

The parnotes package¹

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¹ This is rev. 2, last modified 7/26/2016. ² See `parnotes.sty` for copyright and contact details.

The parnotes package adds a new note type, `\parnote`. Parnotes are set as normal, running paragraphs and may be placed two ways:

- Automatically, at the end of the paragraph
- Manually, using the `\parnotes` command

This package was inspired by a question on the TeX Stack Exchange³ that asked for notes which are placeable immediately after the paragraph in which they are mentioned, to avoid the interruption posed by footnotes.

³ "Placing footnotes or endnotes at the end of the current paragraph" at <http://tex.stackexchange.com/questions/34746>

1 Usage

Load parnotes normally:

```
\usepackage[<options>]{parnotes}
```

The package options are described in section 2.1.

```
\parnote{<text>}
```

Place a parnote mark and assign it note *<text>*. This mark is placeable within headings but will not appear in the table of contents.

```
\parnote[<mark>]{<text>}
```

As above, but use *<mark>* instead of the standard auto-incrementing parnote mark.

```
\begin{autopn}  
\end{autopn}
```

Parnotes within an `autopn` environment are set automatically at the end of every paragraph. This behavior does not carry into nested environments. To set parnotes inside another environment, nest `autopn` within it or use `\parnotes`.

`\parnotes`

Place all parnotes immediately. Use it after every paragraph for autopn-like behavior outside autopn (or where autopn doesn't apply).

`\parnotereset`

Reset the parnote number. This maps to `\setcounter{parnotemark}{1}`.

`\parnoteclear`

Reset the parnote number and also delete any pending parnotes.

`\parnoteref{<label>}`

Refer to previous parnote mark `<label>`. Use the standard \TeX macro `\label` within a parnote to assign it a label. You may also use the standard \TeX reference macros `\ref` and `\pageref`.

2 Configuration

Configure parnotes using package options, or manually using format macros.

2.1 Package options

The following options are provided:

<code>restart</code>	Reset the parnote number each time parnotes are placed.
<code>roman</code>	Use lowercase Roman numerals instead of Arabic numerals for parnote marks. Specify this if you mix parnotes with footnotes.
<code>breakwithin</code>	Place a line break after every parnote.
<code>indentafter</code>	Allow indentation in the paragraph following a parnote.
<code>narrower</code>	Give parnotes an increased margin, like block quotes.
<code>nomultiple</code>	Disable special behavior for multiple consecutive parnotes.

The following options change the font used within parnotes:

<code>notesrm</code>	Roman. Default.
<code>notesit</code>	Italic.
<code>notessf</code>	Sans-serif.

2.2 Format macros

Five internal macros control formatting for parnotes and parnote marks:

`\parnotefmt{<text>}`
`\theparnotemark{<counter>}`
`\parnotevskip`
`\parnoteintercmd`
`\parnotecusmarkfmt{<mark>}`

Table 1: Default values for format macros.

Macro	Default value
<code>\parnotefmt</code>	<code>\footnotesize\rmfamily\noindent #1</code>
<code>\theparnotemark</code>	<code>\arabic{parnotemark}</code>
<code>\parnotevskip</code>	<code>\medskipamount</code>
<code>\parnoteintercmd</code>	<code>\hspace{1em plus 0.3em minus 0.2em}</code>
<code>\parnotecusmarkfmt</code>	<code>#1</code>

Parnote text is set using `\parnotefmt`, and parnote marks using `\parnotecusmarkfmt`. When the optional argument of `\parnote` is *not* used, `\theparnotemark` is used to get the parnote mark for formatting. At least `\parnotevskip` vertical space appears before and after the parnote text. The macro `\parnoteintercmd` is executed between all consecutive parnotes.

parnotes rev. 1 had a different macro, `\parnotemarkfmt`, to control parnote marks. Unfortunately, the definition of this macro is incompatible with the new feature in rev. 2 allowing for manually-specified parnote marks, so it had to be split into two macros `\parnotecusmarkfmt` and `\theparnotemark`. This is a breaking change.

Table 1 shows these macros' default values. Note that the package options `narrower`, `notesrm`, `notesit`, and `notessf` modify `\parnotefmt`. The option `roman` modifies `\theparnotemark`. The option `breakwithin` changes `\parnoteintercmd` into a line break.

Redefine these macros using `\renewcommand` to fine-tune parnotes's formatting. For example, to set parnotes in a sans-serif font, load parnotes as follows:

```
1 \usepackage{parnotes}
2 \renewcommand{\parnotefmt}[1]{\footnotesize\sffamily\noindent #1}
```

This is the same as specifying the `notessf` package option.

To have parnotes set as *completely normal text*, but one size smaller than their surroundings (using `\smaller` from `relsize`):

```
1 \usepackage{relsize}
2 \usepackage[indentafter]{parnotes}
3 \renewcommand{\parnotefmt}[1]{\smaller #1}
4 \renewcommand{\parnotevskip}{0pt}
```

Or to set parnotes in a block set off by rules, with each parnote separated by a bullet:

```
1 \usepackage{parnotes}
2 \renewcommand{\parnotevskip}{0pt}
3 \renewcommand{\parnotefmt}[1]{\footnotesize\rmfamily
4   \noindent\rule{\linewidth}{1pt}\
5   \noindent #1\par
6   \noindent\rule{\linewidth}{1pt}
7 }
8 \renewcommand{\parnoteintercmd}{\;$\bullet$;}
```

Note that since `\parnotefmt` is redefined, adding the package option `narrower` to this example will not work; instead, `\narrower` must be placed manually within the new definition for `\parnotefmt`.

3 Changelog

Revision 2, released on Jul 26, 2016

- **Breaking change:** You can no longer redefine `\parnotemarkfmt`. Use `\theparnotemark` and `\parnotecusmarkfmt` instead. See section 2.2 for details.
- Bug fix: `\parnotefmt` no longer changes the font to `\rmfamily` by default.
- `\parnote` now behaves more like `\footnote`:
 - It respects `\spacefactor`
 - It no longer inserts `\unskip`
- The parnote mark counter may be reset using standard LaTeX macros, e.g., `\setcounter{parnotemark}{5}`
- `\label` now works within parnote text; `\ref` returns the parnote label, `\pageref` returns the page where the note *text* is set, and `\parnoteref` returns the parnote label formatted as a mark.
- Implemented the system for separators between multiple footnotes from `footmisc` and `manyfoot` and added package option `nomultiple` to disable.
- Internal: The package now uses a single counter (`\c@parnotemark`) for marks.

Revision 1, released on Jan 3, 2012

- Initial release.

4 Example

The following pages show a typeset example using parnotes, including interactions with lists, headings, and environments (here, multicolumn text from the `multicol` package).

```
1 \documentclass{article}
2 \usepackage{multicol} % for demonstration
3 \usepackage{lipsum} % for demonstration
4 \usepackage[narrower,notessf]{parnotes}
5
6 \begin{document}
7 \begin{autopn}
8 \begin{abstract}
9 \begin{autopn}
10 Since this is in an environment, \texttt{autopn} must be nested within
```

```

11 it.\parnote{If \texttt{autopn} \emph{weren't} nested, I could've used
12 \texttt{\textbackslash parnotes} here to set parnotes manually.}
13 \end{autopn}
14 \end{abstract}
15 \tableofcontents
16 \section{On parnotes\parnote{Parnote marks will display in a heading,
17 but not within the table of contents. In \texttt{autopn}, parnotes will
18 display right after the heading.}}
19
20 This is a paragraph with a parnote\parnote{See? And it's long enough
21 to push the \emph{next} parnote nearer the end of the line.}. Actually,
22 it has two.\parnote{By default, parnotes are set in a continuous
23 paragraph with 1~em of space between each note.} This sentence ends
24 the paragraph, but it doesn't have a parnote.
25
26 This is a normal paragraph. Note that it isn't indented since the
27 parnotes make it obvious where the paragraph boundaries are. To change
28 this behavior, use the \texttt{indentafter} option.
29
30 This paragraph's indentation isn't changed.
31
32 Here's an environment with a nested \texttt{autopn}:
33 \begin{multicols}{2}
34 \begin{autopn}
35 Since parnotes are set within the normal paragraph flow, they interact
36 well with environments\parnote{Like this multicolumn environment from
37 \textsf{multicols} -- it will break columns and pages along with
38 the normal text within the environment.}.
39
40 This is just filler text without any parnotes.
41 \end{autopn}
42 \end{multicols}
43 Here's an environment without a nested \texttt{autopn}:
44 \begin{multicols}{2}
45 Without a nested \texttt{autopn}, any parnotes\parnote{Like this one.}
46 will be set after the end of the next paragraph \emph{outside} this
47 environment. If \texttt{\textbackslash parnotes} is called just before
48 the environment ends, then the parnotes will be set within that
49 environment. This is useful for, say, multi-paragraph quotes.
50
51 This environment always specifies that it ends a paragraph, so
52 parnotes will always be set after it if needed. In some other
53 circumstances, \texttt{autopn} may not "see" that there's a
54 paragraph break after the environment, so
55 \texttt{\textbackslash parnotes} will have to be called after the
56 environment ends.
57 \end{multicols}
58
59 Here's an extra-long parnote\parnote{\lipsum[1]}, to show that parnotes
60 can break pages. In fact, \TeX\ should prefer to break the page within

```

```

61 the parnotes rather than between this text and the start of the
62 parnotes.
63 \end{autopn}
64
65 In some circumstances, it's best to forego \texttt{autopn} altogether
66 -- for example, if parnotes\parnote{Like this one.} should only be
67 set after several paragraphs. Then just call
68 \texttt{\textbackslash parnotes} wherever the parnotes should be set.
69
70 The same applies if parnotes are to be placed only at the end of a
71 section, or at a "scene break."
72 \parnotes
73
74 The only limiting factor is that \texttt{\textbackslash parnotes} must
75 be executed after the parnotes it refers to. Here's a table with notes
76 in an adjacent minipage:\\[0.5in]
77 \hspace*{\fill}
78 \begin{tabular}{|c|c|}
79 \hline a & b\parnote{Note 1} \\ \hline c\parnote{Note 2} & d \\ \hline
80 \end{tabular}
81 \hspace{1in}
82 \begin{minipage}{3in}
83 % locally redefining format macros so the notes are on separate
84 % lines, with no vertical space
85 \renewcommand{\parnoteintercmd}{\\}
86 \renewcommand{\parnotevskip}{0pt}
87 \textbf{Notes:}
88 \parnotes
89 \end{minipage}\\[0.5in]
90 Now for a list:
91 \begin{enumerate}
92 \begin{autopn}
93 \item This item has no parnote.
94 \item This one does\parnote{See? But notice that
95 \texttt{\textbackslash narrower} doesn't work in lists, so
96 this is set flush with the list's margin}.
97 \item This one has a parnote\parnote{Would I ever lie to you?} in its
98 first paragraph\dots
99
100 But not in its second.
101 \end{autopn}
102 \end{enumerate}
103 New features in \textsf{parnotes} rev.~2: Multiple parnote marks%
104 \parnote{Parnote 1}\parnote{Parnote 2}.
105 Manually-specified marks\parnote{aaa}{Parnote with special mark%
106 \label{pn:special}} and references (see~\ref{pn:special},
107 p.~\pageref{pn:special}), allowing you to re-use parnote marks%
108 \parnotemark{\ref{pn:special}}.
109 \parnotes
110 \end{document}

```

Abstract

Since this is in an environment, `autopn` must be nested within it.¹

¹ If `autopn` *weren't* nested, I could've used `\parnotes` here to set parnotes manually.

Contents

1 On parnotes

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1 On parnotes²

² Parnote marks will display in a heading, but not within the table of contents. In `autopn`, parnotes will display right after the heading.

This is a paragraph with a parnote³. Actually, it has two.⁴ This sentence ends the paragraph, but it doesn't have a parnote.

³ See? And it's long enough to push the *next* parnote nearer the end of the line. ⁴ By default, parnotes are set in a continuous paragraph with 1 em of space between each note.

This is a normal paragraph. Note that it isn't indented since the parnotes make it obvious where the paragraph boundaries are. To change this behavior, use the `indentafter` option.

This paragraph's indentation isn't changed.
Here's an environment with a nested `autopn`:

Since parnotes are set within the normal paragraph flow, they interact well with environments⁵.

multicols – it will break columns and pages along with the normal text within the environment.

⁵ Like this multicolumn environment from This is just filler text without any parnotes.

Here's an environment without a nested `autopn`:

Without a nested `autopn`, any parnotes⁶ will be set after the end of the next paragraph *outside* this environment. If `\parnotes` is called just before the environment ends, then the parnotes will be set within that environment. This is useful for, say, multi-paragraph quotes.

This environment always specifies that it ends a paragraph, so parnotes will always be set after it if needed. In some other circumstances, `autopn` may not “see” that there's a paragraph break after the environment, so `\parnotes` will have to be called after the environment ends.

⁶ Like this one.

Here's an extra-long parnote⁷, to show that parnotes can break pages. In fact, `TEX` should prefer to break the page within the parnotes rather than between this text and the start of the parnotes.

⁷ Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id,

vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

In some circumstances, it's best to forego `\autopn` altogether – for example, if `\parnotes`⁸ should only be set after several paragraphs. Then just call `\parnotes` wherever the parnotes should be set.

The same applies if parnotes are to be placed only at the end of a section, or at a “scene break.”

⁸ Like this one.

The only limiting factor is that `\parnotes` must be executed after the parnotes it refers to. Here's a table with notes in an adjacent minipage:

a	b ⁹
c ¹⁰	d

Notes:

⁹ Note 1

¹⁰ Note 2

Now for a list:

1. This item has no parnote.
2. This one does¹¹.

¹¹ See? But notice that `\narrower` doesn't work in lists, so this is set flush with the list's margin

3. This one has a parnote¹² in its first paragraph...

¹² Would I ever lie to you?

But not in its second.

New features in `\parnotes` rev. 2: Multiple parnote marks^{13,14}. Manually-specified marks^{aaa} and references (see `aaa`, p. 8), allowing you to re-use parnote marks^{aaa}.

¹³ Parnote 1 ¹⁴ Parnote 2 ^{aaa} Parnote with special mark