The *quotchap* package*

Karsten Tinnefeld†  Jan Klever
jasa.klever@gmx.de

printed July 9, 2019

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.

\begin{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

\*This file has version number v1.2, last revised on 2019/07/09, documentation dated 2019/07/09.
†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.

\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.

\quotefont The font for quotations can be set globally with \quotefont. For example: \renewcommand\quotefont{\sffamily\slshape}. The default is \slshape.

\qauthorfont The font for the author of the quote can be set globally with \qauthorfont. For example: \renewcommand\qauthorfont{\scshape}. The default ist \upshape.

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}

(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 \texttt{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 `\RequiredPackages` in here and thus define a flag: `@usecolor` is true whenever the `grey` option is specified.

```latex
\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 used for the chapter numbers. I ignore the font\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.

\DeclareOption{avantgarde}{\@newfontcmd{\@defaultcnfont}{pag}}
\DeclareOption{beramono}{\@newfontcmd{\@defaultcnfont}{fvm}}
\DeclareOption{berasans}{\@newfontcmd{\@defaultcnfont}{fvs}}
\DeclareOption{beraserif}{\@newfontcmd{\@defaultcnfont}{fve}}
\DeclareOption{biolinum}{\@newfontcmd{\@defaultcnfont}{LinuxBiolinumO-LF}}
\DeclareOption{bookman}{\@newfontcmd{\@defaultcnfont}{pbk}}
\DeclareOption{charter}{\@newfontcmd{\@defaultcnfont}{bch}}
\DeclareOption{courier}{\@newfontcmd{\@defaultcnfont}{pcr}}
\DeclareOption{helvetica}{\@newfontcmd{\@defaultcnfont}{phv}}
\DeclareOption{kpfonts}{\@newfontcmd{\@defaultcnfont}{jkp}}
\DeclareOption{libertine}{\@newfontcmd{\@defaultcnfont}{LinuxLibertineO-LF}}
\DeclareOption{lmodern}{\@newfontcmd{\@defaultcnfont}{lmr}}
\DeclareOption{newcentury}{\@newfontcmd{\@defaultcnfont}{pnc}}
\DeclareOption{palatino}{\@newfontcmd{\@defaultcnfont}{ppl}}
\DeclareOption{times}{\@newfontcmd{\@defaultcnfont}{ptm}}
\DeclareOption{utopia}{\@newfontcmd{\@defaultcnfont}{put}}

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

\ProcessOptions\relax
\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.

\if@usecolor
\IfFileExists{color.sty}{%
\RequirePackage{color}
\definecolor{chaptergrey}{rgb}{0.6,0.6,0.6}{%}
\PackageError{quotchap}{%The color package is apparently unavailable.\MessageBreak
Turn off the ‘grey’ option and come back again}{%Since you did not say ‘nogrey’, quotchap defined chapter numbers to appear\MessageBreak grey. You do not need a color
\else
\PackageWarning{quotchap}{%You have tried to specify more than one font to be used for the chapter numbers. I ignore the font\CurrentOption'}
\endinput
\fi
printer, since most printing devices can cope\MessageBreak with
grey scales, but you need the color package coming with the
\graphics\MessageBreak bundle available from CTAN.}}
\else
\providecommand*{\color}{[1]}\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.
\AtEndOfPackage{%
\newcommand*{\chapnumfont}{%\usefont{T1}{\@defaultcnfont}{b}{n}\fontsize{100}{130}\selectfont%
\let\size@chapter\huge
\providecommand*{\chapterheadstartvskip}{\vspace*{2.3\baselineskip}}
\providecommand*{\chapterheadendvskip}{\vspace{1.7\baselineskip}}
\providecommand*{\sectfont}{\relax}
\providecommand*{\quotefont}{\slshape}
\providecommand*{\qauthorfont}{\upshape}
\@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.)
\newenvironment{savequote}{10cm}{%
\begin{lrbox}{\@quotebox}{\begin{minipage}[t]{#1}\footnotesize\quotefont
\ignorespaces%
\unskip\end{minipage}\end{lrbox}
\global\setbox\@quotebox\copy\@quotebox
\global\let@printcites@iprintcites
\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.
\newcommand{\qauthor}{1}{
The user can set any font for the chapter number by providing its family name to this command.

\newcommand{\qsetcnfont}[1]{\renewcommand*{\@defaultcnfont}{#1}}

5.3 Making up the chapter heading

Here are the modifications 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}\@printcites\@afterindentfalse\secdef\@chapter\@schapter}
\renewcommand{\@makechapterhead}[1]{\chapterheadstartvskip\size\sectfont\raggedleft\chapnumfont\ifnum \c@secnumdepth >\m@ne\if@mainmatter\thechapter\fi\fi\par\nobreak}{\raggedleft\advance\leftmargin10em\interlinepenalty\@M #1\par}}\nobreak\chapterheadendvskip}
\renewcommand{\@makeschapterhead}[1]{\let\c@secnumdepth\m@ne\@makechapterhead{#1}}
\newcommand*{\@iprintcites}{\vbox to\z@{\copy\@quotebox\vss}\global\let\@printcites\relax}

And this is it. Happy \TeXing!