



A
Self-Publisher's
Take On
Markdown and TEX

Lloyd R. Prentice

Hi folks.

What an honor to share thoughts with such an awesome group.

I'm a self-publisher.

A self-publisher is an army of one.

She bulldogs through every task on this list with every book she publishes. See Table 1.

I say she since some 67 percent of self-publishers are women.

Book idea	Blurbs
Research	Pre-pub reviews
Draft	Cover copy
Edit	Cover design
Revise	Print
Photos	Distribute
Illustrations	Market
Front matter	Returns
Back matter	Bookkeeping
Interior design	Take out the trash
Typeset	And myriad things
Proof	REPEAT
Revise	
Price	

Table 1: Self-Publishing tasks

A self-publisher wears many hats.

- Author
- Editor
- Designer
- Publisher
- Marketer
- Entrepreneur

It's a juggling act.

- Time
- Money
- Expertise
- Creativity

But time is the most precious asset.

Bowker, the U.S. ISBN registry, tells us that more than 1.6 million ISBNs were issued to self-publishers in 2018. See Figure 1.

Note that eBooks accounted for 8 percent.



Figure 1: Bowker self-publishing stats

A study published early this year reports annual global sales of 300 million self-published books.¹

...a 1.25 billion dollar market!

Expected growth: 17 percent compounded annually.

Now, you may be wording if self-publishers are getting rich.

Turns out that 90 percent of self-published books sell less than 100 copies.

20 percent of self-publishers report making no income at all from their books.

So this is where, I hope, we can help.

How?

...by providing better tools and know-how.

¹WordsRated, a non-commercial international research group <https://wordsrated.com/self-published-book-sales-statistics/>

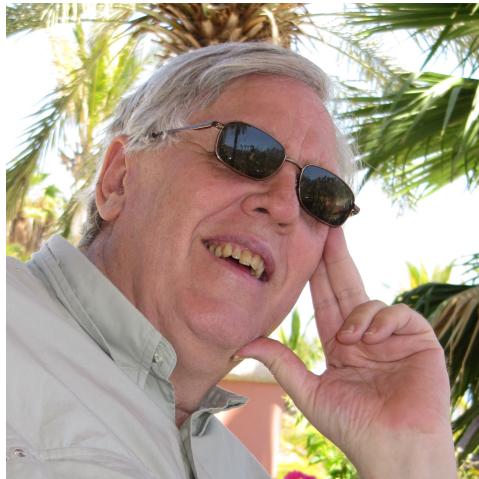


Figure 2: Lloyd R. Prentice

That is, by making it easier to publish trade-quality books.

This is me in my salad days — less a few hard-knock wrinkles. See Figure 2.

I've typeset three books with LaTeX—

two novels... See Figures 3 and 4.

and a computer programming book. See Figure 5.

I typeset the novels with LyX. See Figure 6.

It was easy enough for me—

But my friend, noted storyteller Jay O'Callahan, found Lyx a tech step too far.

My novels turned out ok, so—

I set out to typeset my computer programming book with LyX.

But the code listings looked awful.

I sent a plea for help to Kathryn Hargreaves.



Figure 3: fiction

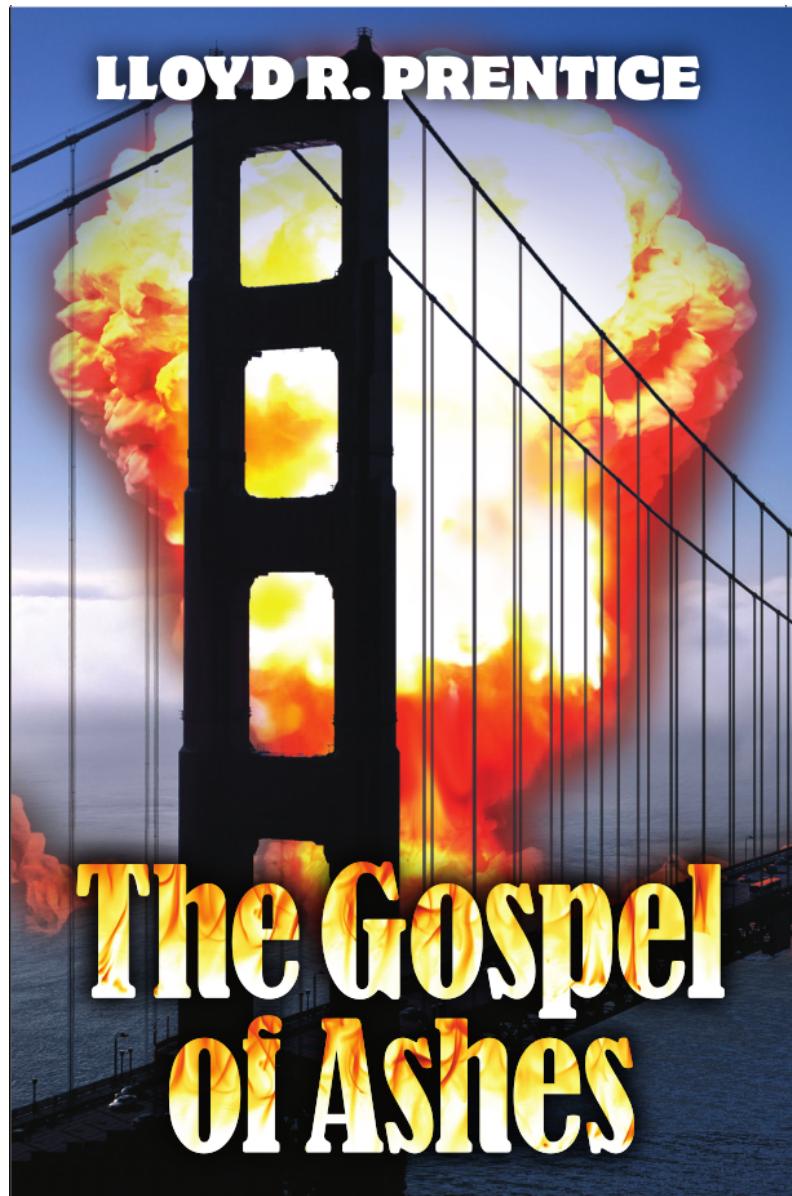


Figure 4: fiction

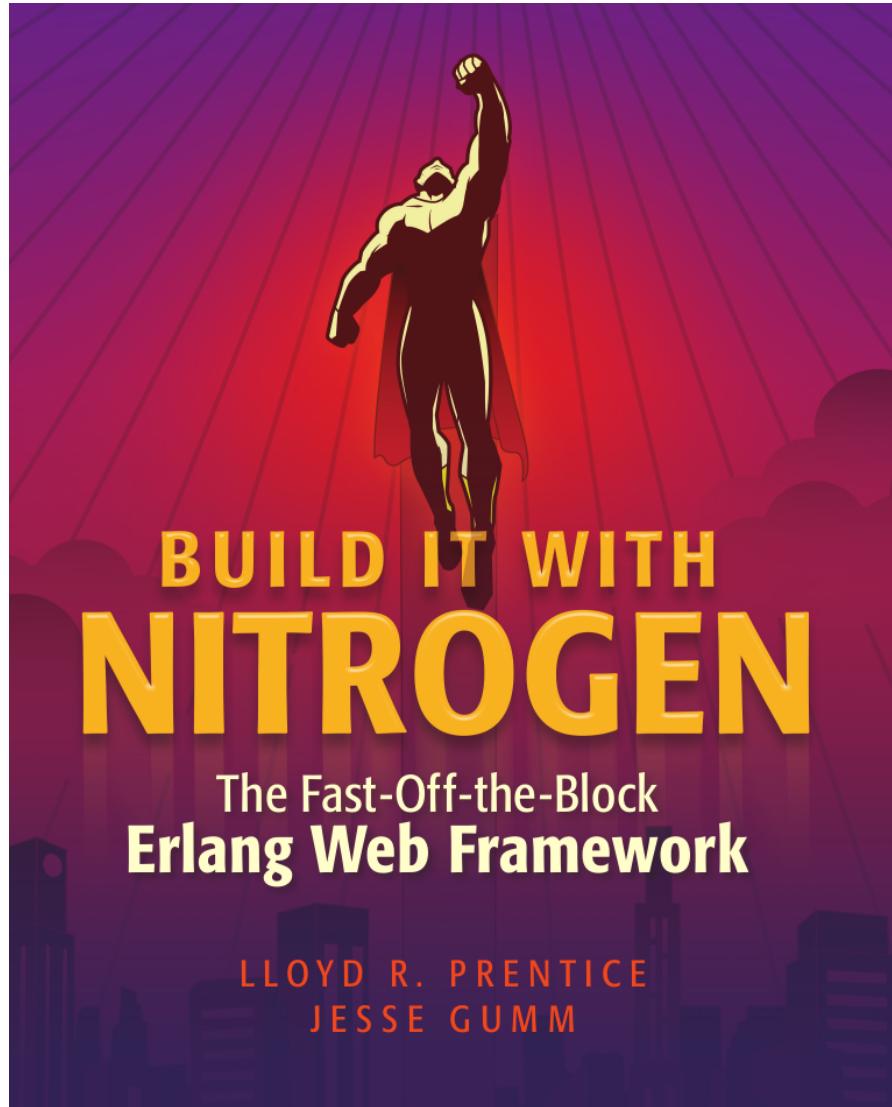


Figure 5: nonfiction

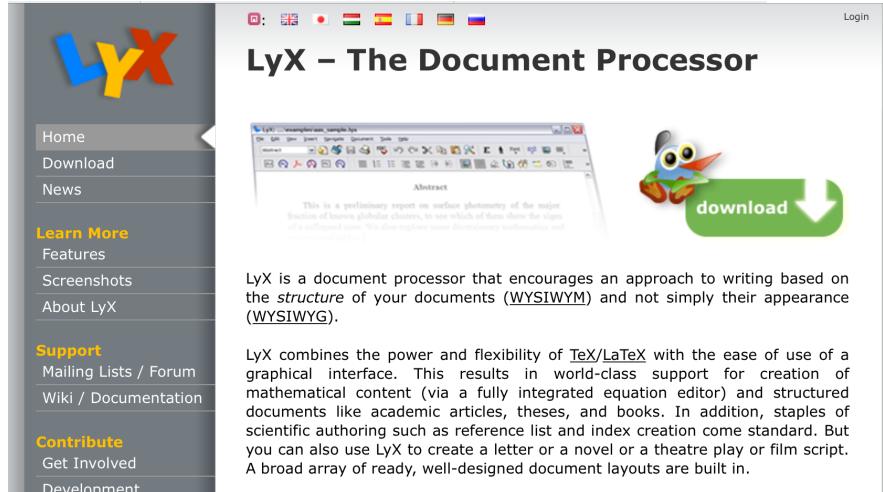


Figure 6: LyX Document Processor

Kathryn smushed the LyX source into a LaTeX editor, fixed the listings, and bailed me out.

I realized then that I needed to learn how to custom style my books with LaTeX.

But as a word guy—a writer — I found LaTeX text markup mind-numbing.

Did I mention that I'm a lazy cuss?

Running into Vit Novotný's markdown package was a Eureka moment. See Figure 7.

I knew markdown from my software development work.

I learn best by doing so I knew what my very next book was going to be all about...

Markdown and LaTeX. See Figure 8.

As a writer, I value uninterrupted creative flow.

With markdown I can compose, structure, and publish with minimal

Markdown Package User Manual

Vít Novotný

2.15.2-0-gb238dbc (2022/05/31)

- [1 Introduction](#)
 - [1.1 Requirements](#)
 - [1.2 Installation](#)
 - [1.2.1 Local Installation](#)
 - [1.2.2 Portable Installation](#)
 - [1.3 First Document](#)
 - [1.3.1 Using Lua](#)
 - [1.3.2 Using Plain TeX](#)

Figure 7: LaTeX markdown packages

distraction. See Figure 9.

Note the chapter head, italic and bold face, and subheads.

And note the markdown that generated it just below.

With markdown, we can do unordered lists...

- Dogs
- Cats
- Mice

Markdown:

```
* Dogs
* Cats
* Mice
```

Ordered lists...

1. Dogs
2. Cats

PUBLISH
BEAUTIFUL BOOKS
with MARKDOWN

The Fast-Track to LATEX

Lloyd R. Prentice

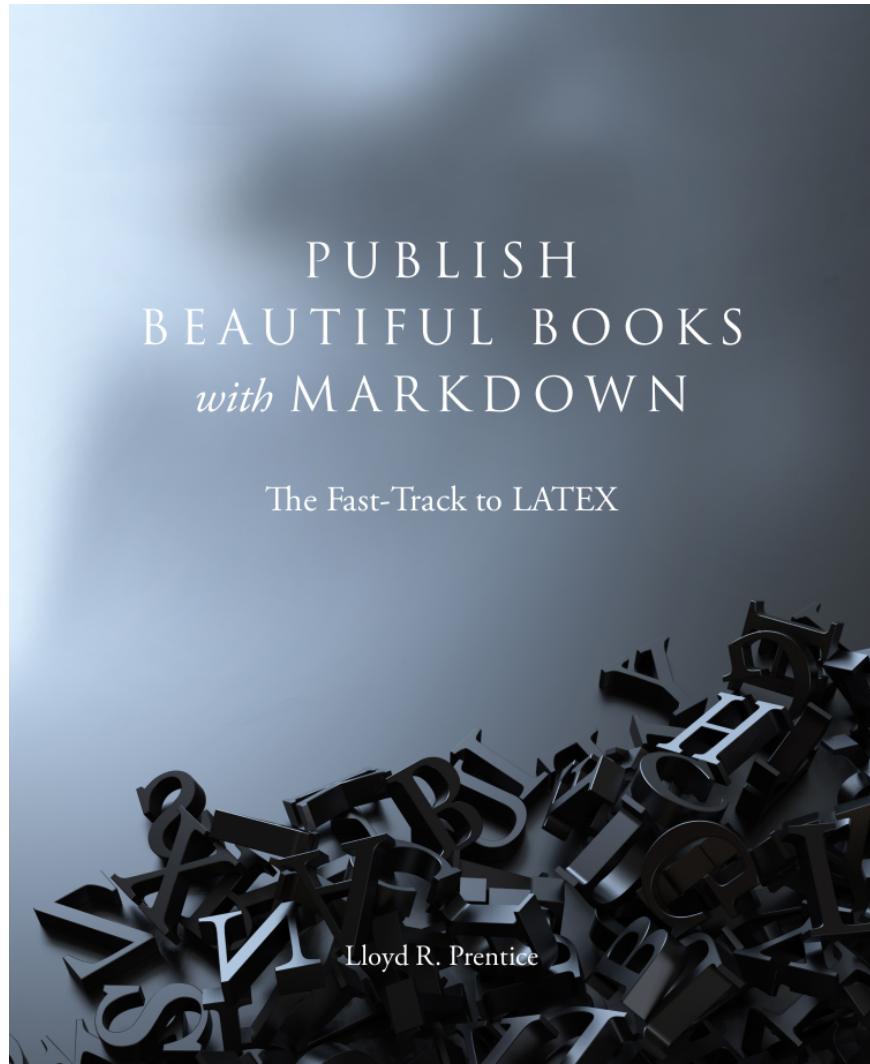


Figure 8: Expected launch: Fall 2022

Seven

It's Greek to Me

Paragraphs

 Lorem ipsum dolor sit amet, *consectetur* adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. **Ut enim ad minim veniam**, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

Markdown

```
# It's Greek to Me
```

```
## Paragraphs
```

```
  Lorem ipsum dolor sit amet, *consectetur* adipiscing  
  elit, sed do eiusmod tempor incididunt ut labore et  
  dolore magna aliqua. **Ut enim ad minim veniam**, quis  
  nostrud exercitation ullamco laboris nisi ut aliquip
```

19

Figure 9: Compiled page

Name	Speed	Weight
Peregrine falcon	242 mph	1.5-3.3 lbs
Golden eagle	200 mph	7.9-15 lbs
Common swift	103 mph	1.05-1.76 oz

Table 2: Speed by weight

3. Mice

Markdown:

- 1. Dogs
- 2. Cats
- 3. Mice

Footnotes...

Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.²

Note the footnote in the first paragraph and at the bottom of the page...

Here's how the footnote is specified:

Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. [^footnote]

[^footnote]: This is a footnote

We can also do tables... See Table 2.

²This is a footnote



Figure 10: Photo by: Laurie Beckelman

And here's how the table is specified in markdown:

Name	Speed	Weight
Peregrine falcon	242 mph	1.5-3.3 lbs
Golden eagle	200 mph	7.9-15 lbs
Common swift	103 mph	1.05-1.76 oz

: Speed by weight

Images... See Figure 10.

Here's how images are called in markdown:

```
![lone_pine] (images/lone_pine.jpg  
"Photo by: Laurie Beckelman")
```

We can construct diagrams in the dot language:

```
``` dot Publish Beautiful workflow  
digraph tree {
```

```
Editor -> Markdown
Editor -> LaTeX
Markdown -> LaTeX
LaTeX -> Latexmk
Latexmk -> Lualatex
Lualatex -> Pdf
Editor [label = "plain text editor"]
LaTeX [label = "LaTeX template"]
Latexmk [label = "latexmk"]
Lualatex [label = "lualatex"]
Pdf [label = "PDF"]
}
```

Result? See Figure 11.

Markdown is easy to read—

*Easy to Read!*

**Easy to Write!**

...and easy to write.

\*Easy to Read!\*

\*\*Easy to Write!\*\*

With markdown, I can compose then compile, review, and revise with just a few keystrokes—a near seamless workflow.

Here's how markdown-tagged chapters for a book are called into a LaTeX template:

```
\markdownInput{md/chapter_1.md}
\markdownInput{md/chapter_2.md}
\markdownInput{md/chapter_3.md}
\markdownInput{md/chapter_4.md}
\markdownInput{md/chapter_5.md}
\markdownInput{md/chapter_6.md}
\markdownInput{md/chapter_7.md}
```

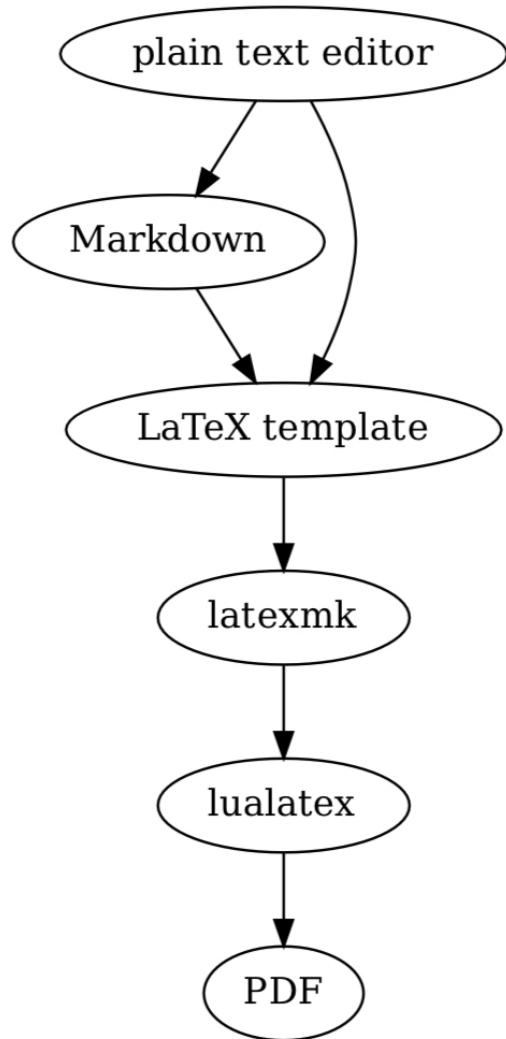


Figure 11: Dot diagram

```
\markdownInput{md/chapter_8.md}
\markdownInput{md/chapter_9.md}
\markdownInput{md/chapter_10.md}
\markdownInput{md/chapter_11.md}
\markdownInput{md/chapter_12.md}
\markdownInput{md/chapter_13.md}
\markdownInput{md/chapter_14.md}
```

With markdown and LaTeX, the self-publisher can create a complete book marketing suite.

She may employ a professional graphic designer—or not.

But, with each new publishing venture she need only change the book cover image and markdown to launch her next book marketing campaign.

The template for postcard shown in Figure 12 was developed for me by Amy Hendrikson.

So what have I learned?

Given more than a year of work on Publish Beautiful, I would say that markdown and LaTeX are true gifts to serious writers and the book publishing world...

But—a challenge for self-publishers.

I fear that my friend Jay O’Callahan would freak out if I recommended LaTeX.

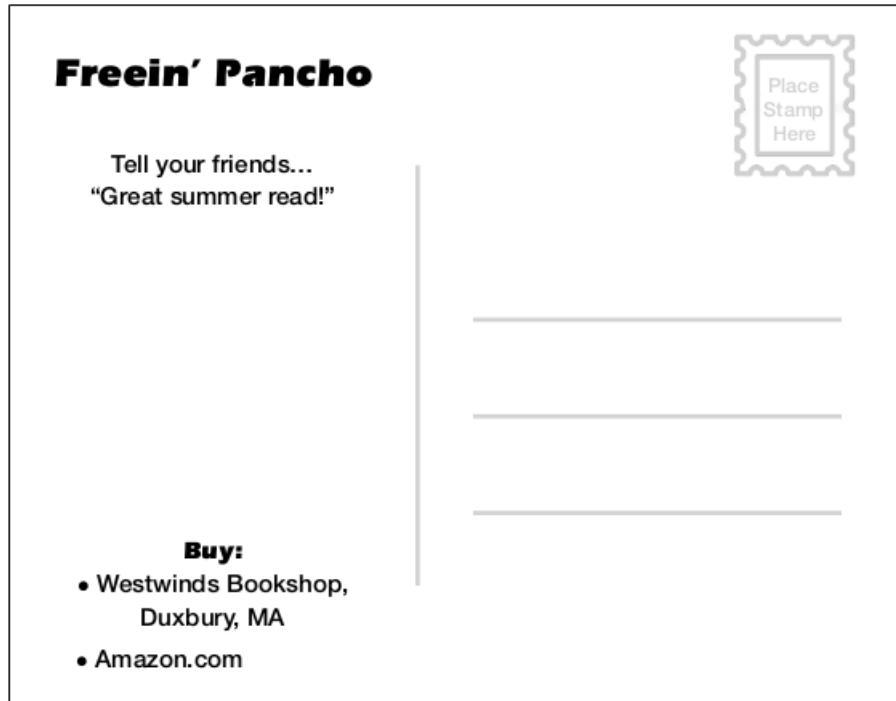
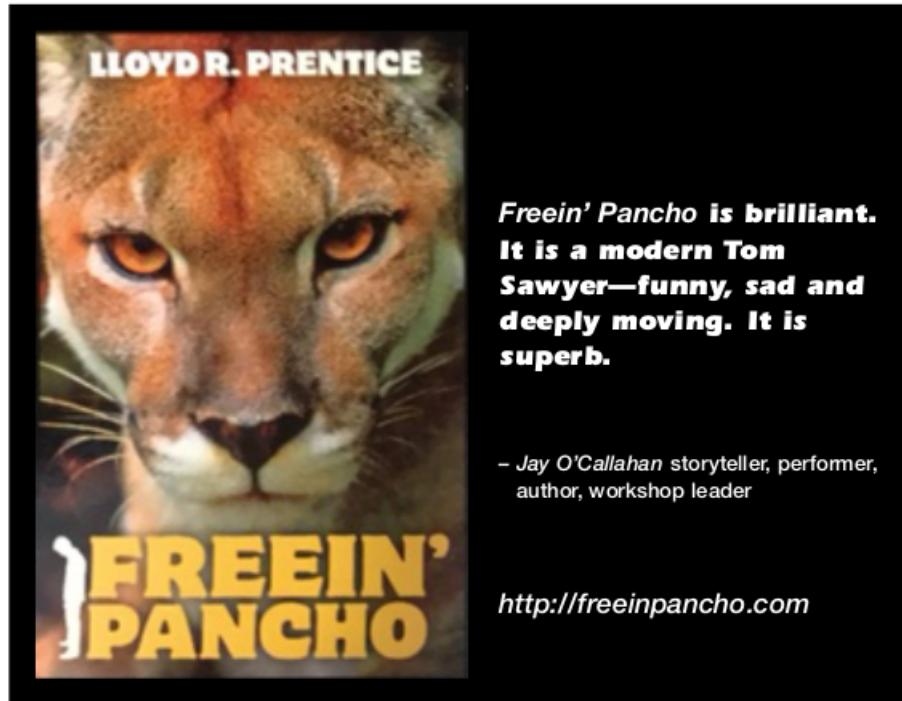
So, challenge for TeX gurus and wizards—

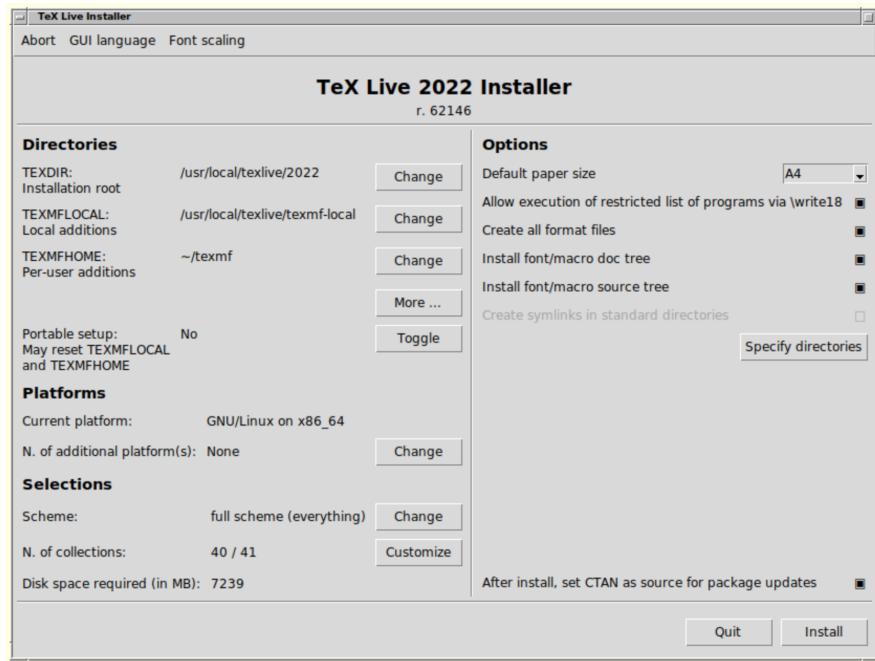
How can we make markdown and LaTeX as friction-free and inviting as possible for self-publishers?

The first frustration I ran into was installation of TeX Live—

TeX Live Full Install — 4+ GB!

I found the TeX Live installation docs, well, a bit of a challenge for my attention-deficit mind.





But more, waiting and waiting while my system downloaded over fiber internet more than 4 gigabytes into my hard drive was a "what am I getting into?" moment.

Back at dawn of time, I was initiated into the forth world where an operating system, compiler, interpreter, and code editor take up less than eight kilobytes of disk space.

In my view, a full TeX Live system install is massive overkill for the typical self-publisher.

Hundreds, if not thousands, of packages that a self-publisher would never ever need in a lifetime.

I groused and TeX wizard Karl Berry came to the rescue.

Karl suggested a TeX Live scheme with a selection of packages expressly devoted to book publishing.

Vit Novotný and Peter Flynn suggested their favorite book publishing

Select scheme:

- a [ ] full scheme (everything)
- b [ ] medium scheme (small + more packages and languages)
- c [ ] small scheme (basic + xetex, metapost, a few languages)
- d [ ] basic scheme (plain and latex)
- e [ ] minimal scheme (plain only)
- f [ ] infrastructure-only scheme (no TeX at all)
- g [X] book publishing scheme (core LaTeX and add-ons)
- h [ ] ConTeXt scheme
- i [ ] GUST TeX Live scheme
- j [ ] teTeX scheme (more than medium, but nowhere near full)
- k [ ] custom selection of collections

Actions: (disk space required: 416 MB)

<R> return to main menu

<Q> quit

Figure 13: TeX Live Book Publishing Scheme

packages.

And Karl launched it.

Book Publishing Scheme — 175 packages! See Figure 13:

The scheme is installable now by selecting item g, book publishing scheme, during TeX Live install.

It currently comprises some 175 packages.

Occupies slightly over 400 megabytes on disk.

The scheme still needs front-line review and testing, so we invite all to install it and help identify missing must-have packages.

The TeX Live book publishing scheme is, in my view, a big first step in reaching out and inviting self-publishers into the TeX community.

But it's not enough.

The next issue is user documentation.

This, I know, is a long — simmering — discussion in the TeX community.

Self-publishers need how-tos and tutorials that give them instant gratification.

## WHY

When and why does the user need this package?  
Must be short and to the point

## HOW

Simple learn-by-doing example  
Deliver instant gratification

## WHAT

Application tips  
Tech overview

They don't need tech-speak nor theory. They've spent months on their books.  
Invested hopes and dreams.

They just want to rush their PDF files off to KDP and reap riches.

Unfortunately, most are sadly disappointed.

One reason: Less than trade-quality layout and readability.

So self-publishers need to know WHY LaTeX styling and typography is superior to their word processor—

Not in the technical sense, but how it helps create a first impression of a book that a reader wants to read.

They need exemplary templates for fiction, nonfiction, and academic books.



Figure 14: Zotonic Content Management System

To my mind, the challenge comes down to this:

How can we provide my friend, Jay O'Callahan, and other tech-wary self-publishers, with comfort-food documentation that eases them into LaTeX?

So this is the second initiative I'll mention today.

Karl Berry and I are working with Marc Worrell, lead developer of the Zotonic Content Management System, to publish an engaging website where self-publishers can learn how to install LaTeX.

A site where they can find outstanding how-to tools, tutorials, and resources, including books as well as professional consulting help.

You can help by contributing your hard-earned book publishing know-how.

We welcome contributions.

I have no illusions that these two initiatives will lure hordes of self-publishers into the TeX community.

But I do believe that well-written and well-placed how-tos and tutorials will

attract best-of-the-best self-publishers and help them achieve more rewarding sales success.

Self-publishers are important voices of our time and culture.

Self-publishers are tool users. It's up to LaTeX tool makers to give them the very best of all possible tools.

Thank you!