Various chapter styles for the memoir class[*]

Lars Madsen[†]

April 3, 2006

The main idea behind this document is to demonstrate various either contributed or inspired chapter styles for the memoir class.

If you have style you would like to contribute a style/implementation, please send it with a minimal example to daleif+memoir@imf.au.dk and I will include it into this document.

<p style="text-align:center">* * *</p>

The visual examples you will find later in this document have all been made using external documents and included as images (eps or pdf). As such, all images are scaled to have the same width as the text in this document, therefore some images are scaled down.

Also, please do not trust the spacing between the chapter title and the start of the following text. This \afterchapskip-spacing is silently reduced (to \onelineskip) in order to save space, the same goes for \beforechapskip.

<p style="text-align:center">* * *</p>

In any good chapter style design one should have given a thought at both the normal numbered style as well as the unnumbered style. Therefore the example text features both a numbered chapter and an unnumbered. (I have relaxed \clearforchapter in order to have both on the same side.)

The sample text used is

```
――――――――――――――――― chapterexample.tex ―――――――――――――――――
%% LaTeX2e file 'chapterexample.tex'
%% generated by the 'filecontents' environment
%% from source 'MemoirChapStyles' on 2006/04/03.
%%
\chapter{A chapter title}
Some text at the beginning of a chapter. And we add a lot of text to
make sure that it spans more than one line.
\fancybreak{$***$}
\chapter*{A non-numbered chapter title}
Some text at the beginning of a chapter. And we add a lot of text to
make sure that it spans more than one line.
\thispagestyle{empty}
```

<p style="text-align:center">* * *</p>

If you want to use one of the styles presented in this document, then there is no need to start retyping it all your self. Simply download the source for this document (MemoirChapStyles.tex) from http://www.imf.au.dk/system/latex/artikler/MemoirChapStyles/ (which is where you will find the latest version) or from CTAN, via http://www.ctan.org/tex-archive/info/MemoirChapStyles/. Run it once through LaTeX, then you will get a file called ⟨*Name of style*⟩-style.tex, which is the source code for example displaying that particular style. Then just copy the code from there.

---

[*]Version 1.3, 2006/04/03

[†]Email: daleif@imf.au.dk

Acknowledgement

Acknowledgement goes (of course) to Peter Wilson for creating the memoir class in the first place. But also to the people how contributed with styles or comments: Danie Els, David Chadd, Pluton (name used on CTT) plus the ones who posted memoir chapter styles on news groups, I hope it is okay that I include them here.

TODO

Have a look at the chapter styles offered by `fncychap` and `titlesec`.

Contents

1 A little background

As you might already know the memoir class includes a feature to switch the look and feel of a chapter title on a chapter to chapter basis. This is achieved by using \chapterstyle{⟨*style*⟩}. The most extreme use of this is seen in *The Memoir class For Configurable Typesetting – User Guide* by Peter Wilson, also know as the *Memoir manual*, [1].

In general, LaTeX classes use \@makechapterhead to print a chapter title specified my chapter, and \@makeschapterhead for \chapter*. In memoir Peter Wilson made these two macros a bit more flexible than usual. The idea is not that for numbered chapters (i.e. \chapter and secnumdepth ≥ 0) one should think of the chapter title as build by:

```
\chapterheadstart
\printchaptername \chapternamenum \printchapternum
\afterchapternum
\printchaptertitle{The title}
\afterchaptertitle
```

For unnumbered (i.e. \chapter* and \chapter width secnumdepth < 0):

```
\chapterheadstart
\printchapternonum
\printchaptertitle{The title}
\afterchaptertitle
```

Note that \printchaptertitle is the only macro that takes an argument. At the start of every memoir chapter style these macros are initialised to

---

```
\renewcommand\chapterheadstart{\vspace*{\beforechapskip}}
\renewcommand\printchaptername{\chapnamefont \@chapapp}
\renewcommand\chapternamenum{\space}
\renewcommand\printchapternum{\chapnumfont \thechapter}
\renewcommand\afterchapternum{\par\nobreak\vskip \midchapskip}
\renewcommand\printchapternonum{}
\renewcommand\printchaptertitle[1]{\chaptitlefont #1}
\renewcommand\afterchaptertitle{\par\nobreak\vskip \afterchapskip}
```

So one just have to change the ones one need. There are a few other macros that are nice to know the meaning of. Remember that these are *not* reset at the start of a new chapter style.

\beforechapskip length, self explanatory,usually set using \chapterheadstart, default 50pt

\midchapskip length, distance between the chapter name / number and the title, usually set using \afterchapternum, default 20pt

\afterchapskip length, distance between the chapter title and the following text, usually set using \afterchaptertitle, default 40pt

\chapnamefont the font setting used for *Chapter* or similar, default \normalfont\huge\bfseries

\chapnumfont same for the chapter number, default \normalfont\huge\bfseries

\chaptitlefont same for the chapter title, default \normalfont\Huge\bfseries

One might ask what `\printchapternonum` is good for when it is always initialised to nothing. Well if a design need to one could use it to insert a phantom width as wide as the chapter name plus number would have been. If on the other hand one is creating a style where the chapter name and number is actually typeset using `\printchaptertitle` (like a framed one) then one could first define a new if construction, say, `\ifNoChapNum` and then let `\printchapternonum` set this to true and so on.

In memoir a new chapter style is defined as

```
\makechapterstyle{⟨name⟩}{
⟨code⟩
}
```

Where ⟨code⟩ is redefinitions of the macros mentioned above. (Remember that if you redefine `\printchaptertitle` then you have to use `##1` to represent the title.) Activating a given style is done by simply issuing

```
\chapterstyle{⟨name⟩}
```

By the way, if you happen to like a given style but wanted to, say, add color to the chapter title, you could just refined `\chaptitlefont` after use issued `\chapterstyle`. (Even simpler to just use `\addtodef\chaptitlefont{}{\color{nicered}}`.)

As a simple example here is the code for the `section` chapter style

─────────────── Source code for the section chapter style ───────────────
```
\makechapterstyle{section}{%
  \renewcommand{\printchaptername}{}
  \renewcommand{\chapternamenum}{}
  \renewcommand{\chapnumfont}{\normalfont\Huge\bfseries}
  \renewcommand{\printchapternum}{\chapnumfont \thechapter\space}
  \renewcommand{\afterchapternum}{}
}
```
───

2 Default styles included in memoir

First we have the six default chapterstyles in the memoir class. The source code for these can be found in `memoir.cls`.

─────────────────────── Source for the **default** style ───────────────────────

```
\chapterstyle{default}
```

Chapter 1

A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

* * *

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

─────────────────────── Source for the **section** style ───────────────────────

```
\chapterstyle{section}
```

---

1 A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

* * *

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

```
\chapterstyle{hangnum}
```

1   A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

* * *

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

```
\chapterstyle{companion}
```

CHAPTER 1

A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

* * *

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.
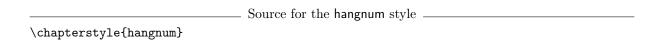
1   A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

<div align="center">* * *</div>

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

One

A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

<div align="center">* * *</div>

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

<div align="center">* * *</div>

The memoir manual also mentions a style called **veelo**, by Bastiaan Veelo

```
\makeatletter
\usepackage{graphicx}
\newlength{\numberheight}
\newlength{\barlength}
\makechapterstyle{veelo}{%
   \setlength{\beforechapskip}{40pt}
   \setlength{\midchapskip}{25pt}
   \setlength{\afterchapskip}{40pt}
   \renewcommand{\chapnamefont}{\normalfont\LARGE\flushright}
   \renewcommand{\chapnumfont}{\normalfont\HUGE}
   \renewcommand{\chaptitlefont}{\normalfont\HUGE\bfseries\flushright}
   \renewcommand{\printchaptername}{%
     \chapnamefont\MakeUppercase{\@chapapp}}
   \renewcommand{\chapternamenum}{}
   \setlength{\numberheight}{18mm}
   \setlength{\barlength}{\paperwidth}
   \addtolength{\barlength}{-\textwidth}
   \addtolength{\barlength}{-\spinemargin}
   \renewcommand{\printchapternum}{%
     \makebox[0pt][l]{%
       \hspace{.8em}%
       \resizebox{!}{\numberheight}{\chapnumfont \thechapter}%
       \hspace{.8em}%
       \rule{\barlength}{\numberheight}}}
   \makeoddfoot{plain}{}{}{\thepage}
}
\makeatother
\chapterstyle{veelo}
```

CHAPTER 1 ██████

A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make
sure that it spans more than one line.

* * *

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make
sure that it spans more than one line.

Another example from the manual is a style based upon the design used in Robert Bringhursts, *The Elements of Typographic Style.*

―――――――――――――――――― Source for the bringhurst style ――――――――――――――――――

```
\makechapterstyle{bringhurst}{%
\renewcommand{\chapterheadstart}{}
\renewcommand{\printchaptername}{}
\renewcommand{\chapternamenum}{}
\renewcommand{\printchapternum}{}
\renewcommand{\afterchapternum}{}
\renewcommand{\printchaptertitle}[1]{%
  \raggedright\Large\scshape\MakeLowercase{##1}}
\renewcommand{\afterchaptertitle}{%
  \vskip\onelineskip \hrule\vskip\onelineskip}
}
\chapterstyle{bringhurst}
```

A CHAPTER TITLE

――

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

* * *

A NON-NUMBERED CHAPTER TITLE

――

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

Which is a very simple, but nice design. The most radical thing about the Bringhurst design is actually the quite odd headers, which are placed in the outer margins a bit down the page. See [1] for more information.

Styles memtioned in the memoir addendum

Style to replicate the appearance of `\section` in the article class. The style is currently a part of `mempath.sty`.

```
\chapterstyle{reparticle}
```

1   A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

<div align="center">* * *</div>

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

The difference between this style and the section style is the way a long title text is handled. Style originally by Thomas Dye, inspired by a style used in a book by Aidan Southall.

```
%% Thomas Dye's southall chapter style
\newlength{\headindent}
\newlength{\rightblock}
\makechapterstyle{southall}{%
  \setlength{\headindent}{36pt}
  \setlength{\rightblock}{\textwidth}
  \addtolength{\rightblock}{-\headindent}
  \setlength{\beforechapskip}{2\baselineskip}
  \setlength{\afterchapskip}{5\baselineskip}
  \setlength{\midchapskip}{0pt}
  \renewcommand{\chaptitlefont}{\huge\rmfamily\raggedright}
  \renewcommand{\chapnumfont}{\chaptitlefont}
  \renewcommand{\printchaptername}{}
  \renewcommand{\chapternamenum}{}
  \renewcommand{\afterchapternum}{}
  \renewcommand{\printchapternum}{%
    \begin{minipage}[t][\baselineskip][b]{\headindent}
      {\vspace{0pt}\chapnumfont%%\figureversion{lining}
        \thechapter}
    \end{minipage}}
  \renewcommand{\printchaptertitle}[1]{%
    \hfill\begin{minipage}[t]{\rightblock}
      {\vspace{0pt}\chaptitlefont ##1\par}\end{minipage}}
  \renewcommand{\afterchaptertitle}{%
    \par\vspace{\baselineskip}%
    \hrulefill \par\nobreak\noindent \vskip\afterchapskip}
}
\chapterstyle{southall}
```

1 A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

<p style="text-align:center">∗ ∗ ∗</p>

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

Style based on the chapter heads found in Warren Chappell and Robert Bringhurst: *A Short History of the Printed Word.* Hartley & Marks, 1999.

─────────────────────── Source for the chappell style ───────────────────────
```
\makechapterstyle{chappell}{
  \setlength\beforechapskip{0pt}
  \renewcommand*\chapnamefont{\large\centering}
  \renewcommand*\chapnumfont{\large}
  \renewcommand*\printchapternonum{%
    \vphantom{\printchaptername}%
    \vphantom{\chapnumfont 1}%
    \afterchapternum
    \vskip -\onelineskip}
  \renewcommand*\chaptitlefont{\Large\itshape}
  \renewcommand*\printchaptertitle[1]{%
    \hrule\vskip\onelineskip\centering\chaptitlefont ##1}
}
\chapterstyle{chappell}
```
──

<div style="border:1px solid black;">

<div align="center">Chapter 1</div>

<div align="center">*A chapter title*</div>

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

<div align="center">* * *</div>

<div align="center">*A non-numbered chapter title*</div>

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

</div>

3 Styles found via Google Groups

Style posted on CTT 2006/01/31 by Troels Pedersen. I changed the color, and also altered the original `\marginpar` to a `\sidebar`, since the `\marginpar` is a movable float, which might look odd in some cases.

——————————— Source for the TroelsPedersen style ———————————

```
\usepackage{graphicx,color}
\definecolor{nicered}{rgb}{.647,.129,.149}
\makeatletter
\newlength{\numberheight}
\makechapterstyle{TroelsPedersen}{%
   \setlength{\beforechapskip}{-20pt}
   \setlength{\midchapskip}{0pt}
   \setlength{\afterchapskip}{10pt}
   \renewcommand{\chapnamefont}{\normalfont\LARGE\itshape}
   \renewcommand{\chapnumfont}{\normalfont\HUGE\itshape\color{nicered}}
   \renewcommand{\chaptitlefont}{\normalfont\huge\itshape\color{nicered}}
   \renewcommand{\afterchapternum}{}
   \renewcommand{\printchaptername}{}
   \setlength{\numberheight}{20mm}
   \renewcommand{\chapternamenum}{}%
   \renewcommand{\printchapternum}{%
     \sidebar{\makebox[0pt][l]{%
        \resizebox{!}{\numberheight}{\chapnumfont\thechapter}}}}%
   \renewcommand\printchaptertitle[1]{\chaptitlefont##1}
}
\makeatother
\chapterstyle{TroelsPedersen}
```
———

A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

<div align="center">* * *</div>

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

Posted in a question on CTT 2006/02/09 by Anders Lyhne. (I added `\raggedleft` to the `\chaptitlefont` and added the `\printchapternonum` line.)

──────────── Source for the AndersLyhne style ────────────

```
\usepackage{graphicx}
\makechapterstyle{AndersLyhne}{%
  \newlength{\chapterlineskipx}
  \setlength{\chapterlineskipx}{0.2cm}
  \setlength{\beforechapskip}{1.5cm}
  \setlength{\afterchapskip}{1cm}
  \setlength{\midchapskip}{2cm}
  \renewcommand\chapnamefont{\normalfont\normalsize\scshape\raggedleft}
  \renewcommand\chaptitlefont{\normalfont\normalsize\bfseries\sffamily\raggedleft}
  \renewcommand\chapternamenum{}
  \renewcommand\printchapternum{\makebox[0pt][l]{\hspace{0.2em}%
      \resizebox{!}{2ex}{\chapnamefont\bfseries\sffamily\thechapter}}}
  \renewcommand\afterchapternum{\par\hspace{1.5cm}\hrule\vspace{0.2cm}}
  \renewcommand\printchapternonum{\par}
  \renewcommand\afterchaptertitle{\vskip\chapterlineskipx
    \hrule\vskip\afterchapskip}
}
\chapterstyle{AndersLyhne}
```
──

A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

<div align="center">* * *</div>

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

This styles is a modified verion of a style posted by Peter Wilson in an answer on CTT on 2005/01/18. I made sure that the chapter number disappears in the unnumbered version. I out-commented the \cleardoublepage because of space issues for this document.

──────── Source for the PeterWilson1 style ────────

```
\newif\ifNoCHapNum
\makechapterstyle{PeterWilson1}{%
  \setlength{\beforechapskip}{0pt}
  \renewcommand{\printchaptername}{}
  \renewcommand{\printchapternum}{}
  \setlength{\midchapskip}{0pt}
  \renewcommand{\printchaptertitle}[1]{%
    \hrule \vskip 0.5\onelineskip
    \Huge \hspace{0pt}\hfill\ifNoCHapNum\relax\else\thechapter.\ \fi
    ##1 \hfill\hspace{0pt}
    \NoCHapNumfalse%
    \vskip 0.5\onelineskip
    \hrule}
  \renewcommand\printchapternonum{\NoCHapNumtrue}
%  \renewcommand{\afterchaptertitle}{\cleardoublepage}
}
\chapterstyle{PeterWilson1}
```

1. A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

$$* * *$$

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

Style by Scott Thatcher, posted on CTT 2006/01/18.

—————————————— Source for the **ScottThatcher** style ——————————————

```
\makechapterstyle{ScottThatcher}{%
  \renewcommand{\chapterheadstart}{}
  \renewcommand{\chaptitlefont}{\large}
  \renewcommand{\chapnumfont}{\scshape\MakeLowercase}
  \renewcommand{\printchaptername}{\centerline{\chapnumfont{Chapter
        \thechapter}}}
  \renewcommand{\chapternamenum}{}
  \renewcommand{\printchapternum}{}
  \renewcommand{\afterchapternum}{%
    \par\centerline{\parbox{0.5in}{\hrulefill}}\par}
  \renewcommand{\printchaptertitle}[1]{%
    \centerline{\chaptitlefont\MakeUppercase{##1}}}
}
\chapterstyle{ScottThatcher}
```

———

CHAPTER 1
————

A CHAPTER TITLE

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

$$* * *$$

A NON-NUMBERED CHAPTER TITLE

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

By Alexander Grebenkov 2004/11/25, found via Google Groups on fido.ru.tex.

```
   \makechapterstyle{AlexanderGrebenkov}{%
 \renewcommand{\chapterheadstart}{\vspace*{\beforechapskip}\hrule\medskip}
 \renewcommand{\chapnamefont}{\normalfont\large\scshape}
 \renewcommand{\chapnumfont}{\normalfont\large\scshape}
 \renewcommand{\chaptitlefont}{\normalfont\large\scshape}
 \renewcommand{\printchaptername}{\S}
 \renewcommand{\chapternamenum}{ }
 \renewcommand{\printchapternum}{\chapnumfont \thechapter}
 \renewcommand{\afterchapternum}{. }
 \renewcommand{\afterchaptertitle}{\par\nobreak\medskip\hrule\vskip
\afterchapskip}
}
\chapterstyle{AlexanderGrebenkov}
```

---

§ 1. A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make
sure that it spans more than one line.

<div align="center">* * *</div>

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make
sure that it spans more than one line.

---

4 Contributed styles

First here are are few of my own.

```
\usepackage{color,calc,graphicx,soul,fourier}
\definecolor{nicered}{rgb}{.647,.129,.149}
\makeatletter
\newlength\dlf@normtxtw
\setlength\dlf@normtxtw{\textwidth}
\def\myhelvetfont{\def\sfdefault{mdput}}
\newsavebox{\feline@chapter}
\newcommand\feline@chapter@marker[1][4cm]{%
  \sbox\feline@chapter{%
    \resizebox{!}{#1}{\fboxsep=1pt%
      \colorbox{nicered}{\color{white}\bfseries\sffamily\thechapter}%
    }}%
  \rotatebox{90}{%
    \resizebox{%
      \heightof{\usebox{\feline@chapter}}+\depthof{\usebox{\feline@chapter}}}%
```

```
    {!}{\scshape\so\@chapapp}}\quad%
  \raisebox{\depthof{\usebox{\feline@chapter}}}{\usebox{\feline@chapter}}%
}
\newcommand\feline@chm[1][4cm]{%
  \sbox\feline@chapter{\feline@chapter@marker[#1]}%
  \makebox[0pt][l]{% aka \rlap
    \makebox[1cm][r]{\usebox\feline@chapter}%
  }}
\makechapterstyle{daleif1}{
  \renewcommand\chapnamefont{\normalfont\Large\scshape\raggedleft\so}
  \renewcommand\chaptitlefont{\normalfont\huge\bfseries\scshape\color{nicered}}
  \renewcommand\chapternamenum{}
  \renewcommand\printchaptername{}
  \renewcommand\printchapternum{\null\hfill\feline@chm[2.5cm]\par}
  \renewcommand\afterchapternum{\par\vskip\midchapskip}
  \renewcommand\printchaptertitle[1]{\chaptitlefont\raggedleft ##1\par}
}
\makeatother
\chapterstyle{daleif1}
```

<div style="text-align:right">

CHAPTER

1

</div>

<div style="text-align:right">

A CHAPTER TITLE

</div>

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

<div style="text-align:center">* * *</div>

<div style="text-align:right">

A NON-NUMBERED CHAPTER TITLE

</div>

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

This style will be used in the next version of my LaTeX book. This next style was made one late night for a talk about memoir in the Danish TeX Users Group. It has later been used in a few master theses.

—————————————— Source for the daleif2 style ——————————————

```
\usepackage{graphicx}
\makechapterstyle{daleif2}{
```

```
\renewcommand\chapnamefont{\normalfont\Large\scshape\raggedleft}
\renewcommand\chaptitlefont{\normalfont\Huge\bfseries\sffamily\raggedleft}
\renewcommand\chapternamenum{}
\renewcommand\printchapternum{%
  \makebox[0pt][l]{\hspace{0.4em}%
    \resizebox{!}{4ex}{\chapnamefont\bfseries\sffamily\thechapter}}}
\renewcommand\afterchapternum{\par\hspace{1.5cm}\hrule\vskip\midchapskip}
}
\chapterstyle{daleif2}
```

CHAPTER **1**

A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make
sure that it spans more than one line.

$* * *$

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make
sure that it spans more than one line.

Danie Els contributed the following style along with the BlueBox style on page .

———————————————— Source for the GreyNum style ————————————————

```
\usepackage{fix-cm}
\usepackage{fourier}%................... Roman+math - Utopia
\usepackage[scaled=.92]{helvet}%....... Sans serif - Helvetica
\usepackage[T1]{fontenc}
\usepackage{color}
\definecolor{ChapGrey}{rgb}{0.6,0.6,0.6}
\newcommand{\LargeFont}{% Needs a 'stretchable' font
    \usefont{\encodingdefault}{\rmdefault}{b}{n}%
    \fontsize{60}{80}\selectfont\color{ChapGrey}}
\makeatletter
\makechapterstyle{GreyNum}{%
  \renewcommand{\chapnamefont}{\large\sffamily\bfseries\itshape}
  \renewcommand{\chapnumfont}{\LargeFont}
  \renewcommand{\chaptitlefont}{\Huge\sffamily\bfseries\itshape}
  \setlength{\beforechapskip}{0pt}
  \setlength{\midchapskip}{40pt}
  \setlength{\afterchapskip}{60pt}
  \renewcommand\chapterheadstart{\vspace*{\beforechapskip}}
  \renewcommand\printchaptername{%
```

```
    \begin{tabular}{@{}c@{}}
      \chapnamefont \@chapapp\\}
    \renewcommand\chapternamenum{\noalign{\vskip 2ex}}
    \renewcommand\printchapternum{\chapnumfont\thechapter\par}
    \renewcommand\afterchapternum{%
    \end{tabular}
    \par\nobreak\vskip\midchapskip}
  \renewcommand\printchapternonum{}
  \renewcommand\printchaptertitle[1]{%
    {\chaptitlefont{##1}\par}}
  \renewcommand\afterchaptertitle{\par\nobreak\vskip \afterchapskip}
}
\makeatother
\chapterstyle{GreyNum}
```

Chapter

1

A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

$* * *$

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

Danie notes:

This looks a lot better with real italics sans-serif fonts such as Lucida Sans
```
\usepackage[expert,vargreek]{lucidabr}%.. Lucida Bright + Expert (commercial)
```
or Myrad
```
\usepackage{charter}%........... Roman     - Charter
\renewcommand{\sfdefault}{fmy}%. Sans serif - Myrad (Springer bundle)
```

5   Vincent Zoonekynd

Some time ago Vincent Zoonekynd published a long list of general chapter styles for LaTeX, see http://zoonek.free.fr/LaTeX/LaTeX_samples_chapter/0.html. In this section we implement several of these styles. Special thanks to Danie Els for the BlueBox style (aka VZ39).

The styles are named after Vincent Zoonekynd (VZ) and the number on the mentioned page.

──────────── Source for the VZ14 style ────────────

```
\makeatletter
\newcommand\thickhrulefill{\leavevmode \leaders \hrule height 1ex \hfill \kern \z@}
\setlength\midchapskip{10pt}
\makechapterstyle{VZ14}{
  \renewcommand\chapternamenum{}
  \renewcommand\printchaptername{}
  \renewcommand\chapnamefont{\Large\scshape}
  \renewcommand\printchapternum{%
    \chapnamefont\null\thickhrulefill\quad
    \@chapapp\space\thechapter\quad\thickhrulefill}
  \renewcommand\printchapternonum{%
    \par\thickhrulefill\par\vskip\midchapskip
    \hrule\vskip\midchapskip
  }
  \renewcommand\chaptitlefont{\Huge\scshape\centering}
  \renewcommand\afterchapternum{%
    \par\nobreak\vskip\midchapskip\hrule\vskip\midchapskip}
  \renewcommand\afterchaptertitle{%
    \par\vskip\midchapskip\hrule\nobreak\vskip\afterchapskip}
}
\makeatother
\chapterstyle{VZ14}
```

──────────────────────────────────────

▬▬▬▬▬ CHAPTER 1 ▬▬▬▬▬

A CHAPTER TITLE

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

∗ ∗ ∗

▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬

A NON-NUMBERED CHAPTER TITLE

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

Variation over VZ15.

```
\usepackage{pifont,graphicx}
\newcommand\mylleaf{\ding{'247}}
\newcommand\myrleaf{\reflectbox{\mylleaf}}
\newcommand\MyNumToName[1]{%
  \ifcase#1\relax % case 0
  \or First\or Second\or Third%
  \else Not implemented\fi}
\makeatletter
\setlength\midchapskip{10pt}
\makechapterstyle{VZ15b}{
  \renewcommand\chapternamenum{}
  \renewcommand\printchaptername{}
  \renewcommand\chapnamefont{\Large\scshape}
  \renewcommand\printchapternum{%
    \chapnamefont\null\hfill\mylleaf\quad
    \MyNumToName{\thechapter}\space\@chapapp\quad\myrleaf\hfill\null}
  \renewcommand\printchapternonum{%
    \par\hrule\vskip\midchapskip}
  \renewcommand\chaptitlefont{\Huge\scshape\centering}
  \renewcommand\afterchapternum{%
    \par\nobreak\vskip\midchapskip\hrule\vskip\midchapskip}
  \renewcommand\afterchaptertitle{%
    \par\vskip\midchapskip\hrule\nobreak\vskip\afterchapskip}
}
\makeatother
\chapterstyle{VZ15b}
```

❧ First Chapter ❧

A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make
sure that it spans more than one line.

∗ ∗ ∗

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make
sure that it spans more than one line.

Though I believe this style would look better without the lines.

Variation over VZ21. Note the use of two different tabulars depending upon the length of the title. Also note that we use the build-in booktabs rules, and note that the thickness of these rules can be individually adjusted.

———————————————— *Source for the VZ21 style* ————————————————

```
\usepackage{calc,fourier}
\usepackage[T1]{fontenc}
\makeatletter
\setlength\midchapskip{7pt}
\makechapterstyle{VZ21}{
  \renewcommand\chapnamefont{\Large\scshape}
  \renewcommand\chapnumfont{\Large\scshape\centering}
  \renewcommand\chaptitlefont{\huge\bfseries\centering}
  \renewcommand\printchaptertitle[1]{%
    \setlength\tabcolsep{7pt}% used as indentation on both sides
    \settowidth\@tempdimc{\chaptitlefont ##1}%
    \setlength\@tempdimc{\textwidth-\@tempdimc-2\tabcolsep}%
    \chaptitlefont
    \ifdim\@tempdimc > 0pt\relax% one line
    \begin{tabular}{c}
      \toprule  ##1\\ \bottomrule
    \end{tabular}
    \else% two+ lines
    \begin{tabular}{%
        >{\chaptitlefont\arraybackslash}p{\textwidth-2\tabcolsep}}
      \toprule ##1\\ \bottomrule
    \end{tabular}
    \fi
  }
}
\makeatother
\chapterstyle{VZ21}
```

CHAPTER 1

———————————————————————

A CHAPTER TITLE

———————————————————————

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

* * *

———————————————————————

A non-numbered chapter title

———————————————————————

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

Next up is VZ23.

```
\setlength\midchapskip{10pt}
\makechapterstyle{VZ23}{
  \renewcommand\chapternamenum{}
  \renewcommand\printchaptername{}
  \renewcommand\chapnumfont{\Huge\bfseries\centering}
  \renewcommand\chaptitlefont{\Huge\scshape\centering}
  \renewcommand\afterchapternum{%
    \par\nobreak\vskip\midchapskip\hrule\vskip\midchapskip}
  \renewcommand\printchapternonum{%
    \vphantom{\chapnumfont \thechapter}
    \par\nobreak\vskip\midchapskip\hrule\vskip\midchapskip}
}
\chapterstyle{VZ23}
```

1

A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

<div align="center">* * *</div>

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

A variation over VZ34 (in the original the first cell in the tabular adjusts to the width of the chapter number, here it does not).

```
\usepackage{calc}
\newif\ifNoChapNumber
\makeatletter
\makechapterstyle{VZ34}{
  \renewcommand\chapternamenum{}
  \renewcommand\printchaptername{}
  \renewcommand\printchapternum{}
  \renewcommand\chapnumfont{\Huge\bfseries}
  \renewcommand\chaptitlefont{\Huge\bfseries\raggedright}
  \renewcommand\printchaptertitle[1]{%
    \begin{tabular}{@{}p{1cm}|!{\quad}p{\textwidth-1cm-2em-4\tabcolsep }}
      \ifNoChapNumber\relax\else\chapnumfont \thechapter\fi
```

```
      & \chaptitlefont ##1
    \end{tabular}
    \NoChapNumberfalse
  }
  \renewcommand\printchapternonum{\NoChapNumbertrue}
}
\chapterstyle{VZ34}
```

1 | A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

*** A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

Variation over VZ39, contributed by Danie Els.

——————————————— Source for the BlueBox style ———————————————

```
\usepackage{fourier} % or what ever
\usepackage[scaled=.92]{helvet}%. Sans serif - Helvetica
\usepackage{color,calc}
\newsavebox{\ChpNumBox}
\definecolor{ChapBlue}{rgb}{0.00,0.65,0.65}
\makeatletter
\newcommand*{\thickhrulefill}{%
  \leavevmode\leaders\hrule height 1\p@ \hfill \kern \z@}
\newcommand*\BuildChpNum[2]{%
  \begin{tabular}[t]{@{}c@{}}
    \makebox[0pt][c]{#1\strut}  \\[.5ex]
    \colorbox{ChapBlue}{%
      \rule[-10em]{0pt}{0pt}%
      \rule{1ex}{0pt}\color{black}#2\strut
      \rule{1ex}{0pt}}%
  \end{tabular}}
\makechapterstyle{BlueBox}{%
  \renewcommand{\chapnamefont}{\large\scshape}
  \renewcommand{\chapnumfont}{\Huge\bfseries}
  \renewcommand{\chaptitlefont}{\raggedright\Huge\bfseries}
  \setlength{\beforechapskip}{20pt}
  \setlength{\midchapskip}{26pt}
  \setlength{\afterchapskip}{40pt}
  \renewcommand{\printchaptername}{}
  \renewcommand{\chapternamenum}{}
```

```
  \renewcommand{\printchapternum}{%
    \sbox{\ChpNumBox}{%
      \BuildChpNum{\chapnamefont\@chapapp}%
      {\chapnumfont\thechapter}}}
  \renewcommand{\printchapternonum}{%
    \sbox{\ChpNumBox}{%
      \BuildChpNum{\chapnamefont\vphantom{\@chapapp}}%
      {\chapnumfont\hphantom{\thechapter}}}}
  \renewcommand{\afterchapternum}{}
  \renewcommand{\printchaptertitle}[1]{%
    \usebox{\ChpNumBox}\hfill
    \parbox[t]{\hsize-\wd\ChpNumBox-1em}{%
      \vspace{\midchapskip}%
      \thickhrulefill\par
      \chaptitlefont ##1\par}}%
}
\chapterstyle{BlueBox}
```

1

A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

<div align="center">* * *</div>

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

Style inspired by VZ43

—————————————————— Source for the **VZ43** style ——————————————————

```
\usepackage{calc,color}
\newif\ifNoChapNumber
\newcommand\Vlines{%
  \def\VL{\rule[-2cm]{1pt}{5cm}\hspace{1mm}\relax}
  \VL\VL\VL\VL\VL\VL\VL}
\makeatletter
\setlength\midchapskip{0pt}
\makechapterstyle{VZ43}{
  \renewcommand\chapternamenum{}
  \renewcommand\printchaptername{}
  \renewcommand\printchapternum{}
  \renewcommand\chapnumfont{\Huge\bfseries\centering}
  \renewcommand\chaptitlefont{\Huge\bfseries\raggedright}
  \renewcommand\printchaptertitle[1]{%
```
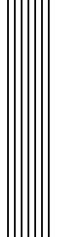
```
    \Vlines\hspace*{-2em}%
    \begin{tabular}{@{}p{1cm} p{\textwidth-3cm}}%
      \ifNoChapNumber\relax\else%
      \colorbox{black}{\color{white}%
        \makebox[.8cm]{\chapnumfont\strut \thechapter}}
      \fi
      & \chaptitlefont ##1
    \end{tabular}
    \NoChapNumberfalse
  }
  \renewcommand\printchapternonum{\NoChapNumbertrue}
}
\makeatother
\chapterstyle{VZ43}
```

1 A chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

$$* * *$$

A non-numbered chapter title

Some text at the beginning of a chapter. And we add a lot of text to make sure that it spans more than one line.

Bibliography

[1] Peter Wilson, *The Memoir Class for Configurable Typesetting – User Guide*, 2005.

[2] Peter Wilson, *ADDENDUM – The Memoir Class for Configurable Typesetting – User Guide*, 2006.

[3] Vincent Zoonekynd. On-line list of different chapter styles for LaTeX. Available at http://zoonek.free.fr/LaTeX/LaTeX_samples_chapter/0.html.