{;}%
674 \initiate@active@char{!}%
675 \initiate@active@char{?}%
```

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 a non-breaking `\FBthinspace` instead. If no space has been typed, we add `\FDP@thinspace` which will be defined, up to the user's wishes, as a non-breaking `\FBthinspace` or as `\@empty`.

```
676 \declare@shorthand{french}{;}{;%
677 \ifFB@spacing
678 \ifhmode
679 \ifdim\lastskip>1sp
680 \unskip\penalty\M\FBthinspace
681 \else
682 \FDP@thinspace
683 \fi
684 \fi
685 \fi
```

Now we can insert a ; character.

```
686 \string;}
```

The next three definitions are very similar.

```
687 \declare@shorthand{french}{!}{;%
688 \ifFB@spacing
689 \ifhmode
```

```

690     \ifdim\lastskip>1sp
691     \unskip\penalty\@M\FBthinspace
692     \else
693     \FDP@thinspace
694     \fi
695   \fi
696 \fi
697 \string!}
698 \declare@shorthand{french}{?}{%
699   \ifFB@spacing
700   \ifhmode
701     \ifdim\lastskip>1sp
702     \unskip\penalty\@M\FBthinspace
703     \else
704     \FDP@thinspace
705     \fi
706   \fi
707 \fi
708 \string?}
709 \declare@shorthand{french}{:}{%
710   \ifFB@spacing
711   \ifhmode
712     \ifdim\lastskip>1sp
713     \unskip\penalty\@M\FBcolonspace
714     \else
715     \FDP@colonspace
716     \fi
717   \fi
718 \fi
719 \string:}

```

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.

```

720 \declare@shorthand{system}{:}{\string:}
721 \declare@shorthand{system}{!}{\string!}
722 \declare@shorthand{system}{?}{\string?}
723 \declare@shorthand{system}{;}{\string;}
724 %}

```

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

```

725 \addto\extrasfrench{\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.

```

726   \bbl@activate{:}\bbl@activate{;}%
727   \bbl@activate{!}\bbl@activate{?}%
728 }
729 \addto\noextrasfrench{%
730   \bbl@deactivate{:}\bbl@deactivate{;}%

```

```

731   \bbl@deactivate{!}\bbl@deactivate{?}%
732 }
733 \fi

```

2.2.4 Punctuation switches common to all engines

A new ‘if’ `\ifFBAutoSpacePunctuation` needs to be defined now to control the two possible ways of dealing with ‘high punctuation’. its default value is true, but it can be set to false by `\frenchsetup{AutoSpacePunctuation=false}` for finer control.

```

734 \newif\ifFBAutoSpacePunctuation \FBAutoSpacePunctuationtrue

```

`\AutoSpaceBeforeFDP` `\autospace@beforeFDP` and `\noautospace@beforeFDP` are internal commands. `\NoAutoSpaceBeforeFDP` `\autospace@beforeFDP` defines `\FDP@thinspace` and `\FDP@colonspace` as non-breaking spaces and sets LuaTeX attribute `\FB@addDPspace` to 1 (true), while `\noautospace@beforeFDP` lets these spaces empty and sets flag `\FB@addDPspace` to 0 (false). 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).

```

735 \def\autospace@beforeFDP{%
736   \ifFB@luatex@punct\FB@addDPspace=1 \fi
737   \def\FDP@thinspace{\penalty\@M\FBthinspace}%
738   \def\FDP@colonspace{\penalty\@M\FBcolonspace}}
739 \def\noautospace@beforeFDP{%
740   \ifFB@luatex@punct\FB@addDPspace=0 \fi
741   \let\FDP@thinspace\@empty
742   \let\FDP@colonspace\@empty}
743 \ifLaTeXe
744   \def\AutoSpaceBeforeFDP{\autospace@beforeFDP
745     \FBAutoSpacePunctuationtrue}
746   \def\NoAutoSpaceBeforeFDP{\noautospace@beforeFDP
747     \FBAutoSpacePunctuationfalse}
748   \AtEndOfPackage{\AutoSpaceBeforeFDP}
749 \else
750   \let\AutoSpaceBeforeFDP\autospace@beforeFDP
751   \let\NoAutoSpaceBeforeFDP\noautospace@beforeFDP
752   \AutoSpaceBeforeFDP
753 \fi

```

`\rmfamilyFB` In $\text{\LaTeX}2\epsilon$ `\ttfamily` (and hence `\texttt`) will be redefined ‘AtBeginDocument’ `\sffamilyFB` as `\ttfamilyFB` so that no space is added before the four ; : ! ? characters, `\ttfamilyFB` even if `AutoSpacePunctuation` is true. When `AutoSpacePunctuation` is false, the eventually typed spaces are left unchanged (not turned into thin spaces, no penalty added). `\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 `\frenchsetup{}`. This is also a workaround for the weird behaviour of these characters in verbatim mode.

```
754 \ifLaTeXe
755   \DeclareRobustCommand\ttfamilyFB{\FB@spacing@off \ttfamilyORI}
756   \DeclareRobustCommand\rmfamilyFB{\FB@spacing@on \rmfamilyORI}
757   \DeclareRobustCommand\sffamilyFB{\FB@spacing@on \sffamilyORI}
758 \fi
```

\NoAutoSpacing The following command disables automatic spacing for high punctuation and French quote characters; it also switches off active punctuation characters (if any). It is engine independent (works for TeX, LuaTeX and XeTeX based engines) and is meant to be used inside a group.

```
759 \DeclareRobustCommand*\NoAutoSpacing{%
760   \FB@spacing@off
761   \ifFB@active@punct\shorthandoff{;:!?}\fi
762 }
```

2.3 Commands for French quotation marks

\guillemotleft pdfLaTeX users are supposed to use 8-bit output encodings (T1, LY1,...) to typeset French, those who still stick to OT1 should load `aeguill` 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 and LuaLaTeX, `\guillemotleft` and `\guillemotright` are defined by package `fontspec` (v. 2.5d and up).

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

```
763 \ifLaTeXe
764 \else
765   \ifFBunicode
766     \def\guillemotleft{{\char"00AB}}
767     \def\guillemotright{{\char"00BB}}
768     \def\textquotedblleft{{\char"201C}}
769     \def\textquotedblright{{\char"201D}}
770   \else
771     \def\guillemotleft{\leavevmode\raise0.25ex
772       \hbox{$\scriptscriptstyle\ll$}}
773     \def\guillemotright{\raise0.25ex
774       \hbox{$\scriptscriptstyle\gg$}}
775     \def\textquotedblleft{' '}
776     \def\textquotedblright{' '}
777   \fi
778   \let\xspace\relax
779 \fi
```

\FBgspchar The next step is to provide correct spacing after ‘<’ and before ‘>’; no line break is allowed neither *after* the opening one, nor *before* the closing one. French quotes

\FB@og

\FB@fg

(including spacing) are printed by `\FB@og` and `\FB@fg`, the expansion of the top level commands `\og` and `\fg` is different in and outside French.

The definitions of `\FB@og` and `\FB@fg` need some engine-dependent tuning: for LuaTeX, `\FB@spacing` is set to 0 locally to prevent the quotes characters from adding space when option `og=«, fg=»` is set.

```

780 \newcommand*{\FB@guillspace}{\penalty\@M\FBguillspace}
781 \newcommand*{\FBgspchar}{\char"A0\relax}
782 \newif\ifFBucsNBSP
783 \ifFB@luatex@punct
784   \DeclareRobustCommand*{\FB@og}{\leavevmode
785     \bgroup\FB@spacing=0 \guillemotleft\egroup
786     \ifFBucsNBSP\FBgspchar\else\FB@guillspace\fi}
787   \DeclareRobustCommand*{\FB@fg}{\ifdim\lastskip>\z@unskip\fi
788     \ifFBucsNBSP\FBgspchar\else\FB@guillspace\fi
789     \bgroup\FB@spacing=0 \guillemotright\egroup}
790 \fi

```

With XeTeX, `\ifFB@spacing` is set to false locally for the same reason.

```

791 \ifFB@xetex@punct
792   \DeclareRobustCommand*{\FB@og}{\leavevmode
793     \bgroup\FB@spacingfalse\guillemotleft\egroup
794     \FB@guillspace}
795   \DeclareRobustCommand*{\FB@fg}{\ifdim\lastskip>\z@unskip\fi
796     \FB@guillspace
797     \bgroup\FB@spacingfalse\guillemotright\egroup}
798 \fi
799 \ifFB@active@punct
800   \DeclareRobustCommand*{\FB@og}{\leavevmode
801     \guillemotleft
802     \FB@guillspace}
803   \DeclareRobustCommand*{\FB@fg}{\ifdim\lastskip>\z@unskip\fi
804     \FB@guillspace
805     \guillemotright}
806 \fi

```

`\og` The user level macros for quotation marks are named `\og` (“ouvrez guillemets”) and `\fg` (fermez guillemets). Another option for typesetting quotes in French is to use the command `\frquote` (see below). Dummy definition of `\og` and `\fg` just to ensure that this commands are not yet defined.

```

807 \newcommand*{\og}{\@empty}
808 \newcommand*{\fg}{\@empty}

```

The definitions of `\og` and `\fg` for 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. 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).

```

809 \ifLaTeXe
810   \def\bb\@frenchguillemets{\renewcommand*{\og}{\FB@og}%

```

```

811 \renewcommand*{\fg}{\FB@fg\xspace}}
812 \renewcommand*{\og}{\textquotedblleft}
813 \renewcommand*{\fg}{\ifdim\lastskip>\z@ \unskip\fi
814 \textquotedblright\xspace}
815 \else
816 \def\bbl@frenchguillemets{\let\og\FB@og
817 \let\fg\FB@fg}
818 \def\og{\textquotedblleft}
819 \def\fg{\ifdim\lastskip>\z@ \unskip\fi \textquotedblright}
820 \fi

821 \addto\extrasfrench{\babel@save\og \babel@save\fg \bbl@frenchguillemets}

```

\frquote Another way of entering French quotes relies on `\frquote{}` with supports up to two levels of quotes. Let's define the default quote characters to be used for level one or two of quotes. . .

```

822 \newcommand*{\ogi}{\FB@og}
823 \newcommand*{\fgi}{\FB@fg}
824 \newcommand*{\ogii}{\textquotedblleft}
825 \newcommand*{\fgii}{\textquotedblright}

```

and the needed technical stuff to handle options:

```

826 \newcount\FBguill@level
827 \newtoks\FB@everypar
828 \newif\ifFBcloseguill \FBcloseguilltrue
829 \newif\ifFBInnerGuillSingle
830 \def\FBguillopen{\bgroup\NoAutoSpacing\guillemotleft\egroup}
831 \def\FBguillclose{\bgroup\NoAutoSpacing\guillemotright\egroup}
832 \let\FBguillnone\empty
833 \let\FBeveryparguill\FBguillopen
834 \let\FBverylineguill\FBguillnone

```

The main command `\frquote` accepts (in LaTeX2e only) a starred version which suppresses the closing quote; it is meant to be used for inner quotations which end together with the outer one, then only one closing guillemet (the outer one) should be printed.

```

835 \ifLaTeXe
836 \DeclareRobustCommand\frquote{%
837 \@ifstar{\FBcloseguillfalse\fr@quote}%
838 {\FBcloseguilltrue\fr@quote}}
839 \else
840 \newcommand\frquote[1]{\fr@quote{#1}}
841 \fi

```

The internal command `\fr@quote` takes one (long) argument: the quotation text.

```

842 \newcommand{\fr@quote}[1]{%
843 \leavevmode
844 \advance\FBguill@level by \@ne
845 \ifcase\FBguill@level
846 \or

```

This for level 1 (outer) quotations: save `\everypar` before customising it, set `\FBeverypar@quote` for level 1 quotations and add it to `\everypar`, then print the quotation:

```

847 \FB@everypar=\everypar
848 \ifx\FBeveryparguill\FBguillnone
849 \else
850 \def\FBeverypar@quote{\FBeveryparguill\FB@guillspace}%
851 \everypar=\expandafter{\the\everypar \FBeverypar@quote}%
852 \fi
853 \ogi #1\fgi
854 \or

```

This for level 2 (inner) quotations: Omega's command `\localleftbox` included in LuaTeX, is convenient for repeating guillemets at the beginning of every line.

```

855 \ifx\FBverylineguill\FBguillopen
856 \localleftbox{\guillemotleft\FB@guillspace}%
857 \let\FBeverypar@quote\relax
858 \ogi #1\ifFBcloseguill\fgi\fi
859 \else
860 \ifx\FBverylineguill\FBguillclose
861 \localleftbox{\guillemotright\FB@guillspace}%
862 \let\FBeverypar@quote\relax
863 \ogi #1\ifFBcloseguill\fgi\fi
864 \else

```

otherwise we need to redefine `\FBeverypar@quote` (and eventually `\ogii`, `\fgii`) for level 2 quotations:

```

865 \let\FBeverypar@quote\relax
866 \ifFBInnerGuillSingle
867 \def\ogii{\leavevmode
868 \guilsinglleft\FB@guillspace}%
869 \def\fgii{\ifdim\lastskip>z@\unskip\fi
870 \FB@guillspace\guilsinglright}%
871 \ifx\FBeveryparguill\FBguillopen
872 \def\FBeverypar@quote{\guilsinglleft\FB@guillspace}%
873 \fi
874 \ifx\FBeveryparguill\FBguillclose
875 \def\FBeverypar@quote{\guilsinglright\FB@guillspace}%
876 \fi
877 \fi
878 \ogii #1\ifFBcloseguill \fgii \fi
879 \fi
880 \fi
881 \else

```

Warn if `\FBguill@level > 2`:

```

882 \ifx\PackageWarning\@undefined
883 \fb@warning{\noexpand\frquote\space handles up to
884 two levels.\ Quotation not printed.}%
885 \else
886 \PackageWarning{french.ldf}{%

```

```

887         \protect\frquote\space handles up to two levels.
888         \MessageBreak Quotation not printed. Reported}
889     \fi
890 \fi

```

Clean on exit: adjust \FBguill@level and restore \localleftbox and \everypar.

```

891 \advance\FBguill@level by \m@ne
892 \ifx\FBverylineguill\FBguillnone\else\localleftbox{}\fi
893 \ifx\FBveryparguill\FBguillnone\else\everypar=\FB@everypar\fi
894 }

```

2.4 Date in French

\frenchtoday The following code creates a macro \datefrench which in turn defines command
\frenchdate \frenchtoday (\today is defined as \frenchtoday in French). The correspond-
\datefrench ing commands for the French dialect, \dateacadian and \acadiantoday are also
created btw. This new implementation relies on commands \SetString and
\SetStringLoop, therefore requires babel 3.10 or newer.

Explicitly defining \BabelLanguages as the list of all French dialects defines *both*
\datefrench and \dateacadian; this is required as french.ldf is read only
once even if both language options french and acadian are supplied to ba-
bel. Note that coding \StartBabelCommands*{french,acadian} would *only* define
\csname date\CurrentOption\endcsname, leaving the second language undefined
in babel's sens.

```

895 \def\BabelLanguages{french,acadian}
896 \StartBabelCommands*{\BabelLanguages}{date}
897     [unicode, fontenc=TU EU1 EU2, charset=utf8]
898     \SetString\monthiiname{février}
899     \SetString\monthviiiname{août}
900     \SetString\monthxiiname{décembre}
901 \StartBabelCommands*{\BabelLanguages}{date}
902     \SetStringLoop{month#1name}{%
903         janvier,f\'evrier,mars,avril,mai,juin,juillet,%
904         ao\^ut,septembre,octobre,novembre,d\'ecembre}
905     \SetString\today{\FB@date{\year}{\month}{\day}}
906 \EndBabelCommands

```

\frenchdate (which produces an unbreakable string) and \frenchtoday (breakable)
both rely on \FB@date, the inner group is needed for \hbox.

```

907 \newcommand*{\FB@date}[3]{%
908     {\number#3}\ifnum1=#3{\ier}\fi\FBdatespace
909     \csname month\romannumeral#2name\endcsname
910     \ifx#1\@empty\else\FBdatespace\number#1\fi}}
911 \newcommand*{\FBdatebox}{\hbox}
912 \newcommand*{\FBdatespace}{\space}
913 \newcommand*{\frenchdate}{\FBdatebox\FB@date}
914 \newcommand*{\acadiantoday}{\FBdatebox\FB@date}

```


2.5 Extra utilities

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

`\up` eases the typesetting of superscripts like '1^{er}'. Up to version 2.0 of babel-french `\up` was just a shortcut for `\textsuperscript` in LaTeX2e, 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 `\frenchsetup{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 `scalegnt` which will be loaded at the end of babel's loading (babel-french being an option of babel, it cannot load a package while being read).

```
915 \newif\ifFB@poorman
916 \newdimen\FB@Mht
917 \ifLaTeXe
918   \AtEndOfPackage{\RequirePackage{scalegnt}}
```

`\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 `\frenchsetup{}`.

```
919 \newcommand*{\FBsupR}{-0.12}
920 \newcommand*{\FBsupS}{0.65}
921 \newcommand*{\FB@lc}[1]{\MakeLowercase{#1}}
922 \DeclareRobustCommand*{\FB@up@fake}[1]{%
923   \settoheight{\FB@Mht}{M}%
924   \addtolength{\FB@Mht}{\FBsupR \FB@Mht}%
925   \addtolength{\FB@Mht}{-\FBsupS ex}%
926   \raisebox{\FB@Mht}{\scalefont{\FBsupS}{\FB@lc{#1}}}%
927 }
```

The only packages I currently know to take advantage of real superscripts are a) `realscripts` used in conjunction with XeLaTeX or LuaLaTeX and OpenType fonts having the font feature 'VerticalPosition=Superior' 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.

```

928 \def\FB@split#1#2#3#4\@nil{\def\FB@firstthree{#1#2#3}%
929 \def\FB@suffix{#4}}
930 \def\FB@x{x}
931 \def\FB@j{j}
932 \DeclareRobustCommand*\FB@up{[1]{%
933 \bgroup \FB@poormantrue
934 \expandafter\FB@split\fb@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.

```

935 \edef\reserved@a{\lowercase{%
936 \noexpand\IfFileExists{\fb@encoding\FB@firstthree -sup.fd}}}%
937 \reserved@a
938 {\ifx\FB@suffix\FB@x \FB@poormanfalse\fi
939 \ifx\FB@suffix\FB@j \FB@poormanfalse\fi
940 \ifFB@poorman \FB@up@fake{#1}%
941 \else \FB@up@real{#1}%
942 \fi}%
943 {\FB@up@fake{#1}}%
944 \egroup}

```

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

```

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

```

`\fup` is defined as `\FB@up` unless `\realsuperscript` is defined by `realscripts.sty`.

```

947 \DeclareRobustCommand*\fup{[1]{%
948 \ifx\realsuperscript\@undefined
949 \FB@up{#1}%
950 \else
951 \bgroup\let\fakesuperscript\FB@up@fake
952 \realsuperscript{\FB@lc{#1}}\egroup
953 \fi}

```

Let's provide a temporary definition for `\up` (redefined 'AtBeginDocument' as `\fup` or `\textsuperscript` according to `\frenchsetup{}` options).

```

954 \providecommand*\up{\relax}

```

Poor man's definition of `\up` for Plain.

```

955 \else
956 \providecommand*\up{[1]{\leavevmode\raise1ex\hbox{\sevenrm #1}}
957 \fi

```

`\ieme` Some handy macros for those who don't know how to abbreviate ordinals:

```

\ier 958 \def\ieme{\up{e}\xspace}
\iere 959 \def\iemes{\up{es}\xspace}
\iemes 960 \def\ier{\up{er}\xspace}
\iers 961 \def\iers{\up{ers}\xspace}
\ieres

```

```

962 \def\iere{\up{re}\xspace}
963 \def\ieres{\up{res}\xspace}

```

```

\FBmedkern
\FBthickkern 964 \newcommand*\FBmedkern{\kern+.2em}
965 \newcommand*\FBthickkern{\kern+.3em}

```

```

\No And some more macros relying on \up for numbering, first two support macros.
\no 966 \newcommand*\FrenchEnumerate[1]{#1\up{o}\FBthickkern}
\Nos 967 \newcommand*\FrenchPopularEnumerate[1]{#1\up{o})\FBthickkern}
\nos Typing \primo should result in ‘o’,
\primo 968 \def\primo{\FrenchEnumerate1}
\fmprimo 969 \def\secundo{\FrenchEnumerate2}
970 \def\tertio{\FrenchEnumerate3}
971 \def\quarto{\FrenchEnumerate4}
while typing \fmprimo gives ‘o’.
972 \def\fmprimo{\FrenchPopularEnumerate1}
973 \def\fmsecundo{\FrenchPopularEnumerate2}
974 \def\fmtertio{\FrenchPopularEnumerate3}
975 \def\fmquarto{\FrenchPopularEnumerate4}
Let’s provide four macros for the common abbreviations of “Numéro”.
976 \DeclareRobustCommand*\No{\N\up{o}\FBmedkern}
977 \DeclareRobustCommand*\no{\n\up{o}\FBmedkern}
978 \DeclareRobustCommand*\Nos{\N\up{os}\FBmedkern}
979 \DeclareRobustCommand*\nos{\n\up{os}\FBmedkern}

```

\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 babel-french: a `\kern0pt` 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}.

```

980 \DeclareRobustCommand*\bsc[1]{\leavevmode\begin{group}\kern0pt
981 \scshape #1\endgroup}
982 \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.

```

983 \ifFBunicode
984 \newcommand*\at{{\char"0040}}
985 \newcommand*\circonflexe{{\char"005E}}
986 \newcommand*\tild{{\char"007E}}
987 \newcommand*\boi{{\char"005C}}
988 \newcommand*\degre{{\char"00B0}}

```

```

989 \else
990   \ifLaTeXe
991     \DeclareTextSymbol{\at}{T1}{64}
992     \DeclareTextSymbol{\circonflexe}{T1}{94}
993     \DeclareTextSymbol{\tild}{T1}{126}
994     \DeclareTextSymbolDefault{\at}{T1}
995     \DeclareTextSymbolDefault{\circonflexe}{T1}
996     \DeclareTextSymbolDefault{\tild}{T1}
997     \DeclareRobustCommand*\boi{\textbackslash}
998     \DeclareRobustCommand*\degree{\r{}}
999   \else
1000     \def\T@one{T1}
1001     \ifx\fontencoding\T@one
1002       \newcommand*\degree{{\char6}}
1003     \else
1004       \newcommand*\degree{{\char23}}
1005     \fi
1006     \newcommand*\at{{\char64}}
1007     \newcommand*\circonflexe{{\char94}}
1008     \newcommand*\tild{{\char126}}
1009     \newcommand*\boi{{\backslash}}
1010   \fi
1011 \fi

```

\degrees 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 `\degrees` to 0.3 em, this lets the symbol ‘degree’ stick to the preceding (e.g., 45\degrees) or following character (e.g., 20~\degrees C).

If T_EX 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.

```

1012 \ifLaTeXe
1013   \newcommand*\degrees{\degree}
1014   \ifFBunicode
1015     \DeclareRobustCommand*\degrees{\degree}
1016   \else
1017     \def\Warning@degree@TSone{\FBWarning
1018       {Degrees would look better in TS1-encoding:%
1019       \MessageBreak add \protect
1020       \usepackage{textcomp} to the preamble.%
1021       \MessageBreak Degrees used}}
1022     \AtBeginDocument{\ifx\DeclareEncodingSubset\undefined
1023       \DeclareRobustCommand*\degrees{%
1024         \leavevmode\hbox to 0.3em{\hss\degree\hss}%
1025         \Warning@degree@TSone
1026         \global\let\Warning@degree@TSone\relax}%
1027     \else
1028       \DeclareRobustCommand*\degrees{%
1029         \hbox{\UseTextSymbol{TS1}{\textdegree}}}%

```

```

1030             \fi
1031         }
1032     \fi
1033 \else
1034     \newcommand*{\degres}{%
1035         \leavevmode\hbox to 0.3em{\hss\degre\hss}}
1036 \fi

```

2.6 Formatting numbers

`\StandardMathComma` As mentioned in the T_EXbook p. 134, the comma is of type `\mathpunct` in math mode: `\DecimalMathComma` it is automatically followed by a thin 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. Unfortunately, `\newcount` inside `\if` breaks Plain formats.

```

1037 \newif\ifFB@icomma
1038 \newcount\mc@charclass
1039 \newcount\mc@charfam
1040 \newcount\mc@charslot
1041 \newcount\std@mcc
1042 \newcount\dec@mcc
1043 \ifFBLuaTeX
1044     \mc@charclass=\Umathcharclass'\,
1045     \newcommand*{\dec@math@comma}{%
1046         \mc@charfam=\Umathcharfam'\,
1047         \mc@charslot=\Umathcharslot'\,
1048         \Umathcode'\,= 0 \mc@charfam \mc@charslot
1049     }
1050     \newcommand*{\std@math@comma}{%
1051         \mc@charfam=\Umathcharfam'\,
1052         \mc@charslot=\Umathcharslot'\,
1053         \Umathcode'\,= \mc@charclass \mc@charfam \mc@charslot
1054     }
1055 \else
1056     \std@mcc=\mathcode'\,
1057     \dec@mcc=\std@mcc
1058     \@tempcnta=\std@mcc
1059     \divide\@tempcnta by "1000
1060     \multiply\@tempcnta by "1000
1061     \advance\dec@mcc by -\@tempcnta
1062     \newcommand*{\dec@math@comma}{\mathcode'\,=\dec@mcc}
1063     \newcommand*{\std@math@comma}{\mathcode'\,=\std@mcc}
1064 \fi
1065 \newcommand*{\DecimalMathComma}{%
1066     \ifFBfrench\dec@math@comma\fi
1067     \ifFB@icomma\else\addto\extrasfrench{\dec@math@comma}\fi
1068 }
1069 \newcommand*{\StandardMathComma}{%

```

```

1070 \std@math@comma
1071 \ifFB@icomma\else\addto\extrasfrench{\std@math@comma}\fi
1072 }
1073 \ifLaTeXe
1074 \AtBeginDocument{\@ifpackageloaded{icomma}%
1075                  {\FB@icommatrue}%
1076                  {\addto\noextrasfrench{\std@math@comma}}}%
1077 }
1078 \else
1079 \addto\noextrasfrench{\std@math@comma}
1080 \fi

```

\nombre The command `\nombre` is now borrowed from `numprint.sty` for LaTeX2e. 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 babel-french v. 1.x. about the change:

```

1081 \newcommand*{\nombre}[1]{\fb@warning{*** \noexpand\nombre
1082                               no longer formats numbers\string! ***}}

```

Let's activate LuaTeX punctuation if necessary (LaTeX or Plain) so that `\FBsetspace` commands can be used in the preamble, then cleanup and exit without loading any `.cfg` file in case of Plain formats.

```

1083 \ifFB@luatex@punct
1084 \activate@luatexpunct
1085 \fi
1086 \let\FBstop@here\relax
1087 \def\FBclean@on@exit{%
1088   \let\ifLaTeXe\undefined
1089   \let\LaTeXetrue\undefined
1090   \let\LaTeXefalse\undefined
1091   \let\FB@llc\loadlocalcfg
1092   \let\loadlocalcfg\@gobble}
1093 \ifx\magnification\@undefined
1094 \else
1095   \def\FBstop@here{%
1096     \FBclean@on@exit
1097     \ldf@finish\CurrentOption
1098     \let\loadlocalcfg\FB@llc
1099     \endinput}
1100 \fi
1101 \FBstop@here

```

What follows is for LaTeX2e *only*. We redefine `\nombre` for LaTeX2e. 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 babel-french because of possible options conflict.

```

1102 \renewcommand*{\nombre}[1]{\Warning@nombre{#1}}
1103 \newcommand*{\Warning@nombre}[1]{%

```

```

1104 \ifdefined\numprint
1105   \numprint{#1}%
1106 \else
1107   \PackageWarning{french.ldf}{%
1108     \protect\nombre\space now relies on package numprint.sty,%
1109     \MessageBreak add \protect
1110     \usepackage[autolanguage]{numprint},\MessageBreak
1111     see file numprint.pdf for more options.\MessageBreak
1112     \protect\nombre\space called}%
1113   \global\let\Warning@nombre\relax
1114   {#1}%
1115 \fi
1116 }

1117 \newcommand*{\FBthousandsep}{\kern \fontdimen2\font \relax}

```

2.7 Caption names

The next step consists in 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.

Let's give a chance to a class or a package read before `babel-french` to define `\FBfigtabshape` as `\relax`, otherwise `\FBfigtabshape` will be defined as `\scshape` (can be changed with `\frenchsetup{SmallCapsFigTabCaptions=false}`).

```
1118 \providecommand*{\FBfigtabshape}{\scshape}
```

New implementation for caption names(requires babel's 3.10 or newer).

```

1119 \StartBabelCommands*{\BabelLanguages}{captions}
1120   [unicode, fontenc=TU EU1 EU2, charset=utf8]
1121   \SetString{\refname}{Références}
1122   \SetString{\abstractname}{Résumé}
1123   \SetString{\prefacename}{Préface}
1124   \SetString{\contentsname}{Table des matières}
1125   \SetString{\ccname}{Copie à }
1126   \SetString{\proofname}{Démonstration}
1127   \SetString{\partfirst}{Première}
1128   \SetString{\partsecond}{Deuxième}
1129   \SetStringLoop{ordinal#1}{%
1130     \frenchpartfirst,\frenchpartsecond,Troisième,Quatrième,%
1131     Cinquième,Sixième,Septième,Huitième,Neuvième,Dixième,Onzième,%
1132     Douzième,Treizième,Quatorzième,Quinzième,Seizième,%
1133     Dix-septième,Dix-huitième,Dix-neuvième,Vingtième}
1134 \StartBabelCommands*{\BabelLanguages}{captions}
1135   \SetString{\refname}{R\ 'ef\ 'erences}
1136   \SetString{\abstractname}{R\ 'esum\ 'e}
1137   \SetString{\bibname}{Bibliographie}
1138   \SetString{\prefacename}{Pr\ 'eface}
1139   \SetString{\chaptername}{Chapitre}
1140   \SetString{\appendixname}{Annexe}

```

```

1141 \SetString{\contentsname}{Table des mati\`eres}
1142 \SetString{\listfigurename}{Table des figures}
1143 \SetString{\listtablename}{Liste des tableaux}
1144 \SetString{\indexname}{Index}
1145 \SetString{\figurename}{\FBfigtabshape Figure}}
1146 \SetString{\tablename}{\FBfigtabshape Table}}
1147 \SetString{\pagename}{page}
1148 \SetString{\seename}{voir}
1149 \SetString{\alsoname}{voir aussi}
1150 \SetString{\enclname}{P.~J. }
1151 \SetString{\ccname}{Copie \`a }
1152 \SetString{\headtoname}{}
1153 \SetString{\proofname}{D\`emonstration}
1154 \SetString{\glossaryname}{Glossaire}

```

When `PartNameFull=true` (default), `\part{}` is printed in French as “Première partie” instead of “Partie I”. As logic is prohibited inside `\SetString`, let’s hide the test about `PartNameFull` in `\FB@partname`.

```

1155 \SetString{\partfirst}{Premi\`ere}
1156 \SetString{\partsecond}{Deuxi\`eme}
1157 \SetString{\partnameord}{partie}
1158 \SetStringLoop{ordinal#1}{%
1159   \partfirst,\partsecond,Troisi\`eme,Quatri\`eme,%
1160   Cinqi\`eme,Sixi\`eme,Septi\`eme,Huiti\`eme,Neuvi\`eme,Dixi\`eme,%
1161   Onzi\`eme,Douzi\`eme,Treizi\`eme,Quatorzi\`eme,Quinzi\`eme,%
1162   Seizi\`eme,Dix-septi\`eme,Dix-huiti\`eme,Dix-neuvi\`eme,%
1163   Vingt\`eme}
1164 \AfterBabelCommands{%
1165   \DeclareRobustCommand*\FB@emptypart{\def\thepart{}}%
1166   \DeclareRobustCommand*\FB@partname{%
1167     \ifFBPartNameFull
1168       \csname ordinal\romannumeral\value{part}\endcsname\space
1169       \partnameord\FB@emptypart
1170     \else
1171       Partie%
1172     \fi}%
1173   }
1174 \SetString{\partname}{\FB@partname}
1175 \EndBabelCommands

```

2.8 Figure and table captions

`\FBWarning` `\FBWarning` is an alias of `\PackageWarning{french.ldb}` which can be made silent by option `SuppressWarning`.

```

1176 \newcommand{\FBWarning}[1]{\PackageWarning{french.ldb}{#1}}

```

`\CaptionSeparator` Let’s consider now captions in figures and tables. In French, captions in figures and tables should never be printed as ‘Figure 1: ’ which is the default in standard LaTeX2e classes (a space should precede the colon in French). This flaw may occur with pdfLaTeX as ‘:’ is made active too late. With LuaLaTeX and XeLaTeX, this

glitch doesn't occur, you get 'Figure 1 : ' which is correct in French. With pdfLaTeX babel-french provides the following workaround.

The standard definition of `\@makecaption` (e.g., the one provided in `article.cls`, `report.cls`, `book.cls` which is frozen for LaTeX2e according to Frank Mittelbach), is saved in `\STD@makecaption`. 'AtBeginDocument' we compare it to its current definition (some classes like `memoir`, `koma-script` classes, AMS classes, `ua-thesis.cls`... change it). If they are identical, `babel-french` just adds a hook called `\FBCaption@Separator` to `\@makecaption`; `\FBCaption@Separator` defaults to `' : '` as in the standard `\@makecaption` and will be changed to `' : '` in French 'AtBeginDocument'; it can be also set to `\CaptionSeparator (' - ')` using [CustomiseFigTabCaptions](#). While saving the standard definition of `\@makecaption` we have to make sure that characters `' :` and `' >` have `\catcode 12` (`babel-french` makes `' :` active and `spanish.lfd` makes `' >` active).

```

1177 \bgroup
1178   \catcode' :=12 \catcode' >=12 \relax
1179   \long\gdef\STD@makecaption#1#2{%
1180     \vskip\abovecaptionskip
1181     \sbox\@tempboxa{#1: #2}%
1182     \ifdim \wd\@tempboxa >\hsize
1183       #1: #2\par
1184     \else
1185       \global \@minipagefalse
1186       \hb@xt@\hsize{\hfil\box\@tempboxa\hfil}%
1187     \fi
1188     \vskip\belowcaptionskip}
1189 \egroup

```

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

With `memoir` and `koma-script` classes, `babel-french` customises `\captiondelim` or `\captionformat` in French (unless option [CustomiseFigTabCaptions](#) is set to `false`) and issues no warning.

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

Enable the standard warning only if high punctuation is active.

```

1190 \newif\if@FBwarning@capsep
1191 \ifFB@active@punct\@FBwarning@capseptrue\fi
1192 \newcommand*{\CaptionSeparator}{\space\textendash\space}
1193 \def\FBCaption@Separator{: }
1194 \long\def\FB@makecaption#1#2{%
1195   \vskip\abovecaptionskip
1196   \sbox\@tempboxa{#1\FBCaption@Separator #2}%
1197   \ifdim \wd\@tempboxa >\hsize
1198     #1\FBCaption@Separator #2\par
1199   \else
1200     \global \@minipagefalse
1201     \hb@xt@\hsize{\hfil\box\@tempboxa\hfil}%
1202   \fi
1203   \vskip\belowcaptionskip}

```

Disable the standard warning with ACM, AMS and SMF classes.

```
1204 \ifclassloaded{acmart}{\@FBwarning@capsepfalse}{}
1205 \ifclassloaded{amsart}{\@FBwarning@capsepfalse}{}
1206 \ifclassloaded{amsbook}{\@FBwarning@capsepfalse}{}
1207 \ifclassloaded{amsdtx}{\@FBwarning@capsepfalse}{}
1208 \ifclassloaded{amslatex}{\@FBwarning@capsepfalse}{}
1209 \ifclassloaded{amproc}{\@FBwarning@capsepfalse}{}
1210 \ifclassloaded{smfart}{\@FBwarning@capsepfalse}{}
1211 \ifclassloaded{smfbook}{\@FBwarning@capsepfalse}{}

```

No warning with memoir or koma-script classes: they change `\@makecaption` but we will manage to customise them in French later on (see below after executing `\FBprocess@options`).

```
1212 \newif\ifFB@koma
1213 \@ifclassloaded{memoir}{\@FBwarning@capsepfalse}{}
1214 \@ifclassloaded{scrartcl}{\@FBwarning@capsepfalse\FB@komatrue}{}
1215 \@ifclassloaded{scrbook}{\@FBwarning@capsepfalse\FB@komatrue}{}
1216 \@ifclassloaded{scrreprt}{\@FBwarning@capsepfalse\FB@komatrue}{}

```

No warning with the beamer class which defines `\beamer@makecaption` (customised below) instead of `\@makecaption`. No warning either if `\@makecaption` is undefined (i.e. letter).

```
1217 \@ifclassloaded{beamer}{\@FBwarning@capsepfalse}{}
1218 \ifdefined\@makecaption\else\@FBwarning@capsepfalse\fi

```

The caption, subcaption and floatrow packages are compatible with babel-french if they are loaded after babel.

Check if packages caption3 subcaption or floatrow are loaded now (before babel-french) and step counter `FBcaption@count` accordingly; it's value will be checked `\AtBeginDocument`. N.B.: caption loads caption3, subcaption loads caption3 and floatrow loads caption3.

```
1219 \newcounter{FBcaption@count}
1220 \@ifpackageloaded{caption3}{\addtocounter{FBcaption@count}{4}}{}
1221 \@ifpackageloaded{subcaption}{\addtocounter{FBcaption@count}{2}}{}
1222 \@ifpackageloaded{floatrow}{\stepcounter{FBcaption@count}}{}

```

First 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 babel-french; then change the definition of `\FBCaption@Separator`, taking care that the colon is typeset correctly in French (*not* 'Figure 1: légende').

```
1223 \AtBeginDocument{%
1224   \ifx\@makecaption\STD@makecaption
1225     \global\let\@makecaption\FB@makecaption

```

If `OldFigTabCaptions=true`, do not overwrite `\FBCaption@Separator` (already saved as `:` for other languages and set to `\CaptionSeparator` by `\extrasfrench` when French is the main language); otherwise add a space before the `:` in French in order to avoid problems when `AutoSpacePunctuation=false`.

```
1226   \ifFBOldFigTabCaptions
1227   \else
1228     \def\FBCaption@Separator{\ifFBfrench\space\fi : }%

```

```

1229 \fi
1230 \ifFBCustomiseFigTabCaptions
1231   \ifFB@mainlanguage@FR
1232     \def\FBCaption@Separator{\CaptionSeparator}%
1233   \fi
1234 \fi
1235 \@FBwarning@capsepfalse
1236 \fi

```

Cancel the warning if caption3.sty has been loaded *after* babel.

```

1237 \@ifpackageloaded{caption3}{%
1238   \ifnum\value{FBcaption@count}=0 \@FBwarning@capsepfalse\fi
1239 }{}%
1240 \if@FBwarning@capsep
1241   \ifnum\value{FBcaption@count}>0

```

caption3.sty has been loaded *before* babel, maybe by the class...

```

1242   \FBWarning
1243     {Figures' and tables' captions might look like\MessageBreak
1244     'Figure 1:' in French instead of 'Figure 1 :'.\MessageBreak
1245     If you have loaded any of the packages caption,\MessageBreak
1246     subcaption or floatrow BEFORE babel/french,\MessageBreak
1247     please move them AFTER babel/french.\MessageBreak
1248     If one of them is loaded by your class,\MessageBreak
1249     you can still add AFTER babel/french\MessageBreak
1250     \protect\usepackage[labelsep=period]{caption} or\MessageBreak
1251     \protect\usepackage[labelsep=endash]{caption} or\MessageBreak
1252     ... live with it; reported}%
1253   \else

```

caption3.sty hasn't been loaded at all.

```

1254   \FBWarning
1255     {Figures' and tables' captions might look like\MessageBreak
1256     'Figure 1:' in French instead of 'Figure 1 :'.\MessageBreak
1257     If it happens, see your class documentation to\MessageBreak
1258     fix this issue or add AFTER babel/french\MessageBreak
1259     \protect\usepackage[labelsep=period]{caption} or\MessageBreak
1260     \protect\usepackage[labelsep=endash]{caption} or\MessageBreak
1261     or ... live with it; reported}%
1262   \fi
1263 \fi
1264 \let\FB@makecaption\relax
1265 \let\STD@makecaption\relax
1266 }

```

2.9 Dots...

\FBtextellipsis LaTeX'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 LaTeX only).

The `\if` construction in the LaTeX 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.

```
1267 \ifFBunicode
1268   \let\FBtextellipsis\textellipsis
1269 \else
1270   \DeclareTextSymbol{\FBtextellipsis}{LY1}{133}
1271   \DeclareTextCommandDefault{\FBtextellipsis}{%
1272     .\kern\fontdimen3\font.\kern\fontdimen3\font.\xspace}
1273 \fi
```

`\Mdots@` and `\Tdots@` 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 redefined as `\FBtextellipsis` in French.

```
1274 \newcommand*{\Tdots@}{\@xp\textellipsis}
1275 \newcommand*{\Mdots@}{\@xp\mdots@}
1276 \AtBeginDocument{\DeclareRobustCommand*{\dots}{\relax
1277   \csname\ifmmode M\else T\fi dots@endcsname}%
1278   \ifdefined\@xp\else\let\@xp\relax\fi
1279   \ifdefined\mdots@\else\let\Mdots@\mathellipsis\fi
1280 }
1281 \def\bbl@frenchdots{\babel@save\Tdots@ \let\Tdots@\FBtextellipsis}
1282 \addto\extrasfrench{\bbl@frenchdots}
```

2.10 More checks about packages' loading order

Like packages `captions` and `floatrow` (see section 2.8), package listings should be loaded after `babel-french` due to active characters issues (pdfLaTeX only).

```
1283 \ifFB@active@punct
1284   \@ifpackageloaded{listings}
1285     {\AtBeginDocument{%
1286       \FBWarning{Please load the "listings" package\MessageBreak
1287         AFTER babel/french; reported}}%
1288     }{}
1289 \fi
```

Package `natbib` should be loaded before `babel-french` due to active characters issues (pdfLaTeX only).

```
1290 \newif\if@FBwarning@natbib
1291 \ifFB@active@punct
1292   \@ifpackageloaded{natbib}{\@FBwarning@natbibtrue}
1293 \fi
1294 \AtBeginDocument{%
1295   \if@FBwarning@natbib
1296     \@ifpackageloaded{natbib}{\@FBwarning@natbibfalse}%
1297   }
```

```

1297 \fi
1298 \if@FBwarning@natbib
1299 \FBwarning{Please load the "natbib" package\MessageBreak
1300 BEFORE babel/french; reported}%
1301 \fi
1302 }

```

Package beamerarticle should be loaded before babel-french to avoid list's conflicts, see p. 54.

```

1303 \newif\if@FBwarning@beamerarticle
1304 \@ifpackageloaded{beamerarticle}{}{\@FBwarning@beamerarticletrue}
1305 \AtBeginDocument{%
1306 \if@FBwarning@beamerarticle
1307 \@ifpackageloaded{beamerarticle}{}%
1308 {\@FBwarning@beamerarticlefalse}%
1309 \fi
1310 \if@FBwarning@beamerarticle
1311 \FBwarning{Please load the "beamerarticle" package\MessageBreak
1312 BEFORE babel/french; reported}%
1313 \fi
1314 }

```

2.11 Setup options: keyval stuff

All setup options are handled by command `\frenchsetup{}` using the keyval syntax. A list of flags is defined and set to a default value which will possibly be changed 'AtEndOfPackage' if French is the main language. After this, `\frenchsetup{}` eventually modifies the preset values of these flags.

Option processing can occur either in `\frenchsetup{}`, but *only for options explicitly set* by `\frenchsetup{}`, or 'AtBeginDocument'; any option affecting `\extrasfrench{}` *must* be processed by `\frenchsetup{}`: when French is the main language, `\extrasfrench{}` is executed by babel when it switches the main language and this occurs *before* reading the stuff postponed by babel-french 'AtBeginDocument'. Reexecuting `\extrasfrench{}` is an option which was used up to v2.6h, it has been dropped in v3.0a because of its side-effects (f.i. `\babel@save` and `\babel@savevariable` did not work for French).

`\frenchsetup` Let's now define this command which reads and sets the options to be processed either immediately (i.e. just after setting the key) or later (at `\begin{document}`) by `\FBprocess@options`. `\frenchsetup{}` can only be called in the preamble.

```

1315 \newcommand*{\frenchsetup}[1]{%
1316 \setkeys{FB}{#1}%
1317 }%
1318 \@onlypreamble\frenchsetup

```

Keep the former name `\frenchbsetup` working for compatibility.

```

1319 \let\frenchbsetup\frenchsetup
1320 \@onlypreamble\frenchbsetup

```

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

```

1321 \newif\ifFBShowOptions
1322 \newif\ifFBStandardLayout          \FBStandardLayouttrue
1323 \newif\ifFBGlobalLayoutFrench      \FBGlobalLayoutFrenchtrue
1324 \newif\ifFBReduceListSpacing
1325 \newif\ifFBListOldLayout
1326 \newif\ifFBListItemsAsPar
1327 \newif\ifFBCompactItemize
1328 \newif\ifFBStandardItemizeEnv      \FBStandardItemizeEnvtrue
1329 \newif\ifFBStandardEnumerateEnv    \FBStandardEnumerateEnvtrue
1330 \newif\ifFBStandardItemLabels      \FBStandardItemLabelstrue
1331 \newif\ifFBStandardLists           \FBStandardListstrue
1332 \newif\ifFBIndentFirst
1333 \newif\ifFBFrenchFootnotes
1334 \newif\ifFBAutoSpaceFootnotes
1335 \newif\ifFBOriginalTypewriter
1336 \newif\ifFBThinColonSpace
1337 \newif\ifFBThinSpaceInFrenchNumbers
1338 \newif\ifFBFrenchSuperscripts      \FBFrenchSuperscriptstrue
1339 \newif\ifFBLowercaseSuperscripts   \FBLowercaseSuperscriptstrue
1340 \newif\ifFBPartNameFull            \FBPartNameFulltrue
1341 \newif\ifBFCustomiseFigTabCaptions
1342 \newif\ifFBOldFigTabCaptions
1343 \newif\ifFBSmallCapsFigTabCaptions \FBSmallCapsFigTabCaptionstrue
1344 \newif\ifFBSuppressWarning
1345 \newif\ifFBINGuillSpace

```

The defaults values of these flags have been chosen so that babel-french 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 (or a French dialect) 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 `\frenchsetup{}`.

The following patch is for koma-script classes: the `\partformat` command, defined as `\partname~\thepart\autodot`, is incompatible with our redefinition of `\partname`.

```

1346 \ifFB@koma
1347   \ifdefined\partformat
1348     \def\FB@partformat@fix{%
1349       \ifFBPartNameFull
1350         \babel@save\partformat
1351         \renewcommand*{\partformat}{\partname}%
1352       \fi}
1353   \addto\extrasfrench{\FB@partformat@fix}%
1354 \fi
1355 \fi

```

Our list customisation conflicts with the beamer class and with the beamerarticle package. The patch provided in beamerbasecompatibility solves the conflict except in case of language changes, so we provide our own patch. When the beamer is loaded, lists are not customised at all to ensure compatibility. The beamerarticle

package needs to be loaded *before* babel, a warning is issued otherwise, see section 2.10; a light customisation is compatible with the beamerarticle package.

```

1356 \def\FB@french{french}
1357 \def\FB@acadian{acadian}
1358 \newif\ifFB@mainlanguage@FR
1359 \AtEndOfPackage{%
1360   \ifx\bbl@main@language\FB@french \FB@mainlanguage@FRtrue
1361   \else \ifx\bbl@main@language\FB@acadian \FB@mainlanguage@FRtrue \fi
1362   \fi
1363   \ifFB@mainlanguage@FR
1364     \FBGlobalLayoutFrenchtrue
1365     \@ifclassloaded{beamer}%
1366     {\PackageInfo{french.ldf}{%
1367       No list customisation for the beamer class,%
1368       \MessageBreak reported}}%
1369     {\@ifpackageloaded{beamerarticle}%
1370      {\FBStandardItemLabelsfalse
1371       \FBReduceListSpacingtrue
1372       \PackageInfo{french.ldf}{%
1373         Minimal list customisation for the beamerarticle%
1374         \MessageBreak package; reported}}}%

```

Otherwise customise lists “à la française”:

```

1375     {\FBReduceListSpacingtrue
1376     \FBStandardItemizeEnvfalse
1377     \FBStandardEnumerateEnvfalse
1378     \FBStandardItemLabelsfalse}%
1379   }
1380   \FBIndentFirsttrue
1381   \FBFrenchFootnotesttrue
1382   \FBAutoSpaceFootnotesttrue
1383   \FBCustomiseFigTabCaptionstrue
1384 \else
1385   \FBGlobalLayoutFrenchfalse
1386 \fi

```

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

```

1387 \RequirePackage{keyval}%
1388 \define@key{FB}{ShowOptions}[true]%
1389   {\csname FBShowOptions#1\endcsname}%
1390 \define@key{FB}{StandardLayout}[true]%
1391   {\csname FBStandardLayout#1\endcsname
1392   \ifFBStandardLayout
1393     \FBReduceListSpacingfalse
1394     \FBStandardItemizeEnvtrue
1395     \FBStandardItemLabelstrue
1396     \FBStandardEnumerateEnvtrue
1397     \FBIndentFirstfalse
1398     \FBFrenchFootnotesfalse

```

```

1399         \FBAutoSpaceFootnotesfalse
1400         \FBGlobalLayoutFrenchfalse
1401     \else
1402         \FBReduceListSpacingtrue
1403         \FBStandardItemizeEnvfalse
1404         \FBStandardItemLabelsfalse
1405         \FBStandardEnumerateEnvfalse
1406         \FBIndentFirsttrue
1407         \FBFrenchFootnotesttrue
1408         \FBAutoSpaceFootnotesttrue
1409     \fi}%
1410 \define@key{FB}{GlobalLayoutFrench}[true]%
1411     {\csname FBGlobalLayoutFrench#1\endcsname

```

If this key is set to **true** when French is the main language, nothing to do: all flags keep their default value. If this key is set to **false**, nothing to do either: `\babel@save` will do the job. Warn and reset in case this key is set to true while the main language is *not* French.

```

1412     \ifFBGlobalLayoutFrench
1413     \ifFB@mainlanguage@FR
1414     \else
1415         \FBGlobalLayoutFrenchfalse
1416         \PackageWarning{french.ldf}%
1417             {Option ‘GlobalLayoutFrench’ skipped:\MessageBreak
1418             French is *not* babel’s last option.\MessageBreak
1419             Reported}%
1420     \fi
1421 \fi}%
1422 \define@key{FB}{ReduceListSpacing}[true]%
1423     {\csname FBReduceListSpacing#1\endcsname}%
1424 \define@key{FB}{ListOldLayout}[true]%
1425     {\csname FBListOldLayout#1\endcsname
1426     \ifFBListOldLayout
1427         \FBStandardEnumerateEnvtrue
1428         \renewcommand*{\FrenchLabelItem}{\textendash}%
1429     \fi}%
1430 \define@key{FB}{CompactItemize}[true]%
1431     {\csname FBCompactItemize#1\endcsname
1432     \ifFBCompactItemize
1433         \FBStandardItemizeEnvfalse
1434         \FBStandardEnumerateEnvfalse
1435     \else
1436         \FBStandardItemizeEnvtrue
1437         \FBStandardEnumerateEnvtrue
1438     \fi}%
1439 \define@key{FB}{StandardItemizeEnv}[true]%
1440     {\csname FBStandardItemizeEnv#1\endcsname}%
1441 \define@key{FB}{StandardEnumerateEnv}[true]%
1442     {\csname FBStandardEnumerateEnv#1\endcsname}%
1443 \define@key{FB}{StandardItemLabels}[true]%
1444     {\csname FBStandardItemLabels#1\endcsname}%

```



```

1445 \define@key{FB}{ItemLabels}%
1446     {\renewcommand*{\FrenchLabelItem}{#1}}%
1447 \define@key{FB}{ItemLabeli}%
1448     {\renewcommand*{\Frlabelitemi}{#1}}%
1449 \define@key{FB}{ItemLabelii}%
1450     {\renewcommand*{\Frlabelitemii}{#1}}%
1451 \define@key{FB}{ItemLabeliii}%
1452     {\renewcommand*{\Frlabelitemiii}{#1}}%
1453 \define@key{FB}{ItemLabeliv}%
1454     {\renewcommand*{\Frlabelitemiv}{#1}}%
1455 \define@key{FB}{StandardLists}[true]%
1456     {\csname FBStandardLists#1\endcsname
1457     \ifFBStandardLists
1458         \FBReduceListSpacingfalse
1459         \FBCompactItemizefalse
1460         \FBStandardItemizeEnvtrue
1461         \FBStandardEnumerateEnvtrue
1462         \FBStandardItemLabelstrue
1463     \else
1464         \FBReduceListSpacingtrue
1465         \FBCompactItemizetrue
1466         \FBStandardItemizeEnvfalse
1467         \FBStandardEnumerateEnvfalse
1468         \FBStandardItemLabelsfalse
1469     \fi}%
1470 \define@key{FB}{ListItemsAsPar}[true]%
1471     {\csname FBListItemsAsPar#1\endcsname}%
1472 \define@key{FB}{IndentFirst}[true]%
1473     {\csname FBIndentFirst#1\endcsname}%
1474 \define@key{FB}{FrenchFootnotes}[true]%
1475     {\csname FBFrenchFootnotes#1\endcsname}%
1476 \define@key{FB}{AutoSpaceFootnotes}[true]%
1477     {\csname FBAutoSpaceFootnotes#1\endcsname}%
1478 \define@key{FB}{AutoSpacePunctuation}[true]%
1479     {\csname FBAutoSpacePunctuation#1\endcsname}%
1480 \define@key{FB}{OriginalTypewriter}[true]%
1481     {\csname FBOriginalTypewriter#1\endcsname}%
1482 \define@key{FB}{ThinColonSpace}[true]%
1483     {\csname FBThinColonSpace#1\endcsname
1484     \ifFBThinColonSpace
1485         \renewcommand*{\FBcolonspace}{\FBthinspace}%
1486     \fi}%
1487 \define@key{FB}{ThinSpaceInFrenchNumbers}[true]%
1488     {\csname FBThinSpaceInFrenchNumbers#1\endcsname}%
1489 \define@key{FB}{FrenchSuperscripts}[true]%
1490     {\csname FBFrenchSuperscripts#1\endcsname}%
1491 \define@key{FB}{LowercaseSuperscripts}[true]%
1492     {\csname FBLowercaseSuperscripts#1\endcsname}%
1493 \define@key{FB}{PartNameFull}[true]%
1494     {\csname FBPartNameFull#1\endcsname}%
1495 \define@key{FB}{CustomiseFigTabCaptions}[true]%

```

```

1496         {\csname FBCustomiseFigTabCaptions#1\endcsname}%
1497 \define@key{FB}{OldFigTabCaptions}[true]%
1498         {\csname FBOldFigTabCaptions#1\endcsname
1499         \ifFBOldFigTabCaptions
1500             \def\FB@capsep@fix{\babel@save\FBCaption@Separator
1501             \def\FBCaption@Separator{\Caption@Separator}}%
1502             \addto\extrasfrench{\FB@capsep@fix}%
1503             \ifdefined\extrasacadian
1504                 \addto\extrasacadian{\FB@capsep@fix}%
1505             \fi
1506         \fi}%
1507 \define@key{FB}{SmallCapsFigTabCaptions}[true]%
1508         {\csname FBSmallCapsFigTabCaptions#1\endcsname
1509         \ifFBSmallCapsFigTabCaptions
1510             \let\FBfigtabshape\scshape
1511         \else
1512             \let\FBfigtabshape\relax
1513         \fi}%
1514 \define@key{FB}{SuppressWarning}[true]%
1515         {\csname FBSuppressWarning#1\endcsname
1516         \ifFBSuppressWarning
1517             \renewcommand{\FBWarning}[1]{}%
1518         \fi}%

```

Here are the options controlling French guillemets spacing and the output of `\frquote{}`.

```

1519 \define@key{FB}{INGuillSpace}[true]%
1520         {\csname FBINGuillSpace#1\endcsname
1521         \ifFBINGuillSpace
1522             \renewcommand*{\FBguillspace}{\space}%
1523         \fi}%
1524 \define@key{FB}{InnerGuillSingle}[true]%
1525         {\csname FBInnerGuillSingle#1\endcsname}%
1526 \define@key{FB}{EveryParGuill}[open]%
1527         {\expandafter\let\expandafter
1528         \FBeveryparguill\csname FBguill#1\endcsname
1529         \ifx\FBeveryparguill\FBguillopen
1530         \else\ifx\FBeveryparguill\FBguillclose
1531             \else\ifx\FBeveryparguill\FBguillnone
1532                 \else
1533                     \let\FBeveryparguill\FBguillopen
1534                     \FBWarning{Wrong value for 'EveryParGuill':
1535                     try 'open',\MessageBreak
1536                     'close' or 'none'. Reported}%
1537                 \fi
1538             \fi
1539         \fi}%
1540 \define@key{FB}{EveryLineGuill}[open]%
1541         {\ifFB@luatex@punct
1542         \expandafter\let\expandafter
1543         \FBeverylineguill\csname FBguill#1\endcsname

```

```

1544         \ifx\FBverylineguill\FBguillopen
1545         \else\ifx\FBverylineguill\FBguillclose
1546             \else\ifx\FBverylineguill\FBguillnone
1547                 \else
1548                     \let\FBverylineguill\FBguillnone
1549                     \FBWarning{Wrong value for 'EveryLineGuill':
1550                         try 'open',\MessageBreak
1551                         'close' or 'none'. Reported}%
1552                 \fi
1553             \fi
1554         \fi
1555     \else
1556         \FBWarning{Option 'EveryLineGuill' skipped:%
1557             \MessageBreak this option is for
1558             LuaTeX *only*.\MessageBreak Reported}%
1559     \fi}%

```

Option [UnicodeNoBreakSpaces](#) (LuaLaTeX only) is meant for HTML translators: when true, all non-breaking spaces added by babel-french are coded in the PDF file as Unicode characters, namely U+A0 or U+202F, instead of penalties and glues.

```

1560 \define@key{FB}{UnicodeNoBreakSpaces}[true]%
1561 {
1562     \ifFB@luatex@punct
1563         \csname FBucsNBSP#1\endcsname
1564         \ifFBucsNBSP \FB@ucsNBSP=1 \fi
1565     \else
1566         \FBWarning{Option 'UnicodeNoBreakSpaces' skipped:%
1567             \MessageBreak this option is for
1568             LuaTeX *only*.\MessageBreak Reported}%
1569     \fi
1570 }%

```

Inputting 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`. Life is simple here with modern LuaTeX or XeTeX engines: we just have to activate the `\FB@addGUILspace` attribute for LuaTeX or set `\XeTeXcharclass` of quotes to the proper value for XeTeX.

With pdfTeX (or old LuaTeX and XeTeX engines), quote characters are made active and expand to `\og\ignorespaces` and `\fg` respectively if the current language is French, and to `\guillemotleft` and `\guillemotright` otherwise (think of German quotes), this is done by `\FB@@og` and `\FB@@fg`; thus correct non-breaking 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, apple mac, ...) or multi-bytes (utf-8, utf8x); the next command is meant for checking whether a character is single-byte (`\FB@second` is empty) or not.

```

1570 \def\FB@parse#1#2\endparse{\def\FB@second{#2}}%
1571 \define@key{FB}{og}%
1572 {\ifFBunicode

```

LuaTeX or XeTeX in use, first try modern LuaTeX: we just need to set LuaTeX's attribute `\FB@addGUILspace` to 1,

```

1573         \ifFB@luatex@punct
1574             \FB@addGUILspace=1 \relax
1575         \fi

```

then with XeTeX it is a bit more tricky:

```

1576         \ifFB@xetex@punct

```

\XeTeXinterchartokenstate is defined, we just need to set \XeTeXcharclass to \FB@guilo for the French opening quote in T1 and Unicode encoding (see subsection 2.2).

```

1577             \XeTeXcharclass"13 = \FB@guilo
1578             \XeTeXcharclass"AB = \FB@guilo
1579             \XeTeXcharclass"A0 = \FB@guilnul
1580             \XeTeXcharclass"202F = \FB@guilnul
1581         \fi

```

Issue a warning with older Unicode engines requiring active characters.

```

1582         \ifFB@active@punct
1583             \FBWarning{Option og=« not supported with this version
1584                 of\MessageBreak LuaTeX/XeTeX; reported}%
1585         \fi
1586     \else

```

This is for conventional TeX engines:

```

1587         \newcommand*{\FB@@og}{%
1588             \ifFBfrench
1589                 \ifFB@spacing\FB@og\ignorespaces
1590                 \else\guillemotleft
1591             \fi
1592             \else\guillemotleft\fi}%
1593         \AtBeginDocument{%
1594             \ifdefined\uc@dclc

```

Package inputenc with utf8x (ucs) encoding loaded, use \uc@dclc:

```

1595             \uc@dclc{171}{default}{\FB@@og}%
1596         \else

```

if encoding is not utf8x, check if the argument of og is a single-byte character:

```

1597             \FB@parse#1\endparse
1598             \ifx\FB@second\@empty

```

This means 8-bit character encoding. Package MULEenc (from CJK) defines \mule@def to map characters to control sequences.

```

1599             \ifdefined\mule@def
1600                 \mule@def{11}{\FB@@og}%
1601             \else
1602                 \ifdefined\DeclareInputText
1603                     \@tempcnta'#1\relax
1604                     \DeclareInputText{\the\@tempcnta}{\FB@@og}%
1605                 \else

```

Package inputenc not loaded, no way...

```

1606                 \FBWarning{Option 'og' requires package
1607                     inputenc;\MessageBreak reported}%

```

```

1608             \fi
1609             \fi
1610         \else

```

This means multi-byte character encoding, we assume UTF-8

```

1611             \DeclareUnicodeCharacter{00AB}{\FB@@og}%
1612             \fi
1613         \fi}%
1614     \fi
1615 }%

```

Same code for the closing quote.

```

1616 \define@key{FB}{fg}%
1617 {
1618     \ifFB@luatex@punct
1619         \FB@addGUIlspace=1 \relax
1620     \fi
1621     \ifFB@xetex@punct
1622         \XeTeXcharclass"14 = \FB@guilf
1623         \XeTeXcharclass"BB = \FB@guilf
1624         \XeTeXcharclass"A0 = \FB@guilnul
1625         \XeTeXcharclass"202F = \FB@guilnul
1626     \fi
1627     \ifFB@active@punct
1628         \FBWarning{Option fg=» not supported with this version
1629             of\MessageBreak LuaTeX/XeTeX; reported}%
1630     \fi
1631 \else
1632     \newcommand*{\FB@@fg}{%
1633         \ifFB@french
1634             \ifFB@spacing\FB@fg
1635             \else\guillemotright
1636         \fi
1637         \else\guillemotright\fi}%
1638 \AtBeginDocument{%
1639     \ifdefined\uc@dcldc
1640         \uc@dcldc{187}{default}{\FB@@fg}%
1641     \else
1642         \FB@parse#1\endparse
1643         \ifx\FB@second\@empty
1644             \ifdefined\mule@def
1645                 \mule@def{27}{\FB@@fg}%
1646             \else
1647                 \ifdefined\DeclareInputText
1648                     \@tempcnta'#1\relax
1649                     \DeclareInputText{\the\@tempcnta}{\FB@@fg}%
1650                 \else
1651                     \FBWarning{Option 'fg' requires package
1652                         inputenc;\MessageBreak reported}%
1653                 \fi
1654             \fi
1655         \else

```

```

1656             \DeclareUnicodeCharacter{00BB}{\FB@fg}%
1657             \fi
1658         \fi}%
1659     \fi
1660 }%
1661 }

```

\FBprocess@options \FBprocess@options will be executed at \begin{document}: it first checks about packages loaded in the preamble (possibly after babel) which customise lists: currently enumitem, paralist and enumerate; then it processes the options as set by \frenchsetup{} or forced for compatibility with packages loaded in the preamble. When French is the main language, \extrasfrench and \captionsfrench *have already been processed* by babel at \begin{document} *before* \FBprocess@options.

```

1662 \newcommand*{\FBprocess@options}{%

```

Update flags if a package customising lists has been loaded, currently: enumitem, paralist, enumerate.

```

1663   \@ifpackageloaded{enumitem}{%
1664     \ifFBStandardItemizeEnv
1665     \else
1666       \FBStandardItemizeEnvtrue
1667       \PackageInfo{french.ldf}%
1668         {Setting StandardItemizeEnv=true for\MessageBreak
1669           compatibility with enumitem package,\MessageBreak
1670           reported}%
1671     \fi
1672   \ifFBStandardEnumerateEnv
1673   \else
1674     \FBStandardEnumerateEnvtrue
1675     \PackageInfo{french.ldf}%
1676       {Setting StandardEnumerateEnv=true for\MessageBreak
1677         compatibility with enumitem package,\MessageBreak
1678         reported}%
1679   \fi}{}%
1680 \@ifpackageloaded{paralist}{%
1681   \ifFBStandardItemizeEnv
1682   \else
1683     \FBStandardItemizeEnvtrue
1684     \PackageInfo{french.ldf}%
1685       {Setting StandardItemizeEnv=true for\MessageBreak
1686         compatibility with paralist package,\MessageBreak
1687         reported}%
1688   \fi
1689   \ifFBStandardEnumerateEnv
1690   \else
1691     \FBStandardEnumerateEnvtrue
1692     \PackageInfo{french.ldf}%
1693       {Setting StandardEnumerateEnv=true for\MessageBreak
1694         compatibility with paralist package,\MessageBreak
1695         reported}%
1696   \fi}{}%

```

```

1697 \@ifpackageloaded{enumerate}{%
1698   \ifFBStandardEnumerateEnv
1699   \else
1700     \FBStandardEnumerateEnvtrue
1701     \PackageInfo{french.lfd}{%
1702       {Setting StandardEnumerateEnv=true for\MessageBreak
1703        compatibility with enumerate package,\MessageBreak
1704        reported}%
1705     \fi}{}%

```

Reset `\FB@ufl`'s normal meaning and update lists' settings now in case French is the main language:

```

1706 \def\FB@ufl{\update@frenchlists}
1707 \ifFB@mainlanguage@FR
1708   \update@frenchlists
1709 \fi

```

The layout of footnotes is handled at the `\begin{document}` depending on the values of flags `FrenchFootnotes` and `AutoSpaceFootnotes` (see section 2.14), nothing has to be done here for footnotes.

`AutoSpacePunctuation` adds a non-breaking space (in French only) before the four active characters (`,:!?`) even if none has been typed before them.

```

1710 \ifFBAutoSpacePunctuation
1711   \autospace@beforeFDP
1712 \else
1713   \noautospace@beforeFDP
1714 \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.

```

1715 \ifFBOriginalTypewriter
1716 \else
1717   \let\ttfamilyORI\ttfamily
1718   \let\rmfamilyORI\rmfamily
1719   \let\sffamilyORI\sffamily
1720   \let\ttfamily\ttfamilyFB
1721   \let\rmfamily\rmfamilyFB
1722   \let\sffamily\sffamilyFB
1723 \fi

```

When package `numprint` is loaded with option `autolanguage`, `numprint`'s command `\npstylefrench` has to be redefined differently according to the value of flag `ThinSpaceInFrenchNumbers`. As `\npstylefrench` was undefined in old versions of `numprint`, we provide this command.

```

1724 \@ifpackageloaded{numprint}{%
1725   {\ifnprt@autolanguage
1726     \providecommand*\npstylefrench{}}%
1727   \ifFBThinSpaceInFrenchNumbers
1728     \renewcommand*\FBthousandsep{\,}%
1729   \fi

```

```

1730      \g@addto@macro\npstylefrench{\npthousandsep{\FBthousandsep}}%
1731      \fi
1732      }{}%

```

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.

```

1733 \ifFBFrenchSuperscripts
1734   \DeclareRobustCommand*\up{\@ifstar{\FB@up@fake}{\fup}}%
1735 \else
1736   \DeclareRobustCommand*\up{\@ifstar{\FB@up@fake}%
1737                                   {\textsuperscript}}%
1738 \fi

```

LowercaseSuperscripts: if **false** `\FB@lc` is redefined to do nothing.

```

1739 \ifFBLowercaseSuperscripts
1740 \else
1741   \renewcommand*\FB@lc[1]{##1}%
1742 \fi

```

Unless **CustomiseFigTabCaptions** has been set to **false**, use `\CaptionSeparator` for koma-script, memoir and beamer classes.

```

1743 \ifFBCustomiseFigTabCaptions
1744   \ifFB@koma
1745     \renewcommand*\captionformat{\CaptionSeparator}%
1746   \fi
1747   \@ifclassloaded{memoir}%
1748     {\captiondelim{\CaptionSeparator}}{}%
1749   \@ifclassloaded{beamer}%
1750     {\defbeamertemplate{caption label separator}{FBcustom}{%
1751       \CaptionSeparator}%
1752     \setbeamertemplate{caption label separator}[FBcustom]}{}%
1753 \else

```

When **CustomiseFigTabCaptions** is **false**, have the colon behave properly in French: locally force `\autospace@beforeFDP` in case of **AutoSpacePunctuation=false**.

```

1754   \ifFB@koma
1755     \renewcommand*\captionformat{{\autospace@beforeFDP : }}%
1756   \fi
1757   \@ifclassloaded{memoir}%
1758     {\captiondelim{{\autospace@beforeFDP : }}%
1759     }{}%
1760   \@ifclassloaded{beamer}%
1761     {\defbeamertemplate{caption label separator}{FBcolon}{%
1762       {\autospace@beforeFDP : }}%
1763     \setbeamertemplate{caption label separator}[FBcolon]%
1764     }{}%
1765 \fi

```

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

```

1766 \ifFBShowOptions
1767   \GenericWarning{* }{%
1768     ***** List of possible options for babel-french *****\MessageBreak

```



```

1769 [Default values between brackets when french is loaded *LAST*]%
1770 \MessageBreak
1771 ShowOptions=true [false]\MessageBreak
1772 StandardLayout=true [false]\MessageBreak
1773 GlobalLayoutFrench=false [true]\MessageBreak
1774 PartNameFull=false [true]\MessageBreak
1775 IndentFirst=false [true]\MessageBreak
1776 ListItemsAsPar=true [false]\MessageBreak
1777 ReduceListSpacing=false [true]\MessageBreak
1778 StandardItemizeEnv=true [false]\MessageBreak
1779 StandardEnumerateEnv=true [false]\MessageBreak
1780 StandardItemLabels=true [false]\MessageBreak
1781 ItemLabels=\textendash, \textbullet,
1782 \protect\ding{43},... [\textendash]\MessageBreak
1783 ItemLabeli=\textendash, \textbullet,
1784 \protect\ding{43},... [\textendash]\MessageBreak
1785 ItemLabelii=\textendash, \textbullet,
1786 \protect\ding{43},... [\textendash]\MessageBreak
1787 ItemLabeliii=\textendash, \textbullet,
1788 \protect\ding{43},... [\textendash]\MessageBreak
1789 ItemLabeliv=\textendash, \textbullet,
1790 \protect\ding{43},... [\textendash]\MessageBreak
1791 StandardLists=true [false]\MessageBreak
1792 ListOldLayout=true [false]\MessageBreak
1793 CompactItemize=false [true]\MessageBreak
1794 FrenchFootnotes=false [true]\MessageBreak
1795 AutoSpaceFootnotes=false [true]\MessageBreak
1796 AutoSpacePunctuation=false [true]\MessageBreak
1797 ThinColonSpace=true [false]\MessageBreak
1798 OriginalTypewriter=true [false]\MessageBreak
1799 UnicodeNoBreakSpaces=true [false]\MessageBreak
1800 og= <left quote character>, fg= <right quote character>%
1801 INGuillSpace=true [false]\MessageBreak
1802 EveryParGuill=open, close, none [open]\MessageBreak
1803 EveryLineGuill=open, close, none
1804 [open in LuaTeX, none otherwise]\MessageBreak
1805 InnerGuillSingle=true [false]\MessageBreak
1806 ThinSpaceInFrenchNumbers=true [false]\MessageBreak
1807 SmallCapsFigTabCaptions=false [true]\MessageBreak
1808 CustomiseFigTabCaptions=false [true]\MessageBreak
1809 OldFigTabCaptions=true [false]\MessageBreak
1810 FrenchSuperscripts=false [true]\MessageBreak
1811 LowercaseSuperscripts=false [true]\MessageBreak
1812 SuppressWarning=true [false]\MessageBreak
1813 \MessageBreak
1814 %*****%
1815 \MessageBreak\protect\frenchsetup{ShowOptions}}
1816 \fi
1817 }

```

At `\begin{document}`, we have to provide an `\xspace` command in case the

xspace package is not loaded, do some setup for hyperref's bookmarks, execute `\FBprocess@options`, switch LuaTeX punctuation on and issue some warnings if necessary.

```
1818 \AtBeginDocument{%
1819   \providecommand*\xspace{\relax}%
```

Let's redefine some commands in hyperref's bookmarks.

```
1820   \ifdefined\pdfstringdefDisableCommands
1821     \pdfstringdefDisableCommands{%
1822       \let\up\relax
1823       \let\up\relax
1824       \let\degre\textdegree
1825       \let\degres\textdegree
1826       \def\ieme{e\xspace}%
1827       \def\iemes{es\xspace}%
1828       \def\ier{er\xspace}%
1829       \def\iers{ers\xspace}%
1830       \def\iere{re\xspace}%
1831       \def\ieres{res\xspace}%
1832       \def\FrenchEnumerate#1{#1\degre\space}%
1833       \def\FrenchPopularEnumerate#1{#1\degre)\space}%
1834       \def\No{N\degre\space}%
1835       \def\no{n\degre\space}%
1836       \def\Nos{N\degre\space}%
1837       \def\nos{n\degre\space}%
1838       \def\FB@og{\guillemotleft\space}%
1839       \def\FB@fg{\space\guillemotright}%
1840       \def\at{@}%
1841       \def\circonflexe{\string^}%
1842       \def\tild{\string~}%
1843       \def\boi{\textbackslash}%
1844       \let\bsc\textsc
1845     }%
1846   \fi
```

Let's now process the remaining options, either not explicitly set by `\frenchsetup{}` or possibly modified by packages loaded after babel-french.

```
1847   \FBprocess@options
```

When option `UnicodeNoBreakSpaces` is `true` (LuaLaTeX only) we need to redefine `\FBmedkern`, `\FBthickkern` and `\FBthousandsep` as Unicode characters.

```
1848   \ifFBucsNBSP
1849     \renewcommand*\FBmedkern{\char"202F\relax}%
1850     \renewcommand*\FBthickkern{\char"A0\relax}%
1851     \ifFBThinSpaceInFrenchNumbers
1852       \renewcommand*\FBthousandsep{\char"202F\relax}%
1853     \else
1854       \renewcommand*\FBthousandsep{\char"A0\relax}%
1855     \fi
1856   \fi
```

Finally, a warning is issued with pdfLaTeX when OT1 encoding is in use at the `\begin{document}`; mind that `\encodingdefault` is defined as ‘long’, the test would fail if `\FBOTone` was defined with `\newcommand*`!

```

1857 \begingroup
1858   \newcommand{\FBOTone}{OT1}%
1859   \ifx\encodingdefault\FBOTone
1860     \FBWarning{OT1 encoding should not be used for French.%
1861               \MessageBreak
1862               Add \protect\usepackage[T1]{fontenc} to the
1863               preamble\MessageBreak of your document; reported}%
1864   \fi
1865 \endgroup
1866 }
```

2.12 French lists

`\listFB` Vertical spacing in lists should be shorter in French texts than the defaults provided by LaTeX. Note that the easy way, just changing values of vertical spacing parameters `\listORI` 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 0pt, but will be noticeable when `\parskip` is *not* null.

```

1867 \let\listORI\list
1868 \let\endlistORI\endlist
1869 \def\FB@listVsettings{%
1870   \setlength{\itemsep}{0.4ex plus 0.2ex minus 0.2ex}%
1871   \setlength{\parsep}{0.4ex plus 0.2ex minus 0.2ex}%
1872   \setlength{\topsep}{0.8ex plus 0.4ex minus 0.4ex}%
1873   \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`.

```

1874   \@tempdima=\parskip
1875   \addtolength{\topsep}{-\@tempdima}%
1876   \addtolength{\partopsep}{\@tempdima}%
1877 }
1878 \def\listFB#1#2{\listORI{#1}{\FB@listVsettings #2}}
1879 \let\endlistFB\endlist

```

Let’s now consider French `itemize`-lists. They differ from those provided by the standard LaTeX classes:

- The ‘•’ is never used in French itemize-lists, an emdash ‘—’ or an en-dash ‘–’ 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 `\frenchsetup{}` (see section 2.11).
- 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 shown p. 6.

`\FrenchLabelItem` Default labels for French itemize-lists (same label for all levels):

```

\FrenchLabelItem 1880 \newcommand*{\FrenchLabelItem}{\textemdash}
\Frlabelitemi 1881 \newcommand*{\Frlabelitemi}{\FrenchLabelItem}
\Frlabelitemii 1882 \newcommand*{\Frlabelitemii}{\FrenchLabelItem}
\Frlabelitemiii 1883 \newcommand*{\Frlabelitemiii}{\FrenchLabelItem}
\Frlabelitemiv 1884 \newcommand*{\Frlabelitemiv}{\FrenchLabelItem}

```

`\listindentFB` Let’s define four dimens `\listindentFB`, `\descindentFB`, `\labelindentFB` and `\descindentFB` `\labelwidthFB` to customise lists’ horizontal indentations. They are given silly negative values here in order to eventually enable their customisation in the preamble. They will get reasonable defaults later when entering French (see `\setlabelitemsFB` and `\setlistindentFB`) unless they have been customised.

```

1885 \newdimen\listindentFB
1886 \setlength{\listindentFB}{-1pt}
1887 \newdimen\descindentFB
1888 \setlength{\descindentFB}{-1pt}
1889 \newdimen\labelindentFB
1890 \setlength{\labelindentFB}{-1pt}
1891 \newdimen\labelwidthFB
1892 \setlength{\labelwidthFB}{-1pt}

```

`\FB@listHsettings` `\FB@listHsettings` holds the new horizontal settings chosen for French lists itemize and enumerate (two possible layouts).

```

1893 \newdimen\leftmarginFB
1894 \def\FB@listHsettings{%
1895   \ifFBListItemsAsPar

```

Optional layout: lists’ items are typeset as paragraphs with indented labels.

```

1896   \itemindent=\labelindentFB
1897   \advance\itemindent by \labelwidthFB
1898   \advance\itemindent by \labelsep
1899   \leftmargini\z@
1900   \bbl@for\FB@dp {2, 3, 4, 5, 6}%
1901     {\csname leftmargin\romannumeral\FB@dp\endcsname=\labelindentFB}%
1902   \else

```

Default layout: labels hanging into the left margin.

```

1903   \leftmarginFB=\labelwidthFB
1904   \advance\leftmarginFB by \labelsep
1905   \bbl@for\FB@dp {1, 2, 3, 4, 5, 6}%

```

```

1906      {\csname leftmargin\romannumeral\FB@dp\endcsname=\leftmarginFB}%
1907      \advance\leftmargini by \listindentFB
1908      \fi
1909      \leftmargin=\csname leftmargin\ifnum\@listdepth=\@ne i\else
1910                                     ii\fi\endcsname
1911 }

```

\itemizeFB New environment for French itemize-lists.

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

```

1912 \def\FB@itemizesettings{%
1913     \ifFBReduceListSpacing
1914         \setlength{\itemsep}{\z@}%
1915         \setlength{\parsep}{\z@}%
1916         \setlength{\topsep}{\z@}%
1917         \setlength{\partopsep}{\z@}%
1918         \@tempdima=\parskip
1919         \addtolength{\topsep}{-\@tempdima}%
1920         \addtolength{\partopsep}{\@tempdima}%
1921     \fi
1922     \settowidth{\labelwidth}{\csname\@itemitem\endcsname}%
1923     \ifFBListOldLayout
1924         \setlength{\leftmargin}{\labelwidth}%
1925         \addtolength{\leftmargin}{\labelsep}%
1926         \addtolength{\leftmargin}{\parindent}%
1927     \else
1928         \FB@listHsettings
1929     \fi
1930 }

```

The definition of \itemizeFB follows the one of \itemize in standard LaTeX classes (see `ltlists.dtx`), spaces are customised by \FB@itemizesettings.

```

1931 \def\itemizeFB{%
1932     \ifnum \@itemdepth >\thr@@\toodeep\else
1933         \advance\@itemdepth by \@ne
1934         \edef\@itemitem{labelitem\romannumeral\the\@itemdepth}%
1935         \expandafter
1936         \listORI
1937         \csname\@itemitem\endcsname
1938         \FB@itemizesettings
1939     \fi
1940 }
1941 \let\enditemizeFB\endlistORI

1942 \def\setlabelitemsFB{%
1943     \let\labelitemi\Frlabelitemi
1944     \let\labelitemii\Frlabelitemii
1945     \let\labelitemiii\Frlabelitemiii
1946     \let\labelitemiv\Frlabelitemiv

```

```

1947 \ifdim\labelwidthFB<\z@
1948 \settowidth{\labelwidthFB}{\FrenchLabelItem}%
1949 \fi
1950 }
1951 \def\setlistindentFB{%
1952 \ifdim\labelindentFB<\z@
1953 \ifdim\parindent=\z@
1954 \setlength{\labelindentFB}{1.5em}%
1955 \else
1956 \setlength{\labelindentFB}{\parindent}%
1957 \fi
1958 \fi
1959 \ifdim\listindentFB<\z@
1960 \ifdim\parindent=\z@
1961 \setlength{\listindentFB}{1.5em}%
1962 \else
1963 \setlength{\listindentFB}{\parindent}%
1964 \fi
1965 \fi
1966 \ifdim\descindentFB<\z@
1967 \ifFBListItemsAsPar
1968 \setlength{\descindentFB}{\labelindentFB}%
1969 \else
1970 \setlength{\descindentFB}{\listindentFB}%
1971 \fi
1972 \fi
1973 }

```

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

```

1974 \def\enumerateFB{%
1975 \ifnum \@enumdepth >\thr@@\@toodeep\else
1976 \advance\@enumdepth by \@ne
1977 \edef\@enumctr{enum\romannumeral\the\@enumdepth}%
1978 \expandafter
1979 \list
1980 \csname label\@enumctr\endcsname
1981 {\FB@listHsettings
1982 \usecounter\@enumctr\def\makelabel##1{\hss\llap{##1}}}%
1983 \fi
1984 }
1985 \let\endenumerateFB\endlistORI

```

\descriptionFB Same tuning for the `\description` environment (see `classes.dtx` for the original definition). Customisable dimen `\descindentFB`, which defaults to `\listindentFB`, is added to `\itemindent` (first level only). When `\descindentFB=0pt` (1st level labels start at the left margin), `\leftmargini` is reduced to `\listindentFB` instead of `\listindentFB + \leftmarginFB`.

When option `ListItemsAsPar` is turned to `true`, the description items are also displayed as paragraphs; `\descindentFB=0pt` can be used to push labels to the left margin.

```

1986 \def\descriptionFB{%
1987     \list{}\FB@listHsettings
1988         \labelwidth=\z@
1989         \ifFBListItemsAsPar
1990             \itemindent=\descindentFB
1991         \else
1992             \itemindent=-\leftmargin
1993             \ifnum\@listdepth=1
1994                 \ifdim\descindentFB>\z@
1995                     \ifdim\listindentFB>\z@
1996                         \leftmargini=\listindentFB
1997                         \leftmargin=\leftmargini
1998                         \itemindent=-\leftmargin
1999                     \fi
2000                 \else
2001                     \advance\itemindent by \descindentFB
2002                 \fi
2003             \fi
2004         \fi
2005         \let\makelabel\descriptionlabel}%
2006 }
2007 \let\enddescriptionFB\endlistORI

```

`\update@frenchlists` `\update@frenchlists` will set up lists according to the final options (default or part of `\bbl@frenchlistlayout` of `\frenchsetup{}` eventually overruled in `\FBprocess@options`).

```

2008 \def\update@frenchlists{%
2009     \setlistindentFB
2010     \ifFBReduceListSpacing \let\list\listFB \fi
2011     \ifFBStandardItemizeEnv
2012     \else \let\itemize\itemizeFB \fi
2013     \ifFBStandardItemLabels
2014     \else \setlabelitemsFB \fi
2015     \ifFBStandardEnumerateEnv
2016     \else \let\enumerate\enumerateFB \let\description\descriptionFB \fi
2017 }

```

If `GlobalLayoutFrench=true`, nothing has to be done at language's switches regarding lists. Otherwise, `\extrasfrench` saves the standard settings for lists and then executes `\update@frenchlists`. In both cases, there is nothing to do for lists in `\noextrasfrench`.

In order to ensure compatibility with packages customising lists, the command `\update@frenchlists` should not be included in the first call to `\extrasfrench` which occurs *before* the relevant flags are finally set, so we define `\FB@ufl` as `\relax`, it will be redefined later 'AtBeginDocument' by `\FBprocess@options` as `\update@frenchlists`, see p. 63.

```

2018 \def\FB@ufl{\relax}
2019 \def\bbl@frenchlistlayout{%

```

```

2020 \ifFBGlobalLayoutFrench
2021 \else
2022 \babel@save\list \babel@save\itemize
2023 \babel@save\enumerate \babel@save\description
2024 \babel@save\labelitemi \babel@save\labelitemii
2025 \babel@save\labelitemiii \babel@save\labelitemiv
2026 \FB@ufl
2027 \fi
2028 }
2029 \addto\extrasfrench{\bbl@frenchlistlayout}

```

2.13 French indentation of sections

`\bbl@frenchindent` 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.

```

2030 \def\bbl@frenchindent{%
2031 \ifFBGlobalLayoutFrench
2032 \else
2033 \babel@save\@afterindentfalse
2034 \fi
2035 \ifFBIndentFirst
2036 \let\@afterindentfalse\@afterindenttrue
2037 \@afterindenttrue
2038 \fi}
2039 \def\bbl@nonfrenchindent{%
2040 \ifFBGlobalLayoutFrench
2041 \ifFBIndentFirst
2042 \@afterindenttrue
2043 \fi
2044 \fi}
2045 \addto\extrasfrench{\bbl@frenchindent}
2046 \addto\extrasfrench{\bbl@nonfrenchindent}

```

2.14 Formatting footnotes

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

The layout of footnotes is controlled by two flags `\ifFBAutoSpaceFootnotes` and `\ifFBFrenchFootnotes` which are set by options of `\frenchsetup{}` (see section 2.11). 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!).

We save the original definition of `\@footnotemark` at the `\begin{document}` in order to include any customisation that packages might have done; we define a variant `\@footnotemarkFB` which just adds a thin space before the number or symbol calling

a footnote (any space typed in is removed first). The choice between the two definitions (valid for the whole document) is controlled by flag `\ifFBAutoSpaceFootnotes`.

```

2047 \AtBeginDocument{\@ifpackageloaded{bigfoot}%
2048             {\PackageInfo{french.ldf}%
2049             {bigfoot package in use.\MessageBreak
2050             babel-french will NOT customise footnotes;%
2051             \MessageBreak reported}}%
2052             {\let\@footnotemarkORI\@footnotemark
2053             \def\@footnotemarkFB{\leavevmode\unskip\unkern
2054             \,\@footnotemarkORI}%
2055             \ifFBAutoSpaceFootnotes
2056             \let\@footnotemark\@footnotemarkFB
2057             \fi}%
2058             }

```

`\@makefnindentFB` We then define `\@makefnindentFB`, a variant of `\@makefnindent` 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), right aligned on `\parindentFFN` and followed by a dot and an half quad kern. Whenever symbols are used to number footnotes (as in `\thanks` 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).

```

2059 \newdimen\parindentFFN
2060 \parindentFFN=10in

```

`\FBfnindent` will be set ‘AtBeginDocument’ to the width of the box holding the footnote mark, `\dotFFN` and `\kernFFN` (flushed right). It is used by memoir and koma-script classes.

```

2061 \newcommand*{\dotFFN}{.}
2062 \newcommand*{\kernFFN}{\kern .5em}
2063 \newdimen\FBfnindent

```

`\@makefnindentFB`’s definition is now tuned according to the document’s class for better compatibility.

Koma-script classes provide `\deffootnote`, a handy command to customise the footnotes’ layout (see English manual `scrguien.pdf`); it redefines `\@makefnindent` and `\@makefnmark`. First, save the original definitions.

```

2064 \ifFB@koma
2065   \let\@makefnindentORI\@makefnindent
2066   \let\@makefnmarkORI\@makefnmark

```

`\@makefnindentFB` and `\@makefnmarkFB` will be used when option `FrenchFootnotes` is `true`.

```

2067 \deffootnote[\FBfnindent]{0pt}{\parindentFFN}%
2068             {\thefootnotemark\dotFFN\kernFFN}
2069 \let\@makefnindentFB\@makefnindent
2070 \let\@makefnmarkFB\@makefnmark

```

`\@makefntextTH` and `\@@makefnmarkTH` are meant for the `\thanks` command used by `\maketitle` when `FrenchFootnotes` is `true`.

```
2071 \deffootnote[\parindentFFN]{0pt}{\parindentFFN}%
2072         {\textsuperscript{\thefootnotemark}}
2073 \let\@makefntextTH\@makefntext
2074 \let\@@makefnmarkTH\@@makefnmark
```

Restore the original definitions.

```
2075 \let\@makefntext\@makefntextORI
2076 \let\@@makefnmark\@@makefnmarkORI
2077 \fi
```

Definitions for the memoir class:

```
2078 \ifclassloaded{memoir}
```

(see original definition in `memman.pdf`)

```
2079 {\newcommand{\@makefntextFB}[1]{%
2080     \def\footscript##1{##1\dotFFN\kernFFN}%
2081     \setlength{\footmarkwidth}{\FBfnindent}%
2082     \setlength{\footmarksep}{-\footmarkwidth}%
2083     \setlength{\footparindent}{\parindentFFN}%
2084     \makefootmark #1}%
2085 }
```

Definitions for the beamer class:

```
2086 \ifclassloaded{beamer}
```

(see original definition in `beamerbaseframecomponents.sty`), note that for the beamer class footnotes are LR-boxes, not paragraphs, so `\parindentFFN` is irrelevant. class.

```
2087 {\def\@makefntextFB#1{%
2088     \def\insertfootnotetext{#1}%
2089     \def\insertfootnotemark{\insertfootnotemarkFB}%
2090     \usebeamertemplate***{footnote}}%
2091 \def\insertfootnotemarkFB{%
2092     \usebeamercolor[fg]{footnote mark}%
2093     \usebeamerfont*{footnote mark}%
2094     \llap{\@thefnmark}\dotFFN\kernFFN}%
2095 }
```

Now the default definition of `\@makefntextFB` for standard LaTeX and AMS classes. The next command prints the footnote mark according to the specifications of the French 'Imprimerie Nationale'. Keep in mind that `\@thefnmark` might be empty (i.e. in AMS classes' titles)!

```
2096 \providecommand*\insertfootnotemarkFB{%
2097     \parindent=\parindentFFN
2098     \rule{\z@\footnotesep}
2099     \setbox\@tempboxa\hbox{\@thefnmark}%
2100     \ifdim\wd\@tempboxa>\z@
2101         \llap{\@thefnmark}\dotFFN\kernFFN
2102     \fi}
2103 \providecommand\@makefntextFB[1]{\insertfootnotemarkFB #1}
```

The rest of `\@makefntext`'s customisation is done at the `\begin{document}`. We save the original definition of `\@makefntext`, and then redefine `\@makefntext` according to the value of flag `\ifFBFrenchFootnotes` (true or false). Koma-script classes require a special treatment.

The LuaTeX command `\localleftbox` used by `\frquote{}` has to be reset inside footnotes, done for LaTeX based formats only.

```

2104 \providecommand\localleftbox[1]{}
2105 \AtBeginDocument{%
2106   \ifpackageloaded{bigfoot}{}%
2107     {\ifdim\parindentFFN<10in
2108       \else
2109         \parindentFFN=\parindent
2110         \ifdim\parindentFFN<1.5em \parindentFFN=1.5em \fi
2111       \fi
2112       \settowidth{FBfnindent}{\dotFFN\kernFFN}%
2113       \addtolength{FBfnindent}{\parindentFFN}%
2114       \let\@makefntextORI\@makefntext
2115       \ifFB@koma

```

Definition of `\@makefntext` for koma-script classes: running `makefntextORI` inside a group to reset `\localleftbox{}` would mess up the layout of footnotes whenever the first mandatory argument of `\deffootnote{}` (used as `\leftskip`) is non-nil (default is 1em, 0pt in French).

```

2116   \let\@makefnmarkORI\@makefnmark
2117   \long\def\@makefntext#1{%
2118     \ifFBFrenchFootnotes
2119       \ifx\footnote\thanks
2120         \let\@makefnmark\@makefnmarkTH
2121         \begingroup\localleftbox{}\@makefntextTH{#1}\endgroup
2122       \else
2123         \let\@makefnmark\@makefnmarkFB
2124         \begingroup\localleftbox{}\@makefntextFB{#1}\endgroup
2125       \fi
2126     \else
2127       \let\@makefnmark\@makefnmarkORI
2128       \@makefntextORI{#1}%
2129     \fi}%
2130   \else

```

Special add-on for the memoir class: `\maketitle` redefines `\@makefntext` as `\makethanksmark` which is customised as follows to match the other notes' vertical alignment.

```

2131   \ifclassloaded{memoir}%
2132     {\ifFBFrenchFootnotes
2133       \setlength{\thanksmarkwidth}{\parindentFFN}%
2134       \setlength{\thanksmarksep}{-\thanksmarkwidth}%
2135     \fi
2136   }{}%

```

Special add-on for the beamer class: issue a warning in case `\parindentFFN` has been changed.

```

2137      \@ifclassloaded{beamer}%
2138      {\ifFBFrenchFootnotes
2139       \ifdim\parindentFFN=1.5em\else
2140       \FBWarning{%
2141        \protect\parindentFFN\space is ineffective%
2142        \MessageBreak within the beamer class.%
2143        \MessageBreak Reported}%
2144       \fi
2145       \fi
2146      }{}%

```

Definition of \@makefntext for all classes other than koma-script:

```

2147      \long\def\@makefntext#1{\begingroup\localleftbox{}%
2148      \ifFBFrenchFootnotes
2149       \@makefntextFB{#1}%
2150      \else
2151       \@makefntextORI{#1}%
2152      \fi\endgroup}%
2153  \fi
2154  }%
2155 }

```

For compatibility reasons, we provide definitions for the commands dealing with the layout of footnotes in babel-french version 1.6. `\frenchsetup{}` (see in section 2.11) 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`.

```

2156 \newcommand*{\AddThinSpaceBeforeFootnotes}{\FBAutoSpaceFootnotestruer}
2157 \newcommand*{\FrenchFootnotes}{\FBFrenchFootnotestruer}
2158 \newcommand*{\StandardFootnotes}{\FBFrenchFootnotesfalse}

```

2.15 Clean up and exit

Final cleaning. The macro `\ldf@finish` takes care for setting the main language to be switched on at `\begin{document}` and resetting the category code of `@` to its original value. `\loadlocalcfg` is redefined locally in order not to load any `.cfg` file for French.

```

2159 \FBcleanon@exit
2160 \ldf@finish\CurrentOption
2161 \let\loadlocalcfg\FB@llc
2162 </french>

```

2.16 Files frenchb.ldf, francais.ldf, canadien.ldf and acadian.ldf

Babel now expects a `<lang>.ldf` file for each `<lang>`. So we create portmanteau `.ldf` files for options `canadien`, `francais`, `frenchb` and `acadian`. These files themselves only load `french.ldf` which does the real work. Warn users about options `canadien`, `frenchb` and `francais` being deprecated and force recommended options `acadian` or `french`.

```

2163 <*acadian>
2164 \PackageInfo{acadian.ldf}%
2165 {'acadian' dialect is currently\MessageBreak
2166  *absolutely identical* to the\MessageBreak
2167  'french' language; reported}
2168 </acadian>
2169 <*canadien>
2170 \PackageWarning{canadien.ldf}%
2171 {Option 'canadien' for Babel is *deprecated*,\MessageBreak
2172  it might be removed sooner or later. Please\MessageBreak
2173  use 'acadian' instead; reported}%
2174 \let\l@canadien\l@acadian
2175 \def\CurrentOption{acadian}
2176 </canadien>
2177 <*français>
2178 \PackageWarning{français.ldf}%
2179 {Option 'français' for Babel is *deprecated*,\MessageBreak
2180  it might be removed sooner or later. Please\MessageBreak
2181  use 'french' instead; reported}%
2182 \let\l@français\l@french
2183 \def\CurrentOption{french}
2184 </français>

```

Compatibility code for babel pre-3.13: frenchb.ldf could be loaded with options acadian, canadien, frenchb or français.

```

2185 <*frenchb>
2186 \def\bbl@tempa{frenchb}
2187 \ifx\CurrentOption\bbl@tempa
2188 \let\l@frenchb\l@french
2189 \def\CurrentOption{french}
2190 \PackageWarning{babel-french}%
2191 {Option 'frenchb' for Babel is *deprecated*,\MessageBreak
2192  it might be removed sooner or later. Please\MessageBreak
2193  use 'french' instead; reported}
2194 \else
2195 \def\bbl@tempa{français}
2196 \ifx\CurrentOption\bbl@tempa
2197 \let\l@français\l@french
2198 \def\CurrentOption{french}

```

Plain formats: no warning when français.sty loads frenchb.ldf (babel pre-3.13).

```

2199 \ifx\magnification\@undefined
2200 \PackageWarning{babel-french}%
2201 {Option 'français' for Babel is *deprecated*,\MessageBreak
2202  it might be removed sooner or later. Please\MessageBreak
2203  use 'french' instead; reported}%
2204 \fi
2205 \else
2206 \def\bbl@tempa{canadien}
2207 \ifx\CurrentOption\bbl@tempa
2208 \let\l@canadien\l@acadian
2209 \def\CurrentOption{acadian}

```

```

2210     \PackageWarning{babel-french}%
2211     {Option 'canadien' for Babel is *deprecated*,\MessageBreak
2212     it might be removed sooner or later. Please\MessageBreak
2213     use 'acadian' instead; reported}
2214   \fi
2215 \fi
2216 \fi
2217 </frenchb>
2218 <acadian|canadien|frenchb|français>\input french.lda\relax
2219 <acadian|canadien>\let\extrasacadian\extrasfrench
2220 <acadian|canadien>\let\noextrasacadian\noextrasfrench

```

3 Change History

Changes are listed in reverse order (latest first) and limited to babel-french v3.

v3.5a	General: New optional layout for lists: lists' items can be typeset as paragraphs with indented labels while the default leaves the labels hanging into the left margin.	68	frenchb.lua: Global 'FBsp' table added; local function 'get_glue' changed into global 'FBget_glue'.	23
	\descriptionFB: ListItemsAsPar option taken into account for description lists.	70	\datefrench: Specific code for Plain finally removed (babel bug reported).	40
	\frenchsetup: New option ListItemsAsPar for displaying lists' items "as paragraphs".	53	\extrasfrench: Change \(\no)extras\CurrentOption to \(\no)extrasfrench. \(\no)extrasacadian will be defined as \(\no)extrasfrench in file acadian.ldf.	16
v3.4d	\frenchsetup: New test for deciding about utf8 encoding for keys og and fg (the former one fails with LaTeX 2018 release).	59	\frenchsetup: Patch for koma-script classes moved here, after \ifFBPartNameFull is defined, so that it applies to \extrasacadian too: \AtEndOfPackage is too late.	54
v3.4c	\ifFBXeTeX: Reverting to former test, beware of \XeTeXrevision left as \relax by careless testing.	16	v3.3d	frenchb.lua: In default mode, for ':' only, check if next node is a glyph or not. If it is, turn the 'auto' flag to false (avoids spurious spaces in URLs, MSDOS paths or 10:35).
v3.4b	\datefrench: Do not redefine \date as \frenchdate in French.	40	v3.3c	General: LaTeX 2017-04-15 defines TU encoding for Unicode engines, fontspec is no longer required.
v3.4a	General: \LdfInit checks \FBClean@on@exit instead of \captionsfrench (undefined in PLain). Prevents loading french.ldf again with acadian option.	14		New command \FBthousandsep to customise numprint.
	babel-french now requires eTeX.	14		New configurable kerns \FBmedkern, and \FBthickkern suitable for HTML translation.
	Lua function token.get_meaning requires LuaTeX 1.0.	21		Reorganise warnings when the caption, subcaption or floatrow packages are loaded before babel/french.
	New \FBgspchar to customise the space character to be used for \og and \fg with the UnicodeNoBreakSpaces option.	36		Reset \localleftbox locally inside \@makefntext. Needed by \frquote with LuaTeX.
	New attribute \FB@dialect for the French dialect acadian.	20		frenchb.lua: Function 'get_glue' robustified. 'french_punctuation' can insert Unicode characters instead of glues.
	New command \FBsetspaces to fine tune spacing independently in French and in French dialects.	18		\frenchsetup: New option 'UnicodeNoBreakSpaces' for html translators (LuaLaTeX only).
	Shrink/stretch removed in \FBthousandsep.	47		
	Toks \FBcolonsp, \FBthinsp and \FBguillsp removed.	18		

v3.3b			
General: Generate portmanteau files acadian.ldf, canadien.ldf, frenchb.ldf, and francais.ldf and warn about deprecated options.	76		
New 'if' \ifFBfrench to replace \iflanguage test which is based on patterns.	16		
v3.3a			
General: Compatibility code for pre 2015/10/01 LaTeX release removed, see ltnews23.tex.	20		
Skip \FBguillskip for LuaTeX replaced by toks \FBguillsp. ..	18		
\captionsfrench: Commands \frenchpartfirst, \frenchpartsecond and \frenchpartnameord added. ...	47		
\FBthinspace: Skips \FBcolonskip and \FBthinskip replaced by toks \FBcolonsp and \FBthinsp. ...	17		
\frenchsetup: \frenchbsetup is now an alias for \frenchsetup. .	53		
Options INGuillSpace, ThinColonSpace no longer delayed AtBeginDocument.	53		
\frquote: \FB@quotespace (kern), changed into \FB@guillspace. .	38		
v3.2h			
\@makefntextFB: With beamer.cls, add \llap to \@thefnmark for notes numbered over 99.	74		
\bbl@frenchlistlayout: Execute \update@frenchlists only if GlobalLayoutFrench is false. Delete stuff for lists in \noextrasfrench.	71		
\frenchsetup: Option GlobalLayoutFrench skipped when French is not the main language. ...	54		
v3.2g			
General: Add \boi to redefinitions for bookmarks.	66		
Changed Unicode definition of \boi.	43		
fontspec defines TU encoding now and no longer loads xunicode.sty. Test changed.	66		
Issue a warning if beamerarticle.sty is loaded after babel.	53		
		\frenchsetup: Minimal list customisation when beamerarticle.sty is loaded.	54
		Warn when wrong values are provided to options EveryParGuill or EveryLineGuill.	58
		\frquote: Default options of \frquote are no longer engine-dependent.	38
	v3.2f		
	\DecimalMathComma: Fixed conflict with the icomma package.		45
	v3.2e		
	General: Add missing redefinitions for \leftmarginiv, \leftmarginvi. Suggested by J.F. Burnol.		68
	\DecimalMathComma: \DecimalMathComma didn't work with LuaTeX. Fixed now.		45
	v3.2d		
	\descriptionFB: Changed \listindentFB to \descindentFB which defaults to \listindentFB. \leftmargini reduced when \descindentFB is null.		70
	v3.2c		
	General: New LuaTeX attribute \FB@spacing.		20
	Newif \ifFB@spacing and new commands \FB@spacingon, \FB@spacingoff to control space tuning in French.		20
	Switch \ifFB@spacing added to the four French shorthands.		33
	\FB@xetex@punct@french: Switch \ifFB@spacing added to all \XeTeXinterchartoks commands.		31
	\FBthinspace: Change .16667em to .5\fontdimen2\font to get in XeTeX and pdfTeX the same spacing as in LuaTeX.		17
	\frenchsetup: Add a warning about options og/fg for old XeTeX or LuaTeX engines requiring active characters.		59
	\NoAutoSpacing: New definition based on \FB@spacing@off common to all engines.		36

<code>\ttfamilyFB</code> : New definitions of <code>\ttfamilyFB</code> and <code>co</code> , common to all engines, based on <code>\FB@spacing@off</code> and <code>\FB@spacing@on</code>	35	<code>\shorthandon</code> and <code>\shorthandoff</code>	29
v3.2b		<code>\FB@xetex@punct@french</code> : Save and restore <code>\XeTeXinterchartokenstate</code> , <code>\shorthandon</code> , <code>\shorthandoff</code> using <code>\babel@savevariable</code> and <code>\babel@save</code> , <code>\XeTeXcharclass(es)</code> using <code>\FB@savevariable@loop</code>	31
General: Load <code>lualatex.tex</code> for plain LuaTeX to ensure <code>\newattribute</code> is defined.	20	v3.1k	
Warning added when the subcaption package is loaded before <code>babel/french</code>	50	General: (pdfTeX shorthands) test on <code>\lastskip</code> changed from 0pt to 1sp for active punctuation for consistency with XeTeX and LuaTeX.	33
<code>frenchb.lua</code> : <code>glue_spec</code> removed; starting with LuaTeX 0.95, glue specifications fit in glue.	24	<code>\FB@xetex@punct@french</code> : Thin glues (less than 1sp) should not trigger space insertion before high punctuation. Add a check on <code>\lastkip</code>	31
<code>\ifFB@xetex@punct</code> : New counter <code>\FB@nonchar</code> needed for non characters: it's value will be 4095 for new engines and 255 for older ones.	17	v3.1j	
<code>\NoAutoSpacing</code> : <code>\NoAutoSpacing</code> made robust.	36	General: Loading <code>luatexbase.sty</code> is no longer needed with LaTeX release 2015/10/01 or later.	20
v3.2a		<code>\frquote</code> : <code>\fr@quote</code> completely rewritten: <code>\leavevmode</code> added and explicitly <code>save/retore</code> <code>\everypar</code> and <code>\localleftbox</code> instead of using a group in order to ensure compatibility with package <code>wrapfig</code>	38
<code>\@makefntextFB</code> : <code>beamer.cls</code> requires a specific definition of <code>\@makefntextFB</code> (pointed out by DB). The same is true for <code>memoir</code> and <code>koma-script</code> classes (done). .	73	<code>\PackageWarning</code> is undefined in Plain, use <code>\fb@warning</code> instead.	38
<code>\fg</code> : <code>\xspace</code> moved from <code>\FB@fg</code> to <code>\fg</code> : <code>\xspace</code> messes up <code>\frquote</code> , pointed out by Sonia Labetoulle. As a side effect <code>\xspace</code> is now active in <code>\fg</code> in and outside French.	37	v3.1i	
v3.1m		General: <code>\nombre</code> command changed when <code>numprint.sty</code> is not loaded: only one warning, no error.	46
<code>frenchb.lua</code> : <code>new_glue_scaled</code> returns nil in case of invalid font table (i.e. <code>lcircle1.pfb</code>). In such cases <code>babel-french</code> leaves the node list unchanged.	24	Remove restriction about loading <code>numprint.sty</code> after <code>babel</code>	52
v3.1l		<code>\frquote</code> : <code>\luatexlocalleftbox</code> changed to <code>\localleftbox</code> by new LaTeX release 2015/10/01. .	39
General: Add a variant of <code>\babel@savevariable</code> to save <code>\XeTeXcharclass(es)</code> in a loop. .	31	v3.1h	
<code>frenchb.lua</code> : <code>font.getfont(fid)</code> possibly returns nil even for a positive <code>fid</code> (i.e. <code>AMS lcircle1.pfb</code>). Reported by François Legendre. .	24	General: <code>french.cfg</code> from <code>e-french</code> conflicts with <code>babel-french</code> . Do NOT load it (no need for <code>.cfg</code> files with <code>babel-french</code> anyway).	76
<code>\FB@luatex@punct@french</code> : Use <code>\babel@save</code> to save and restore		v3.1g	
		General: Lua function <code>french_punctuation</code> is now	

inserted at the end of the ‘kerning’ callback (no priority) instead of ‘hpack_filter’ and ‘pre_linebreak_filter’.	29		
Use Babel defined loops <code>\bb\@for</code> instead of <code>\@for</code> borrowed from file <code>ltnctrl.dtx</code> (<code>\@for</code> is undefined in Plain).	30		
<code>frenchb.lua</code> : Flag <code>addgl</code> set to false for ‘<’ at the end of an <code>\hbox</code> or a paragraph or when followed by a null glue (i.e. springs).	28		
flag <code>addgl</code> set to false for ‘>’ at the beginning of an <code>\hbox</code> or a paragraph or a tabular ‘l’ and ‘c’ columns.	27		
Node <code>HLIST</code> added; node <code>TEMP</code> added for the first node of <code>\hboxes</code>	23		
<code>\captionsfrench</code> : <code>\partname</code> ’s definition depends now on flag <code>PartNameFull</code> . No need to redefine it in <code>\frenchbsetup</code>	47		
<code>\frenchsetup</code> : Bug fix for koma-scripts classes: a spurious dot was added by the <code>\partformat</code> command.	54		
<code>PartNameFull</code> now just sets the flag, nothing to add to <code>\captionsfrench</code> when false. . .	53		
v3.1f			
General: <code>\FBCaption@Separator</code> changed when option <code>CustomiseFigTabCaptions</code> is set to false.	50		
<code>\FBprocess@options</code> : Bug fix for the beamer class: figure and table captions are now consistent with babel-french’s documentation. Pointed out by Denis Bitouzé. . .	64		
Definition of <code>\captionformat</code> and <code>\captiondelim</code> changed when option <code>CustomiseFigTabCaptions</code> is set to false.	64		
<code>\FBthinspace</code> : <code>\FBthinspace</code> is no longer a kern but a skip (babel-french adds a nobreak penalty before it).	17		
v3.1e			
<code>\frenchsetup</code> : Corrected typo: <code>SmallCapsFigTabCaptions</code> instead			
			of <code>SmallCapsFigTabCaptions</code> . Pointed out by Céline Chevalier. .
			53
v3.1d			
General: New section: issue warnings if packages <code>listings</code> , <code>numprint</code> and <code>natbib</code> are loaded too early or too late vs babel.	52		
v3.1c			
<code>frenchb.lua</code> : Previous bug fix for null glues (v3.0c) did not work properly. Fixed now (I hope!). Pointed out by Jacques André. . .	25		
v3.1b			
<code>frenchb.lua</code> : Add a check for null fid in <code>french_punctuation</code> (Tikz <code>\nullfont</code>). Bug pointed out by Paul Gaborit.	25		
<code>\captionsfrench</code> : Change <code>\scshape</code> to customisable <code>\FBfigtabshape</code> for <code>\figurename</code> and <code>\tablename</code>	47		
<code>\fprimo</code> : Removed <code>\lowercase</code> from definitions of <code>\FrenchEnumerate</code> , ... <code>\No</code> and <code>co</code> : <code>\up</code> already does the conversion.	43		
<code>\frenchsetup</code> : New option <code>SmallCapsFigTabCaptions</code>	53		
<code>\ieres</code> : Removed <code>\lowercase</code> from definitions of <code>\ieme</code> and <code>co</code> : <code>\up</code> already does the conversion. . .	42		
v3.1a			
General: <code>fontspec</code> is not required for T1 fonts used with the <code>luainputenc.sty</code> package.	66		
Misplaced <code>\fi</code> for plain formats. .	20		
New command <code>\frquote</code> for imbedded or long French quotations.	38		
<code>frenchb.lua</code> : Added flag <code>addgl</code> which must also be true when <code>prev</code> or <code>next</code> is not a char (i.e. <code>\kern0</code> in <code>«\texttt{a}»</code>).	27		
Codes 0x13 and 0x14 added for French quotes in T1-encoding. . .	22		
Look ahead when next is a kern (i.e. in <code>«\texttt{a}»</code>).	28		
<code>\frenchsetup</code> : Codes 0x13 and 0x14 added for French quotes in T1-encoding. Support for older			

versions of LuaTeX and XeTeX dropped.	59	<code>\captionsfrench</code> deleted in favor of new babel 3.9 syntax.	48
New options <code>InnerGuillSingle</code> , <code>EveryParGuill</code> and <code>EveryLineGuill</code> to control <code>\frquote</code>	53	More informative, less TeXnical warning about <code>\@makecaption</code> . .	50
v3.0c		New flag <code>\ifFB@luatex@punct</code> for ‘high punctuation’ management with LuaTeX engines.	17
General: babel-french requires babel-3.9i.	14	New handling of ‘high punctuation’ through callbacks with LuaTeX engines.	20
Just load <code>luatexbase.sty</code> instead of <code>luaotfload.sty</code> with plain formats.	20	No warning about <code>\@makecaption</code> for SMF classes.	50
No need to define <code>\l@french</code> as <code>\lang@french</code> , <code>babel.def</code> (3.9j) takes care for this.	15	Options processing completely reorganised, now <code>\babel@save</code> and <code>\babel@savevariable</code> are usable for French.	53
<code>frenchb.lua</code> : Null glues should not trigger space insertion before high punctuation. Bug pointed out by Benoit Rivet for the ‘ <code>lstlisting</code> ’ environment of the listings package.	25	Support for options <code>frenchb</code> , <code>francais</code> , <code>canadien</code> , <code>acadian</code> changed.	14
<code>\frenchsetup</code> : New option <code>INGuillSpace</code>	53	Test <code>\ifXeTeX</code> changed to <code>\ifBUnicode</code> and ‘ <code>xltxtra</code> ’ changed to ‘ <code>fontspec</code> ’.	66
No list customisation when beamer class is loaded.	54	<code>\CaptionSeparator</code> : Remove <code>\FBCaption@SeparatorORI</code> , use <code>\babel@save</code> instead.	49
v3.0b		<code>\captionsfrench</code> : Take advantage of babel’s <code>\SetString</code> commands for captionnames.	47
General: <code>frenchb.lua</code> was not found by Lua function <code>dofile</code> (not <code>kpathsea</code> aware). Call function <code>kpse.find_file</code> first, as suggested by Paul Gaborit.	29	<code>\datefrench</code> : Take advantage of babel’s <code>\SetString</code> commands for <code>\datefrench</code> . Doesn’t work with Plain (yet?).	40
Require <code>luatexbase</code> with <code>LaTeX2e</code> in case <code>fontspec</code> has not been loaded before babel.	20	<code>\descriptionFB</code> : Added <code>\listindentFB</code> to <code>\itemindent</code> . Suggested by Denis Bitouzé. ...	70
v3.0a		<code>\extrasfrench</code> : Take advantage of babel’s <code>\babel@savevariable</code> to handle apostrophe’s <code>\lccode</code> . ..	16
General:		<code>\FB@fg</code> : Definitions of <code>\FB@og</code> and <code>\FB@fg</code> now depend on punctuation handling (LuaTeX / XeTeX / active).	37
<code>\bbl@nonfrenchguillemets</code> deleted, use <code>\babel@save</code> instead.	38	<code>\FBprocess@options</code> : With <code>koma-script</code> and <code>memoir</code> class, customise <code>\captionformat</code> and <code>\captiondelim</code>	64
<code>\LdfInit</code> checks		<code>\frenchsetup</code> : New options <code>OldFigTabCaptions</code> and <code>CustomiseFigTabCaptions</code>	53
<code>\captionsfrench</code> instead of <code>\datefrench</code> to avoid a conflict with <code>papertex.cls</code> which loads <code>datetime.sty</code>	14		
<code>french.cfg</code> will be loaded (if found) instead of <code>frenchb.cfg</code> . NO NEED for .cfg files in French anyway. ..	76		
In Plain, provide a substitute for <code>\PackageWarning</code> and <code>\PackageInfo</code>	14		
Merging of <code>\captionsfrenchb</code> , <code>\captionsfrancais</code> with			