

F N P C T

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footnote kerning

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English documentation

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1 License and Requirements

F N P C T 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”.

F N P C T depends on the l3kernel¹ and xparse which is part of the l3packages² bundle.

¹ CTAN: l3kernel ² CTAN: l3packages

2 What's it all about?

2.1 Basics

The `FN PCT` 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 \renewcommand\thempfootnote{\arabic{mpfootnote}}
```

Now, let's see some action:

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

The three little pigs built their houses
out of straw,¹ sticks² and bricks.³

¹ not to be confused with hay

² or lumber according to some sources

³ 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 following 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 = true/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.

```

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

```

The three little pigs built their houses
out of straw¹, sticks² and bricks³.

¹ not to be confused with hay

² or lumber according to some sources

³ 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>}` → new `*` argument added.
- `\footnotemark*{<num>}` → new `*` argument added.

This argument temporarily turns off the punctuation/footnote switching.

```

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

```

The three little pigs built their houses
out of straw¹, sticks² and bricks³.

¹ not to be confused with hay

² or lumber according to some sources

³ 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` = <dim> → set both spaces.
- ▶ `punct-after` = true/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.
- ▶ `normal-marks` = true/false → sets the footnote marks in the foot not as superscripts but as normal font. If you're not using a KOMA-Script³ class this option will load the package `scrextend`. *This option can only be set in the preamble.* Default = false

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

```
1 % some ridiculous settings:
2 \setfnpct{after-punct-space=2pt,before-footnote-space=2pt}
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}
```

³ CTAN: [KOMA-Script](#)

The three little pigs built their houses
out of straw,¹ sticks² and bricks.³

¹ not to be confused with hay

² or lumber according to some sources

³ probably fired clay bricks

And now the same with switched order:

```
1 % 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 straw¹, sticks² and bricks³.

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,^{4,5} `FNPCT` provides an extra command for that:

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

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

⁴ see these footnotes ⁵ for an example

The three little pigs built their houses
out of straw,¹ sticks² and bricks.^{3,4}

¹ not to be confused with hay

² or lumber according to some sources

³ probably fired clay bricks

⁴ or something else

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

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

The three little pigs built their houses
out of straw,¹ sticks² 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:

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

The three little pigs built their houses
out of straw,¹ sticks² and bricks.^{3,4}

¹ not to be confused with hay

² or lumber according to some sources

³ probably fired clay bricks; or something

else

⁴ 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 = ;
- `mult-fn-sep` = <separator> → choose the separator that is put between footnote marks. Default = ,

```

1 \setfnpct{mult-fn-delim=//,mult-fn-sep=;}
2 \begin{minipage}[t]{.4\linewidth}
3 \noindent The three little pigs built their houses
4 out of straw\footnote{not to be confused with hay},
5 sticks\footnote{or lumber according to some sources}
6 and bricks\multfootnote{probably fired clay bricks;
7 or something else//what do I know}.
8 \end{minipage}\hfil
9 \setfnpct{mult-fn-delim=;,mult-fn-sep=}
10 \renewcommand*\thempfootnote{\fnsymbol{mpfootnote}}
11 \begin{minipage}[t]{.4\linewidth}
12 \noindent The three little pigs built their houses
13 out of straw\footnote{not to be confused with hay},
14 sticks\footnote{or lumber according to some sources}
15 and bricks\multfootnote{probably fired clay bricks;
16 or something else}.
17 \end{minipage}

```

<p>The three little pigs built their houses out of straw,¹ sticks² and bricks.^{3;4}</p> <hr style="width: 20%; margin-left: 0;"/> <p>¹ not to be confused with hay ² or lumber according to some sources ³ probably fired clay bricks; or something else ⁴ what do I know</p>	<p>The three little pigs built their houses out of straw,* sticks[†] and bricks.^{‡§}</p> <hr style="width: 20%; margin-left: 0;"/> <p>* not to be confused with hay [†] or lumber according to some sources [‡] probably fired clay bricks [§] or something else</p>
--	--

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

```

1 % in preamble: \setfnpct{multiple}
2 % or \usepackage[multiple]{fnpct}
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;or
8 something else}.
9 \end{minipage}

```

The three little pigs built their houses
out of straw,¹ sticks² and bricks.^{3,4}

¹ not to be confused with hay

² or lumber according to some sources

³ probably fired clay bricks

⁴ or something else

5 Footcites

Preliminary testing suggests that `FNpCT` seems to be compatible with the `\footcite` and `\footfullcite` commands provided by the `biblatex`⁶ package. However, the punctuation switching does not apply to them.

The kerning works ...

```
1 \setfnpct{before-footnote-space=2pt}
2 \begin{minipage}{.5\linewidth}
3   \noindent The three little pigs built their houses
4   out of straw\footnote{not to be confused with hay},
5   sticks\footnote{or lumber according to some sources}
6   and bricks\footnote{probably fired clay bricks}. The
7   companion\footfullcite{companion} has nothing on this
8   topic.
9 \end{minipage}
```

The three little pigs built their houses out of
straw,¹ sticks² and bricks.³ The companion⁴
has nothing on this topic.

¹ 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:

```
1 \begin{minipage}{.5\linewidth}
2   \noindent The three little pigs built their houses
3   out of straw\footnote{not to be confused with hay},
4   sticks\footnote{or lumber according to some sources}
5   and bricks\footnote{probably fired clay bricks}. The
6   companion has nothing on this topic\footfullcite{companion}.
7 \end{minipage}
```

⁶ CTAN: [biblatex](#)

The three little pigs built their houses out of straw,¹ sticks² and bricks.³ The companion has nothing on this topic⁴.

¹ 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.

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

- `\kfp` → insert the `after-dot-space` or (if `punct-after = true`) the `before-dot-space`.
- `\kfc` → insert the `after-comma-space` or (if `punct-after = true`) the `before-comma-space`.

```

1 \setfnpct{after-punct-space=-.15em}
2 \begin{minipage}{.5\linewidth}
3 \noindent The three little pigs built their houses
4 out of straw\footnote{not to be confused with hay},
5 sticks\footnote{or lumber according to some sources}
6 and bricks\footnote{probably fired clay bricks}. The
7 companion has nothing on this topic.\kfp\footfullcite{companion}
8 \end{minipage}

```

The three little pigs built their houses out of straw,¹ sticks² and bricks.³ The companion has nothing on this topic.⁴

¹ 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`:

```

1 \setfnpct{punct-after}
2 \begin{minipage}{.5\linewidth}
3 \noindent The three little pigs built their houses
4 out of straw\footnote{not to be confused with hay},
5 sticks\footnote{or lumber according to some sources}
6 and bricks\footnote{probably fired clay bricks}. The
7 companion has nothing on this topic\footfullcite{companion}\kfp.
8 \end{minipage}

```

The three little pigs built their houses out of straw¹, sticks² and bricks³. The companion has nothing on this topic⁴.

¹ 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.

6 Other packages

6.1 bigfoot

`FN PCT` is compatible with the `bigfoot`⁷ [6] package. You need to be a bit cautious, though. You'll need to

- load `bigfoot` first;
- declare footnotes with `\DeclareNewFootnote` *after* loading `FN PCT` but *in* the document preamble.

Also verbatim material won't work inside footnotes anymore. Since `FN PCT` does not redefine any `\footnotetext` like command it will still work inside one of them.

For every footnote class defined with `\DeclareNewFootnote` the commands `\footnote<class>` and `\footnotemark<class>` are redefined with the starred variant and a `\multfootnote<class>` is defined. The `multiple` option will turn all `\footnote<class>` commands into the corresponding `\multfootnote<class>`.

`FN PCT` has an additional package option which *cannot* be set with `\setfnpct` and only has any effects if `bigfoot` has been loaded:

- `bigfoot-default-top = true/false` → sets the default footnote class as top layer. Default = false

Since this package cannot easily combine every footnote package for demonstration purposes the following code is shown in figure 1:

```
1 \documentclass{article}
2 \usepackage[
3   paperwidth=.5\textwidth,
4   paperheight=12\baselineskip,
5   margin=5pt,
6   bottom=1.5cm]{geometry}
7
8 \usepackage{bigfoot}
9 \usepackage[bigfoot-default-top]{fnpct}
```

⁷ CTAN: `bigfoot`

```

10 \setfnpct{multiple}
11 \DeclareNewFootnote[para]{B}[alph]
12
13 \begin{document}
14
15 \noindent The three little pigs built their houses
16 out of straw\footnote*{not to be confused with hay%
17 \footnoteB{let alone grass}}, sticks\footnote{or
18 lumber according to some sources} and bricks%
19 \footnote{probably fired clay bricks;or something}.
20
21 \end{document}

```

The three little pigs built their houses
out of straw¹, sticks² and bricks.^{3,4}

¹not to be confused with hay^a
²or lumber according to some sources
³probably fired clay bricks
⁴or something
^alet alone grass

1

Figure 1: bigfoot example

6.2 endnotes

The endnotes⁸ [1] package provides the commands `\endnote` and `\endnotemark` which can be used to output all notes at the end of a chapter, say.

If the package is loaded `FNPCT` extends its functionality to these commands in the same way it does with footnotes. For example an according `\multendnote` is defined. With the package option `multiple` all `\endnotes` are turned into `\multendnotes`.

⁸ CTAN: [endnotes](#)

```

1 \begin{minipage}[t]{.4\linewidth}
2 \noindent The three little pigs built their houses
3 out of straw\endnote{not to be confused with hay},
4 sticks\endnote{or lumber according to some sources}
5 and bricks\endnote{probably fired clay bricks}.
6
7 \theendnotes
8 \end{minipage}\hfil
9 \begin{minipage}[t]{.4\linewidth}
10 \noindent The three little pigs built their houses
11 out of straw\endnote*{not to be confused with hay},
12 sticks\endnote{or lumber according to some sources}
13 and bricks\multendnote{probably fired clay bricks;or
14 something else}.
15
16 \theendnotes
17 \end{minipage}

```

The three little pigs built their houses
out of straw,¹ sticks² and bricks.³

Notes

- ¹not to be confused with hay
- ²or lumber according to some sources
- ³probably fired clay bricks

The three little pigs built their houses
out of straw⁴, sticks⁵ and bricks.^{6,7}

Notes

- ⁴not to be confused with hay
- ⁵or lumber according to some sources
- ⁶probably fired clay bricks
- ⁷or something else

6.3 fixfoot

The fixfoot⁹ [2] package provides possibility to create repeating footnotes. `FN PCT` supports this package provided you take care of the following:

- load the fixfoot package first;
- use `\DeclareFixedFootnote` only in the preamble but *after* loading `FN PCT`;

Every fixed footnote declared with `\DeclareFixedFootnote` gets an optional `*` to prevent the punctuation switching.

Since this package cannot easily combine every footnote package for demonstration purposes the following code is shown in figure 2:

⁹ CTAN: [fixfoot](#)

```

1 \documentclass{article}
2 \usepackage[
3   paperwidth=.55\textwidth,
4   paperheight=12\baselineskip,
5   margin=5pt,
6   bottom=1.5cm]{geometry}
7
8 \usepackage{fixfoot}
9 \usepackage{fnpct}
10
11 \DeclareFixedFootnote{\myfn}{I'm confused: what do I want to say?}
12
13 \begin{document}
14
15 \noindent The three little pigs\myfn\ built their houses
16 out of straw\myfn*, sticks\footnote{or lumber according
17 to some sources} and bricks\footnote{probably fired clay
18 bricks}.
19
20 \end{document}

```

The three little pigs¹ built their houses
out of straw¹, sticks² and bricks.³

¹I'm confused: what do I want to say?

²or lumber according to some sources

³probably fired clay bricks

Figure 2: fixfoot example

6.4 footmisc

Testing showed no incompatibilities with the footmisc¹⁰ package [3]. The only thing is that you won't have to use its multiple option.

6.5 manyfoot

The manyfoot¹¹ package [7] is not and will not be supported. It is loaded by bigfoot (see section 6.1), anyway.

¹⁰ CTAN: [footmisc](#) ¹¹ CTAN: [manyfoot](#)

6.6 parnotes

The parnotes¹² package [5] does something similar to the endnotes package. If parnotes is loaded `FNPCT` extends its functionality analogous to the one of endnotes.

Again the `multiple` option turns all `\parnotes` into `\multparnotes`.

<pre>1 \begin{minipage}[t]{.4\linewidth} 2 \noindent The three little pigs built their houses 3 out of straw\parnote{not to be confused with hay}, 4 sticks\parnote{or lumber according to some sources} 5 and bricks\parnote{probably fired clay bricks}. 6 7 \parnotes 8 \end{minipage}\hfil 9 \begin{minipage}[t]{.4\linewidth} 10 \noindent The three little pigs built their houses 11 out of straw\parnote*{not to be confused with hay}, 12 sticks\parnote{or lumber according to some sources} 13 and bricks\multparnote{probably fired clay bricks;or 14 something else}. 15 16 \parnotes 17 \end{minipage}</pre>	<p>The three little pigs built their houses out of straw,¹ sticks² and bricks.³</p> <p>¹not to be confused with hay ²or lumber according to some sources ³probably fired clay bricks</p>	<p>The three little pigs built their houses out of straw⁴, sticks⁵ and bricks.^{6,7}</p> <p>⁴not to be confused with hay ⁵or lumber according to some sources ⁶probably fired clay bricks ⁷or some- thing else</p>
--	--	--

References

- [1] Robin Fairbairns. *endnotes*. URL: <http://www.ctan.org/pkg/endnotes>.
- [2] Robin Fairbairns. *fixfoot*. Version 0.3a. URL: <http://www.ctan.org/pkg/fixfoot>.
- [3] Robin Fairbairns. *footmisc*. Version 5.5b. URL: <http://www.ctan.org/pkg/footmisc>.
- [4] Michel Goossens, Frank Mittelbach, and Alexander Samarin. *The LaTeX Companion*. 1st ed. Reading, Mass.: Addison-Wesley, 1994. 528 pp.
- [5] Micheal Hughes. *parnotes*. Version 1. URL: <http://www.ctan.org/pkg/parnotes>.
- [6] David Kastrup. *bigfoot*. Version 1.25. URL: <http://www.ctan.org/pkg/bigfoot>.
- [7] Alexander I. Rozhenko. *manyfoot*. Version 1.10. URL: <http://www.ctan.org/pkg/manyfoot>.

¹² CTAN: [parnotes](#)

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

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