# LuaQuotes: <br> A package for smart quotation marks 

Elijah Z Granet*<br>4 November 2022<br>Version 1.2.0

## Contents

1 Overview ..... 2
1.1 Purpose ..... 2
2 Smart quotes ..... 2
2.1 Options ..... 2
2.1.1 English Features ..... 2
2.1.2 French option ..... 3
2.1.3 The German option ..... 3
2.2 Activation and De-activation ..... 3
2.3 Monospace ..... 4
3 Auxiliary Punctuation ..... 4
3.1 Standalone quotes ..... 4
3.2 Additional symbols ..... 6
4 Future Development and Localisation ..... 7
5 Licence ..... 7
6 Implementation ..... 8
6.1 LuaTeX check ..... 8
6.2 Dependencies ..... 8
6.3 Avoiding smart quotes in monospace ..... 9
6.4 Quote replacement functions ..... 10
6.5 Activation commands ..... 12
6.6 English option ..... 14
6.7 Auxiliary punctuation ..... 15

[^0]6.8 The German option ..... 16
6.9 The French option ..... 19
6.10 Process Options ..... 22
7 Version History ..... 22
7.1 1.1.0 ..... 22
7.2 1.0.1 ..... 22
7.3 1.0.1 ..... 22
7.4 1.0.0 ..... 23

## 1 Overview

### 1.1 Purpose

This package provides a function to automatically have 'smart quotes' in LuaIAT ${ }_{E} X$. By 'smart quotes', I refer to the automatic insertion of curved or 'typographer's' quotation marks when the user types straight quotation marks. The below figure illustrates the distinction in English typography:
User input Smart Quotes Off Smart Quotes On

## "Howdy!" "Howdy!" "Howdy!" 'Don't!' 'Don’t!’ ‘Don’t!'

## 2 Smart quotes

### 2.1 Options

The default option, for English quotation marks, is called by:
|usepackage\{luaquotes\}

The French and German options, for those languages' punctuation, are called by the following respective commands.

```
lusepackage[fr]{luaquotes} %French
|usepackage[de]{luaquotes} % German
```


### 2.1.1 English Features

The English features are designed to smartly recognise English punctuation:

| Feature | Userinput | Output |
| :---: | :---: | :---: |
| Double Quotes | "Salut!" | 'Hello" |
| Single Quotes | 'Hello!' | 'Hello' |
| Contractions | Don't | Don't |
| Elision | 'ello | 'ello |

### 2.1.2 French option

The French option produces the following output, including the extra space around punctuation prescribed by French typography:


### 2.1.3 The German option

The German option produces the following outpu:

| User input | Output |
| :---: | :---: |
| "Hallo!" | „Hallo!" |
| 'Hallo!' | ,Hallo!‘ |

### 2.2 Activation and De-activation

The package automatically activates the smart quotes function at the beginning of the document. To deactivate the smart quotes function within a document, the following commands are used:

```
\dumbquotes %English
\frdumbquotes %French
ldedumbquotes %German
```

The following commands re-activate the smart quotes function:

```
|smartquotes %English
|frsmartquotes %French
|desmartquotes % German
```

A limitation on the (de-)activation of the package is that the Lua filters will not deactivate within the same paragraph, so the function can only be changed across paragraphs.

### 2.3 Monospace

As a general rule, smart quotes are rather undesirable in monospace text, and therefore, within the \textttenvironment the package does not apply smart quotes. Thus, the same input produces in roman face "Hello World" but in monospace "Hello World".

As the example above shows, the default behaviour of this package forces straight quotes in monospace, and disables $\mathrm{T}_{\mathrm{E}} \mathrm{X}$ quote ligatures (but not other $\mathrm{T}_{\mathrm{E}} \mathrm{X}$ ligatures) to do so, on the assumption that any form of curved quotes are undesirable.

For extended periods of monospaced text called by \ttfamily, the activation and de-activation methods above should be used. I considered altering the \ttfamily command to always call on \dumbquotes, but I thought it best to avoid messing with the command. This may change in future development.

If a user desires to disable the smart quotes for other faces, this is easily done globally by adding the following line to the font's configuration in fontspec:

## RawFeature $=\{+q$ tbye $\}$

This will, however, result in the font using straight quotes rather than the standard $T_{E} X$ quote ligatures, making it a distinct option than the activation and deactivation options supra.

## 3 Auxiliary Punctuation

The smart quotes feature covers the 'standard' usage of quotes, but there are many instances where quotation mark or quote-mark like features are needed outside the automatic formatting. The package provides several commands for this.

### 3.1 Standalone quotes

The marks in this section are the set of quotation marks used generally in writing and require little explanation. However, it should be noted that the commands \sqoneright and \apost (which produce identical output) are very useful for aphetic words by which the first syllable is clipped, as in the sequence ' bout the smart quotes function will incorrectly produce an opening quote instead of the correct closing quote to indicate the elision. Thus, the incorrect result of 'bout is produced. The solution is to use the code \apost bout which produces 'bout.

Name

Single low quote $\quad U+201 \mathrm{~A} \quad$ \desingle $\quad \square$
Double low quo

Single quote

## UTF-8 Command Produces

U+201E \dedouble ., I \dqone
 Double
Left single quote
Right single quote
$U+2019$
U+2019
\apost

Left double quote $\quad U+201 C$
Right double quote U+201D
\sqtworight $\square^{99}$

| Left guillemet [w/ space] | U+00AB | \glmtl | < |
| :---: | :---: | :---: | :---: |
| Right guillemet [w/ space] | U+00BB | \glmtr | $\square \gg$ |
| Single left guillemet [w/ space] | U+2039 | \sglmtl | $<\square$ |
| Single right guillemet [w/ space] | U+203A | \sglmtr | $\square>$ |

### 3.2 Additional symbols

These are quote like symbols which are useful for precise punctuation, since standard smart quotation marks do not work well in their specialised use cases.

| Name | UTF-8 | Command Produces |  |
| :--- | :--- | :--- | :--- |
| Backtick | U+0060 | \bcktck | $\square$ |

For typesetting US/Imperial measurements like feet and inches, the correct symbol is a prime and double prime. Many modern typefaces have these symbols, and they are thus useful for typesetting feet and inch measurements (like $6^{\prime} 4^{\prime \prime}$ ).

| Name | UTF-8 | Command |
| :--- | :--- | :--- | :--- |
| Single Prime | U+2032 | \lqprime |
| Double Prime | $\square^{\prime}$ |  |

For certain Polynesian langauges, a letter called the 'Okina is used; while this appears identical to a left single quotation mark in many fonts, it is encoded differently in Unicode because it is properly a letter, not a punctuation mark.

| Name | UTF-8 | Command | Produces |
| :--- | :--- | :--- | :--- |
| Okina | U+022B | lokina | $\square$ |

## 4 Future Development and Localisation

The package's online repository is the best place to report bugs, feature requests, or other contributions, and is located at:
github.com/ezgranet/luaquotes.
One obvious point of future development is the addition of other language localisations; this is technologically easy in principle but difficult for me to accomplish without assistance because it requires detailed knowledge of typographic conventions for any given language standard, and therefore the aid of contributors and collaborators.

## 5 Licence

This project is licensed under the Latex Public Project Licence version 1.3c. This documentation is copyright of the author but licensed under CC-BY-SA 3.0.

## 6 Implementation

```
|def\luaquotesversionnumber{1.1}
|ProvidesPackage{dev-lua}
    [2022/10/25\luaquotesversionnumber smart quotes with lua]
    % !TeX program = lualatex
!TeX encoding = utf8
This work may be distributed and/or modified under the
conditions of the LaTeX Project Public License, either version 1.3
of this license or (at your option) any later version.
The latest version of this license is in
% http://www.latex-project.org/lppl.txt
and version 1.3 or later is part of all distributions of LaTeX
version 2005/12/01 or later.
%
This work has the LPPL maintenance status `maintained'.
%
The Current Maintainer of this work is Elijah Z Granet
```


### 6.1 LuaTeX check

```
    %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% to show the package only works with Lua
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
    \RequirePackage{iftex}
    |ifPDFTeX {
        \PackageError{luaquotes}
            {You are using pdfTeX but this package only works
            \MessageBreak with LuaTeX}{}
    }
lelse\ifXeTeX{ \PackageError{luaquotes}
            {You are using XeTeX but this package only works
            \MessageBreak with LuaTeX}{}
}\fi\fi
```


### 6.2 Dependencies

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

```
% Dependency
%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
    \RequirePackage{luacode}
    %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% fontspec for the auxiliary
% quotes where tligs need
% to be disabled
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
    \RequirePackage{fontspec}
    %%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```


### 6.3 Avoiding smart quotes in monospace

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% removing the effects for monospace
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
|begin{luacode}
|begin{minted}[
frame=lines,
framesep=2mm,
baselinestretch=1.2,
bgcolor=LightGray,
fontsize=\footnotesize,
linenos,
breaklines,
firstnumber=last
]
{lua}
local uchar = unicode.utf8.char
    fonts.handlers.otf.addfeature{
        name = "qtbye",
        type = "substitution",
        data =
        {
    " = 0x0022,
" = 0x0022,
, = 0x0027,
< = 0x0022,
" = 0x0022,
< = 0x0027,
```

```
, = 0x0027
    },
```

lend\{luacode\}

### 6.4 Quote replacement functions

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Code here and throughout similar
%functions partly adapted from TeX.SE user
% Mico
% https://tex.stackexchange.com/questions/499953/how-to-generate-correct-
single-and-double-quotes-in-tex
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

function doublequotes ( s )


```
}
    %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Assuming, at the start of the line means an opening quotation mark not an
\hookrightarrow apostrophe
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```


### 6.5 Activation commands

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% activation and deactivation
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\newcommand\doublequoteson{\directlua{
```

```
luatexbase.add_to_callback (
    "process_input_buffer", doublequotes , "doublequotes")
```

    \}\}
    |newcommand\doublequotesoff\{|directlua\{
luatexbase.remove_from_callback (
"process_input_buffer",
"doublequotes")
\}\}
|newcommand\abbrevsingleon\{\directlua\{
luatexbase.add_to_callback (
"process_input_buffer",
abbrevsingle ,
"abbrevsingle")
$\square$
|newcommand\abbrevsingleoff\{|directlua\{
luatexbase.remove_from_callback (
"process_input_buffer",
"abbrevsingle")
|newcommand|singlequotelinestarton\{|directlua\{
luatexbase.add_to_callback (
"process_input_buffer", singlequotelinestart , "singlequotelinestart")
\}\}
luatexbase.remove_from_callback (
"process_input_buffer", "singlequotelinestart")
\}\}
|newcommand\singlequoteson\{1directlua\{
luatexbase.add_to_callback (
\}\}
|newcommand|singlequotesoff\{|directlua\{
luatexbase.remove_from_callback (
"process_input_buffer", "singlequotes")

```
}}
    %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% global functions, useful for things like this
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%
    |newcommand{\smartquotes}{%
|doublequoteson%
|singlequotelinestarton%
\abbrevsingleon%
|singlequoteson}
    |newcommand{ \dumbquotes}{
    |doublequotesoff
|abbrevsingleoff
    |singlequotelinestartoff
    |singlequotesoff}
```


### 6.6 English option

```
    |DeclareOption{en}{
\AtBeginDocument{
|frsmartquotes
|frdumbquotes
|desmartquotes
|dedumbquotes\smartquotes}
|renewcommand{\texttt}[1]{{\ttfamily\addfontfeature{RawFeature={+qtbye,-tlig}}
# #1}}
    }
```


### 6.7 Auxiliary punctuation

```
202
203
204
205
206
207
```

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% auxiliary punctuation
% auxiliary punctuation
%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Essentially to be used where the
% Essentially to be used where the
% thing fails to provide the
% thing fails to provide the
% quotation or
% quotation or
% quote like punctuation
% quote like punctuation
% needed
% needed
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% German quotations
% German quotations
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
|newcommand{\desingle}{{\addfontfeature{RawFeature={-qtbye,-
|newcommand{\desingle}{{\addfontfeature{RawFeature={-qtbye,-
tlig}}\symbol{"201A}}}
tlig}}\symbol{"201A}}}
|newcommand{\dedouble}{{\addfontfeature{RawFeature={-qtbye,-
|newcommand{\dedouble}{{\addfontfeature{RawFeature={-qtbye,-
tlig}}\symbol{"201E}}}
tlig}}\symbol{"201E}}}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% backtick
% backtick
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
|newcommand{\bcktck}{{\addfontfeature{RawFeature={-qtbye,-tlig}}`}}
|newcommand{\bcktck}{{\addfontfeature{RawFeature={-qtbye,-tlig}}`}}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Straight double
% Straight double
% and single quotes
% and single quotes
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
|newcommand{\\dqone}{{\addfontfeature{RawFeature={-qtbye,-
|newcommand{\\dqone}{{\addfontfeature{RawFeature={-qtbye,-
G tlig}}\symbol{"0027}}}
G tlig}}\symbol{"0027}}}
|newcommand{\dqtwo}{{\addfontfeature{RawFeature={-qtbye,-
|newcommand{\dqtwo}{{\addfontfeature{RawFeature={-qtbye,-
tlig}}\symbol{"0022}}}
tlig}}\symbol{"0022}}}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```
```

% Feet and inches
%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\newcommand{\Iqprime}{'}
Inewcommand{<br>qdoubleprime} {"}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%
% The Okina, for typing
% Hawai`i %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%% %%%%%%%%%%%%%%%%%%%%%%%%%%%%%% |newcommand {lokina} {`}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% The individual smart quotes
%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
|newcommand{\sqtwoleft}{{\addfontfeature{RawFeature={-qtbye,-tlig}}"}}
|newcommand{\sqtworight}{{\addfontfeature{RawFeature={-qtbye,-tlig}}"}}
|newcommand{\sqoneright}{{\addfontfeature{RawFeature={-qtbye,-tlig}}'}}
\newcommand{\apost}{{\addfontfeature{RawFeature={-qtbye,-tlig}}'}}
|newcommand{\sqoneleft}{{\addfontfeature{RawFeature={-qtbye,-tlig}}‘}}
|newcommand{\glmtl}{{\addfontfeature{RawFeature={-qtbye,-tlig}}<<|,}}
|newcommand{\glmtr}{{\addfontfeature{RawFeature={-qtbye,-tlig}} \,>}}
|newcommand{\sglmtl} {{\addfontfeature{RawFeature={-qtbye,-tlig}}< \,}}
|newcommand{\sglmtr}{{\addfontfeature{RawFeature={-qtbye,-tlig}}\, >}}

```
\% Prime, mostly for

\subsection*{6.8 The German option}
```

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% DEUTSCH
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%
|Zuaexec{

```
function dedoublequotes ( s )

    end
IZuaexec\{
function desinglequotelinestart ( s )
        return (s:gsub ("^'",",") )
    end
|Zuaexec\{
function desinglequotesclose( s )
return ( s:gsub ( " ’(..-)'", " , §\%1`") )
    end
```

    }
    %% Two utility macros to activate/deactivate the Lua function:
\newcommand\dedoublequoteson{\directlua{

```
luatexbase.add_to_callback (
    "process_input_buffer", dedoublequotes , "dedoublequotes")
|newcommand\dedoublequotesoff\{|directlua\{luatexbase.remove_from_callback (
    "process_input_buffer", "dedoublequotes")
\}\}
|newcommand|desinglequotelinestarton\{|directlua\{
luatexbase.add_to_callback (
    \}\}
|newcommand \(\backslash\) desinglequotelinestartoff \(\{\backslash\) directlua\{
luatexbase.remove_from_callback (
    "process_input_buffer", "desinglequotelinestart")
    \}\}
|newcommand\desinglequotescloseon\{|directlua\{
luatexbase.add_to_callback (
    "process_input_buffer", desinglequotesclose , "desinglequotesclose")
        \}\}
    |newcommand\desinglequotescloseoff\{|directlua\{
```

luatexbase.remove_from_callback (
"process_input_buffer", "desinglequotesclose")

```
    \}\}
    |newcommand\{1desmartquotes\}\{|dedoublequoteson
|desinglequotelinestarton
|desinglequotescloseon\}
    Inewcommand\{1dedumbquotes\} \{|dedoublequotesoff
|desinglequotelinestartoff
|desinglequotescloseoff\}
    |DeclareOption\{de\}\{
|AtBeginDocument\{
|frsmartquotes
|frdumbquotes
|smartquotes
|dumbquotes\dumbquotes
|desmartquotes\}
|renewcommand\{|texttt\}[1]\{\{|ttfamily|addfontfeature\{RawFeature=\{+qtbye,-tlig\}\}
    \#1\}\}
\}

\subsection*{6.9 The French option}
```

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Français
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
|luaexec{

```
function frdoublequotes ( s )

    end
\}
|Zuaexec\{
function frsinglequotelinestart ( s ) return (s:gsub (欧'","'") )
\}
|Zuaexec\{
```

function frsinglequotesclose( s )
return ( s:gsub ( " `(..-)'"," < \1, \%1<br>,>") )
end

```
\}
\%\% Two utility macros to activate/deactivate the Lua function:
|newcommand\frdoublequoteson\{|directlua\{
luatexbase.add_to_callback (
    "process_input_buffer", frdoublequotes , "frdoublequotes")
        \}\}
|newcommand \(\mid\) frdoublequotesoff \(\{\) |directlua\{
luatexbase.remove_from_callback (
    "process_input_buffer", "frdoublequotes")
\}\}
|newcommand\frsinglequotelinestarton\{|directlua\{
luatexbase.add_to_callback (
    "process_input_buffer", frsinglequotelinestart , "frsinglequotelinestart")
    \}\}
|newcommand\frsinglequotelinestartoff\{|directlua\{
luatexbase.remove_from_callback (
    "process_input_buffer", "frsinglequotelinestart")
    \}\}
    |newcommand|frsinglequotescloseon\{|directlua\{
    luatexbase.add_to_callback (
    "process_input_buffer", frsinglequotesclose , "frsinglequotesclose")
\}\}
|newcommand \(\backslash\) frsinglequotescloseoff\{|directlua\{
luatexbase.remove_from_callback (
"process_input_buffer", "frsinglequotesclose")
```

}}
|frsinglequotelinestarton
|frsinglequotescloseon}
|newcommand{\ frdumbquotes}{\frdoublequotesoff
|frsinglequotelinestartoff
\frsinglequotescloseoff}
|DeclareOption{fr}{
|AtBeginDocument{\desmartquotes\dedumbquotes\smartquotes\dumbquotes\dumbquotes\frsmartquotes}
|renewcommand{\texttt}[1]{{\ttfamily\addfontfeature{RawFeature={+qtbye,-tlig}}

# \#1}}

}

```

\subsection*{6.10 Process Options}
```

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Default option is English
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
|ExecuteOptions{en}%
\ProcessOptions*

```

\section*{7 Version History}
```

7.1 1.1.0
25 October 2022: Added support for elision

```

\subsection*{7.2 1.0.1}

30 August 2022: Further corrections to bug preventing non-English usage

\subsection*{7.3 1.0.1}

28 August 2022: Change bug preventing non-English usage
7.4 1.0.0

21 August 2022: Package creation```


[^0]:    *e-mail: ezg21@cantab.ac.uk

