\textbf{\LaTeX\ SUPPORT FOR HEURISTICA}\

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Andrey V. Panov's \textit{Heuristica} font family extends the \textit{Utopia} font family, adding many accented glyphs, Cyrillic glyphs, ligatures, superior and oldstyle fixed-width figures in all styles, and Small Caps in Regular style only. The font package is widely distributed as a free font collection in OpenType, TrueType and Type1 formats, but not until now on ctan with complete \LaTeX\ support files in encodings T1+TS1, LY1, T2A, T2B and T2C.

The newtx package has been modified, as of version 1.26, to offer a new option utopia (or, equivalently, heuristica) that uses math italic glyphs taken from Utopia and oldstyle figures from Heuristica. Its slanted Greek alphabets are constructed from the txfonts slanted Greek letters by reducing their italic angle from 15.5° to 13°, matching Utopia's italic angle. So, for Heuristica text and matching math, you can use:

\begin{verbatim}
\usepackage[osf,scaled=.92]{heuristica}
\usepackage[varqu,varl]{inconsolata} % typewriter
\usepackage[type1,scaled=.95]{cabin} % sans serif like Gill Sans
\usepackage[utopia,vvarbb,bigdelims]{newtxmath}
\end{verbatim}

The effect of the option osf is to force the default figure style in heuristica to be oldstyle 0123456789 while using lining figures 0123456789 in math mode. The only other option of interest is supers, which changes the footnote marker style to use the superior figures from Heuristica rather than the default mathematical superscripts. (The superiors package offers further options.)

\textit{Heuristica} is so austere for a text font and \textit{inconsolata} is so fancy for a typewriter font that you may find they blend together all too well. For more of a distinction replace the inconsolata line above with

\begin{verbatim}
\usepackage{z/l.Varmtt} % serifed typewriter font extending cmtt
\end{verbatim}

As I find Utopia text rather cramped, I suggest applying a small amount of letterspacing (tracking) and increasing the interword spacing by means of the microtype package. Alternatively, as of version 1.09, this package offers complete control over word-spacing by specifying the options described below. Heuristica word-spacing is governed by three quantities:

\begin{itemize}
\item spacing (default value .211em), \texttt{\fontdimen2} of the main text font.
\end{itemize}

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\footnote{There is most likely also a way to use MathDesign or fourier with at least partial compatibility.}
• stretch (default value 1.055em), \fontdimen3 of the main text font.
• shrink (default value .0703em), \fontdimen4 of the main text font.

(Note the use of em values rather than absolute values so that word spacing responds to scale changes.) You may modify these values individually or by setting a value for the option space or by specifying looser or loosest.

• Option spacing=.24em would change the spacing from .211em to .24em.
• Option stretch=.14em would change the stretch from .1055em to .14em.
• Option shrink=.1em would change the shrink from .0703em to .1em.
• Option space=1.2 would multiply each word-spacing parameter by the factor 1.2. (The option space with no value would result in a factor of 1.23, leading to a spacing value of close to .26em. This documentation uses option space with no value specified.)
• Option looser would change the three parameters to .25em, .125em, .1em respectively.
• Option loosest would change the three parameters to .28em, .125em, .13em respectively.

Macros:
• \textlf and \texttlf render their arguments in tabular lining figures, no matter what the default figure style. Eg, \textlf{345} produces 345.
• \textosf and \texttosf render their arguments in tabular oldstyle figures, no matter what the default figure style. Eg, \textosf{345} produces 345.
• \textsu renders its argument in superior figures, no matter what the default figure style. Eg, \textsu{345} produces 345.
• \textin renders its argument in inferior figures, no matter what the default figure style. Eg, \textin{345} produces 345.
• \textfrac renders its two arguments as a fraction, using \textsu for the numerator and \textin for the denominator. Eg, \textfrac{31}{64} produces \(31/64\).

Very Brief, Nonsensical Math Example:
Let \(B(X)\) be the set of blocks of \(\Lambda_X\) and let \(b(X) := |B(X)|\) so that \(\hat{\phi} = \sum_{Y \subset X} (-1)^{b(Y)} b(Y)\).