Production notes

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As a reader might imagine, editing this article posed unusual challenges. Grzegorz provided his `Ubu Stereo` font (discussed in the text) to make it possible.

To process the article, we used XƎLaTeX, using filename lookups for the fonts: `FreeSerif.otf`, `DejaVuSans.ttf`, `Carlito-Regular.ttf`, `UbuStereo-Regular.ttf`. Avoiding system font lookups allows the article to be processed on different systems without having to change their font configurations, highly desirable for *TUGboat*.

For the actual editing, however, it was necessary to make it work on GNU/Linux, so I edited my configuration file `~/.fonts.conf` to contain the line:

```
  <dir>/some/directory</dir>
```

in the `<fontconfig>` block, where `/some/directory` is the directory where I saved `UbuStereo-Regular.ttf`. To my knowledge, all GNU/Linux systems use Fontconfig (`fontconfig.org`) to find application fonts.

To make Fontconfig know about the new directory:

```
fc-cache -fv # | sort >/tmp/fc
```

The commented-out part redirects lots of possibly-but-not-necessarily interesting output from the terminal.

This command shows the names of all the (scalable) monospaced fonts available:

```
fc-list :spacing=mono:scalable=true family |sort
```

Sadly, `Ubu Stereo` does not show up here, as it is technically not monospaced (per the article). Eliminating the `:spacing=mono` selector (i.e., listing all scalable fonts), it does appear.

To use the font in a standard terminal:

```
xterm -fa 'Ubu Stereo' -fs 19
```

The font size (`-fs`) is what worked best on my monitor.

Then I ran GNU Emacs (`gnu.org/s/emacs`) within the xterm: `emacs-nw`. Running Emacs directly under X had complications I didn't need to track down. I used the latest Emacs (24.5), compiled from the original source, as Unicode support is one of the most active development areas in Emacs.

I didn't need Grzegorz's Elisp code (referred to in the article), since I could use the existing unitext.

A final lament: I find that `xterm`, `emacs`, and other programs just drop characters from UTF-8-encoded source when input and font do not match perfectly. What happened to "be liberal in what you accept"? Beware ...