# **EMBRAC**

vo.7 2017/07/04

Upright Brackets in Emphasized Text

Clemens NIEDERBERGER

https://bitbucket.org/cgnieder/embrac/

contact@mychemistry.eu

### **Table of Contents**

1	License and Requirements	1	6 Adding More Brackets & Adjusting the Kerning	4
2	Acknowledgements	1	7 biblatex Compatibility	6
3	New	1	8 Turn EMBRAC Temporarily Off	6
4	About	2	9 Watch out!	7
5	How it Works	2	Index	8

## 1 License and Requirements

Permission is granted to copy, distribute and/or modify this software under the terms of the LATEX Project Public License (LPPL), version 1.3 or later (http://www.latex-project.org/lppl.txt). The software has the status "maintained."

EMBRAC needs the the l3kernel [L3Pa] and l3packages [L3Pb].

# 2 Acknowledgements

I like to thank both Dominik Waßenhoven for inspiration [Waß12] and Bruno Le Floch for providing code [Flo11]. Without either of them this package probably wouldn't exist.

#### 3 New

**vo.1a** The command \RenewEmph has been renamed into \ChangeEmph and a new slightly different \RenewEmph has been added.

- **vo.2** Improved interaction with biblatex.
- vo.3 Added support for fontspec's \textsi.
- vo.5 Don't replace brackets in math mode.
- vo.6 Added support for \textsl.
- **vo.7** Added support for symbols with a catcode other than 12.

#### 4 About

Parentheses and brackets are not letters, and it makes little sense to speak of them as roman or italic. There are vertical parentheses and sloped ones, and the parentheses on italic fonts are almost always sloped, but vertical parentheses are generally to be preferred. That means they must come from the roman font, and may need extra spacing when used with italic letterforms.

The sloped square brackets usually found on italic fonts are, if anything, even less useful than sloped parentheses. If, perish the thought, there were a book or film entitled *The View from My [sic] Bed*, sloped brackets might be useful as a way of indicating that the brackets and their contents are actually part of the title. Otherwise, vertical brackets should be used, no matter whether the text is roman or italic: "The View from My [sic] Bed" and "the view from my [sic] bed." [Brio4, p. 85]

Both this quote from *The Elements of Typographic Style* by Robert Bringhurst and the article "Aufrechte Klammern in kursivem Text" by Dominik Waßenhoven [Waß12] inspired this package. Indeed, **EMBRAC** heavily borrows from the code Wassenhoven provided in his article. The code was originally provided by Bruno Le Floch answering a question on TeX.sx [Flo11].

EMBRAC tries to redefine \emph, \textit and \textsl in a way that neither parentheses nor square brackets are sloped. In an ideal world you of course wouldn't need this package because the italic font you're using would have vertical parentheses and brackets by itself.

```
1 \emph{This is emphasized [sic] text.} \par
2 \emph{This is emphasized text (as you can see).}

This is emphasized [sic] text.
This is emphasized text (as you can see).
```

#### 5 How it Works

The commands \emph, \textit and \textsl are redefined:

Version o.6: added \textsl

<sup>1.</sup> Many thanks again for his kind permission to use it!

```
\emph*{\langle emphasized text\rangle}
Emphasizing text.
\textit*{\langle text in italics\rangle}
Italicizing text,
\textsl*{\langle slanted text\rangle}
Slanting text,
\textsi*{\langle text in italic small caps\rangle}
```

This command is only defined and thus redefined if you loaded fontspec, *i. e.*, if you're compiling your document with X¬ILATEX or LuaLATEX.

They now have a \* argument that restores the original behaviour. Otherwise they're used just as before.

Let's see the example again:

```
1 \emph{This is emphasized [sic] text.} \par
2 \emph{This is emphasized text (as you can see).}

This is emphasized [sic] text.
This is emphasized text (as you can see).
```

As you can see you don't have to do anything apart from loading **EMBRAC** in your preamble. Well – that's actually not entirely true. You have to take care of the kerning of the parentheses and brackets. Otherwise things could look worse with **EMBRAC** than without.

The following example demonstrates one point why you have to be very careful when using **EMBRAC**. Certain parenthesis-letter combinations might need adjustments of the kerning:

```
1 \emph{This is (just) emphasized text.} \par
2 \emph{This is (\kern.lem just) emphasized text.}

This is (just) emphasized text.
This is (just) emphasized text.
```

This of course strongly depends on the font you've chosen. Kerning is a very important aspect when using this package and you shouldn't use it without giving it a certain amount of attention. See the next section for more details.

### 6 Adding More Brackets & Adjusting the Kerning

If you want you can change the behaviour of **EMBRAC**. Maybe it should only affect squared brackets? Or curly braces, too? This can be done with the following commands. They all work locally which means if used inside a group outside of it everything stays what it was.

```
\AddEmph\{\langle o \rangle\}[\langle io\text{-}kern \rangle, \langle oo\text{-}kern \rangle]\{\langle c \rangle\}[\langle ic\text{-}kern \rangle, \langle oc\text{-}kern \rangle] Add a pair of brackets to be left upright in italic text.
```

```
\ChangeEmph{\langle o \rangle}[\langle io\text{-}kern \rangle, \langle oo\text{-}kern \rangle]{\langle c \rangle}[\langle ic\text{-}kern \rangle, \langle oc\text{-}kern \rangle] Change the kerning values for a given pair of brackets.
```

```
\mathbb{R}_{c} = \mathbb{E}_{c} \left\{ \langle o \rangle \right\} \left[ \langle io\text{-}kern \rangle, \langle oo\text{-}kern \rangle \right] \left\{ \langle c \rangle \right\} \left[ \langle ic\text{-}kern \rangle, \langle oc\text{-}kern \rangle \right]
```

Renew the kerning values for a given pair of brackets. See below for the difference to \ChangeEmph.

```
\ensuremath{\mathsf{DeleteEmph}}\{\langle o \rangle\}\{\langle c \rangle\}
```

Remove a pair of brackets from treatment.

In the above descriptions  $\langle o \rangle$  means opening bracket and  $\langle c \rangle$  means closing bracket. The kerning arguments are all four optional and require – if given – to be a length. If they're not given  $\AddEmph$  and  $\Begin{array}{c} RenewEmph \ before. \end{array}$ 

Introduced in version 0.4

To each of these commands there are two variants that are only semantically different.<sup>2</sup> They are all called  $\langle base \rangle$  OpEmph or  $\langle base \rangle$  ClEmph where  $\langle base \rangle$  is either Add, Change, Renew or Delete. Their arguments are all the same: the half of what the main commands have for either modifying the opening or the closing symbols.

```
\AddOpEmph\{\langle o \rangle\}[\langle io-kern \rangle, \langle oo-kern \rangle]
```

An an opening bracket to the treatment.

```
\AddClEmph\{\langle c \rangle\}[\langle ic-kern \rangle, \langle oc-kern \rangle]
```

An a closing bracket to the treatment.

They allow you to add single symbols to **EMBRAC**'s mechanism instead of adding pairs.

In all these commands the optional argument  $\langle io\text{-}kern \rangle$  is inserted after the opening bracket (inner opening),  $\langle oo\text{-}kern \rangle$  is inserted before it (outer opening).  $\langle ic\text{-}kern \rangle$  is inserted before the closing bracket (inner closing),  $\langle oc\text{-}kern \rangle$  after it (outer closing).

**EMBRAC** initially makes these definitions:

```
1 % add some defaults:
2 \AddEmph{[]{]}[.04em,-.12em]
3 \AddEmph{()[-.04em]{)}[,-.15em]
```

<sup>2.</sup> They're also using different lists internally but you shouldn't concern yourself with this.

#### 6 Adding More Brackets & Adjusting the Kerning

This document however uses "Linux Libertine O" both for the roman and the italic font and redefines them in this way (still not sure these are the best values):

```
1 \RenewEmph{[}[-0.045em,.02em]{]}[.055em,-.09em]
2 \ChangeEmph{(}[-.01em,.04em]{)}[.04em,-.05em]
```

You can change them as you wish, but be careful with the kerning! What's too less for one letter might be too much for others:

```
\ChangeEmph{(}[.lem]{)}[.lem]
\( \text{\par } \text{\par
```

To see why it is important to pay attention to the kerning values let's look at how **EMBRAC**'s features look without kerning (*i. e.*, 0pt for each value), with the default settings and with the settings for this document:

#### No Kerning:

This is emphasized [sic] text.
This is emphasized text [as you can see].
This is emphasized (sic) text.
This is emphasized text (as you can see).

#### **EMBRAC**'s Default Kerning:

This is emphasized [sic] text.

This is emphasized text [as you can see].

This is emphasized (sic) text.

This is emphasized text (as you can see).

#### **Adjusted Kerning:**

This is emphasized [sic] text.
This is emphasized text [as you can see].
This is emphasized (sic) text.
This is emphasized text (as you can see).

<sup>3.</sup> http://www.linuxlibertine.org/

Deleting a pair removes it completely from **EMBRAC**'s mechanism. All information about the pair and its kerning values will be lost. So if you want the effects to be temporary use grouping.

```
1 \DeleteEmph{[]{]}
2 \emph{This is emphasized [sic] text.} \par
3 \emph{This is emphasized text (as you can see).}

This is emphasized [sic] text.
This is emphasized text (as you can see).
```

By the way: this packages provides a simple file embrac\_kerning\_test.tex for testing kerning values. You should find it in the same directory as this documentation.

### 7 biblatex Compatibility

This is **EMBRAC**'s only package option:

```
biblatex = true|on|parens|false|off|none
```

Default: false

If set to true (or one of its aliases) parentheses and squared brackets as defined by biblatex with \bibleftparen, \bibrightparen, \bibleftbracket and \bibrightbracket are treated the same way (if not removed from the treatment with \DeleteEmph).

The command \blx@imc@mkbibemph is patched to use the original definition of \emph.

```
1 % this document uses \usepackage[biblatex]{embrac}
2 \emph{Let's cite Bringhurst again:~\cite{bringhurst04}}.

Let's cite Bringhurst again: [Brio4].
```

## 8 Turn EMBRAC Temporarily Off

Redefining \emph, \textit and \textsl is not without danger. Sometimes you might find that you'd want to keep the original definition for a small portion of your document. You can use the following commands whose functions are obvious, I guess:

#### \EmbracOff

Turn **EMBRAC**'s treatment off.

#### **\EmbracOn**

Turn **EMBRAC**'s treatment on.

Both commands are local.

#### 9 Watch out!

Please be aware that **EMBRAC** does not affect \itshape nor \em (nor \it which you shouldn't use in a LATEX document, anyway).

```
This is italic [sic] text.
```

#### References

- [Brio4] Robert Bringhurst. *The Elements of Typographic Style.* Hartley & Marks, Canada, 2004. ISBN: 978-0-88179-205-5.
- [Flo11] Bruno Le FLOCH. *Upright parentheses in italic text*. Mar. 9, 2011. URL: http://tex.stackexchange.com/a/13057/5049 (visited on 06/28/2012).
- [L<sub>3</sub>Pa] The IAT<sub>E</sub>X<sub>3</sub> Project Team. l<sub>3</sub>kernel. version SVN 6377, Jan. 19, 2016 (or newer). URL: http://mirror.ctan.org/macros/latex/contrib/l<sub>3</sub>kernel/.
- [L3Pb] THE IATEX3 PROJECT TEAM.
  | I3packages. version SVN 6377, Jan. 19, 2016 (or newer).
  | URL: http://mirror.ctan.org/macros/latex/contrib/l3packages/.
- [Waß12] Dominik WASSENHOVEN. "Aufrechte Klammern in kursivem Text". In: 2 (2012), pp. 51–53.

# Index

A	F
\AddClEmph 4	FLOCH, Bruno Le
\AddEmph	fontspec (package)
\Add0pEmph	
Aufrechte Klammern in kursivem Text 1 f.	I
	\it7
В	\itshape7
biblatex6	L
biblatex (package)	l3kernel (bundle)
\bibleftbracket 6	l3packages (bundle)
\bibleftparen6	LPPL
\bibrightbracket 6	LPPL
\bibrightparen 6	R
Bringhurst, Robert	\RenewEmph
c	Т
\ChangeEmph	\textit 2 f., 6
	\textsi2 f.
D	\textsl 2 f., 6
\DeleteEmph	THE LATEX3 PROJECT TEAM
(Deteteeliipii	The Elements of Typographic Style 2, 6
E	U
\em7	Upright parentheses in italic text 1 f.
\EmbracOff6	1 0 1
\EmbracOn 7	W
\emph2 f., 6	Wassenhoven, Dominik