

February 26, 2025

Editor
The R Journal

Dear Professor Hurley,

Please consider the article titled “Rendering LaTeX in R” for publication in the R Journal.

The manuscript introduces a new package called `xdvir` which allows users to render LaTeX fragments in R plots, including labels and data symbols for `ggplot2` plots. The article covers basic usage of the `xdvir` package, but because there is a range of scenarios in which the package can be used, the article also goes into some lower-level detail, plus several extended examples.

I believe the readers of the R Journal will find this article helpful for their work because it provides access to the sophisticated typesetting capabilities of LaTeX, for example the ability to render high-quality mathematical equations, when drawing text labels and annotations on R plots.

I have successfully built the article on Linux (Ubuntu), Windows, and Mac OS. There is one remaining ERROR and one remaining NOTE from `rjtools::initial_check_article()`:

- Some section titles are not in sentence case because they contain proper nouns (e.g., “R”).
- There are “spelling errors” because there are several software and symbol names that are not English words.

The only requirement for building the article (beyond a TeX installation) is that the fonts TeX Gyre Adventor (<https://www.gust.org.pl/projects/e-foundry/tex-gyre/adventor>) and Lato Light (<https://fonts.google.com/specimen/Lato>) must be installed:

- On Linux, there should be just a package, e.g., `tex-gyre` and `fonts-lato` on Ubuntu.
- On Windows, the fonts can be downloaded from <https://online-fonts.com/fonts/tex-gyre-adventor> and <https://fonts.google.com/specimen/Lato> and then double-click your heart out until you see an “install” button and click that. Be sure to install all fonts, e.g., the bold and italic variants, as well as the “regular” font. Also make sure that MikTeX knows about the new fonts by refreshing its font map (under the Tools menu in the MikTeX Console).
- On Mac OS, download the fonts and install as for Windows.

For a smooth build, please ensure that the following R packages are installed: `ggplot2`, `gridGraphics`, `gggrid`, `gridBezier`, `ggtext`, `signs`, plus of course `xdvir` itself and its dependencies. The TikZ examples may also require a full TeX install (e.g., TeX Live, MikTeX, or MacTeX) rather than just TinyTeX.

As recommended in the `rjtools` documentation, the best recipe for building is:

```
pandoc::pandoc_activate(version = '3.1.6')  
rmarkdown::render("murrell-xdvir.Rmd", output_format = "all")
```

Yours sincerely,

A handwritten signature in dark ink, appearing to read 'P. R. Murrell', written in a cursive style.

Paul Murrell
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