The `quotchap` package[*]

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Abstract

This document describes the `quotchap` package. This package redefines the `\chapter` and `\chapter*` commands to create fancy chapter head pages with huge chapter numbers (possibly greyed) and provides commands for adding quotations in the upper left corner of these pages. It was written by Karsten Tinnefeld, who abandoned to work on it. This package is now maintained by Jan Klever.

1 Introduction

`quotchap` is designed to do visual formatting and build some fancy and attractive chapter headings for documents. It buries the original `\chapter[*]`-commands to provide a new style: Chapter number and title are set flush right, on separate lines, and much huger as normal: The title is to be `\Huge`, the number is set in 100pt size, and possibly in 60% grey (not to blacken the page more than necessary). This means, of course, that some scalable font had to be chosen. We offer package options for all the postscript fonts in the PSNFSS package and some other common fonts, defaulting to Adobe's Bookman for matters of personal taste. You can choose any font for the chapter number by using the command `\qsetcnfont`.

2 Quotations

This package provides the feature to include some quotations right before the beginning of the chapter. An environment is given to save quotes to be used at the beginning of the next chapter, and an additional command gives an easy way to provide author information to the quotes.

savequote   The `savequote` environment should appear at the top level, not in the document's preamble (i.e., after `\begin{document}`) and before the start of the chapter you want to decorate. It has one optional argument that provides the width of

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[†]Thanks to Stefan Mintert for the chapter number layout idea basing on his iNAbook class.

the quotation paragraph. The default is 10cm (approx. 3.94in). Possibly you may want to set your quote in "quotation marks", as these marks differ from country to country, it is left to you.

qauthor Each quotation can consist of several paragraphs, but must end with a `\qauthor{A. U. Thor}` command. This is not only provided to uphold the principles of "honour whom honour is due" but to provide the right author name formatting and inter quotation spacing. The quotes can follow each other immediately.

The whole bunch of quotation is deleted after it has been printed once, so you have to rewrite them when you find no way past repeating them. When you give no quotations for some chapter, the upper left area of the corresponding page will be simply void.

qsetcnfont If you want to use a font for the chapter number, that is not available as package optionen, you can set it with `\qsetcnfont{<family>}`. For example: `\qsetcnfont{pzc}` to use Zapf Chancery.

3 Examples

Let's take a look at an example:

```
\begin{savequote}[45mm]
  ---When shall we three meet again
  in thunder, lightning, or in rain?

  ---When the hurlyburly's done,
  when the battle's lost and won.
  \qauthor(Shakespeare, Macbeth}
  Cookies! Give me some cookies!
  \qauthor{Cookie Monster}
\end{savequote}
```

—*When shall we three meet again*
in thunder, lightning, or in rain?
—*When the hurlyburly's done,*
when the battle's lost and won.

Shakespeare, Macbeth

Cookies! Give me some cookies!

Cookie Monster

```
\chapter{Classic Sesame Street}
```

(chapter start page not demonstrated—try for yourself.)

4 Document Options

Printing the chapter number in bold and that big a font uses quite some ink on the paper. Thus it is strongly recommended to use the **grey** option (which is enabled by default and disabled by specifying **nogrey**) that improves the quality by printing the number in 60% grey. The `color` package is used to set the colour `chaptergrey`, redefining this colour may produce even more colourful effects.

The `color` package is `\Require`d without any option, if you want to specify some, include the color package before the quotchap package.

The other options are used to select a title font, they are all self-explaining and thus simply listed here:

avantgarde Adobe's Avantgarde

beramono Bera Mono

berasans Bera Sans

beraserif Bera Serif

biolinum Biolinum

bookman Adobe's Bookman (default)

charter Bitstream's Charter BT

courier Adobe's Courier

helvetica Adobe's Helvetica

kpfonts Kp-Fonts

libertine Libertine

lmodern Latin Modern

newcentury Adobe's New Century Schoolbook

palatino Adobe's Palatino

times Adobe's Times

utopia Adobe's Utopia

5 Implementation

Ok, here comes the code.

5.1 Option parsing

The first part is about parsing the options. We may not `\RequirePackage`s in here and thus define a flag: `@usecolor` is true whenever the **grey** option is specified.

```
1 \newif\if@usecolor\@usecolortrue
2 \DeclareOption{grey}{\@usecolortrue}
3 \DeclareOption{nogrey}{\@usecolorfalse}
```

For the fonts, there follows a bunch of options that are all meant to be specified exclusively. It would have been possible to use `\newcommand` to ensure this, but it gives cryptic errors. Rather check this first.

```
4 \newcommand*{\@newfontcmd}{\@ifundefined{@defaultcnfont}{\newcommand*}{%
5    \PackageWarning{quotchap}{%
6      You have tried to specify more than one font to be\MessageBreak
7      used for the chapter numbers. I ignore the font\MessageBreak
8      '\CurrentOption'}
9    \providecommand*}}
```

Next is defining the font options. We set \@defaultcnfont according to Karl
Berry's font name scheme. Providing more than one font gives an error (due to
defining an already defined command); the options exclude each other.

```
10 \DeclareOption{avantgarde}{\@newfontcmd{\@defaultcnfont}{pag}}
11 \DeclareOption{beramono}{\@newfontcmd{\@defaultcnfont}{fvm}}
12 \DeclareOption{berasans}{\@newfontcmd{\@defaultcnfont}{fvs}}
13 \DeclareOption{beraserif}{\@newfontcmd{\@defaultcnfont}{fve}}
14 \DeclareOption{biolinum}{\@newfontcmd{\@defaultcnfont}{fxb}}
15 \DeclareOption{bookman}{\@newfontcmd{\@defaultcnfont}{pbk}}
16 \DeclareOption{charter}{\@newfontcmd{\@defaultcnfont}{bch}}
17 \DeclareOption{courier}{\@newfontcmd{\@defaultcnfont}{pcr}}
18 \DeclareOption{helvetica}{\@newfontcmd{\@defaultcnfont}{phv}}
19 \DeclareOption{kpfonts}{\@newfontcmd{\@defaultcnfont}{jkp}}
20 \DeclareOption{libertine}{\@newfontcmd{\@defaultcnfont}{fxl}}
21 \DeclareOption{lmodern}{\@newfontcmd{\@defaultcnfont}{lmr}}
22 \DeclareOption{newcentury}{\@newfontcmd{\@defaultcnfont}{pnc}}
23 \DeclareOption{palatino}{\@newfontcmd{\@defaultcnfont}{ppl}}
24 \DeclareOption{times}{\@newfontcmd{\@defaultcnfont}{ptm}}
25 \DeclareOption{utopia}{\@newfontcmd{\@defaultcnfont}{put}}
```

We can now let the options be processed. If no postscript font has been spec-
ified, the default is Adobe's Bookman.

```
26 \ProcessOptions\relax
27 \providecommand*{\@defaultcnfont}{pbk}
```

If nobody said **nogrey**, we fetch the color package and define our colour.
If the color package is not included until now, we define \color to do nothing
but gobble up its argument. An error is issued when **grey** is turned on and the
color package is nonexistent. When you read the documentation because of this:
color.sty is included in the graphics bundle to be found at CTAN.

```
28 \if@usecolor
29   \IfFileExists{color.sty}{%
30     \RequirePackage{color}
31     \definecolor{chaptergrey}{rgb}{0.6,0.6,0.6}}{%
32     \PackageError{quotchap}{%
33       The color package is apparently unavailable.\MessageBreak
34       Turn off the 'grey' option and come back again}{%
35       Since you did not say 'nogrey', quotchap defined chapter
36       numbers to appear\MessageBreak grey. You do not need a color
37       printer, since most printing devices can cope\MessageBreak with
38       grey scales, but you need the color package coming with the
39       graphics\MessageBreak bundle available from CTAN.}}
40 \else
41   \providecommand*{\color}[1]{}
42 \fi
```

Now we are ready to give the final font declarations. The commands \sectfont
and \chapterhead{start|end}vskip are defined in the KOMA-Script classes the
chapter is based on, they are provided in case quotchap is used with other,

e.g. the default classes. If we are building a report, there is no `\frontmatter`, `\mainmatter` and `\backmatter` resp. everything is `\mainmatter`, thus we have to provide the corresponding switch used in the `\chapter` command.

```
43 \AtEndOfPackage{%
44   \newcommand*{\chapnumfont}{%
45     \usefont{T1}{\@defaultcnfont}{b}{n}\fontsize{100}{130}\selectfont%
46     \color{chaptergrey}}
47   \let\size@chapter\huge
48   \providecommand*{\chapterheadstartvskip}{\vspace*{2.3\baselineskip}}
49   \providecommand*{\chapterheadendvskip}{\vspace{1.7\baselineskip}}
50   \providecommand*{\sectfont}{\relax}
51   \@ifundefined{@mainmattertrue}{\newif\if@mainmatter\@mainmattertrue}{}}
```

5.2 User Level Commands

savequote   Here go the top level command declarations (and definitions, too). We use the `lrbox` environment to save the contents of the whole environment in a horizontal box. The quotes are effectively a paragraph box typeset in footnote size and oblique style, to the width given as a parameter, while any spacing at the beginning and the end of the environment is ignored. Since `\newenvironment` implies a group, we have to make the box `\@quotebox` global explicitly.

Finally, we enable the box insertion command that is disabled initially and after each chapter heading. (Possibly it is faster to delete the save box contents and insert a nearly-empty vertical box at each chapter—profilers to the front.)

```
52 \newenvironment{savequote}[1][10cm]{%
53   \begin{lrbox}{\@quotebox}
54     \begin{minipage}[t]{#1}\footnotesize\slshape
55       \ignorespaces}{%
56       \unskip\end{minipage}\end{lrbox}
57   \global\setbox\@quotebox\copy\@quotebox
58   \global\let\@printcites\@iprintcites
59   \ignorespacesafterend}
```

\qauthor   The `\qauthor` command simply selects some font and skip—lets the name be set in roman letters and flush right at two ems distance from the margin.

```
60 \newcommand{\qauthor}[1]{%
61   \par\smallskip
62   {\raggedleft\upshape #1\qquad\hbox{}\par}\bigskip}
```

\qsetcnfont   The user can set any font for the chapter number by providing its family name to this command.

```
63 \newcommand{\qsetcnfont}[1]{%
64   \renewcommand*{\@defaultcnfont}{#1}}
```

5.3 Making up the chapter heading

Here are the modification to the chapter command definitions of the KOMA-Script document classes. This package was originally designed to co-operate only with

them; therefore we have to provide some measurement defined only there. We insert the citations (if available) by calling the insert box or do nothing wrapper.

The second modification is the formatting of the heading. If there is a chapter number to be printed, our really huge font is selected and the number is typeset to the right margin, followed by the title, as usual.

```
65 \newsavebox{\@quotebox}
66 \let\@printcites\relax
67 \renewcommand\chapter{%
68   \if@openright\cleardoublepage\else\clearpage\fi
69   \thispagestyle{plain}%
70   \global\@topnum\z@
71   \@printcites
72   \@afterindentfalse
73   \secdef\@chapter\@schapter}
74 \renewcommand{\@makechapterhead}[1]{\chapterheadstartvskip%
75   {\size@chapter{\sectfont\raggedleft
76       {\chapnumfont
77         \ifnum \c@secnumdepth >\m@ne%
78         \if@mainmatter\thechapter%
79         \fi\fi
80         \par\nobreak}%
81       {\raggedleft\advance\leftmargin10em\interlinepenalty\@M #1\par}}
82     \nobreak\chapterheadendvskip}}
83 \renewcommand{\@makeschapterhead}[1]{%
84   {\let\c@secnumdepth\m@ne\@makechapterhead{#1}}}
85 \newcommand*{\@iprintcites}{%
86   \vbox to\z@{\copy\@quotebox\vss}
87   \global\let\@printcites\relax}
```

And this is it. Happy TeXing!