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.

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 *iNAb*ook 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.

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.

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}

\chapter{Classic Sesame Street}

—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

\begin{savequote}

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 \Required 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.

\newif\if@usecolor\@usecolortrue
\DeclareOption{grey}{\@usecolortrue}
\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.

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

\begin{verbatim}
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}{LinuxBiolinumO-LF}}
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}{LinuxLibertineO-LF}}
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}}
\end{verbatim}

We can now let the options be processed. If no postscript font has been specified, the default is Adobe’s Bookman.

\begin{verbatim}
26 \ProcessOptions\relax
27 \providecommand*{\@defaultcnfont}{pbk}
\end{verbatim}

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.

\begin{verbatim}
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\fi
41 \providecommand*{\color}[1]{}
\end{verbatim}

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 \texttt{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 \texttt{newenvironment} implies a group, we have to make the box \texttt{\@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 \texttt{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\quad\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.

\newsavebox{\@quotebox}
\let\@printcites\relax
\renewcommand\chapter{%
  \if@openright\cleardoublepage\else\clearpage\fi
  \thispagestyle{plain}%
  \global\topnum\z@\n\@printcites
\@afterindentfalse
\secdef\@chapter\@schapter}
\renewcommand{\@makechapterhead}{[1]{\chapterheadstartvskip%
  \size@chapter{\sectfont\raggedleft
    \ifnum \c@secnumdepth >\m@ne%
    \if@mainmatter thechapter%
    \fi\fi%
    \par\nobreak}%
  \raggedleft\advance\leftmargin10em\interlinepenalty\@M #1\par}}
\nobreak\chapterheadendvskip}}
\renewcommand{\@makeschapterhead}{%
  \let\c@secnumdepth\m@ne\@makechapterhead{#1}}
\newcommand*{\@iprintcites}{
  \vbox to\z@{
    \copy\@quotebox\vss
  }
  \global\let\@printcites\relax}

And this is it. Happy \TeX\!ing!