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footnote kerning

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English documentation

Contents		4.2 The delimiter and separator .	5	
1	License and Requirements	1	4.3 Automagic	7
•	License and Requirements		5 Footcites	7
2	What's it all about?	1	3 Tooleites	,
	2.1 Basics	1	6 Other notes	9
	2.2 Temporarily disable switching	3	6.1 endnotes	9
			6.2 parnotes	9
3	Options	3		
			References	9
4	Multiple footnotes	5		
	4.1 Rasics	5	Index	10

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 l3kernel¹ and xparse which is part of the l3packages² bundle.

2 What's it all about?

2.1 Basics

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

¹ CTAN: l3kernel ² CTAN: l3packages

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

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,\frac{1}{2} sticks\frac{2}{2} and bricks.\frac{3}{2}
| \frac{1}{2} not to be confused with hay
| or lumber according to some sources
| probably fired clay bricks
```

To ensure that the kerning is set the right way the footnote *must* be placed before the dot or the comma. The command can look ahead but not look back. This means if you place the \footnote command after a dot or a comma it is treated as if followed a word, i.e. a thin space is inserted: effectively the opposite of the desired behaviour.

The order-switching can be prevented using a package option since not all countries and languages have the same typographic conventions.

▶ 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}
\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\frac{1}{2}, sticks\frac{2}{2} and bricks\frac{3}{2}.

\[
\frac{1}{1}\]
not to be confused with hay
\[
\frac{2}{2}\]
or lumber according to some sources
\[
\frac{3}{2}\]
probably fired clay bricks
```

2.2 Temporarily disable switching

One maybe want to put some footnote marks *before* the punctuation and some after, for example because the first one describes a single word but the second one a whole sentence. For this purpose FNPCT adds a * argument to \footnote and \footnotemark:

- ▶ \footnote*[<num>] {<footnote text>} \rightarrow new * argument added.
- ▶ \footnotemark*[<num>] \rightarrow new * argument added.

This argument temporarily turns off the punctuation/footnote switching.

```
| \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} \text{ not to be confused with hay} |
| or lumber according to some sources |
| 3 \text{ probably 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

All package options are listed below. They all can be set as a package option or with the \setfnpct command. Most of them are for adjusting 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
- ▶ after-punct-space = $\langle \text{dim} \rangle \rightarrow \text{set both spaces}$.
- ▶ 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 = <dim> → 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
- ▶ mult-fn-delim = <delimiter> → sets the delimiter for the \multfootnote command.
- ▶ mult-fn-sep = <separator> → sets the separator between multiple footnote marks.

Let's take a look at an example with some ridiculous settings:

```
% some ridiculous settings:

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

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

And now the same with switched order:

```
% some ridiculous settings:

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

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

4 \noindent The three little pigs built their houses

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

6 sticks\footnote{or lumber according to some sources}

7 and bricks\footnote{probably fired clay bricks}.

8 \end{minipage}

The three little pigs built their houses

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

1 not to be confused with hay

2 or lumber according to some sources

3 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,^{3,4} FNPCT provides an extra command for that:

▶ \multfootnote*{<list>;<of>;<footnotes>} → different footnotes are separated with a semicolon. The * turns the footnote/punctuation switching temporarily off.

```
| \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, sticks and bricks. And bricks and bricks. And bricks and bricks. And bricks are of lumber according to some sources
| or lumber according to some sources
| or something else|
```

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

```
| \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
| 1 not to be confused with hay
| 2 or lumber according to some sources
| 3 probably fired clay bricks
| 5 or something else
```

4.2 The delimiter and separator

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:

³ see these footnotes ⁴ for 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{;}}
| or something else; what do I know}.
| \end{minipage}

The three little pigs built their houses
| out of straw, sticks and bricks. 3, 4
| or lumber according to some sources
| probably fired clay bricks; or something else
| what do I know
```

There are options which lets you choose the (input) delimiter and the (output) separator:

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

 \blacktriangleright mult-fn-sep = <separator> \rightarrow choose the separator that is put between footnote marks. Default = ,

```
\setfnpct{mult-fn-delim=//,mult-fn-sep=;}
 \begin{minipage}[t]{.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}
 \setfnpct{mult-fn-delim=;,mult-fn-sep=}
 \renewcommand*\thempfootnote{\fnsymbol{mpfootnote}}
 \begin{minipage}[t]{.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 The three little pigs built their houses
out of straw,1 sticks2 and bricks.3;4
                                     out of straw,* sticks† and bricks.‡§
not to be confused with hay
                                       not to be confused with hay
<sup>2</sup> or lumber according to some sources
                                     † or lumber according to some sources
<sup>3</sup> probably fired clay bricks; or something
                                       probably fired clay bricks
                                     § or something else
else
what do I know
```

4.3 Automagic

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

▶ multiple = true/false → let \footnote behave like \multfootnote. This option can only
be set in the preamble. Default = false

```
% in preamble: \setfnpct{multiple}
% or \usepackage[multiple]{fnpct}
\usepackage[minipage]{.4\linewidth}
\undersethnoindent 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}.
\undersethend{minipage}

The three little pigs built their houses
out of straw,\frac{1}{2} sticks\frac{2}{2} and bricks.\frac{3}{2}.4

\undersethend{minipage}

The three little pigs built their houses
out of straw,\frac{1}{2} sticks\frac{2}{2} and bricks.\frac{3}{2}.4

\undersethend{minipage}

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 biblatex⁵ 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}
```

⁵ CTAN: biblatex

The three little pigs built their houses out of straw,¹ sticks ² and bricks.³ The companion ⁴ has nothing on this topic.

- not to be confused with hay
- ² or lumber according to some sources
- $^{3}\,$ probably fired clay bricks
- ⁴ Michel Goossens, Frank Mittelbach, and Alexander 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,1 sticks2 and bricks.3 The companion has
nothing on this topic<sup>4</sup>.
<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.
```

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

- $ightharpoonup \setminus \underline{\texttt{kfc}} \rightarrow \text{insert the after-comma-space or (if punct-after = true)}$ 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}
| \end{minipage}
| \left|
| \l
```

The three little pigs built their houses out of straw, sticks and bricks. The companion has nothing on this topic.

- not to be confused with hay
- ² or lumber according to some sources
- ³ probably fired clay bricks
- ⁴ Michel Goossens, Frank Mittelbach, and Alexander 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>.
<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.
```

6 Other notes

6.1 endnotes

6.2 parnotes

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.				
A after-comma-space 3, 8 after-dot-space 3 8 after-punct-space 3				
B before-comma-space 4, 8 before-dot-space 3, 8 before-footnote-space 4 before-punct-space 4 biblatex 7				
F \footcite				
K \kfc8 \kfp8				
L 13kernel				
$\begin{array}{llllllllllllllllllllllllllllllllllll$				
P punct-after				
S \setfnpct2 f.				

X	1
xparse	1