The `libgreek` package

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Abstract

The `libgreek` package[1] allows (PDF)LATEX users to use the Greek letters from the Libertine/Biolinum fonts of the `libertine-legacy`[2] package (or earlier `libertine` version). The typeset document does not need to load `libertine-legacy` (or an earlier `libertine`) but of course this package must be present on the user's computer.

1 Example

Here is a minimal example:

```
\documentclass{article}
\usepackage{libgreek}
\begin{document}
$\alpha\beta\gamma$
\end{document}
```

If the Libertine fonts (from `legacy` or earlier) are on your system, this should compile without error and the `dvi` or `pdf` document will use these fonts. To use the Biolinum font, use `\usepackage[biolinum]{libgreek}`. The Greek letters are made available only in math mode.

To see the available symbol names for use in math mode, look at or (pdf)latexify the `libgreekcheck.tex` file included in the package distribution and view the `dvi` or the `pdf`.

Important: although you definitely can use `\usepackage{libertine-type1}` in your document to enable the use therein of the latest (PDF)LATEX Libertine text fonts, the `libertine-legacy` (or earlier) package must be installed on your system for `libgreek` to work for math mode.

2 Package options

As seen before the `biolinum` option declares to use Biolinum. There is also a `libertine` option, it is on by default. All further options are of the key=value type.

scale=`factor` will scale the font by the given factor, relative to nominal size (when the Libertine/Biolinum fonts are used elsewhere in the document, they will also be scaled by this factor). Note that the similar option of the `libertine-legacy` package is called `scaled` and has precisely the same effect. Example: scale=1.2 will scale by 20%.

style=`{ISO|French|TeX}` specifies the shape of the Greek letters. `ISO` means italic for lowercase and uppercase, `French` means upright for lowercase and uppercase, `TeX` means italic for lowercase and upright for uppercase. This option will override any `greek` or `Greek` option. The package defaults to `style=TeX`.

greek=`value` specifies the shape (n, it, or sl) for both the lowercase and uppercase Greek letters. So `greek=it` is like `style=ISO`, and `greek=n` is like `style=French`.

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[1] This document describes `libgreek` version 1.0 (2011/03/14).
[2] `http://mirrors.ctan.org/help/Catalogue/entries/libertine-legacy.html`

Greek=value specifies the shape (n, it, or sl) for only the uppercase Greek letters. To have lowercase upright and uppercase italic, use `greek=n,Greek=it`.

series=value tells which series to use. The default is the value of `\seriesdefault` at the time of loading the package. See the `libertine-legacy` documentation for the admissible values (they include m, b, bx (bx=b) for Libertine and m, b, bx (bx=b), o, s for Biolinum).

boldseries=value tells which series to use in bold math. Default is `\bfdefault` at the time of loading the package.

(1) the bold italic Greek Libertine glyphs are missing from `libertine v5` and later versions up to `libertine-legacy`. Use bold slanted instead.

(2) the bold lowercase Greek Biolinum letters are in fact not bold.

Advanced example of use (we use slanted rather than italic to circumvent the problem mentioned above):

```
\documentclass{article}
\usepackage[scale=2,series=b,greek=sl,Greek=n]{libgreek}
\begin{document}
$\alpha\beta\gamma\phi\psi \Alpha\Beta\Gamma\Phi\Psi$
\end{document}
```

3 Version

The documentation has been updated on September 23, 2012. The `libgreek.sty` file has not been changed from its initial March 14, 2011 version.