

v0.1alpha 2012/05/18

footnote kerning

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### English documentation

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# 1 License and Requirements

FNPCT is placed under the terms of the LaTeX Project Public License, version 1.3 or later (http://www.latex-project.org/lppl.txt). It has the status "maintained".

FNPCT depends on the l3kernel<sup>1</sup> and xparse which is part of the l3packages<sup>2</sup> bundle.

## 2 What's it all about?

The fnpct package basically does two things to footnotes: if footnote marks are followed by a comma or a dot the order of footnote and punctuation mark is reversed and the kerning gets adjusted.

All examples in this documentation use

```
| \renewcommand\thempfootnote{\arabic{mpfootnote}}
```

<sup>&</sup>lt;sup>1</sup> CTAN: l3kernel <sup>2</sup> CTAN: l3packages

Now, let's see some action:

```
| \begin{minipage}{.4\linewidth}
| \noindent The three little pigs built their houses
| out of straw\footnote{not to be confused with hay},
| sticks\footnote{or lumber according to some sources}
| and bricks\footnote{probably fired clay bricks}.
| \end{minipage}
| The three little pigs built their houses
| out of straw, sticks and bricks.
| out of straw, sticks and bricks.
| not to be confused with hay
| or lumber according to some sources
| probably fired clay bricks
```

The order-switching can be prevented using a package option

▶ punct-after = <u>true</u>/false → when true the punctuation sign will be placed after the footnote.

which like all options can also be set using the setup command.

▶ \setfnpct{<options>} → set up options. Can be used anywhere in the document. Some options can only be set in the preamble, though.

```
| \setfnpct{punct-after}
| \text{begin{minipage}{.4\linewidth}}
| \text{noindent The three little pigs built their houses}
| out of straw\footnote{not to be confused with hay},
| sticks\footnote{or lumber according to some sources}
| and bricks\footnote{probably fired clay bricks}.
| \text{end{minipage}}
| The three little pigs built their houses
| out of straw\frac{1}{2}, sticks\frac{2}{2} and bricks\frac{3}{2}.
| \quad \frac{1}{2} not to be confused with hay
| or lumber according to some sources
| approbably fired clay bricks
```

Please be aware that this package is in an experimental state and there hasn't been extensive testing with other footnote behaviour changing packages!

# 3 Options

Besides the "order switching" you can also adjust the kerning:

- ▶ after-dot-space = <dim> → space to be inserted after a dot and before the footnote mark.

  Default = -.06em
- ▶ after-comma-space = <dim> → space to be inserted after a comma and before the footnote mark. Default = -.06em
- $\blacktriangleright$  after-punct-space =  $\langle \text{dim} \rangle \longrightarrow \text{set both spaces}$ .
- ▶ punct-after = <u>true</u>/false → when true the punctuation sign will be placed after the footnote.
- ▶ before-dot-space = <dim> → space to be inserted before a dot and after the footnote mark, i.e. with punct-after = true. Default = -.15em
- ▶ before-comma-space = <dim> → space to be inserted before a comma and after the footnote mark, i.e. with punct-after = true. Default = -.15em
- ▶ before-punct-space =  $\langle \dim \rangle \rightarrow \text{set both spaces}$ .
- ▶ before-footnote-space = <dim> → space to be inserted between a word and the following footnote mark. Default = .06em
- ▶ multiple = true/false → lets \footnote be equal to \multfootnote

Let's take a look at an example:

```
% some ridiculous settings:

\[
\setfnpct\{after-punct-space=2pt,before-footnote-space=2pt\}
\]
\[
\begin\{minipage\}\{.4\linewidth\}\\
\]
\[
\noindent The three little pigs built their houses
\]
\[
\text{out of straw\footnote}\{\text{not to be confused with hay}\},\]
\[
\text{sticks\footnote}\{\text{or lumber according to some sources}\}\]
\[
\text{and bricks\footnote}\{\text{probably fired clay bricks}\}.\]
\[
\text{end\{minipage\}}
\]

The three little pigs built their houses
\[
\text{out of straw,}^1\text{ sticks}^2\text{ and bricks.}^3\]
\[
\frac{1}{1\text{not to be confused with hay}}\]
\[
\text{or lumber according to some sources}\]
\[
\text{probably fired clay bricks}\]
```

And now the same with switched order:

```
% some ridiculous settings:

\setfnpct{punct-after, before-punct-space=2pt, before-footnote-space=2 pt}

begin{minipage}{.4\linewidth}

\noindent The three little pigs built their houses

out of straw\footnote{not to be confused with hay},

sticks\footnote{or lumber according to some sources}

and bricks\footnote{probably fired clay bricks}.

\end{minipage}

The three little pigs built their houses

out of straw¹, sticks² and bricks³.

\frac{1}{1} not to be confused with hay}

or lumber according to some sources

probably fired clay bricks
```

Some of the options are explained in a bit more detail in the next sections.

## 4 Multiple footnotes

#### 4.1 Basics

Since multiple footnotes have to be treated differently,<sup>3,4</sup> fnpct provides an extra command for that:

▶ \multfootnote{<list>;<of>;<footnotes>} → different footnotes are separated with a semicolon.

```
| \begin{minipage}{.4\linewidth}
| \noindent The three little pigs built their houses
| out of straw\footnote{not to be confused with hay},
| sticks\footnote{or lumber according to some sources}
| and bricks\multfootnote{probably fired clay bricks;or
| something else}.
| \end{minipage}

| The three little pigs built their houses
| out of straw,\frac{1}{2} sticks\frac{2}{2} and bricks.\frac{3}{4}.
| \frac{1}{1} not to be confused with hay
| or lumber according to some sources
| probably fired clay bricks
| or something else
```

Every of the items of the list has an optional argument equivalent to the optional argument of \footnote:

<sup>&</sup>lt;sup>3</sup> see this <sup>4</sup> as an example

```
| \begin{minipage}{.4\linewidth}
| \noindent The three little pigs built their houses
| out of straw\footnote{not to be confused with hay},
| sticks\footnote{or lumber according to some sources}
| and bricks\multfootnote{probably fired clay bricks; [5] or
| something else}.
| \end{minipage}

| The three little pigs built their houses
| out of straw, 1 sticks 2 and bricks. 3,5
| inot to be confused with hay
| or lumber according to some sources
| probably fired clay bricks
| or something else
```

#### 4.2 The delimiter

Since the semicolon might be part of the footnote text you might have some trouble. But there are ways around. Maybe try enclosing it with braces:

```
| \begin{minipage}{.4\linewidth}
| \noindent The three little pigs built their houses
| out of straw\footnote{not to be confused with hay},
| sticks\footnote{or lumber according to some sources}
| and bricks\multfootnote{probably fired clay bricks{;}}
| or something else; what do I know}.
| \end{minipage}
| The three little pigs built their houses
| out of straw,\frac{1}{2} sticks\frac{2}{2} and bricks.\frac{3}{4}
| \frac{1}{1} not to be confused with hay
| or lumber according to some sources
| probably fired clay bricks; or something else
| what do I know
```

There is an option which lets you choose the delimiter:

```
\blacktriangleright mult-fn-delim = <delimiter> \rightarrow choose delimiter for the \multfootnote. Default = ;
```

```
\setfnpct{mult-fn-delim=//}
\begin{minipage}{.4\linewidth}
\noindent The three little pigs built their houses
out of straw\footnote{not to be confused with hay},
sticks\footnote{or lumber according to some sources}
and bricks\multfootnote{probably fired clay bricks;
or something else//what do I know}.
\end{minipage}

The three little pigs built their houses
out of straw, sticks and bricks. and bricks are a bricks. and bricks are a bricks. The three little pigs built their houses
out of straw, sticks and bricks. and bricks. and bricks. and bricks. and bricks. The three little pigs built their houses
out of straw, sticks and bricks. and bricks. The three little pigs built their houses
out of straw, sticks and bricks. and bricks. The three little pigs built their houses
out of straw, sticks and bricks. The three little pigs built their houses
out of straw, sticks and bricks. The three little pigs built their houses
out of straw, sticks and bricks. The three little pigs built their houses
out of straw, sticks and bricks. The three little pigs built their houses
out of straw, sticks and bricks. The three little pigs built their houses
out of straw, sticks and bricks. The three little pigs built their houses
out of straw, sticks are a bricks. The three little pigs built their houses
out of straw, sticks are a bricks. The three little pigs built their houses
out of straw are a bricks. The three little pigs built their houses
out of straw are a bricks. The three little pigs built their houses
out of straw are a bricks. The three little pigs built their houses
out of straw are a bricks. The three little pigs built their houses
out of straw are a bricks. The three little pigs built their houses
out of straw are a bricks. The three little pigs built their houses
out of straw are a bricks. The three little pigs built their houses
out of straw are a bricks. The three little pigs built their houses
out of straw are a b
```

### 4.3 Automagic

If you want you can turn all footnotes into \multfootnotes.

▶ multiple =  $\underline{\text{true}}/\text{false} \rightarrow \text{let } \setminus \text{footnote}$  behave like \multfootnote. This option can only be set in the preamble. Default = false

```
% in preamble: \setfnpct{multiple}

\text{begin{minipage}{.4\linewidth}}

\text{noindent} The three little pigs built their houses

out of straw\footnote{not to be confused with hay},

sticks\footnote{or lumber according to some sources}

and bricks\footnote{probably fired clay bricks;or

something else}.

\text{end{minipage}}

The three little pigs built their houses

out of straw,\frac{1}{2} sticks\frac{2}{2} and bricks.\frac{3}{4}

\text{1}

not to be confused with hay}

or lumber according to some sources

probably fired clay bricks

or something else
```

#### 5 Footcites

Preliminary testing suggests that FNPCT seems to be compatible with the \footcite and \footfullcite commands provided by the biblatex<sup>5</sup> package. However, the punctuation switching does not apply to them.

The kerning works ...

```
\setfnpct{before-footnote-space=2pt}
 \begin{minipage}{.5\linewidth}
  \noindent The three little pigs built their houses
  out of straw\footnote{not to be confused with hay},
  sticks\footnote{or lumber according to some sources}
  and bricks\footnote{probably fired clay bricks}. The
  companion\footfullcite{companion} has nothing on this
  topic.
 \end{minipage}
The three little pigs built their houses out of
straw, sticks and bricks. The companion 4
has nothing on this topic.
not to be confused with hay
<sup>2</sup> or lumber according to some sources
 probably fired clay bricks
<sup>4</sup> Michel Goossens, Frank Mittelbach, and Alexan-
der Samarin. The LaTeX Companion. 1st ed. Reading,
Mass.: Addison-Wesley, 1994. 528 pp.
```

... but the punctuation switching doesn't:

```
\begin{minipage}{.5\linewidth}
   \noindent The three little pigs built their houses
   out of straw\footnote{not to be confused with hay},
   sticks\footnote{or lumber according to some sources}
   and bricks\footnote{probably fired clay bricks}. The
   companion has nothing on this topic\footfullcite{companion}.
  \end{minipage}
The three little pigs built their houses out of
straw, sticks and bricks. The companion has
nothing on this topic<sup>4</sup>.
 not to be confused with hay
^{2}\, or lumber according to some sources
 probably fired clay bricks
 Michel Goossens, Frank Mittelbach, and Alexan-
der Samarin. The LaTeX Companion. 1st ed. Reading,
Mass.: Addison-Wesley, 1994. 528 pp.
```

One can simulate that behaviour by actively setting one of these commands:

<sup>&</sup>lt;sup>5</sup> CTAN: biblatex

- $\blacktriangleright$  \kfc  $\rightarrow$  insert the after-comma-space or (if punct-after = true) the before-comma-space.

```
\setfnpct{after-punct-space=-.15em}
 \begin{minipage}{.5\linewidth}
  \noindent The three little pigs built their houses
  out of straw\footnote{not to be confused with hay},
  sticks\footnote{or lumber according to some sources}
  and bricks\footnote{probably fired clay bricks}. The
  companion has nothing on this topic.\kfp\footfullcite{companion}
 \end{minipage}
The three little pigs built their houses out of
straw, sticks and bricks. The companion has
nothing on this topic.4
<sup>1</sup> not to be confused with hay
<sup>2</sup> or lumber according to some sources
<sup>3</sup> probably fired clay bricks
<sup>4</sup> Michel Goossens, Frank Mittelbach, and Alexan-
der Samarin. The LaTeX Companion. 1st ed. Reading,
Mass.: Addison-Wesley, 1994. 528 pp.
```

#### In case of punct-after = true:

```
\setfnpct{punct-after}
 \begin{minipage}{.5\linewidth}
  \noindent The three little pigs built their houses
   out of straw\footnote{not to be confused with hay},
   sticks\footnote{or lumber according to some sources}
   and bricks\footnote{probably fired clay bricks}. The
   companion has nothing on this topic\footfullcite{companion}\kfp.
 \end{minipage}
The three little pigs built their houses out of
straw<sup>1</sup>, sticks<sup>2</sup> and bricks<sup>3</sup>. The companion has
nothing on this topic<sup>4</sup>.
^{1}\, not to be confused with hay
<sup>2</sup> or lumber according to some sources
 probably fired clay bricks
 Michel Goossens, Frank Mittelbach, and Alexan-
der Samarin. The LaTeX Companion. 1st ed. Reading,
Mass.: Addison-Wesley, 1994. 528 pp.
```

# References

[1] Michel Goossens, Frank Mittelbach, and Alexander Samarin. *The LaTeX Companion*. 1st ed. Reading, Mass.: Addison-Wesley, 1994. 528 pp.

# Index

Section titles are indicated **bold**, packages sans serif, commands \brown and options green.

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