

Chapter 1

The Setup

1.1 The headers

I use the memoir class here at 12pt default, with the option to work with much higher font sizes. The chapter style, bianchi, is described in the [documentation for the memoir class](#).

The pagestyle is empty as I don't want any page numbers. The aliaspagestyle is sort of a hack so that even chapter-opening pages don't have page numbers.

You might notice that there is a difference in the side margins between pages. This is because of the “twoside” option mentioned above. This makes L^AT_EX setup the pages for two-side printing by flipping the margins on even and odd pages.

```
\documentclass[a4paper,extrafontsizes,12pt,twoside,openany]{memoir}
\chapterstyle{bianchi}
\aliaspagestyle{chapter}{empty}
\pagestyle{empty}
```

1.2 Paragraph styling

The default typesetting of paragraphs in L^AT_EX is by indentation at the beginning of a paragraph. This has been changed to no indent and then a bigger gap between the paragraphs, by modifying the \parskip and \parindent lengths.

```
\setlength\parindent{0in}
\setlength\parskip{1ex}
```

1.3 X_YTeX packages

Since X_YTeX is being used, these three packages are normally included to be able to make the use of Unicode and some additional functionality easier. The options passed to [xcolor](#) to be able to use of names instead of color codes are also needed by the [hyperref](#) package used below.

```
\usepackage{xunicode}  
\usepackage{xltextra}  
\usepackage[dvipsnames,usenames]{xcolor}
```

1.4 Font setup

I'm using the wonderful [fontspec](#) package with it's brilliant [documentation](#). Also, using the [hyperref](#) package to provide all the links you see in this document.

The main font being used is [Linux Libertine](#). I'll explain what the Mapping option is for in [section 2.2](#).

```
\usepackage{fontspec}  
\setromanfont[Mapping=tex-text]{Linux Libertine O}  
\usepackage[colorlinks=true,urlcolor=blue,linkcolor=blue]{hyperref}
```

Chapter 2

More about fonts

2.1 Ligatures

`fontspec` understands OpenType [ligatures](#). Look at the difference between:

Often office offer fjord.

Often office offer fjord.

This was generated using:

```
{\newcommand{\ligs}{0\red{ft}en o\red{ffi}ce o\red{ff}er \red{fj}ord.}
{\Huge {\addfontfeature{Ligatures=NoCommon} \ligs}} \\\
{\Huge {\addfontfeature{Ligatures=Rare} \ligs}}}
```

2.2 Mapping

As you can see below, with the `tex-text` mapping all the usual quotation marks and the [em-dashes](#) are automatically used.

No tex-text mapping		No---No" ' ' ``
With tex-text mapping		No—No” ” “

This was generated using:

```
\begin{tabular}{l || l}
No tex-text mapping & {\addfontfeature{Mapping=} No---No" ' ' ``} \\
With tex-text mapping & {\addfontfeature{Mapping=tex-text} No---No" ' ' ``} \\
\end{tabular}
```

2.3 More font features exposed

Qu has a ligature	Quiet Qantas
Slashed zero. New style	Ø123456789
Old style numbers	0123456789
Fractions	$\frac{1}{3}$ vs $\frac{1}{3}$
Superiors	1234567890 L ^{ibertine}
More ligatures	„st“ „ct“

This was generated using:

```
\newcommand{\aff}{\addfontfeature}
\begin{tabular}{l | l}
Qu has a ligature & {\Huge \red{Qu}iet \red{Q}antas} \\
Slashed zero. New style & {\Huge {\aff{Numbers=SlashedZero} 0123456789}} \\
Old style numbers & {\Huge {\aff{Numbers=OldStyle} 0123456789}} \\
Fractions & {\Huge {\aff{Fractions=On} 1/3} vs 1/3} \\
Superiors & {\Huge {\aff{VerticalPosition=Superior}1234567890 Libertine}} \\
More ligatures & {\Huge {\aff{Ligatures=Historical}„\red{st}" „\red{ct}"}} \\
\end{tabular}
```

Chapter 3

Miscellaneous

3.1 stackrel - One above another

You can put one element above another by using stackrel as mentioned [here](#):

Do this:

```
H$_2$CO$_3$ $\stackrel{heat}{\longrightarrow}$ H$_2$O + CO$_2$
```

It looks like this: $\text{H}_2\text{CO}_3 \xrightarrow{\text{heat}} \text{H}_2\text{O} + \text{CO}_2$