

pagedown:

In ~~God~~ HTML We Trust

Samantha Tyner, Ph.D.

@sctyner

DC R Conference

Nov. 8, 2019

Disclaimers

This is personal work, independent of my current or past employers.

All opinions are my own.

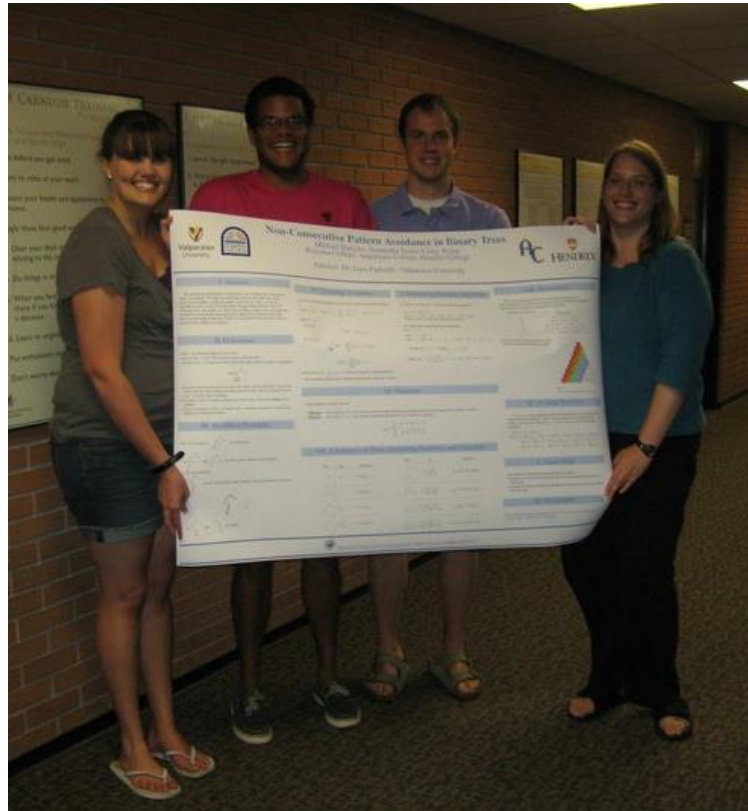
pagedown is the work of Yihui Xie, Romain Lesur, and Brent Thorne.

I chose the title of this talk, "In HTML We Trust" based on a post on Yihui's blog.

If you want to learn from the source, watch Yihui's `rstudio::conf` talk from January 2019.

Reflections on LaTeX

The Beginning



2011 at Valparaiso University

``

``

``



The Problems with LaTeX

📖 Not built for the web



Silly LaTeX, the web is for HTML.

The Problems with LaTeX

📄 Getting tables out of PDFs



Handle with care.

The Problems with LaTeX

 It's inefficient

RESEARCH ARTICLE

An Efficiency Comparison of Document Preparation Systems Used in Academic Research and Development

Markus Knauff*, Jelica Nejasmic

Department of Psychology, Experimental Psychology and Cognitive Science, University of Giessen, Giessen, Germany

[*markus.knauff@psychol.uni-giessen.de](mailto:markus.knauff@psychol.uni-giessen.de)



OPEN ACCESS

Citation: Knauff M, Nejasmic J (2014) An Efficiency Comparison of Document Preparation Systems Used in Academic Research and Development. PLoS ONE 9(12): e115069. doi:10.1371/journal.pone.0115069

Editor: Cynthia Gibas, University of North Carolina at Charlotte, United States of America

Received: July 29, 2014

Accepted: November 18, 2014

Published: December 19, 2014

Copyright: © 2014 Knauff, Nejasmic. This is an open-access article distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author

Abstract

The choice of an efficient document preparation system is an important decision for any academic researcher. To assist the research community, we report a software usability study in which 40 researchers across different disciplines prepared scholarly texts with either Microsoft Word or LaTeX. The probe texts included simple continuous text, text with tables and subheadings, and complex text with several mathematical equations. We show that LaTeX users were slower than Word users, wrote less text in the same amount of time, and produced more typesetting, orthographical, grammatical, and formatting errors. On most measures, expert LaTeX users performed even worse than novice Word users. LaTeX users, however, more often report enjoying using their respective software. We conclude that even experienced LaTeX users may suffer a loss in productivity when LaTeX is used, relative to other document preparation systems. Individuals, institutions, and journals should carefully consider the ramifications of this finding when choosing document preparation strategies, or requiring them of authors.

The Benefits of LaTeX

- 📖 Beautiful typesetting
- 📖 Ubiquitous in journals
- 📖 Feeling of **belonging**



pagedown: LaTeX for the
21st Century?

Why?

| "Can we print a book with HTML and CSS?"

Yihui, Romain, & Brent:



"Yes we can!"

Why?

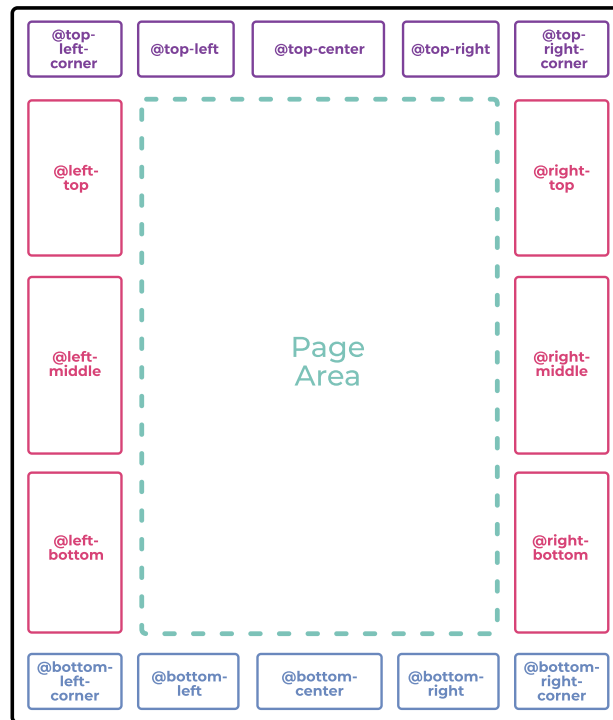
📄 Ctrl + P from the web is ugly



"U-G-L-Y"

How?

📖 paged.js + CSS



www.pagedmedia.org/paged-js/

Installing pagedown

```
# from cran:  
install.packages("pagedown")  
# from github:  
remotes::install_github("rstudio/pagedown")
```

Using pagedown

In RStudio:

 File  New File

 R Markdown  From Template

Template:

 [Using R Markdown Templates](#)

HTML Thesis Document	{pagedown}
HTML Poster (Jacobs University)	{pagedown}
Paged HTML Document	{pagedown}
Journal of Statistical Software HTML Document	{pagedown}
HTML Poster (the ReLaXed style)	{pagedown}
Business Card	{pagedown}
HTML Resume	{pagedown}
HTML Letter	{pagedown}

Using pagedown

YAML

```
---
title: "Paper title"
author: "Jane Doe and John Smith"
date: "2019-11-07"
output:
  pagedown::html_paged:
    toc: true
    self_contained: false
---
```

Then Markdown & code chunks

Using pagedown

- 📖 Lots of templates
- 📖 YAML Header
- 📖 Markdown body
- 📖 R code chunks
- 📖 Advanced: customization with CSS
- 📖 See pagedown.rbind.io for help.

Rendering pagedown


Needs a web server to view:

📖 In RStudio: run `xaringan::inf_mr()` then open in browser.

pagedown examples

My CV:


SAMANTHA C. TYNER, PHD

 EDUCATION

Aug. 2019
|
Dec. 2017

Iowa State University
Postdoctoral Research Associate, CSAFE


PI: Alicia Carriquiry


 Ames, Iowa

Dec. 2017
|
Aug. 2012

Iowa State University
Ph.D. in Statistics, M.S. in Statistics

Dissertation: Graphical discovery in stochastic actor-oriented models for social network analysis

 Ames, Iowa

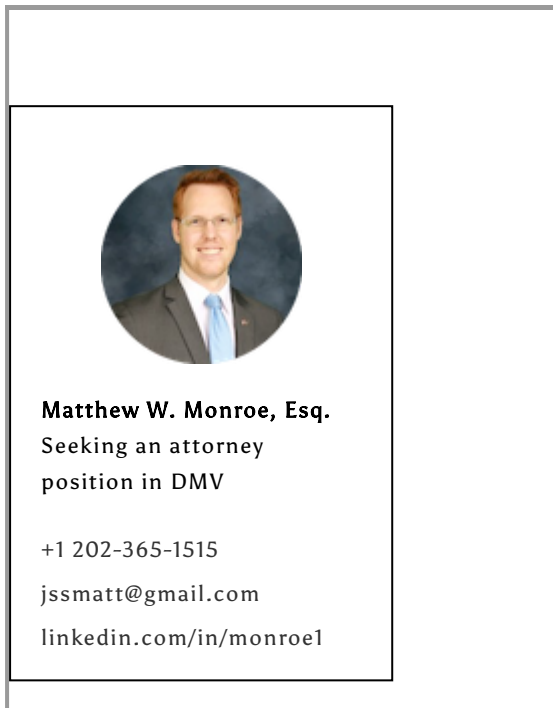


CONTACT INFO

20 / 26

pagedown examples

An e-business card



Disadvantages of pagedown

📖 Immature



Baby shark...🎵

Disadvantages of pagedown

📖 Very strict



The Trunchbull

Disadvantages of pagedown

📖 Change is hard



Case in point

Conclusion

LaTeX is

- 📖 beautiful
- 📖 bulky
- 📖 inefficient

pagedown is

- 📖 forward-thinking
- 📖 flawed
- 📖 fun

Thank you

 sctyner.github.io ||  sctyner90@gmail.com

 github.com/sctyner ||  [@sctyner](https://twitter.com/sctyner)

 linkedin.com/in/sctyner

Slides available at bit.ly/TynerDCR19