4.8 Working with XeLaTeX

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Most of the things said about pdfLaTeX are valid for XeLaTeX as well.

There is a Wiki at http://wiki.xelatex.org/doku.php that collects information relevant to XeTeX and XeLaTeX.

4.8.1 The Fonts

In addition to the normal `tfm` based fonts, XeLaTeX is able to use any font known to the operating system. If you have the `DejaVu` fonts installed, you can simply say

```
\usepackage[Ligatures=TeX]{fontspec}
\setmainfont{DejaVu Serif}
```

in the preamble. This will normally detect the italic and bold version as well, thus `\textit` and `\textbf` will work as usual. When the font is using Opentype technology you have access to many features which required switching to a separate font or using virtual fonts in the past. The main feature is the extended character set, a font may contain latin, greek and cyrillic characters and the corresponding ligatures. A font can even be aware of the language and adapt to the typographic convention of that language
Is there a font that ac- (like the increased space in front of the large punctuation marks in french).
tually does this? To learn about fonts in XeLaTeX read the fontspec manual.

Where do I get Opentype fonts?

If you have `TeXLive` installed, you already have some at: `.../texmf-dist/fonts/opentype` just install them in you operating system. This collection does not include `DejaVu`, which is available at http://dejavu-fonts.org/.

Make sure that each font is only installed *once*, otherwise interesting results may happen.

Entering Unicode Characters

The number of characters in a font has grown but the number of keys on a regular keyboard has not. So, how do I enter non-ASCII characters?

If you write a large amount of text in a foreign language, you can install a keyboard for that language and print out the character positions. (Most operating system have some sort of virtual keyboard, just make a screenshot.) You can even redefine your keyboard layout and make some characters available for direct entry. There is usually some space in the `option` and `shift-option` area.

If you rarely need an exotic character, you can simply pick it in the character palette.

Some editors support digraphs, two letters that are combined into on character. (In Vim `ctrl-k o:` will be transformed into an ö, `ctrl-k JA` will created the mirrored R used by a russian toy store chain.)

How do you do this in emacs?

4.8.2 Compatibility Between XeLATEX and pdfLATEX

There are a few things that are different between XeLATEX and pdfLATEX.

- A XeLATEX document has to be written in Unicode (UTF-8) while pdfLATEX may use different input encodings.

- The microtype packages does not work with XeLATEX yet, support for character protrusion is already under development.

- Everything font related has to be reviewed. (Unless you want to stick to Latin Modern.)