

The parnotes package¹

Chelsea Hughes²

July 23, 2019

¹ This is rev. 3b, last modified 2019/07/23. ² See `parnotes.sty` for copyright details. The package has currently no maintainer.

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{autorn}
\end{autorn}
```

Parnotes within an `autorn` 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 `autorn` 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>reset</code>	Alias name for <code>restart</code> to match what other packages use.
<code>roman</code>	Use lowercase Roman numerals instead of Arabic numerals for parnote marks. Specify this if you mix parnotes with footnotes.
<code>alph</code>	Use lowercase alphabet characters instead.
<code>symbol</code>	Use footnote symbols instead instead.
<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:

Table 1: Default values for format macros.

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

```
\parnotefmt{\text}
\theparnotemark
\parnotevskip
\parnoteintercmd
\parnotecusmarkfmt{\mark}
```

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 3b, released on July 23, 2019 (Frank Mittelbach)

- Added options `reset`, `alph` and `symbol`.
- Changed documentation to use freely available fonts only.

Revision 3, released on Aug 15, 2016

- Bug fix: Use `\protected@edef` to expand the `parnote` counter (fixes incompatibility with BiocStyle)

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{auton}
8 \begin{abstract}
9 \begin{auton}
10 Since this is in an environment, \texttt{\auton} must be nested within
11 it.\parnote{If \texttt{\auton} \emph{weren't} nested, I could've used
12 \texttt{\textbackslash parnotes} here to set parnotes manually.}
13 \end{auton}
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{\auton}, 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{\auton}:
33 \begin{multicols}{2}
34 \begin{auton}
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{auton}
42 \end{multicols}
43 Here's an environment without a nested \texttt{\auton}:
44 \begin{multicols}{2}
45 Without a nested \texttt{\auton}, 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{\auton} 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|c|}\hline a & b\parnote{Note 1} & c\parnote{Note 2} & d \\ \hline
79 \end{tabular}
80 \hspace*{1in}
81 \begin{minipage}{3in}
82 % locally redefining format macros so the notes are on separate
83 % lines, with no vertical space
84 \renewcommand{\parnoteintercmd}{\\}
85 \renewcommand{\parnotevskip}{0pt}
86 \textbf{Notes:}
87 \parnotes
88 \end{minipage}\[0.5in]
89 Now for a list:
90 \begin{enumerate}
91 \begin{autopn}
92 \item This item has no \parnote.
93 \item This one does\parnote{See? But notice that
94 \texttt{\textbackslash narrower} doesn't work in lists, so
95 this is set flush with the list's margin}.
96 \item This one has a \parnote\parnote{Would I ever lie to you?} in its
97 first paragraph\ldots
98
99 But not in its second.
100 \end{autopn}
101 \end{enumerate}
102 New features in \textsf{\parnotes} rev.\sim 2: Multiple \parnote marks%
103 \parnote{Parnote 1}\parnote{Parnote 2}.
104 Manually-specified marks\parnote[aaa]{Parnote with special mark%
105 \label{pn:special}} and references (see\ref{pn:special},
106 p.\sim pageref{pn:special}), allowing you to re-use \parnote marks%
107 \parnotemark{\ref{pn:special}}.
108 \parnotes
109 \end{document}

```