

# The Baskervilleextended package – A FrankenFont L<sup>A</sup>T<sub>E</sub>X style

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The package `baskervilleextended.sty` is a variant of Olaf Dietrich's `sfmath.sty` that implements New Baskerville as the text and main math font in L<sup>A</sup>T<sub>E</sub>X documents. It works with either the standard New Baskerville PostScript font from Adobe, via Y&Y's LY1 encoding, or Apple Baskerville from the Gtamac fonts.

As well as the work of Olaf Dietrich and Stephen Hartke, this package would not be possible without the inspiration of Thierry Bouche's original `mathfont.sty` package, which showed me that it was possible to meld the text font into math usage, and thus get 'FrankenFont' documents that actually look quite reasonable.

## 1 Requirements

The package relies on the `txfonts` package, which comes with T<sub>E</sub>X-Live 2007 and MikT<sub>E</sub>X. The package sets normal text to Baskerville or New Baskerville, sans serif text to Helvetica, and monospaced text to TX mono (via the `txfonts` package).

## 2 Using the g<sub>t</sub>amac<sub>font</sub>s

This is the simplest way to go, but some people might find the maths less aesthetically pleasing than the Adobe New Baskerville. All you need to do is ensure you have a working implementation of the GTAMac fonts, and then call:

```
\usepackage[gtamac]{baskervilleextended}
```

## 3 Using the Adobe New Baskerville

This section assumes you have legal working PostScript fonts for New Baskerville. (The font came on a CD with a number of Adobe products such as Illustrator and PageMaker. My copies date from the mid 1990s.) The installation process works as follows.

1. Copy the PostScript fonts to `texmf/fonts/type1`, or a subfolder inside it such as `texmf/fonts/type1/adobe/newbaskerville`. You may need to rename the files.
2. If you have Mac versions of the fonts, you will need to convert them to PFB fonts using `tlunmac`, using commands along the lines of

```
tlunmac -r NewBasIta/rsrc pnbri8a.pfb
```

3. Download the font support files from <http://www.tug.org/yandy/usely1.htm> or the zip file from [verbeia.com](http://www.verbeia.com).
4. If you download the files from [Verbeia.com](http://www.verbeia.com), unzip the `newbaskerville.zip` file and move the folders inside it to the required places in your local `texmf` folder hierarchy.
  - Move the `newbaskerville` folder inside the `tex` folder somewhere into `texmf/tex/latex`
  - Move the `newbaskerville` folder inside the `tfm` folder into `texmf/fonts/tfm`
  - Move the `newbaskerville` folder inside the `vf` folder into `texmf/fonts/vf`
  - Move the `pnb.map` file into `texmf/fonts/map/pdftex`
  - Perform whatever procedure your  $\TeX$  distribution requires to update the maps and tell  $\TeX$  that the files exist.

You can then call the font, as shown.

```
\usepackage{baskervilleextended}
```

## 4 Contents of the package

```
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{baskervilleextended}
[2007/11/02 0.1 by Luci Ellis]
\RequirePackage[T1]{fontenc}
\RequirePackage{amsmath}
\RequirePackage{txfonts}

\newif\if@gtafont{}
\DeclareOption{gtamac}{\@gtafonttrue}
\ExecuteOptions{}
\ProcessOptions

% Which Baskerville
\newcommand{\@textfont}{pnb}
\if@gtafont\renewcommand{\@textfont}{gtamacbaskerville}
\fi
\renewcommand{\familydefault}{\@textfont}% defines text font as whichever baskerville

\renewcommand{\rmdefault}{\@textfont}

\newcommand{\math@sfgreek}{txr}

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Math font - modified from textmath.sty by Olaf Dietrich
% Change font for digits and "operators" (\sin, \exp, ...)
% to default sans serif font
\SetSymbolFont{operators}{normal}{T1}{\@textfont}{m}{n}
\SetSymbolFont{operators}{bold}{T1}{\@textfont}{bx}{n}
% change letters
\DeclareSymbolFont{textmath}{T1}{\@textfont}{m}{it}
\SetSymbolFont{textmath}{normal}{T1}{\@textfont}{m}{it}
\SetSymbolFont{textmath}{bold}{T1}{\@textfont}{bx}{it}
```

```

\DeclareMathSymbol{A}{\mathalpha}{textmath}{'A}
\DeclareMathSymbol{B}{\mathalpha}{textmath}{'B}
\DeclareMathSymbol{C}{\mathalpha}{textmath}{'C}
\DeclareMathSymbol{D}{\mathalpha}{textmath}{'D}
\DeclareMathSymbol{E}{\mathalpha}{textmath}{'E}
\DeclareMathSymbol{F}{\mathalpha}{textmath}{'F}
\DeclareMathSymbol{G}{\mathalpha}{textmath}{'G}
\DeclareMathSymbol{H}{\mathalpha}{textmath}{'H}
\DeclareMathSymbol{I}{\mathalpha}{textmath}{'I}
\DeclareMathSymbol{J}{\mathalpha}{textmath}{'J}
\DeclareMathSymbol{K}{\mathalpha}{textmath}{'K}
\DeclareMathSymbol{L}{\mathalpha}{textmath}{'L}
\DeclareMathSymbol{M}{\mathalpha}{textmath}{'M}
\DeclareMathSymbol{N}{\mathalpha}{textmath}{'N}
\DeclareMathSymbol{O}{\mathalpha}{textmath}{'O}
\DeclareMathSymbol{P}{\mathalpha}{textmath}{'P}
\DeclareMathSymbol{Q}{\mathalpha}{textmath}{'Q}
\DeclareMathSymbol{R}{\mathalpha}{textmath}{'R}
\DeclareMathSymbol{S}{\mathalpha}{textmath}{'S}
\DeclareMathSymbol{T}{\mathalpha}{textmath}{'T}
\DeclareMathSymbol{U}{\mathalpha}{textmath}{'U}
\DeclareMathSymbol{V}{\mathalpha}{textmath}{'V}
\DeclareMathSymbol{W}{\mathalpha}{textmath}{'W}
\DeclareMathSymbol{X}{\mathalpha}{textmath}{'X}
\DeclareMathSymbol{Y}{\mathalpha}{textmath}{'Y}
\DeclareMathSymbol{Z}{\mathalpha}{textmath}{'Z}
\DeclareMathSymbol{a}{\mathalpha}{textmath}{'a}
\DeclareMathSymbol{b}{\mathalpha}{textmath}{'b}
\DeclareMathSymbol{c}{\mathalpha}{textmath}{'c}
\DeclareMathSymbol{d}{\mathalpha}{textmath}{'d}
\DeclareMathSymbol{e}{\mathalpha}{textmath}{'e}
\DeclareMathSymbol{f}{\mathalpha}{textmath}{'f}
\DeclareMathSymbol{g}{\mathalpha}{textmath}{'g}
\DeclareMathSymbol{h}{\mathalpha}{textmath}{'h}
\DeclareMathSymbol{i}{\mathalpha}{textmath}{'i}
\DeclareMathSymbol{j}{\mathalpha}{textmath}{'j}
\DeclareMathSymbol{k}{\mathalpha}{textmath}{'k}
\DeclareMathSymbol{l}{\mathalpha}{textmath}{'l}
\DeclareMathSymbol{m}{\mathalpha}{textmath}{'m}
\DeclareMathSymbol{n}{\mathalpha}{textmath}{'n}
\DeclareMathSymbol{o}{\mathalpha}{textmath}{'o}
\DeclareMathSymbol{p}{\mathalpha}{textmath}{'p}
\DeclareMathSymbol{q}{\mathalpha}{textmath}{'q}
\DeclareMathSymbol{r}{\mathalpha}{textmath}{'r}
\DeclareMathSymbol{s}{\mathalpha}{textmath}{'s}
\DeclareMathSymbol{t}{\mathalpha}{textmath}{'t}
\DeclareMathSymbol{u}{\mathalpha}{textmath}{'u}
\DeclareMathSymbol{v}{\mathalpha}{textmath}{'v}
\DeclareMathSymbol{w}{\mathalpha}{textmath}{'w}
\DeclareMathSymbol{x}{\mathalpha}{textmath}{'x}
\DeclareMathSymbol{y}{\mathalpha}{textmath}{'y}
\DeclareMathSymbol{z}{\mathalpha}{textmath}{'z}

\DeclareMathSymbol{\imath}{\mathalpha}{textmath}{"10}
\DeclareMathSymbol{\jmath}{\mathalpha}{textmath}{"11}

```

```

\DeclareMathAlphabet{\mathscr}{U}{rsfs}{m}{n} % Ralph Smith Formal Script
\DeclareSymbolFont{textmathGreek}{OT1}{\math@sfGreek}{m}{n}
\SetSymbolFont{textmathGreek}{normal}{OT1}{\math@sfGreek}{m}{n}
\SetSymbolFont{textmathGreek}{bold}{OT1}{\math@sfGreek}{b}{n}
% Redeclaring uppercase Greek and math accents back to txfonts
% Because New Baskerville doesn't have Greek letters in T1 encoding
% And the T1 accents just look bad
\DeclareMathSymbol{\Gamma}{\mathalpha}{textmathGreek}{"00}
\DeclareMathSymbol{\Delta}{\mathalpha}{textmathGreek}{"01}
\DeclareMathSymbol{\Theta}{\mathalpha}{textmathGreek}{"02}
\DeclareMathSymbol{\Lambda}{\mathalpha}{textmathGreek}{"03}
\DeclareMathSymbol{\Xi}{\mathalpha}{textmathGreek}{"04}
\DeclareMathSymbol{\Pi}{\mathalpha}{textmathGreek}{"05}
\DeclareMathSymbol{\Sigma}{\mathalpha}{textmathGreek}{"06}
\DeclareMathSymbol{\Upsilon}{\mathalpha}{textmathGreek}{"07}
\DeclareMathSymbol{\Phi}{\mathalpha}{textmathGreek}{"08}
\DeclareMathSymbol{\Psi}{\mathalpha}{textmathGreek}{"09}
\DeclareMathSymbol{\Omega}{\mathalpha}{textmathGreek}{"0A}
\DeclareMathSymbol{\upDelta}{\mathalpha}{textmathGreek}{"01}
\DeclareMathSymbol{\upOmega}{\mathalpha}{textmathGreek}{"0A}
% Accents
\DeclareMathAccent{\grave}{\mathord}{textmathGreek}{"12}
\DeclareMathAccent{\acute}{\mathord}{textmathGreek}{"13}
\DeclareMathAccent{\breve}{\mathord}{textmathGreek}{"1D}
\DeclareMathAccent{\hat}{\mathord}{textmathGreek}{"5E}
\DeclareMathAccent{\tilde}{\mathord}{textmathGreek}{"7E}
\DeclareMathAccent{\bar}{\mathord}{textmathGreek}{"16}
\DeclareMathAccent{\dot}{\mathalpha}{textmathGreek}{"5F}
\DeclareMathAccent{\ddot}{\mathalpha}{textmathGreek}{"7F}

\endinput

```