

♦ MMXVII ♦ \*

This class is intended to be an interpretation of the mwbk class from Marcin Woliński's mwcls classes. The mwcls classes are simple, yet powerful and customizable classes that allow the end user to customize the layout of headers, headings etc. They also have the benefit of being more economic in space than the most common LATEX classes, while keeping a clear appearance and a smooth flow.

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### The reasons for this class

Although many usual LATEX packages and classes offer a wide array of solutions for text block and margin specifications, and although some of them, notably Koma-Script (Kohm 2015) allow and facilitate the application of "classical" canons of page construction (Bringhurst 2013; Tschichold 1975), one may have several reasons to avoid this aesthetic solution. One reason is that these page construction methods were intended, obviously, for handwritten or printed material. Even assuming the material is to be printed, one reason to find an alternative is economic and environmental: the more paper you print, the more it

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will cost—both in terms of money and environmental impact. But the user also wishes to avoid a sloppy solution, squeezing as much content as possible onto the page just to save space. The compromise solution would be somewhat closer to what most commercial books look like—without jeopardizing legibility. In fact, it is rare to find a book that looks like it has been laid out according to the "canons". That is one motive why I find the mwcls classes (Woliński 2009) useful. Besides, mwcls alternatives for basic classes (mwart for articles, mwrep for reports and mwbk for books) allow the user to easily modify headings, being somewhat more flexible and providing a simpler interface than many classes. The goal was to provide a more user-friendly syntax for some common tweaks and more alternatives to the end-user. (As for the mwart class, I did not find anything to be changed—although the user might adapt some of the options presented in the ycbook class.)

## 1. Options for chapter and section

To add a rule below chapter and section titles, use chapterrule and sectionrule. Other sectional headings may be changed likewise:

```
\SetSectionFormatting{section}
{24pt plus5pt minus2pt} %space before
{\large\textbf{\ifHeadingNumbered
\HeadingNumber.\enspace\fi
\HeadingText}\\\rule[10pt]{\hsize}{0.4pt}}
{10pt plus3pt}%space after
```

Or this, if you want unnumbered headings to be centralized:

```
\SetSectionFormatting[breakbefore,wholewidth]{chapter}
{12pt}
{\ifHeadingNumbered\FormatBlockHeading{\bfseries\LARGE}
\else \FormatBlockHeading{\centering\bfseries\LARGE}\fi}
{24pt plus9pt}
```

Options chaptercentered, chapterleft, and chapterright control chap- chapterleft ter alignment.

Options nochaptercentered, nochapterleft, and nochapterright control chapter alignment and exclude the name "Chapter" from the entry. The default, as in the mwcls classes, is chapterleft.

If you don't want a dot after section numbers, you can invoke the option nodots. This option does not by itself affect the page headings.

# 2. PAGE STYLES

Several page styles are provided:

\pagestyle{headings}

\pagestyle{myheadings}

chapterrule sectionrule

chaptercentered chapterleft chapterright

nochaptercentered nochapterleft nochapterright nodots

```
\pagestyle{headingsbeforeplain}
\pagestyle{myheadingsbeforeplain}
\pagestyle{uheadings} %for heading rules
\pagestyle{myuheadings} %for heading rules
```

The styles headingsbeforeplain and myheadingsbeforeplain have been added, in which an even empty page finishing a chapter takes the plain style. The default option is headings.

\pagestyle{uheadings} and \pagestyle{myuheadings} may be used
instead, defaulting to more usual parameters, and in which the header is separated by a thin line.

All page styles have an option not to include the dot after the chapter/section number: just add nodots to the name of the usual style:

```
\pagestyle{headingsnodot}
```

\pagestyle{uheadingsnodot}

```
\pagestyle{headingsbeforeplainnodot}
```

And so on.

This class is somewhat compatible with the scrlayer-scrpage (formerly scrpage2) for headers and footers:

```
\usepackage{scrlayer-scrpage}
\clearpairofpagestyles
\pagestyle{scrheadings}
\ofoot{\pagemark}
\chead{A centered heading}
```

For additional information, see chapters 5 and 18 of the Koma-Script manual.

### 3. TABLE OF CONTENTS STYLES

The titletoc package can be used to customize the table of contents. As a convenience, the commands \fancytoc and \traditionaltoc can be used in the preamble to create predefined TOC styles. More styles will be added in the future.

#### 4. FOOTNOTES AND MARGIN PARAGRAPHS

The option sansserifnotes changes all footnotes to sans serif.

The option nofootnoterule removes the footnote rule that separates footnotes from the main text.

The option traditionalfootnote removes indentation of footnotes and also the wider space between the footnote mark and the footnote text.

sansserifnotes nofootnoterule

traditionalfootnote



You can choose to turn all footnotes into margin notes with the footmisc package:

```
\usepackage[side,ragged,flushmargin]{footmisc}
```

Margin paragraphs in two-side documents have been somewhat improved, but should not be overindulged. They don't work particularly well in smaller paper formats.

# 5. Other footnote and header options

If you have ever imagined how to change the color of the header line or the footnote line, two commands are provided:  $coloredheadline{}^1$  and  $coloredfootline{}:$ 

\coloredheadline{JungleGreen}
\coloredfootline{Dandelion}
\pagestyle{uheadings}

# 6. Other options

All other options from the mwcls classes are available, e.g.:

- floatssmall;
- floatsnormalsize;
- sfheadings;
- authortitle (default);
- titleauthor;
- \renewcommand{\sectsettings}{};
- SetTOCIndents,
- indentfirst and noindentfirst,
- wide, for shorter margins, and
- font size and paper specifications (12pt, a5paper, etc.).

# 7. FIGURES SPREADING OVER TWO PAGES

Thanks to Martin Scharrer,<sup>2</sup> we also have \twopagepicture (for numbered pictures) and \twopagepicturen (for unnumbered pictures) to automatically split a picture on a spread (left and right pages).

It works thus: \twopagepicture{image place regarding the caption}
{text width or page width}{image}{caption}:

- \twopagepicture{b}{l}{image}{Test}: image below caption ("b"), same
  width as text ("l");
- \twopagepicture{t}{l}{image}{Test}: image above caption ("t"), same
  width as text ("l");
- \twopagepicture{b}{p}{image}{Test}: image below caption ("b"), same width as page ("p"), and
- \twopagepicture{t}{p}{image}{Test}: image above caption ("t"), same width as page ("p"),

 $^{\scriptscriptstyle 1}$  Colored header lines will only work with the page style uheadings activated.

<sup>&</sup>lt;sup>a</sup> http://tex.stackexchange.com/a/23865/9424

## References

- Bringhurst, Robert (2013). *The Elements of Typographic Style: Version 4.0: 20th Anniversary Edition*. Fourth Edition. Hartley and Marks Publishers.
- Kohm, Marcus (2015). The Koma-script guide. http://mirrors.ctan.org/ macros/latex/contrib/koma-script/doc/scrguien.pdf.
- Tschichold, Jan (1975). *Ausgewählte Aufsätze über Fragen der Gestalt des Buches und der Typographie*. Basel: Birkhäuser Verlag.
- Woliński, Marcin (2009). CTAN: Package mwcls. http://mirrors.ctan.org/ macros/latex/contrib/mwcls/mwclsdoc.pdf.