JLdraw

TEX and PostScript macros to draw effective (and beautiful) graphs

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A standard approach to producing documents that include illustrations consists in typesetting text with specialized typesetting software (such as TEX) and inserting illustrations created with other, equally specialized software. To integrate the illustrations better into the typeset page, though, it would be nice to be able to produce or modify them directly with the typesetting software. Drawing graphs with TEX, for example, would allow one to, say, set them `\hsize` wide and `0.75\hsize` high, position labels exactly `\baselineskip` below the horizontal axis, and, especially, typeset all annotations with the same fonts, sizes, and mathematical beauty as the rest of the document.

The hybrid TEX and PostScript macros of `JLdraw` take advantage of TEX's powerful approach to graph and annotate data sets in a variety of ways, in order to produce effective, beautiful, well-integrated graphs. They use TEX to draw all horizontal and vertical lines (axes, tick marks, grid lines) and set all annotations, and PostScript to draw the data, as markers, lines, and areas. Though fairly simple, they were successfully harnessed to a wide range of real-life applications, up to logarithmic graphs and (with some patience) complex multipanel displays. Clearly, they are a tool for drawing final graphs, not for exploring or transforming data sets.

Like most macros, the `JLdraw` ones show limitations. First, their use of `\special`'s to insert PostScript code makes them implementation-dependent. They were developed for Textures® on the Macintosh and must likely be adapted to be used with other TEX implementations. Moreover, the PostScript part of their output is not readily visible in a `dvi` viewer. Second, they were designed to be used with `plain.tex` and were never tried out with other packages, such as LATEX. Finally, though they were developed with care and used extensively by myself, they were never tested by others and are now released with no guarantee whatsoever, whether expressed or implied.

Because I developed the package for my own use, I have had little reason so far to create a user guide for it. I refer you to the corresponding article in TUGboat (Jean-luc Doumont, "Drawing effective (and beautiful) graphs with TEX", *TUGboat* **20**:3, 202–207, 1999) and to the *JLdrawSamples* file, which contains the code that produces the graphs displayed in the article. I am also willing to provide limited help via e-mail.

I wish you success (and pleasure) with `JLdraw`.

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