The parnotes package¹

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 1 This is rev. 1, last modified 01/03/12. 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.

 $^3\,^{\rm m}\text{Placing}$ footnotes or endnotes at the end of the current paragraph" at http://tex.stackexchange.com/questions/34746

1 Usage

Load parnotes normally:

```
\usepackage[\langle options \rangle] {parnotes}
```

The package options are described in section 2.1.

```
\forall x \in \{\langle text \rangle\}
```

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{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.

2 Configuration

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



2.1 Package options

The following options are provided:

restart Reset the parnote numer 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.

Give parnotes an increased margin, like block quotes.

The following options change the font used within parnotes:

notesrm Roman. Default.

notesit Italic. notessf Sans-serif.

2.2 Format commands

Four internal commands control formatting for parnotes and parnote marks:

```
\parnotefmt{⟨text⟩}
\parnotemarkfmt{⟨counter⟩}
\parnotevskip
\parnoteintercmd
```

Parnote text is set using \parnotefmt, and parnote marks are set using \parnotemarkfmt. At least \parnotevskip vertical space appears before and after the parnote text. The macro \parnoteintercmd is executed between all consecutive parnotes.

Table 1 shows the default values of these commands. The package options narrower, notesrm, notesit, and notessf modify \parnotefmt. The option roman modifies \parnotemarkfmt. The option breakwithin changes \parnoteintercmd to a line break.

Redefine these commands 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 its 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}{\;$\bullet$\;}
```

Table 1: Default values for format commands.

Command	Default value
\parnotefmt	\footnotesize\rmfamily\noindent #1
\parnotemarkfmt	\textsuperscript{\arabic{#1}}
\parnotevskip	\medskipamount
$\verb \parmoteintercmd $	\hspace{1em}

Note that since \parnotesfmt is redefined, the package option narrower will not work; instead, \narrower must be placed manually within the new definition for \parnotesfmt.

3 Example

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

```
\documentclass{article}
   \usepackage{multicol} % for demonstration \usepackage{lipsum} % for demonstration
    \usepackage[narrower,notessf]{parnotes}
   \begin{document}
6
    \begin{autopn}
7
8
        \begin{abstract}
9
       \begin{autopn}
10
       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
11
12
       \texttt{\textbackslash parnotes} here to set parnotes manually.}
13
       \end{autopn}
14
       \end{abstract}
    \tableofcontents
15
16
    \section{On parnotes\parnote{Parnote marks will display in a heading, but
       not within the table of contents. In \texttt{autopn}, parnotes will
17
18
       display right after the heading.}}
19
20
   This is a paragraph with a parnote
    \parnote{See? And it's long enough to push the \emph{next} parnote nearer
21
       the end of the line. }.
23
   Actually, it has two.
24
    \parnote{By default, parnotes are set in a continuous paragraph with 1~em
25
       of space between each note.}
26
   This sentence ends the paragraph, but it doesn't have a parnote.
27
28
   This is a normal paragraph. Note that it isn't indented since the parnotes
29
   make it obvious where the paragraph boundaries are. To change this
   behavior, use the \texttt{indentafter} option.
32
   This paragraph's indentation isn't changed. But it does start a list:
33
    \begin{enumerate}
34
    \begin{autopn}
35
       \item This item has no parnote.
36
       \item This one does\parnote{See? But notice that
37
              \texttt{\textbackslash narrower} doesn't work in lists, so
38
              this is set flush with the list's margin}.
39
       \item This one has a parnote\parnote{Would I ever lie to you?} in its
40
           first paragraph\dots
```

```
But not in its second.
 43
    \end{autopn}
 44
    \end{enumerate}
 45
    Here's another environment with a nested \texttt{autopn}:
 46
 47
     \begin{multicols}{2}
 48
     \begin{autopn}
        Since parnotes are set within the normal paragraph flow, they interact
 49
 50
        well with environments\parnote{Like this multicolumn environment from
 51
            \textsf{multicols} -- it will break columns and pages along with
 52
            the normal text within the environment. }.
 53
 54
        This is just filler text without any parnotes.
 55
     \end{autopn}
     \end{multicols}
    Here's an environment without a nested \texttt{autopn}:
 57
 58
     \begin{multicols}{2}
        Without a nested \texttt{autopn}, any parnotes\parnote{Like this one.}
 59
 60
        will be set after the end of the next paragraph \emph{outside} this
        environment. If \texttt{\textbackslash parnotes} is called just before
 61
 62
        the environment ends, then the parnotes will be set within that
        environment. This is useful for, say, multi-paragraph quotes.
 63
 64
 65
        This environment always specifies that it ends a paragraph, so
 66
        parnotes will always be set after it if needed. In some other
        circumstances, \texttt{autopn} may not ``see'' that there's a
 67
 68
        paragraph break after the environment, so
 69
        \texttt{\textbackslash parnotes} will have to be called after the
 70
        environment ends.
 71
 72
        There's also a long parnote\parnote{\lipsum[1]} within this
 73
        environment, to show that \LaTeX\ will break pages within parnotes,
        and will prefer that to breaking pages between the parnotes and
 74
 75
        their corresponding text.
 76
     \end{multicols}
 77
     \end{autopn}
 78
 79
    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}
    wherever the parnotes should be set.
 83
    The same applies if parnotes are to be placed only at the end of a section, or at a ``scene break.'' \,
 84
 85
86
     \parnotes
87
    The only limiting factor is that \texttt{\textbackslash parnotes} must be
89
     executed after the parnotes it refers to. Here's a table with notes in an
 90
    adjacent minipage:\\[1in]
 91
     \hspace*{\fill}
 92
    \begin{tabular}{|c|c|}
         \hline a & b\parnote{Note 1} \\ \hline c\parnote{Note 2} & d \\ \hline
     \end{tabular}
 95
     \hspace{1in}
 96
     \begin{minipage}{3in}
 97
        % locally redefining format commands so the notes are on separate
 98
        % lines, with no vertical space
99
        \renewcommand{\parnoteintercmd}{\\}
        \renewcommand{\parnotevskip}{0pt}
100
101
        \textbf{Notes:}
102
        \parnotes
    \end{minipage}
103
    \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

1 On parnotes²

² Parnote marks will display in a heading, but not within the table of contents. In autopp, 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. But it does start a list:

- 1. This item has no parnote.
- 2. This one does⁵.

⁵ 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 parnote⁶ in its first paragraph...

⁶ Would I ever lie to you?

But not in its second.

Here's another environment with a nested autopn:

Since parnotes are set within the normal paragraph flow, they interact well with environments⁷.

⁷ 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 parnotes⁸ 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.

There's also a long parnote⁹ within this environment, to show that LaTeX will break pages within parnotes, and will prefer that to breaking pages between the parnotes and their corresponding text.

⁸ Like this one. ⁹ Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer 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 parnotes¹ 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:

a	b ¹¹	Notes:
12	1	¹¹ Note 1
C'2	a	12 Note 2

¹⁰ Like this one.