

## v0.1beta-f 2012/05/22

## 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.

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

### 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

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

Now, let's see some action:

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 = <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}{3}, sticks\frac{2}{3} and bricks\frac{3}{3}.

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

## 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 bricks.³
| out to be confused with hay
| or lumber according to some sources
| 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 =  $\langle \dim \rangle \rightarrow \text{set both spaces}$ .
- ▶ 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 =  $\langle dim \rangle \rightarrow set both spaces$ .
- ▶ before-footnote-space = <dim> → space to be inserted between a word and the following footnote mark. Default = .06em
- ▶ dont-mess-around → sets all mentioned lengths to 0 and punct-after = true. Basically this is as if you hadn't loaded fnpct except the multiple footnote command is still available, see section 4.
- ▶ multiple =  $\underline{\text{true}}/\text{false} \rightarrow \text{lets} \setminus \text{footnote}$  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-Script<sup>3</sup> 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:

```
% 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{or lumber according to some sources}
   and bricks\footnote{probably fired clay bricks}.
   \end{minipage}
```

<sup>&</sup>lt;sup>3</sup> CTAN: KOMA-Script

```
The three little pigs built their houses out of straw, <sup>1</sup> sticks <sup>2</sup> and bricks. <sup>3</sup>

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:

```
% 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 straw 1, sticks 2 and bricks 3.

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,<sup>4,5</sup> 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}
```

<sup>&</sup>lt;sup>4</sup> see these footnotes <sup>5</sup> for an example

```
The three little pigs built their houses out of straw, sticks and bricks. 4 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:

```
| \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,\frac{1}{2} sticks\frac{2}{2} and bricks.\frac{3}{2}.5
| \quad \text{int} \text{to be confused with hay} \quad \text{or lumber according to some sources} \quad \text{probably fired clay bricks} \quad \text{or something else} \quad \text{out of straw, \quad \text{or something else}} \quad \text{or something else} \quad \text{out of straw, \quad \text{or something else}} \quad \quad \text{out of straw, \quad \text{or something else}} \quad \text{or something else} \quad \text{or something else} \quad \text{out of straw} \quad \quad \tex
```

Additionally every item has an optional \* which only invokes \footnotetext. This enables for example to set nested footnotes without disrupting the multiple setting. The following example is shown in figure 1:

```
\documentclass{article}
   \usepackage[
    paperwidth=.5\textwidth,
     paperheight=12\baselineskip,
     margin=5pt,
     bottom=1.5cm]{geometry}
   \usepackage[multiple]{fnpct}
   \begin{document}
10
     \noindent The three little pigs built their houses
11
     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%
     \footnotemark; *or something else; what do I know}.
16 \end{document}
```

The three little pigs built their houses out of straw, 1 sticks 2 and bricks. 3,5

1

Figure 1: nested footnotes

## 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:

```
| 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,¹ sticks² and bricks.³,4
| or lumber according to some sources
| out of straw of the pigs built their houses
| out of straw of the pigs built their houses
| out of straw of the pigs built their houses
| out of straw of the pigs built their houses
| out of straw of the pigs built their houses
| out of straw of the pigs built their houses
| out of straw of the pigs built their houses
| out of straw of the pigs built their houses
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| out of straw of the pigs built their houses
| out of straw of the pigs built their houses
| out of straw of the pigs built their houses
| out of straw of the pigs built their houses
| out of straw of the pigs built their houses
| out of straw of the pigs built their houses
| out of straw of the pigs built their houses
| out of straw of the pigs built their houses of the pigs built their h
```

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

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

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

<sup>&</sup>lt;sup>1</sup>not to be confused with hay

<sup>&</sup>lt;sup>2</sup>or lumber according to some sources

<sup>&</sup>lt;sup>3</sup>probably fired clay bricks<sup>4</sup>

<sup>&</sup>lt;sup>4</sup>or something else

 $<sup>^5 \</sup>mathrm{what}$  do I know

```
\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}\hfil
 \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
                                            ^{\dagger}\, or lumber according to some sources
 probably fired clay bricks; or something
                                            <sup>‡</sup> 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 =  $\underline{\text{true}}/\text{false} \rightarrow \text{let } \setminus \text{footnote}$  behave like \multfootnote. This option can only be set in the preamble. Default = false

```
% in preamble: \setfnpct{multiple}
% or \usepackage[multiple]{fnpct}
% \understand \u
```

```
The three little pigs built their houses out of straw, sticks and bricks. In ot to be confused with hay or lumber according to some sources probably fired clay bricks or something else
```

## 5 Nested Footnotes

FNPCT provides some support for nested footnotes. There are some restrictions, though. The command below can be used inside \footnote and \multfootnote, but not inside another \innernote:

▶ \innernote\*[<mark>] {<text>}  $\rightarrow$  a nested footnote.

The output of the following code can be seen in figure 2.

```
\documentclass{article}
   \usepackage[
     paperwidth=.5\textwidth,
     paperheight=12\baselineskip,
     margin=5pt,
     bottom=1.5cm]{geometry}
   \usepackage{fnpct}
   \begin{document}
10
     \noindent The three little pigs built their houses
11
     out of straw\footnote{not to be confused with hay},
12
     sticks\footnote{or lumber according to some sources}
     and bricks\footnote{probably fired clay bricks\%
     \innernote{or not}}.
16 \end{document}
```

This is especially useful if you have more than one additional footnote inside a footnote, a case that can't be solved satisfying (i.e. automatic) way with the method mentioned in section 4. See figure 3 for the output of this code:

```
| \documentclass{article}
| \usepackage[
| paperwidth=.5\textwidth,
| paperheight=12\baselineskip,
| margin=5pt,
| bottom=1.5cm]{geometry}
| usepackage{fnpct}
```

The three little pigs built their houses out of straw,<sup>1</sup> sticks<sup>2</sup> and bricks.<sup>3</sup>

1

Figure 2: \innernote example (a)

```
begin{document}

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\innernote{just guessing}}

fired clay bricks\innernote{or not}}.

end{document}
```

The three little pigs built their houses out of straw,<sup>1</sup> sticks<sup>2</sup> and bricks.<sup>3</sup>

1

Figure 3: \innernote example (b)

\innernote can also be used to escape minipages. In this case use \innernote as a replacement for \footnote and call this command later:

ightharpoonup \writes all \footnotetexts to the inner footnotes when invoked

See figure 4 for the output of the following code:

```
1 \documentclass{article}
2 \usepackage[
```

<sup>&</sup>lt;sup>1</sup>not to be confused with hay

 $<sup>^{2}</sup>$  or lumber according to some sources

<sup>&</sup>lt;sup>3</sup>probably fired clay bricks<sup>4</sup>

<sup>&</sup>lt;sup>4</sup>or not

<sup>&</sup>lt;sup>1</sup>not to be confused with hay

 $<sup>^2</sup>$  or lumber according to some sources

<sup>&</sup>lt;sup>3</sup>probably<sup>4</sup> fired clay bricks<sup>5</sup>

<sup>&</sup>lt;sup>4</sup>just guessing

<sup>&</sup>lt;sup>5</sup>or not

```
paperwidth=.5\textwidth,
paperheight=12\baselineskip,
margin=5pt,
bottom=1.5cm]{geometry}

vusepackage{fnpct}

begin{document}
noindent\fbox{%}
begin{minipage}{.9\linewidth}
The three little pigs built their houses
out of straw\innernote{not to be confused with hay},
sticks\innernote{or lumber according to some sources}
and bricks\innernote{probably}.

end{minipage}}\writeinnernotes

lend{document}
```

The three little pigs built their houses out of straw, sticks and bricks.

<sup>3</sup>probably

1

Figure 4: \innernote example (c)

## 6 Footcites

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

The kerning works ...

 $<sup>^{1}</sup>$ not to be confused with hay

<sup>&</sup>lt;sup>2</sup>or lumber according to some sources

<sup>&</sup>lt;sup>6</sup> CTAN: biblatex

```
\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,1 sticks2 and bricks.3 The companion4
has nothing on this topic.
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.
```

... 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>.
<sup>1</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:

- $\blacktriangleright$  \kfp  $\rightarrow$  insert the after-dot-space or (if punct-after = true) the before-dot-space.
- $\blacktriangleright$  \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. \label{lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lower_lo
      \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
^{2}\, 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>.
<sup>1</sup> not to be confused with hay
^{2}\, 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.
```

## 7 Other packages

FNPCT tries its best to support other footnote and related packages. Each of the following subsections is dedicated to one of these packages and if and how they work together with FNPCT.

## 7.1 bigfoot

The bigfoot<sup>7</sup> [6] package extends the possibilities of the manyfoot<sup>8</sup> package [11], see section 7.4. The main feature is to use different classes of footnotes which are typeset in different apparatus on the bottom of the page.

FNPCT is compatible with bigfoot. You need to be a bit cautious, though. You need to

- load bigfoot first;
- declare footnotes with \DeclareNewFootnote after loading FNPCT but in the document preamble.

Also verbatim material won't work inside footnotes anymore. Since FNPCT 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 >.

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

▶ bigfoot-default-top =  $\underline{\text{true}}/\text{false} \rightarrow \text{sets the default footnote class as top layer.}$  Default = false

Since this package cannot easily combine every footnote package for demonstration purposes the following code is shown in figure 5:

```
documentclass{article}
vusepackage[
paperwidth=.5\textwidth,
paperheight=12\baselineskip,
margin=5pt,
bottom=1.5cm]{geometry}

vusepackage{bigfoot}
vusepackage[bigfoot-default-top]{fnpct}
setfnpct{multiple}
vestfnpct{multiple}
begin{document}

hoindent The three little pigs built their houses
```

<sup>&</sup>lt;sup>7</sup> CTAN: bigfoot <sup>8</sup> CTAN: manyfoot

```
out of straw\footnote*{not to be confused with hay%
footnoteB{let alone grass}}, sticks\footnote{or
lumber according to some sources} and bricks%
footnote{probably fired clay bricks;or something}.

end{document}
```

The three little pigs built their houses out of straw<sup>1</sup>, sticks<sup>2</sup> and bricks.<sup>3,4</sup>

1

Figure 5: bigfoot example

#### 7.2 endnotes

The endnotes<sup>9</sup> [1] package povides 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.

```
begin{minipage}[t]{.4\linewidth}

noindent The three little pigs built their houses

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

sticks\endnote{or lumber according to some sources}

and bricks\endnote{probably fired clay bricks}.

theendnotes

end{minipage}\hfil

begin{minipage}[t]{.4\linewidth}

noindent The three little pigs built their houses

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

sticks\endnote{or lumber according to some sources}

and bricks\multendnote{probably fired clay bricks;or

something else}.

theendnotes

theendnotes

theendnotes

end{minipage}
```

<sup>&</sup>lt;sup>1</sup>not to be confused with hay <sup>a</sup>

 $<sup>^2</sup>$  or lumber according to some sources

<sup>&</sup>lt;sup>3</sup>probably fired clay bricks

<sup>&</sup>lt;sup>4</sup>or something

<sup>&</sup>lt;sup>a</sup>let alone grass

<sup>&</sup>lt;sup>9</sup> CTAN: endnotes

The three little pigs built their houses out of straw,<sup>1</sup> sticks<sup>2</sup> and bricks.<sup>3</sup>

The three little pigs built their houses out of straw<sup>4</sup>, sticks<sup>5</sup> and bricks.<sup>6,7</sup>

#### **Notes**

<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

## Notes

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

#### 7.3 fixfoot

The fixfoot <sup>10</sup> [2] package provides possibility to create repeating footnotes. FNPCT supports this package provided you take care of the following:

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

\DeclareFixedFootnote \\cs\}{\footnote text>}\ is used to store the \{\footnote text>\}\ in \\cs and create a footnote mark for it but don't repeat the footnote text on the same page in the bottom. The document needs several runs to get all the numbers and footnotes right.

Every fixed footnote declared with \DeclareFixedFootnote gets an optional \* to prevent the punctuation switching. There is *no* mult-variant of the fixed notes!

Since this package cannot easily combine every footnote package for demonstration purposes the following code is shown in figure 6:

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

<sup>10</sup> CTAN: fixfoot

20

The three little pigs <sup>1</sup> built their houses out of straw <sup>1</sup>, sticks <sup>2</sup> and bricks. <sup>3</sup>

1

Figure 6: fixfoot example

#### 7.4 footmisc

The footmisc<sup>11</sup> package [3] provides a range of options to customize footnotes, for example output them as margin notes or count footnotes per page.

Testing showed no incompatibilities with footmisc. The only thing is that you won't have to use its multiple option.

## 7.5 footnote

Unfortunately FNPCT is not compatible with the footnote<sup>12</sup> package [12]. Or more precisely it is not compatible if the command pair \savenotes/\spewnotes is invoked. This disables footnote's environments as well as its environment escaping mechanism through \makesavenoteenv.

## 7.6 manyfoot

The manyfoot package [11] is not and will not directly be supported. It is loaded by bigfoot (see section 7.1), anyway. And since the latter states this in its documentation

Purpose of this package is to provide a one-stop solution to almost all problems related to footnotes. You can use it as a drop-in replacement of the 'manyfoot' package, but without many of its shortcomings, and quite a few features of its own.

David Kastrup [6]

you should probably prefer it anyway.

<sup>&</sup>lt;sup>1</sup>I'm confused: what do I want to say?

 $<sup>^2</sup>$ or lumber according to some sources

<sup>&</sup>lt;sup>3</sup>probably fired clay bricks

<sup>11</sup> CTAN: footmisc 12 CTAN: footnote

### 7.7 pagenote

The package pagenote<sup>13</sup> [10] is supported and its \pagenote command is treated the same way as all other note commands: it got an optional \* argument and an additional \multpagenote is defined.

#### 7.8 parnotes

The parnotes<sup>14</sup> package [5] does something similar to the endnotes package. basically it allows to output the footnote text after a paragraph, either by using a special environment or by invoking \parnotes.

If parnotes is loaded fnpct extends its functionality analogous to the one of endnotes. Again the multiple option turns all \parnotes into \multiparnotes.

```
\begin{minipage}[t]{.4\linewidth}
   \noindent The three little pigs built their houses
   out of straw\parnote{not to be confused with hay},
   sticks\parnote{or lumber according to some sources}
   and bricks\parnote{probably fired clay bricks}.
   \parnotes
  \end{minipage}\hfil
  \begin{minipage}[t]{.4\linewidth}
   \noindent The three little pigs built their houses
   out of straw\parnote*{not to be confused with hay},
   sticks\parnote{or lumber according to some sources}
   and bricks\multparnote{probably fired clay bricks;or
   something else }.
   \parnotes
  \end{minipage}
The three little pigs built their houses
                                               The three little pigs built their houses
                                               out of straw<sup>4</sup>, sticks<sup>5</sup> and bricks.<sup>6,7</sup>
out of straw,1 sticks2 and bricks.3
<sup>1</sup> not to be confused with hay <sup>2</sup> or
                                               <sup>4</sup> not to be confused with hay <sup>5</sup> or
lumber according to some sources
                                               lumber according to some sources
                                               <sup>6</sup> probably fired clay bricks <sup>7</sup> or some-
<sup>3</sup> probably fired clay bricks
                                               thing else
```

#### 7.9 sepfootnotes

FNPCT supports the sepfootnotes<sup>15</sup> package [7]. Each note type you have created with with one of the commands

```
\newfootnotes{<prefix>},
\newendnotes{<prefix>} or

13 CTAN: pagenote 14 CTAN: parnotes 15 CTAN: sepfootnotes
```

#### \newsymbolfootnotes{<prefix>}

gets the additional optional \* to prevent punctuation switching. Also the corresponding multvariant \prefix>multnote is defined. The option multiple again turns all note commands into their mult-variant.

You have to call the package before FNPCT and use the \newfootnotes commands in the document preamble.

```
% preamble \newfootnotes{a}

anotecontent{first}{not to be confused with hay}

anotecontent{second}{or lumber according to some sources}

anotecontent{third}{probably fired clay bricks}

begin{minipage}{.4\linewidth}

noindent The three little pigs built their houses

out of straw\anote{first}, sticks\anote{second} and

bricks\anote{third}.

end{minipage}

The three little pigs built their houses

out of straw,¹ sticks² and bricks.³

not to be confused with hay

or lumber according to some sources

probably fired clay bricks
```

#### 7.10 tablefootnote

The package tablefootnote <sup>16</sup> [8] is supported and its \tablefootnote command is treated the same way as all other note commands: it got an optional \* argument and an additional \multtablefootnote is defined.

## 7.11 yafoot

Currently no issues are known when using fnpct with one or all of the packages of the yafoot <sup>17</sup> [9] bundle. Just for reference: these packages are pfnote <sup>18</sup>, fnpos <sup>19</sup> and dblfnote <sup>20</sup>.

<sup>16</sup> CTAN: tablefootnote 17 CTAN: yafoot 18 CTAN: pfnote 19 CTAN: fnpos 20 CTAN: dblfnote

## References

- [1] Robin Fairbairns (current maintainer). 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] Eduardo C. Loureno de Lima. sepfootnotes. Version 0.1. URL: http://www.ctan.org/pkg/sepfootnotes.
- [8] H.-Martin Münch. tablefootnote. Version 1.0g. URL: http://www.ctan.org/pkg/tablefootnote.
- [9] Hiroshi Nakashima. yafoot. Version 1.0. URL: http://www.ctan.org/pkg/yafoot.
- [10] Will Robertson (current maintainer). pagenote. Version 1.1a. URL: http://www.ctan.org/pkg/pagenote.
- [11] Alexander I. Rozhenko. *manyfoot*. Version 1.10. URL: http://www.ctan.org/pkg/manyfoot.
- [12] Mark Wooding. footnote. Version 1.13. URL: http://www.ctan.org/pkg/footnote.

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