The parnotes package\(^1\)

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\(^1\) This is rev. 3, last modified 8/15/2016. \(^2\) See parnotes.sty for copyright and contact details.

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

- Automatically, at the end of the paragraph
- Manually, using the \texttt{\parnotes} command

This package was inspired by a question on the \LaTeX{} Stack Exchange\(^3\) 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 \url{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 \texttt{⟨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 \texttt{⟨mark⟩} instead of the standard auto-incrementing parnote mark.

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

Parnotes within an \texttt{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 \texttt{autopn} within it or use \texttt{\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.
roman Use lowercase Roman numerals instead of Arabic numerals for parnote marks. Specify this if you mix parnotes with footnotes.
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:

\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:

\usepackage{parnotes}
\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):

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

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

\usepackage{parnotes}
\renewcommand{\parnotevskip}{0pt}
\renewcommand{\parnotefmt}[1]{\footnotesize\rmfamily
\noindent\rule{\linewidth}{1pt}\par
\noindent #1\par
\noindent\rule{\linewidth}{1pt}
}
\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 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).

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

\end{document}
\begin{abstract}
Since this is in an environment, \texttt{autopn} must be nested within it. \parnote{If \texttt{autopn} \emph{weren’t} nested, I could’ve used \texttt{\textbackslash parnotes} here to set parnotes manually.}
\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{\textbackslash indentafter} 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.}. This is just filler text without any parnotes.
\end{autopn}
\end{multicols}

Here’s an environment without a nested \texttt{autopn}:

\begin{multicols}{2}
Without a nested \texttt{autopn}, any parnotes \parnote{Like this one.} will be set after the end of the next paragraph \emph{outside} this environment. If \texttt{\textbackslash 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{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 ‘‘see’’ that there’s a paragraph break after the environment, so \texttt{\textbackslash parnotes} will have to be called after the environment ends.
Here’s an extra-long parnote\parnote{\lipsum[1]}, 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.

In some circumstances, it’s best to forego \texttt{autopn} altogether -- for example, if parnotes\parnote{Like this one.} should only be set after several paragraphs. Then just call \texttt{\textbackslash parnotes\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.’’

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

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\dots
\item But not in its second.
\end{autopn}
\end{enumerate}

New features in \texttt{parnotes} rev.~2: Multiple parnote marks\parnote{Parnote 1}\parnote{Parnote 2}. Manually-specified marks\parnote{aaa}{Parnote with special mark} and references (see\texttt{\ref{pn:special}},

\label{pn:special}) and references (see\texttt{\ref{pn:special}},

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\pagemark{\pageref{pn:special}), allowing you to re-use parnote marks}
\parnotemark{\ref{pn:special}}.
\parnotes
\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

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.

⁵ Like this multicolumn environment from multicols – it will break columns and pages along with the normal text within the environment.

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.

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, consectetuer id, vulputate
In some circumstances, it’s best to forego autopn altogether – for example, if parnotes 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.”

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:

<table>
<thead>
<tr>
<th>a</th>
<th>b</th>
</tr>
</thead>
<tbody>
<tr>
<td>c[^\text{10}]</td>
<td>d</td>
</tr>
</tbody>
</table>

**Notes:**
\[^\text{9}\] Note 1
\[^\text{10}\] Note 2

Now for a list:
1. This item has no parnote.
2. This one does\[^\text{11}\].
3. This one has a parnote\[^\text{12}\] in its first paragraph…

\[^\text{11}\] See? But notice that `\text{\text{narrower}}` doesn’t work in lists, so this is set flush with the list’s margin

\[^\text{12}\] Would I ever lie to you?

But not in its second.

New features in parnotes rev. 2: Multiple parnote marks\[^\text{13},\text{14}\]. Manually-specified marks\[^\text{aaa}\] and references (see \[^\text{aaa}, p. 9\]), allowing you to re-use parnote marks\[^\text{aaa}\].

\[^\text{13}\] Parnote 1  \[^\text{14}\] Parnote 2  \[^\text{aaa}\] Parnote with special mark