The epigraph package*

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Abstract

The epigraph package can be used to typeset a relevant quotation or saying as an *epigraph*, usually just after a sectional heading. Various handles are provided to tweak the appearance.

Contents

1 Introduction

My soul, seek not the life of immortals; but enjoy to the full the resources that are within your reach

Pythian Odes
Pindar

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Some authors like to add an interesting quotation at either the start or end of a section. The epigraph package provides commands to assist in the typesetting of a single epigraph. Other authors like to add many such quotations and the package provides environments to cater for these as well.

This manual is typeset according to the conventions of the LaTeX docstrip utility which enables the automatic extraction of the LaTeX macro source files [GMS94].

Section 2 describes the usage of the package. Commented source code for the package is in Section 3.

2 The epigraph package

> The whole is more than the sum of the parts.
>
> *Metaphysica*
> *Aristotle*

The epigraph package provides commands for typesetting a single epigraph and environments for typesetting a list of epigraphs. Epigraphs can be typeset at either the left, the center or the right of the typeblock. A few example epigraphs are exhibited here, and others can be found in an article by Christina Thiele [Thi99].

2.1 The `epigraph` command

The original inspiration for `\epigraph` was Doug Schenck's for the epigraphs in our book [SW94]. That was hard wired for the purpose at hand. The version here provides much more flexibility.

`\epigraph` The command `\epigraph{`⟨*text*⟩`}{`⟨*source*⟩`}` typesets an epigraph using ⟨*text*⟩ as the main text of the epigraph and ⟨*source*⟩ being the original author (or book, article, etc.) of the quoted text. By default the epigraph is placed at the right hand side of the textblock, and the ⟨*source*⟩ is typeset at the bottom right of the ⟨*text*⟩.

2.2 The `epigraphs` environment

`epigraphs` The `epigraphs` environment typesets a list of epigraphs, and by default places them at the right hand side of the textblock.

`\qitem` Each epigraph in the list is specified by a `\qitem{`⟨*text*⟩`}{`⟨*source*⟩`}` command (analogous to the `\item` command in ordinary list environments). By default, the ⟨*source*⟩ is typeset at the bottom right of the ⟨*text*⟩.

2.3 General

> Example is the school of mankind, and they will learn at no other.
>
> *Letters on a Regicide Peace*
> Edmund Burke

The commands described in this section apply to both the `\epigraph` command and the `epigraphs` environment.

An epigraph immediately after a heading will cause the first paragraph of the following text to be indented. If you want the initial paragraph to have no indentation, then start it with the `\noindent` command, or add `\epigraphnoindent` to your document preamble. (`\epigraphnoindentfalse` will reverse the setting.) This command only affects the `\epigraph` command; for the `epigraphs` environment the `\noindent` approach must still be used.

`\epigraphnoindent`

`\epigraphwidth` The epigraphs are typeset in a minipage of width `\epigraphwidth`. The default value for this can be changed using the `\setlength` command. Typically, epigraphs are typeset in a measure much less than the width of the textblock.

`\textflush` In order to avoid bad line breaks, the ⟨*text*⟩ is normally typeset ragged right. The `\textflush` command controls the ⟨*text*⟩ typesetting style, and it can be redefined from its default value of `flushleft` (which produces ragged right). The sensible values are `center` for centered text, `flushright` for ragged left text, and `flushepinormal` for normal justified text.

If by any chance you want the ⟨*text*⟩ to be typeset in some other layout style, the easiest way to do this is by defining a new environment which sets the paragraphing parameters to your desired values. For example, as the ⟨*text*⟩ is typeset in a minipage, there is no paragraph indentation. If you want the paragraphs to be indented and justified then define a new environment like:
`\newenvironment{myparastyle}{\setlength{\parindent}{1em}}{}`
and use it as:
`\renewcommand{\textflush}{myparastyle}`.

`\epigraphflush` As noted, the default position of epigraphs is at the right hand side of the textblock. The positioning is controlled by `\epigraphflush` whose default value is `flushright`. This can be changed to `flushleft` for positioning at the left hand side or to `center` for positioning at the center of the textblock.

`\sourceflush` The `\sourceflush` command controls the position of the ⟨*source*⟩. The default value is `flushright`. It can be changed to `flushleft`, `center` or `flushepinormal`.

For example, to have epigraphs centered with the ⟨*source*⟩ at the left, add the following to your document (after loading the epigraph package):

```
\renewcommand{\epigraphflush}{center}
\renewcommand{\sourceflush}{flushleft}
```

`\epigraphsize` Epigraphs are often typeset in a smaller font than the main text. The `\epigraphsize` command sets the font size to be used. If you don't like the

default value, change it by redefining the command, for example:

```
\renewcommand{\epigraphsize}{\footnotesize}
```

`\epigraphrule` By default, a rule is drawn between the ⟨*text*⟩ and ⟨*source*⟩, with the rule thickness being given by the value of `\epigraphrule`. The value can be changed by using the LaTeX `\setlength` command. A value of `0pt` will eliminate the rule. Personally, I dislike the rule in the list environments.

`\beforeepigraphskip` `\afterepigraphskip` The two `...skip` commands specify the amount of vertical space inserted before and after typeset epigraphs. Again, these can be changed by `\setlength`. It is desirable that the sum of their values should be an integer multiple of the `\baselineskip`.

Note that you can use normal LaTeX commands in the ⟨*text*⟩ and ⟨*source*⟩ arguments. You may wish to use different fonts for the ⟨*text*⟩ (say roman) and the ⟨*source*⟩ (say italic).

The epigraph at the start of this section can be specified as:

```
\epigraph{Example is the school of mankind,
          and they will learn at no other.}%
 {\textit{Letters on a Regicide Peace}\\ \textsc{Edmund Burke}}
```

2.4 Epigraphs before chapter headings

The `\epigraph` command and the `epigraphs` environment typeset an epigraph at the point in the text where they are placed. The first thing that a `\chapter` command does is to start off a new page, so another mechanism is provided for placing an epigraph just before a chapter heading.

`\epigraphhead` The `\epigraphhead[`⟨*distance*⟩`]{`⟨*text*⟩`}` stores ⟨*text*⟩ for printing at ⟨*distance*⟩ below the header on a page. ⟨*text*⟩ can be ordinary text or, more likely, can be either an `\epigraph` command or an `epigraphs` environment. By default, the epigraph will be typeset at the right-hand margin. If the command is immediately preceded by a `\chapter` or `\chapter*` command, the epigraph is typeset on the chapter title page.

The default value for the optional ⟨*distance*⟩ argument is set so that an `\epigraph` consisting of a single line of quotation and a single line denoting the source is aligned with the bottom of the 'Chapter X' line produced by the `\chapter` command. In other cases you will have to experiment with the ⟨*distance*⟩ value. The value for ⟨*distance*⟩ can be either a integer or a real number. The units are in terms of the current value for `\unitlength`. A typical value for ⟨*distance*⟩ for a single line quotation and source for a `\chapter*` might be about 70 (points). A positive value of ⟨*distance*⟩ places the epigraph below the page heading and a negative value will raise it above the page heading.

Here's some example code:

```
\chapter*{Celestial navigation}
\epigraphhead[70]{\epigraph{Star crossed lovers.}{\textit{The Bard}}}
```

The `\epigraphhead` command changes the page style for the page on which it is specified, so there should be no text between the `\chapter` and the `\epigraphhead` commands.

The ⟨*text*⟩ argument is put into a minipage of width `\epigraphwidth`. If you use something other than `\epigraph` or `epigraphs` for the ⟨*text*⟩ argument, you may have to so some positioning of the text yourself so that it is properly located in the minipage. For example

```
\chapter{Short}
\renewcommand{\epigraphflush}{center}
\epigraphhead{\centerline{Short quote}}
```

`\dropchapter` `\undodrop`

If a long epigraph is placed before a chapter title it is possible that the bottom of the epigraph may interfere with the chapter title. The command `\dropchapter{`⟨*length*⟩`}` will lower any subsequent chapter titles by ⟨*length*⟩; a negative ⟨*length*⟩ will raise the titles. The command `\undodrop` restores subsequent chapter titles to their default positions. For example:

```
\dropchapter{2in}
\chapter{Title}
\epigraphhead{long epigraph}
\undodrop
```

`\cleartoevenpage`

On occasions it may be desirable to put something (e.g., an epigraph, a map, a picture) on the page facing the start of a chapter, where the something belongs to the chapter that is about to start rather than the chapter that has just ended. In order to do this in a document that is going to be printed double-sided, the chapter must start on an odd numbered page and the pre-chapter material put on the immediately preceding even numbered page. The `\cleartoevenpage` command is like the `\cleardoublepage` except that the page following the command will be an even numbered page, and the command takes an optional argument, i.e., `\cleartoevenpage{`[arg], which is applied to the skipped page (if any). This command is provided by the `nextpage` package.

Here is an example:

```
... end previous chapter.
\cleartoevenpage
\begin{center}
\begin{picture}... \end{picture}
\end{center}
\chapter{Next chapter}
```

If the style is such that chapter headings are put at the top of the pages, then it would be advisable to include `\thispagestyle{empty}` (or `plain`) immediately after `\cleartoevenpage` to avoid a heading related to the previous chapter from appearing on the page.

If the something is like a figure with a numbered caption and the numbering depends on the chapter numbering, then the numbers have to be hand set (unless you define a special chapter command for the purpose). For example:

```
... end previous chapter.
\cleartoevenpage[\thispagestyle{empty}] % skipped page, if any, to be empty
\thispagestyle{plain}
\addtocounter{chapter}{1} % increment the chapter number
\setcounter{figure}{0}    % initialise figure counter
\begin{figure}
...
\caption{Pre chapter figure}
\end{figure}

\addtocounter{chapter}{-1} % decrement the chapter number
\chapter{Next chapter}     % increments chapter number, initialises figure number
\addtocounter{figure}{1}   % to account for pre-chapter figure
```

2.5 Epigraphs on Part pages

The epigraph package as it stands cannot put an epigraph on the same page as a `\part` or `\part*` title page in a book or report class. This is because the `\part` command internally does some page flipping before and after the title page. However, it is easy enough to put epigraphs on part pages.

- Create a file called, say, `epipart.sty` which looks like this:

  ```
  % epipart.sty
  \let\@epipart\@endpart
  \renewcommand{\@endpart}{\thispagestyle{epigraph}\@epipart}
  \endinput
  ```

- Start your document like:

  ```
  \documentclass[...]{...}
  \usepackage{epigraph}
  \usepackage{epipart}
  ```

- Immediately *before* each `\part` command put an `\epigraphhead` command. For example:

  ```
  \epigraphhead[300]{Epigraph text}
  \part{Part title}
  ```

The value of the optional argument may need changing to vertically adjust the position of the epigraph. If there is any `\part` that does not have an epigraph then an empty `\epigraphhead` command (i.e., `\epigraphhead{}`) must be placed immediately before the `\part` command.

A similar scheme may be used for epigraphs on other kinds of pages. The essential trick is to make sure that the *epigraph* pagestyle is used for the page.

2.6 Epigraphed bibliographies

One author asked how to associate an epigraph with his bibliography. The following is one way to do it (the example is based on the book class).

1. Copy the definition of the `thebibliography` environment from `book.cls` to your own file called, say `epibib.sty`.

2. Edit `epibib.sty` to include the definition of a vacuous command called, say, `\bibadd`. Edit the definition of the `thebibliography` to include `\bibadd` immediately before the `\list` command. The relevant portions of `epibib.sty` will look like this:

```
% epibib.sty
...
\newcommand{\bibadd}{}
\renewenvironment{thebibliography}[1]
  {\chapter*{\bibname
     \@mkboth{\MakeUppercase\bibname}{\MakeUppercase\bibname}}%
   \bibadd
   \list{\@biblabel .....
```

3. In your document, start it off like this:

```
\documentclass...
\usepackage{epigraph}
\usepackage{epibib}
```

   At the point where the bibliography is to go, do something like the following:

```
...
\newcommand{\bepi}{<definition of epigraph>}
\renewcommand{\bibadd}{\bepi}
\bepi  % seems to be required if using \epigraphhead in \bepi
\begin{thebibliography}{...} % or \bibliography{...}
...
```

The same idea can be applied to document elements like an abstract or an index. Of course `\bibadd` can be defined to be anything you want to typeset between the bibliography heading and the start of the reference list.

3 The package code

And now for something completely different.

Monty Python

Announce the name and version of the package, which requires LaTeX 2_ε.

```
1 ⟨*usc⟩
2 \NeedsTeXFormat{LaTeX2e}
3 \ProvidesPackage{epigraph}[2020/01/02 v1.5e typesetting epigraphs]
4 \RequirePackage{nextpage}
```

`\beforeepigraphskip` `\afterepigraphskip` `\epigraphwidth` `\epigraphrule` The several length commands, which can be changed by the user with `\setlength`.

```
5 \newlength{\beforeepigraphskip}
6   \setlength{\beforeepigraphskip}{.5\baselineskip}
7 \newlength{\afterepigraphskip}
8   \setlength{\afterepigraphskip}{.5\baselineskip}
9 \newlength{\epigraphwidth}
10  \setlength{\epigraphwidth}{.4\textwidth}
11 \newlength{\epigraphrule}
12  \setlength{\epigraphrule}{.4\p@}
```

`\epigraphsize` The size of the font to be used.

```
13 \newcommand{\epigraphsize}{\small}
```

`\epigraphnoindent` `\ifepigraphnoindent` Whether to add `\noindent` (false by default for backwards compatibility).

```
14 \newif\ifepigraphnoindent
15 \newcommand\epigraphnoindent{\epigraphnoindenttrue}
```

`\epigraphflush` `\textflush` `\sourceflush` The three commands to position epigraphs in the textblock and to position the components of the epigraph.

```
16 \newcommand{\epigraphflush}{flushright}
17 \newcommand{\textflush}{flushleft}
18 \newcommand{\sourceflush}{flushright}
19
```

`flushleftright` An environment for `\textflush` to use normal minipage typesetting. It is vacuous. Defining this was a mistake as the ccaption package also defines `\flushleftright`.

```
20 \AtBeginDocument{%
21   \@ifundefined{flushleftright}{%
22     \newenvironment{flushleftright}{%
23       \PackageError{epigraph}%
24       {The flushleftright environment has been removed.\MessageBreak
25        Use the flushepinormal environment instead}{\@ehc}}{}}%
26     {\PackageWarningNoLine{epigraph}%
27      {flushleftright has been previously defined.\MessageBreak
28       Use flushepinormal for epigraphs instead}}}
29
```

`flushepinormal` An environment for `\textflush` to use normal minipage typesetting. It is vacuous.

```
\newenvironment{flushepinormal}{}{}
```

`\@epirule` The internal command to draw a rule between text and source.

```
\newcommand{\@epirule}{\rule[.5ex]{\epigraphwidth}{\epigraphrule}}
```

`\@epitext` The internal command to typeset the ⟨*text*⟩. Put it into a minipage of the right size and typeset per `\textflush`.

```
\newcommand{\@epitext}[1]{%
  \begin{minipage}{\epigraphwidth}\begin{\textflush} #1\\
```

Draw a rule if it will be visible, otherwise add some extra vertical space.

```
    \ifdim\epigraphrule>\z@ \@epirule \else \vspace*{1ex} \fi
  \end{\textflush}\end{minipage}}
```

`\@episource` The internal command for typesetting the ⟨*source*⟩, which is put into a minipage and typeset according to `\sourceflush`.

```
\newcommand{\@episource}[1]{%
  \begin{minipage}{\epigraphwidth}\begin{\sourceflush} #1\end{\sourceflush}
  \end{minipage}}
```

`\epigraph` Having got the preliminaries out of the way, here's the user command for a single epigraph. This is set in a minipage to prevent breaking across a page. Position it according to `\epigraphflush`.

```
\newcommand{\epigraph}[2]{%
  \vspace{\beforeepigraphskip}
  \vbox{%
    \epigraphsize
    \begin{\epigraphflush}
    \begin{minipage}{\epigraphwidth}
      \@epitext{#1}\\
      \@episource{#2}%
    \end{minipage}%
    \end{\epigraphflush}%
  }%
  \nointerlineskip
  \vspace*{\afterepigraphskip}%
  \ifepigraphnoindent\@afterheading\fi
}
```

`\qitem` `\qitemlabel` `\qitem` is the epigraph list version of `\item`. Set everything inside a minipage.

```
\newcommand{\qitem}[2]{{\raggedright\item \begin{minipage}{\epigraphwidth}
  \@epitext{#1}\\ \@episource{#2}
  \end{minipage}}}
```

`\qitemlabel` is needed for a list as well. It is not going to typeset anything.

```
\newcommand{\qitemlabel}[1]{\hfill}
```

epigraphs Now for the epigraph list. This is defined in terms of a `list` environment.

```
\newenvironment{epigraphs}{%
```

Do the vertical space, set the font size, position according to `\epigraphflush`, and put everyting into a minipage.

```
  \vspace{\beforeepigraphskip}\begin{\epigraphflush}
  \epigraphsize
  \begin{minipage}{\epigraphwidth}
   \list{}%
```

Make the list just fit the minipage (i.e., no indents).

```
    {\itemindent\z@ \labelwidth\z@ \labelsep\z@
     \leftmargin\z@ \rightmargin\z@
     \let\makelabel\qitemlabel}}%
  {\endlist\end{minipage}\end{\epigraphflush}
   \vspace{\afterepigraphskip}%
}
```

3.1 Epigraphs before a chapter title

\@epichapapp \dropchapter \undodrop Commands to drop and restore positions of chapter titles. Dropping is accomplished by inserting vertical space before the `\@chapapp` command.

```
\newcommand{\dropchapter}[1]{%
  \let\@epichapapp\@chapapp
  \renewcommand{\@chapapp}{\vspace*{#1}\@epichapapp}}
\newcommand{\undodrop}{\let\@chapapp\@epichapapp}
```

Placing an epigraph before a chapter title uses the scheme outlined by Piet van Oostrum [vO96]. This is to put a zero sized picture into the page header.

\if@epirhs \if@epicenter Two booleans for testing whether an epigraph is to be at the RH margin, centered, or at the LH margin. The default is RH margin.

```
\newif\if@epirhs     \@epirhstrue
\newif\if@epicenter  \@epicentertrue
```

\@epipos This routine sets the `\if@epi...` booleans according to the value of `\epigraphflush`. If `\epigraphflush` is neither `center` nor `flushleft` then it defaults to `flushright`. We have to use this to be upward compatible with `\epigraphflush` being set by the user with `\renewcommand`.

```
\newcommand{\@epipos}{
  \long\def\@ept{flushleft}
  \ifx\epigraphflush\@ept
    \@epirhsfalse \@epicenterfalse
  \else
    \long\def\@ept{center}
    \ifx\epigraphflush\@ept
      \@epirhsfalse \@epicentertrue
    \else
      \@epirhstrue  \@epicenterfalse
```

```
    \fi
  \fi}
```

`\epigraphhead` `\epigraphhead[`⟨*distance*⟩`]{`⟨*text*⟩`}` puts ⟨*text*⟩ at ⟨*distance*⟩ (a number, not a length) below the header at the page position specified by `\epigraphflush`.

```
\newcommand{\epigraphhead}[2][95]{%
```

We have to use `\def` instead of the normal LaTeX definition commands as we will keep on (re)defining things. For reasons that are not fully clear to me LaTeX doesn't seem to like me using a `\savebox` for storing the epigraph text, so I'll use a command instead.

```
  \def\@epitemp{\begin{minipage}{\epigraphwidth}#2\end{minipage}}
```

Define an `epigraph` page style.

```
  \def\ps@epigraph{\let\@mkboth\@gobbletwo
```

There are three possible definitions for `\@oddhead` depending on the value of `\epigraphflush`. We call `\@epipos` to decide which one to do.

```
    \@epipos
    \if@epirhs
      \def\@oddhead{\hfil\begin{picture}(0,0)
                          \put(0,-#1){\makebox(0,0)[r]{\@epitemp}}
                          \end{picture}}
    \else
      \if@epicenter
        \def\@oddhead{\hfil\begin{picture}(0,0)
                            \put(0,-#1){\makebox(0,0)[b]{\@epitemp}}
                            \end{picture}\hfil}
      \else
        \def\@oddhead{\begin{picture}(0,0)
                            \put(0,-#1){\makebox(0,0)[l]{\@epitemp}}
                            \end{picture}\hfil}
      \fi
    \fi
    \let\@evenhead\@oddhead
    \def\@oddfoot{\reset@font\hfil\thepage\hfil}
    \let\@evenfoot\@oddfoot}
```

Make `epigraph` be the page style for this page.

```
  \thispagestyle{epigraph}}
```

The end of this package.

```
⟨/usc⟩
```

References

[GMS94] Michel Goossens, Frank Mittelbach, and Alexander Samarin. *The LaTeX Companion*. Addison-Wesley Publishing Company, 1994.

[vO96] Piet van Oostrum *Page layout in LaTeX*, June 1996. (Available from CTAN as file `fancyhdr.tex`).

[SW94] Douglas Schenck and Peter Wilson. *Information Modeling the EXPRESS Way*. Oxford University Press, 1994 (ISBN 0-19-508714-3).

[Thi99] Christina Thiele. *The Treasure Chest: Package tours from CTAN*, TUGboat, vol. 20, no. 1, pp 53–58, March 1999.

Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.