# FNPCT

# V1.1 2022/02/03

## footnotes' interaction with punctuation

## Clemens NIEDERBERGER

https://github.com/cgnieder/fnpct/

clemens@cnltx.de

The **FNPCT** package basically does two things to footnotes: if footnote marks are followed by a punctuation mark the order of footnote and punctuation mark is reversed and the kerning gets adjusted. As a side effect mutiple footnotes and footnote ranges are easily obtained..

## **Table of Contents**

1		face for those upgrading n version o.x	2	6.2	Make note commands known to <b>fnpct</b>	10
2	License		2	7 Oth	er packages	
3	Wh 3.1 3.2	at's it all about?  Introduction	2 2 3 3 3 4	7.1 7.2 7.3 7.4 7.5 7.6 7.7 7.8	bigfoot	12 12 12 12 12 12 12 13
4	Options		5	7.10 7.11		13 13
5	Mu  5.1 5.2 5.3 5.4	Basics	6 6 7 7 8	7.14	tablefootnote tufte-latex's \sidenote biblatex's \footcite	13 13 13 14
6	Extend FNPCT		9	- 6	, ,	•
	6.1	Additional punctuation marks	9	Index		16

## 1 Preface for those upgrading from version o.x

For those upgrading from versions o to version 1: a number of options have been dropped or renamed. Please have a close look at your log file for warnings. Also, the way commands are adapted and hence the syntax of \AdaptNote has changed completely. In many if not all cases leaving them as they were will lead to errors.

The \mult... variants are not defined by default anymore. They can be retained through the load-time option multiple if needed. Letting the note commands behave as their \mult... variants is not supported any more.

\innernote is not provided anymore. Depending on user feedback I might try to add it again to FNPCT.

Please read this manual carefully so you detect all changes.

I am sorry for the inconvenience but I am convinced that the new syntax is more powerful and more flexible in the long run.

#### 2 License

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."

## 3 What's it all about?

#### 3.1 Introduction

The purpose of this package is to offer kerning for footnote marks, *i. e.* the superscripts. This is not appropriate for all superscripts. Symbols must be handled differently than numbers. And of course the amount depends on the chosen font. Robert Bringhurst says in *The Elements of Typographic Style*:

Superscripts frequently come at the ends of phrases or sentences. If they are high above the line, they can be kerned over a comma or period, but this may endanger readability, especially if the text is set in a modest size.

The Elements of Typographic Style [Brio4]

**FNPCT** cannot make these decisions for you. It sets some initial values for the comma and the full stop which looked good to me with the tested fonts. Additionally it kerns the superscripts away from words when it follows directly. The amounts of the kerning can be changed using options.

**FNPCT** also switches the order of the superscript and the following comma or full stop. Additional punctuation marks can be added to the switching behavior and the amount of kerning can be set for each punctuation mark individually. This behavior can also be turned off.

#### 3.2 New Behavior of \footnote

#### 3.2.1 Interaction With Punctuation

The **fnpct** package basically does two things to footnotes:

- if footnote marks are followed by a comma or a full stop¹ the order of footnote and punctuation mark is reversed
- and the kerning gets adjusted.

As a side effect a new method of creating multiple footnotes<sup>2,3</sup> is provided.

In what way is the kerning adjusted? After being placed behind the punctuation mark the footnote mark is moved a little bit back, namely by the amount specified with the option after-punct-space. If the footnote mark follows a word without being followed by a punctuation,<sup>4</sup> there (obviously) is no order switching and a little space is inserted before the footnote mark, namely the amount specified by the option before-footnote-space.

Now, let's see some action:

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

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 full stop or the comma. *The command can look ahead but not look back*. This means if you place the \footnote command after a full stop or a comma it is treated as if following a word, *i. e.* a thin space is inserted: effectively the opposite of the desired behavior. The effects are demonstrated in figure 1 on the following page.

The order-switching can be prevented using the option reverse since not all countries and languages have the same typographic conventions. In this case the full stop and the comma are moved a bit back, namely by the amount specified with the option before-punct-space.

#### 3.2.2 Space Before Footnotes

**FNPCT** tries to help you in one more way: it removes a possible space before a footnote command:

- 1. More punctuation marks can be added through a package option.
- 2. like
- 3. this
- 4. Well, it does not necessarily have to follow a *word*. The important point is *not being followed* by a punctuation mark.

☆ New

#### 3 What's it all about?

without FNPCT	with FNPCT	
text.1	text.1	
text <sup>1</sup> .	text 1.	
text1	text1	

FIGURE 1: The effect of FNPCT.

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

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

For this behavior it uses biblatex's (or csquotes') command \unspace if available. Otherwise it defines the command for itself. This behavior can be turned off by an option.

# 3.3 Temporarily disable (or enable) switching – new syntax of the \footnote command

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 <code>FNPCT</code> adds a \* argument to \footnote and \footnotemark. The complete new syntax now is as follows:

```
\footnote*[\langle num>\rangle] \{\langle footnote text\rangle}\rangle \langle tpunct\rangle new * argument added. \langle tpunct\rangle is the optional trailing punctuation mark. \footnotemark*[\langle num>\rangle] \langle tpunct\rangle new * argument added. \langle tpunct\rangle is the optional trailing punctuation mark.
```

The \* argument temporarily turns off the punctuation/footnote switching. In case you set reverse = {true} the \* argument temporarily enables the 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}\hfil
  \setfnpct{reverse}
```

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

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

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

## 4 Options

#### $\strut_{\langle options \rangle}$

All available options are listed below. They are set with \setfnpct. Underlined values are set if the option is used without value.

```
dont-mess-around = true | false
  Switches of FNPCT's mechanism.
```

reverse = true|false

Initial: false

Initial: false

This option reverses the behavior of starred and un-starred footnotes.

```
unspace = true|false
```

Initial: true

This option turns the behavior described in section 3.2.2 off or on.

```
ranges = true|false
```

Initial: false

Activates ranges for multiple footnotes. This is not compatible with hyperref and does not work for the marks of some packages.

```
add-trailing-token = \{ [\langle before \rangle] \langle token \rangle [\langle after \rangle] \{\langle name \rangle \} \}
```

Adds  $\langle token \rangle$  to <code>FNPCT</code>'s mechanism and activates it.  $\langle before \rangle$  sets the default value for the newly created option <code>before- $\langle name \rangle$ -space</code>.  $\langle after \rangle$  sets the default value for the newly created option <code>after- $\langle name \rangle$ -space</code>. Instead of the option you can also use the command <code>\AddPunctuation</code>, see section 6.2.

```
activate-trailing-tokens = \{\langle tokenlist \rangle\}
```

Initial: .,

Activates tokens that have been added with add-trailing-token.

```
deactivate-trailing-tokens = \{\langle tokenlist \rangle\}
```

Deactivates tokens that have been added with add-trailing-token.

☆ New

## before-footnote-space = $\{\langle dimension \rangle\}$ Initial: .06em Sets the space that is inserted before a footnote that does not follow a punctuation or other note to $\langle dimension \rangle$ . before-dot-space = $\{\langle dimension \rangle\}$ Initial: -.16em Sets the space that is inserted before a dot if the dot follows a footnote mark to $\langle dimension \rangle$ . before-comma-space = $\{\langle dimension \rangle\}$ Initial: -.16em Sets the space that is inserted before a comma if the dot follows a footnote mark to $\langle dimension \rangle$ . before-punct-space = $\{\langle dimension \rangle\}$ Sets the space that is inserted before any punctuation mark known to **fnpct** if the punctuation mark follows a footnote mark to $\langle dimension \rangle$ . $after-dot-space = \{\langle dimension \rangle\}$ Initial: -.06em Sets the space that is inserted after a dot if the dot precedes a footnote mark to $\langle dimension \rangle$ . $after-comma-space = \{\langle dimension \rangle\}$ Initial: -.06em Sets the space that is inserted after a comma if the dot precedes a footnote mark to $\langle dimension \rangle$ . $after-punct-space = \{\langle dimension \rangle\}$ Sets the space that is inserted after any punctuation mark known to **FNPCT** if the punctuation mark precedes a footnote mark to $\langle dimension \rangle$ . $mult-fn-delim = \{\langle code \rangle\}$ Initial: ; Sets the symbol that divides the seperate notes in the \mult... variants. separation-symbol = $\{\langle value \rangle\}$ , Redefines \multfootsep to $\langle value \rangle$ . This symbol separates multiple footnotes if ranges = {false}. $range-symbol = \{\langle value \rangle\}$ Initial: --Redefines \multfootrange to $\langle value \rangle$ . This symbol separates multiple footnotes if ranges =

print-separation =  $\{\langle code \rangle\}$ 

Initial: \textsuperscript{\multfootsep}

The actual code placed between multiple footnotes if ranges = {false}.

The actual code placed between multiple footnotes if  $ranges = \{true\}$ .

## 5 Multiple footnotes

#### 5.1 Basics

{true}.

Since multiple footnotes have to be treated differently,<sup>5,6</sup> **FNPCT** recognizes if \footnote is used multiple times in a row:

<sup>5.</sup> see these footnotes

<sup>6.</sup> for an example

```
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}\footnote{or something else}.

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

#### 5.2 Ranges

Starting with a minimum number of three footnotes in a row **fnpct** can also display the footnote marks as a range.

```
1 \setfnpct{ ranges = true }
2 The three little pigs built their houses out of straw\footnote{not to be
3  confused with hay}, sticks\footnote{or lumber according to some sources}
4 and bricks\footnote{probably fired clay bricks}%
5 \footnote{or something else}\footnote{what do I know}.

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
4. or something else
5. what do I know
```

It is important to note that this has limits: ranges do not work well with hyperref. For that reason <code>FNPCT</code> disables ranges if it detects that hyperref has been loaded. If you insist on using ranges together with hyperref use

```
keep-ranges = <u>true</u>| false Initial: false to enable them again.
```

## 5.3 The delimiter and separator

Some packages or classes like the KOMA-Script classes define \multfootsep. If it is not predefined it is defined by FNPCT:

\multfootsep Initial: ,

In its default definition this command simply expands to a comma.

\multfootrange Initial: --

In its default definition this command simply expands to an endash.

This commands can be redefined to adapt to your needs. You can do this with \renewcommand or by using these options:

separation-symbol =  $\{\langle value \rangle\}_{\underline{\ }}$  Redefines \multiple footnotes if ranges =  $\{\text{false}\}$ .

```
range-symbol = \{\langle value \rangle\}
Initial: --
```

Redefines \multfootrange to  $\langle value \rangle$ . This symbol separates multiple footnotes if ranges =  $\{\text{true}\}$ .

Both symbols are placed inside \textsuperscript. This can also be redefined if necessary:

```
print-separation = \{\langle code \rangle\}
Initial: \text{\textsuperscript}\{\text{\multfootsep}\}
```

The actual code placed between multiple footnotes if ranges = {false}.

```
print-range = \{\langle code \rangle\} Initial: \textsuperscript\\multfootrange\}
```

The actual code placed between multiple footnotes if ranges = {true}.

#### 5.4 \mult... variants

The commands presented in this section are defined to keep some backwards compatibility to versions of <code>FNPCT</code> prior to v1.o. In order to use them you have to call the package with \usepackage[multiple]{fnpct}.

In earlier versions of **fnpct** detecting following footnotes was not as reliable as it is now. For that reason it defined the following command:

```
\mbox{multfootnote}*{\langle list\rangle; \langle of\rangle; \langle footnotes\rangle} \langle tpunct\rangle
```

Different footnotes are separated with a semicolon. The \* turns the footnote/punctuation switching temporarily off.

```
1 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}
- 3 and bricks\multfootnote{probably fired clay bricks;or something else}.

The three little pigs built their houses out of straw, 1 sticks 2 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

☆ New

```
mult-variant-prefix = \{\langle letters \rangle\}
```

Initial: mult

Determines how the variant commands created by the multiple option are named. Choosing mult-variant-prefix = {m} would create \mfootnote etc. instead of \multfootnote.

This command splits its content at every occurrence of; and creates a footnote for each. This delimiter can be changed:

```
mult-fn-delim = \{\langle code \rangle\}
```

Initial: ;

Sets the symbol that divides the seperate notes in the \mult... variants.

Since the semicolon might be part of the footnote text you might have some trouble. Enclosing it in braces should work:

```
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}.
```

The three little pigs built their houses out of straw, 1 sticks 2 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

## **6** Extend **FNPCT**

#### 6.1 Additional punctuation marks

So if you want to extend the punctuation switching and kerning to other punctuation marks you can do something like this:

```
1 \setfnpct{ add-trailing-token = !{bang} }
```

After that the bang is recognized and footnotes switch position:

```
1 The three little pigs built their houses out of straw\footnote{not to be
2 confused with hay}? Sticks\footnote{or lumber according to some sources}
3 and bricks\footnote{probably fired clay bricks}!
```

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

New options have also been defined:

```
1 \setfnpct{ after-bang-space = .03em }
2 The three little pigs built their houses out of straw\footnote{not to be
3    confused with hay}? Sticks\footnote{or lumber according to some sources}
4 and bricks\footnote{probably fired clay bricks}!

The three little pigs built their houses out of straw¹? Sticks² and bricks!³

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

And option after-punct-space is obeyed:

```
1 \setfnpct{ after-punct-space = 2pt }
2 The three little pigs built their houses out of straw\footnote{not to be
3    confused with hay}? Sticks\footnote{or lumber according to some sources}
4 and bricks\footnote{probably fired clay bricks}!

The three little pigs built their houses out of straw¹? Sticks² and bricks! ³

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

Please note that you should not use add-trailing-token inside a group. Ideally it is used in the document preamble only. Using it inside of a group can lead to unwanted side effects and should not be attempted.

#### 6.2 Make note commands known to FNPCT

If a package is not natively supported you can try and adapt commands yourself. Before you do so please check section 7 on the next page.

```
\Lambda = \Lambda = \Lambda
```

This redefines \cs. How the redefinition works is best demonstrated with an example. See below for an example. The arguments  $\langle arguments \rangle$  are defined with the same syntax as xparse's \NewDocumentCommand. See the xparse manual [L<sub>3</sub>Pb] for a complete description. Within  $\langle code \rangle$  #NOTE is replaced with the original command. If the optional argument is not used the counter name cs for a note command \cs is assumed.

In addition to the arguments specified in  $\langle arguments \rangle$  an optional star as first argument is defined which reverses **FNPCT**'s behavior.  $\langle code \rangle$  is also placed inside a group.

```
\AdaptNoteName\{\langle csname\rangle\}\{\langle arguments\rangle\}[\langle counter\ name\rangle]\{\langle code\rangle\}
```

Like \AdaptNote but the first argument expects a csname instead of a command sequence token.

```
\MultVariant{\cs}
```

Defines a command \multcs which splits is argument at each occurrence of the token set by the option mult-fn-delim and turns it into a series of calls of \cs. \multcs also has a starred variant in order to create a series of starred calls of \cs.

```
\MultVariantName{\langle csname \rangle}
```

Like \MultVariant but the argument expects a csname instead of a command sequence token.

```
\AddPunctuation[\langle before \rangle] \langle token \rangle[\langle after \rangle] \{\langle name \rangle\}
```

Adds  $\langle token \rangle$  to FNPCT's mechanism and activates it.  $\langle before \rangle$  sets the default value for the newly created option before- $\langle name \rangle$ -space.  $\langle after \rangle$  sets the default value for the newly created option after- $\langle name \rangle$ -space. This is the same as using option add-trailing-token.

**FNPCT** adapts LATEX's standard footnote commands the following way:<sup>7</sup>

```
1 \AdaptNote\footnote{o+m}[\@mpfn]{\IfNoValueTF{#1}{#NOTE{#2}}{#NOTE[#1]{#2}}}
2 \AdaptNote\footnotemark{o}{\IfNoValueTF{#1}{#NOTE}{#NOTE[#1]}}
3 \MultVariant\footnote
4 % KOMA-Script's or memoir's \footref:
5 \AdaptNote\footref{m}{#NOTE{#1}}
```

You essentially have to rebuild the syntax of the original command and place #NOTE in the code where it should be called. This may seem cumbersome at first but allows to adapt commands with a more or less arbitrary kind of syntax.

The command \AdaptNote can be used multiple times on the same command in order to change a previous redefinition.

## 7 Other packages

**FNPCT** tries its best to support other footnote and related packages.<sup>8</sup> Each of the following subsections is dedicated to one of these packages and if and how they work together with **FNPCT**. Fortunately most of them do quite well.

Most notably the ranges option cannot deal with some packages, often due to the lack of a suiting \...text

<sup>7.</sup> Using \@mpfn as counter name is essential to make ranges work in minipages.

<sup>8.</sup> If you find some package missing please let me know.

## 7.1 bigfoot

The package bigfoot [Kas15] is supported.

You need to be a bit cautious, though: *verbatim material won't work inside footnotes anymore*. You might use Bruno L. Floch's cprotect package [Flo11] if you really need verbatim material in footnotes *and* want to use **fnpct**. Since **fnpct** does not redefine any \footnotetext like command it will still work inside one of them.

#### 7.2 endnotes

The package endnotes [L<sub>3</sub>Pa] is supported.

#### 7.3 enotez

The package enotez [Nie22] is supported.

#### 7.4 fixfoot

The fixfoot [Fai10] package provides a possibility to create repeating footnotes. **FNPCT** supports this package provided you take care of the following:

Use \DeclareFixedFootnote only in the preamble but after loading FNPCT.

\DeclareFixedFootnote  $\{\c s\}$  {\( footnote text \)\) is used to store the \( footnote text \)\ in \( cs \) which in turn creates a footnote mark for it but doesn'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.

fixfoot cannot be used together with ranges = {true}.

#### 7.5 footmisc

The footmisc package [Fai11] 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 (and shouldn't) use its multiple option.

#### 7.6 footnote

Testing showed no incompatibilities with footnote. It cannot adapt its environment footnote, though.

## 7.7 manyfoot

The package manyfoot [Roz19] is supported.

#### 7.8 pagenote

The package pagenote [Wilo9] is supported.

pagenote cannot be used together with ranges = {true}.

#### 7.9 parnotes

The package parnotes [Hug19] is supported.

parnotes cannot be used together with ranges = {true}.

#### 7.10 sepfootnotes

The package sepfootnotes [dLim16] is supported. Define new footnote types after FNPCT has been loaded.

#### 7.11 sidenotes

The package sidenotes [TS20] is *not* supported!

**FNPCT** is not able to adapt sidenotes' commands due to the current implementation of sidenotes.

#### 7.12 snotez

The package snotes [Nie20] is supported.

#### 7.13 tablefootnote

The package tablefootnote [Mün14] is supported.

tablefootnote cannot be used together with ranges = {true}.

#### 7.14 tufte-latex's \sidenote

The \sidenote command from the tufte-latex classes tufte-book and tufte-handout is supported.

tufte-latex cannot be used together with ranges = {true}.

More precisely: the \sidenote command from tufte-latex does not work with ranges. But since \sidenote is only a synonym for \footnote for tufte-latex you can use the latter.

#### 7.15 biblatex's \footcite

If you're willing to sacrifice \footcite's \* argument (which it has in some styles) you can adapt the commands provided by biblatex [Leh+22] as well:

```
1 \AdaptNote\footcite{oo+m}[footnote]{%
2 \setfnpct{dont-mess-around}%
3 \IfNoValueTF{#1}
4 {#NOTE{#3}}
5 {\IfNoValueTF{#2}{#NOTE[#1]{#3}}{#NOTE[#1][#2]{#3}}}%
6 }
```

You could use another token for the star, though, if needed:

```
1 \AdaptNote\footcite{t+oo+m}[footnote]{%
2  \setfnpct{dont-mess-around}%
3  \IfBooleanTF{#1}{%
4  \IfNoValueTF{#2}
5    {#NOTE{#4}}
6    {\IfNoValueTF{#3}{#NOTE[#2]{#4}}{#NOTE[#2][#3]{#4}}}%
7    }{%
8    \IfNoValueTF{#2}
9    {#NOTE*{#4}}
10    {\IfNoValueTF{#3}{#NOTE*[#2]{#4}}{#NOTE*[#2][#3]{#4}}}%
11  }%
12 }
```

Testing showed no problems whatsoever but FNPCT does not adapt the command itself.

Turning **fnpct** off inside of **\footcite** is advised as shown in above examples. **\footcite** calls **\footnote** internally which else might lead to inconsistent and unwanted spaces.

## **Bibliography**

- [Brio4] Robert Bringhurst. *The Elements of Typographic Style.* Hartley & Marks, Canada, 2004. ISBN: 978-0-88179-205-5.
- [dLim16] Eduardo C. Lourenço DE LIMA. sepfootnotes. version 0.3c, July 18, 2016 (or newer). URL: https://www.ctan.org/pkg/sepfootnotes/.
- [Fai10] Robin FAIRBAIRNS. fixfoot. version 0.3a, Feb. 19, 2010 (or newer). URL: https://www.ctan.org/pkg/fixfoot/.

#### Bibliography

- [Fai11] Robin FAIRBAIRNS, current maintainer: Frank MITTELBACH. footmisc. version 5.5b, June 6, 2011 (or newer).

  URL: https://www.ctan.org/pkg/footmisc/.
- [Flo11] Bruno Le FLOCH. cprotect. version 1.0e, Jan. 27, 2011 (or newer). URL: https://www.ctan.org/pkg/cprotect/.
- [Hug19] Micheal Hughes. parnotes. version 3b, July 23, 2019 (or newer). URL: https://www.ctan.org/pkg/parnotes/.
- [Kas15] David KASTRUP. bigfoot. version 2.1, Aug. 30, 2015 (or newer). URL: https://www.ctan.org/pkg/bigfoot/.
- [L<sub>3</sub>Pa] John Lavagnino, current maintainer: The IAT<sub>E</sub>X<sub>3</sub> Project Team. endnotes. version NA, Jan. 2, 2020 (or newer).

  URL: https://www.ctan.org/pkg/endnotes/.
- [L<sub>3</sub>Pb] THE LAT<sub>E</sub>X<sub>3</sub> Project Team. xparse. Jan. 12, 2022 (or newer). URL: https://www.ctan.org/pkg/xparse/.
- [Leh+22] Philipp Lehman et al., current maintainers: Philip Kime and Moritz Wemheuer. biblatex. version 3.17, Feb. 2, 2022 (or newer).

  URL: https://www.ctan.org/pkg/biblatex/.
- [Mün14] H.-Martin Münch. tablefootnote. version 1.1c, Jan. 26, 2014 (or newer). URL: https://www.ctan.org/pkg/tablefootnote/.
- [Nie20] Clemens NIEDERBERGER. snotez. version 0.5a, Dec. 14, 2020 (or newer). URL: https://www.ctan.org/pkg/snotez/.
- [Nie22] Clemens NIEDERBERGER. enotez. version o.1od, Jan. 4, 2022 (or newer). URL: https://www.ctan.org/pkg/enotez/.
- [Roz19] Alexander I. Rozhenko. manyfoot. version 1.11, Aug. 3, 2019 (or newer). URL: https://www.ctan.org/pkg/manyfoot/.
- [TS20] Andy THOMAS and Oliver SCHEBAUM, current maintainer: Andy THOMAS. sidenotes. version 1.00a, Mar. 24, 2020 (or newer).

  URL: https://www.ctan.org/pkg/sidenotes/.
- [Wilo9] Robert Wilson, current maintainer: Will Robertson. pagenote. version 1.1a, Sept. 3, 2009 (or newer).
  URL: https://www.ctan.org/pkg/pagenote/.

# Index

A	footnote (package) 12	parnotes (package) 13	
<pre>activate-trailing-tokens 5</pre>	\footnotemark 4	<pre>print-range 6,8</pre>	
\AdaptNote 2, 10 f., 14	\footnotetext 12	print-separation 6,8	
\AdaptNoteName 11			
add-trailing-token 5, 10 f.	Н	R	
after- $\langle name \rangle$ -space 5, 11	HUGHES, Micheal	range-symbol	
after-comma-space 6	hyperref (package) 5, 7	ranges 5 f., 8, 11 ff.	
after-dot-space 6	_	reverse 3 ff.	
after-punct-space 3, 6, 10	I	ROBERTSON, Will 13	
	\innernote 2	Rozнenko, Alexander I 12	
В	**		
before- $\langle name \rangle$ -space 5, 11	K	S	
before-comma-space 6	KASTRUP, David 12	Schebaum, Oliver 13	
before-dot-space 6	keep-ranges 7	separation-symbol	
before-footnote-space 3, 6	Кіме, Philip	sepfootnotes (package) 13	
before-punct-space 3, 6	Y	\setfnpct 4 f., 7, 9 f., 14	
biblatex (package) 4, 14	L	sidenotes (package) 13	
bigfoot (package) 12	LAVAGNINO, John	snotes (package) 13	
Bringhurst, Robert 2	LEHMAN, Philipp 14 DE LIMA, Eduardo C. Lourenço 13	snotez (package)	
C	LPPL 2	т	
cprotect (package) 12		tablefootnote (package) 13	
csquotes (package) 4	M manyfoot (package) 12	THE LATEX3 PROJECT TEAM . 10,	
D	Mittelbach, Frank 12	12	
deactivate-trailing-tokens 5	mult-fn-delim 6, 9, 11	The Elements of Typographic Style 2	
\DeclareFixedFootnote 12	mult-variant-prefix 9	THOMAS, Andy	
dont-mess-around 5	\multfootnote 8 f.	tufte-book (class)	
	\multfootrange 6, 8	tufte-handout (class) 13	
E	\multfootsep 6 ff.	TT	
endnotes (package) 12	multiple 2, 9, 12	U	
enotez (package) 12	\MultVariant 11	unspace 5	
T.	\MultVariantName 11	\unspace 4	
F	Münch, HMartin 13	W	
FAIRBAIRNS, Robin 12		••	
fixfoot (package) 12	N	WEMHEUER, Moritz 14	
FLOCH, Bruno	Niederberger, Clemens 12 f.	WILSON, Robert	
FLOCH, Bruno Le	n	x	
footmisc (package)	P		
\footnote 3 f.	pagenote (package) 13	xparse (package) 10	