The parnotes package\textsuperscript{1}

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\footnote{This is rev 3b, last modified 2019/07/23.}{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 Exchange\textsuperscript{3} that asked for notes which are placeable immediately after the paragraph in which they are mentioned, to avoid the interruption posed by footnotes.

\footnote{“Placing footnotes or endnotes at the end of the current paragraph” at http://tex.stackexchange.com/questions/34746}{}

1 Usage

Load parnotes normally:

\begin{verbatim}
\usepackage[⟨options⟩]{parnotes}
\end{verbatim}

The package options are described in section 2.1.

\begin{verbatim}
\parnote{⟨text⟩}
\end{verbatim}

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

\begin{verbatim}
\parnote[⟨mark⟩]{⟨text⟩}
\end{verbatim}

As above, but use ⟨mark⟩ instead of the standard auto-incrementing parnote mark.

\begin{verbatim}
\begin{autopn}
\end{autopn}
\end{verbatim}

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 \LaTeX macro \label within a parnote to assign it a label. You may also use the standard \LaTeX 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:

- \restart: Reset the parnote number each time parnotes are placed.
- \reset: Alias name for \restart to match what other packages use.
- \roman: Use lowercase Roman numerals instead of Arabic numerals for parnote marks. Specify this if you mix parnotes with footnotes.
- \alph: Use lowercase alphabet characters instead.
- \symbol: Use footnote symbols instead.
- \breakwithin: Place a line break after every parnote.
- \indentafter: Allow indentation in the paragraph following a parnote.
- \narrower: Give parnotes an increased margin, like block quotes.
- \nomultiple: Disable special behavior for multiple consecutive parnotes.

The following options change the font used within parnotes:

- \notesrm: Roman. Default.
- \notesit: Italic.
- \notessf: Sans-serif.

2.2 Format macros

Five internal macros control formatting for parnotes and parnote marks:
Table 1: Default values for format macros.

<table>
<thead>
<tr>
<th>Macro</th>
<th>Default value</th>
</tr>
</thead>
<tbody>
<tr>
<td>\parnotefmt</td>
<td>\footnotesize\rmfamily\noindent #1</td>
</tr>
<tr>
<td>\theparnotemark</td>
<td>\arabic{parnotemark}</td>
</tr>
<tr>
<td>\parnotevskip</td>
<td>\medskipamount</td>
</tr>
<tr>
<td>\parnoteintercmd</td>
<td>\hspace{1em plus 0.3em minus 0.2em}</td>
</tr>
<tr>
<td>\parnotecusmarkfmt</td>
<td>\textsuperscript{#1}</td>
</tr>
</tbody>
</table>

\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][\footnotesize\sffamily\noindent #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[{parnotefmt}[0pt]}
3 \renewcommand[{parnotefmt}[1][\footnotesize\rmfamily
4 \noindent\rule[\linewidth][1pt][1pt]\]
5 \noindent #1\par
6 \noindent\rule[\linewidth][1pt][1pt]
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 `\thestparnotemark` 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).

\documentclass{article}
\usepackage{multicol} \% for demonstration
\usepackage{lipsum} \% for demonstration
\usepackage[narrower,notessf]{parnotes}

\begin{document}
\begin{autopn}
\begin{abstract}
\begin{autopn}
Since this is in an environment, \texttt{autopn} must be nested within it. \texttt{\parnote{If \texttt{autopn} \texttt{\parnote{\emph{aren’t} nested, I could’ve used \texttt{\parnotes} here to set parnotes manually.}}}}
\end{autopn}
\end{abstract}
\tableofcontents
\section{On parnotes\parnote{Parnote marks will display in a heading, but not within the table of contents. In \texttt{autopn}, parnotes will display right after the heading.}}

This is a paragraph with a parnote\parnote{See? And it’s long enough to push the \emph{next} parnote nearer the end of the line.}. Actually, it has two.\parnote{By default, parnotes are set in a continuous paragraph with 1-em of space between each note.} This sentence ends the paragraph, but it doesn’t have a parnote.

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 \texttt{\parnotes} option.

This paragraph’s indentation isn’t changed.

Here’s an environment with a nested \texttt{autopn}:
\begin{multicols}{2}
\begin{autopn}
Since parnotes are set within the normal paragraph flow, they interact well with environments\parnote{Like this multicolumn environment from \texttt{multicols} -- it will break columns and pages along with the normal text within the environment.}.
\end{autopn}
\end{multicols}

This is just filler text without any parnotes.
\end{autopn}
\end{multicols}

Here’s an environment without a nested \texttt{autopn}:
\begin{multicols}{2}
\begin{autopn}
Without a nested \texttt{autopn}, any parnotes\parnote{Like this one.} will be set after the end of the next paragraph \texttt{\parnote{\emph{outside} this environment. If \texttt{\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.}}
\end{autopn}
\end{multicols}

This environment always specifies that it ends a paragraph, so parnotes will always be set after it if needed. In some other circumstances, \texttt{autopn} may not \texttt{\parnote{\emph{see}}’} that there’s a paragraph break after the environment, so \texttt{\parnotes} will have to be called after the environment ends.
\end{autopn}
\end{multicols}

Here’s an extra-long parnote\parnote{\lipsum[1]}, to show that parnotes can break pages. In fact, \texttt{\LaTeX} should prefer to break the page within the parnotes rather than between this text and the start of the parnotes.
In some circumstances, it’s best to forego `\texttt{autopn}` altogether -- for example, if parnotes should only be set after several paragraphs. Then just call `\texttt{\textbackslash 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.’’ `\parnotes`

The only limiting factor is that `\texttt{\textbackslash parnotes}` must be executed after the parnotes it refers to. Here’s a table with notes in an adjacent minipage:\[0.5in]

\begin{tabular}{|c|c|}
\hline
a & b\parnote{Note 1} \\
\hline
c\parnote{Note 2} & d \\
\hline
\end{tabular}

% locally redefining format macros so the notes are on separate lines, with no vertical space
\renewcommand{\parnoteintercmd}{\}
\renewcommand{\parnotevskip}{0pt}
\textbf{Notes:} `\parnotes`\[0.5in]

Now for a list:
\begin{enumerate}
\begin{autopn}
\item This item has no parnote. \\
\item This one does\parnote{See? But notice that `\texttt{\textbackslash narrower}` doesn’t work in lists, so this is set flush with the list’s margin}. \\
\item This one has a parnote\parnote{Would I ever lie to you?} in its first paragraph\end{autopn}
\end{enumerate}

New features in \textsf{parnotes} rev.~2: Multiple parnote marks\parnotemark{pn:special} and references (see~\ref{pn:special}, p.~\pageref{pn:special}), allowing you to re-use parnote marks\parnotemark{ref[pn:special]}. `\parnotes`\[0.5in]