EMBRAC

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Upright Brackets in Emphasized Text

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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 1.3c 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 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

4 How it Works

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.¹ The code was originally provided by Bruno Le Floch¹ answering a question on TeX.sx [Flo11].

Version 0.6: added \textsl **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).

4 How it Works

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

\emph*{{emphasized text}} Emphasizing text.

\textit*{{*text in italics*}} 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_TLAT_EX or LuaLAT_EX.

^{1.} Many thanks again for his kind permission to use it!

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.

5 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.

```
\label{eq:addemph} $$ dd Emph{ (o)}[(io-kern), (oo-kern)]{ (c)}[(ic-kern), (oc-kern)] Add a pair of brackets to be left upright in italic text.
```

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

5 Adding More Brackets & Adjusting the Kerning

 $\mathbb{R}enewEmph{\langle o \rangle}[\langle io-kern \rangle, \langle oo-kern \rangle]{\langle c \rangle}[\langle ic-kern \rangle, \langle oc-kern \rangle]$

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

$\mathbb{DeleteEmph}(o)$

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 \RenewEmph insert Opt and \ChangeEmph uses the value stored by \AddEmph or \RenewEmph before.

Introduced in version 0.4

To each of these commands there are two variants that are only semantically different.² 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.

```
\Lambda dd0pEmph{\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 $\langle io-kern \rangle$ is inserted after the opening bracket (inner opening), $\langle oo-kern \rangle$ is inserted before it (outer opening). $\langle ic-kern \rangle$ is inserted before the closing bracket (inner closing), $\langle oc-kern \rangle$ after it (outer closing).

EMBRAC initially makes these definitions:

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

This document however uses "Linux Libertine O"³ 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:

^{2.} They're also using different lists internally but you shouldn't concern yourself with this.

^{3.} http://www.linuxlibertine.org/

```
1 \ChangeEmph{(}[.lem]{)}[.lem]
2 \emph{This is (just) emphasized text.} \par % looks OK, kind of
3 \emph{This is emphasized text (as you can see).} % looks bad
```

This is (just) emphasized text. This is emphasized text (as you can see).

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).

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.

6 Adding More Commands

Introduced in version 0.9

If you like to add additional macros to **EMBRAC**'s treatment (in addition to the already known \emph, \textil, \textsl, and \textsl) then you can use the following command

\EmbracMakeKnown{(command)}

Redefine the command $\langle command \rangle$ to replace brackets and parentheses by upright ones. $\langle command \rangle$ is the name of the command *without* the leading backslash!

EMBRAC does this:

- 1 \EmbracMakeKnown{emph}
- 2 \EmbracMakeKnown{textit}
- 3 \EmbracMakeKnown{textsl}

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, \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).

1 \itshape This is italic [sic] text.

This is italic [sic] text.

In cases like this one of the following commands could be used:

 $\mathbb{C}^{op}_{\langle cl \rangle} \{\langle cl \rangle\} \{\langle text \rangle\}$

Introduced in Encloses $\langle text \rangle$ with $\langle op \rangle$ and $\langle cl \rangle$. Both $\langle op \rangle$ and $\langle cl \rangle$ must be brackets known to EMBRAC. version 0.8

 $\mathbb{C} \left\{ \langle text \rangle \right\}$

```
Encloses \langle text \rangle with upright parentheses. This is the same as \langle emb\{()\}\{\langle text \rangle\}.
```

 $\ensuremath{\mathsf{embbracket}}{\langle text \rangle}$

Encloses $\langle text \rangle$ with upright brackets. This is the same as $\mathbb{E}_{\{ \{text\} \}}$.

Introduced in version 0.8

Introduced in

version o.8

\itshape This is italic \embbracket{sic} text.

This is italic [sic] text.

10 Version History

- **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.

References

- **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.
- **vo.8** Added \embparen, \embbracket and \emb.
- vo.9 Added \EmbracMakeKnown

References

[Brio4]	Robert BRINGHURST. <i>The Elements of Typographic Style.</i> Hartley & Marks, Canada, 2004. ISBN: 978-0-88179-205-5.
[Flo11]	Bruno Le Flocн. Upright parentheses in italic text. Mar. 9, 2011. URL: http://tex.stackexchange.com/a/13057/5049 (visited on o6/28/2012).
[L3Pa]	Тне IAT _E X3 Project Теам. I3kernel. Oct. 27, 2020 (or newer). url: https://www.ctan.org/pkg/l3kernel/.
[L3Pb]	Тне IAT _E X3 Project Теам. I3packages. Oct. 27, 2020 (or newer). url: https://www.ctan.org/pkg/l3packages/.
[Waß12]	Dominik Wassenнoven. "Aufrechte Klammern in kursivem Text". In: 2 (2012), pp. 51–53.

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