## Typographers' Inn

Peter Flynn

### Fast startup with LaTeX — a video challenge

It's usually unfair to compare LaTeX with other type-setting systems such as InDesign or FrameMaker, and the old DTP favourites like PageMaker, Ventura, 3B2, and QuarkXPress, some of which are still in use. The reason is not just in some way that 'LaTeX is "better"' — whether you believe that to be true or not — it's that they *work differently*, and LaTeX has a level of programmability and style of automation not as easily accessible in other systems.

Other systems do of course have macros and styles, and many have an internal scripting language. InDesign uses Extendscript;[1] XPress uses AppleScript; Frame uses Extendscript also; PageMaker uses VBScript; 3B2 offers its own scripting language as well as Perl. But LaTeX's programmability is not an add-on or plugin or third-party language, it *is* the TeX typesetting language, inherently a part of the design from the ground up; and LuaLaTeX provides a language with external acceptance.

So when my attention was drawn to a YouTube video put out by Los Angeles online design educators Type-Ed, called *Typeset a page in under 10 minutes in InDesign* [2], I wondered how that would compare to LaTeX. We're not talking here about including the learning curve in either case — that would stretch it to an hour or so for LaTeX and I have no idea how long it takes to learn InDesign to the level needed. There is no voice-over, just music and clicks.
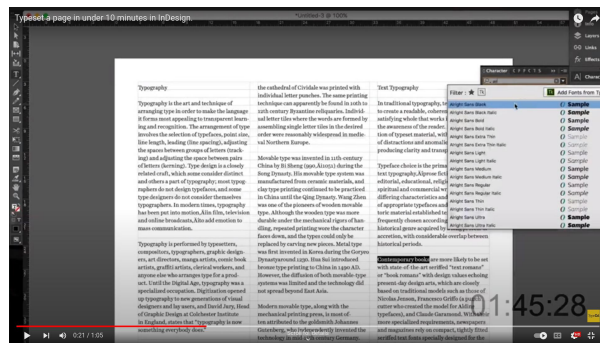


**Figure 1**: Inline styles (run-in paragraph heads) being created in a clip from the video *Typeset a page in under 10 minutes in InDesign*.

The video (Figure 1, `youtube.com/watch?v=VVIQE6kht8c`) is speeded up for brevity, and has a lot of clicking on and off of menus, selecting options and values. It starts as a single-column text document on Letter paper, and they import the material from an external plain text file all about typography. The text is set in Minion Pro and is edited to elide multiple spaces, and then cast into two columns . . . and then three, then the size is changed from 10pt to 12pt to 8¼pt to see the effect. Styling follows, first with paragraph heads, then with section heads, and finally the title. There is a lot of adjustment to the appearance of the paragraphs: changing the set and the spacing; but the end result is very good, and makes an excellent one-off example document to sell people on the idea that InDesign makes it easy to lay out one-off documents.

A few stop–start viewings made it clear that most of the formatting is fairly standard, and can easily be done in LaTeX using standard packages. I'm not sure about the practice of narrowing the set within a multi-column page on a column-by-column basis (the objective seems to be to regularize some parts of the ragged-right setting), but without any narration, the objectives are sometimes unclear.

To test this, I made a small proof-of-concept using the Wikipedia text on *Typography*, but there is significant editing work needed to get it into line with the text used in the video, and a need for abilities in creating a video from screen captures which are outside my skill-set. If there is a LaTeX user out there who is also fluent in InDesign, I'd be interested to see someone dissect the video with a view to making one for LaTeX, as I think it would be a good example for users to see a real-life document being brought into a popular format.

### Footnotes as never before or since — a text challenge

A historian on Twitter tweeted (at `twitter.com/garius/status/1570771789827166208`):

> It's Friday. Have some history.
>
> So you know Hadrian's Wall? Well for over 1000 years everyone thought it was built by someone else.
>
> Until, in 1840, John Hodgson, an unknown Northumbrian clergyman published the LONGEST footnote in history.

It ran to 173 pages. After the footnote, the main text simply carries on with the subject of the local history as if nothing had happened. If you can't read the thread, there's a spoiler in this footnote.[2]

---

[1] InDesign provides access to its own Document Object Model (DOM) so in theory you can use other scripting languages like AppleScript or VBScript.

---

[2] Hodgson was embarrassed by the fact that his *magnum opus* on Northumbrian history would likely be overshadowed

Peter Flynn

The book [1] is now online in Google Books at `books.google.co.uk/books?id=D1IGAAAAQAAJ`, where you can download a PDF; and there on p.149 Hodgson starts his explanation (Figure 2).
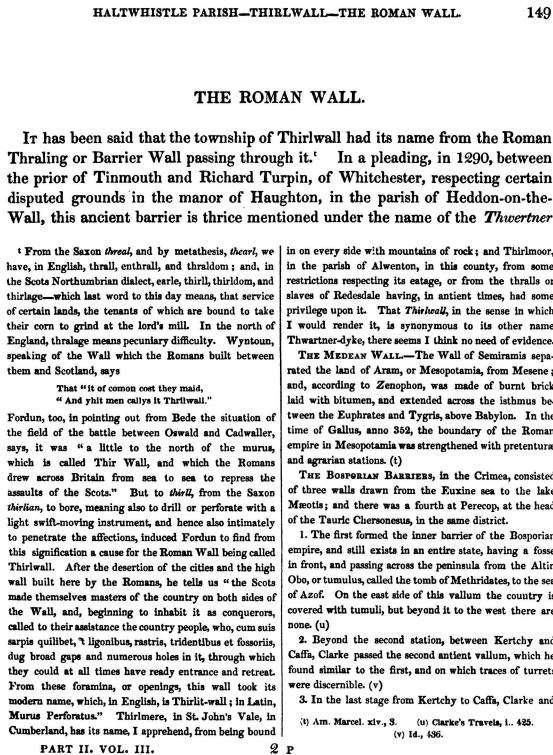


**Figure 2**: The start of the longest footnote.

As with the InDesign video, I had to see what LaTeX would make of 173 pages of a single footnote, but *pdftotext* does not convert Google's PDFs to plaintext well, as multiple lines of text from one column get interleaved with similar-sized blocks of text from the other, despite the vertical rule. Unfortunately Apache *PDFbox* fared no better, interleaving almost every single pair of lines. This appears to be a problem with the way in which the Google scan and OCR have been synchronised, presumably done for the purposes of searching, not reprocessing.

Looking through the pages, there are footnotes within the footnote; run-in subheadings; lists; bibliographic references between paragraphs; tabular settings; embedded graphics, including typographic reconstructions of inscriptions across both columns; and genealogical tree-charts — in fact almost the entire panoply of typographic requirements needed for a whole book.

by including his discovery that the Roman wall everyone until then thought was built by Septimius Severus was actually built by Hadrian, so he put it in a footnote.

By comparison, the page layout itself would be unproblematic, except that the dblfnote package appears to reset to single-column after a page-break, and would in any case need modifying to allow reversion to single-column mode in mid-page for an illustration, like multicol does.

However, the simple answer to my original question is that LaTeX has no problem whatever in maintaining scope for 173 pages of footnote. However, a lot of work would be needed for a full reconstruction to test if all the formatting can be done, if someone [else] would like to take it up.

### Afterthought: List spacing

Just browsing the documentation for an old Tom-Tom VIA 52 satnav and discovered that the main screen diagram has eleven callouts (icons labelled 1–11) but the list explaining them runs from one to nine, and then restarts at one (Figure 3).



**Figure 3**: Callout list misnumbered

It looks very much as if the width of the indent provided for the list geometry was set to allow just a single digit . . . but if that was so, truncation on the left-hand side would have given zero (from the 10) and one (from the 11); truncation on the right-hand side would give two ones. So we must conclude that at 10, the list was actually reset to start at one. Just a little thing to be aware of when you design list indents. And, of course, use LaTeX, not Word, InDesign, or anything else.

### References

[1] J. Hodgson. *History of Northumberland.* [Published] for the Author, Newcastle, Jun 1840.

[2] Type-Ed. Typeset a page in under 10 minutes in InDesign, May 2016.
`youtube.com/watch?v=VVIQE6kht8c`

⋄ Peter Flynn
Textual Therapy Division,
Silmaril Consultants
Cork, Ireland
Phone: +353 86 824 5333
peter (at) silmaril dot ie
blogs.silmaril.ie/peter