Production notes

Karl Berry

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 XeLaTeX, 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:

```
fccache -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:

```
fclist :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 …