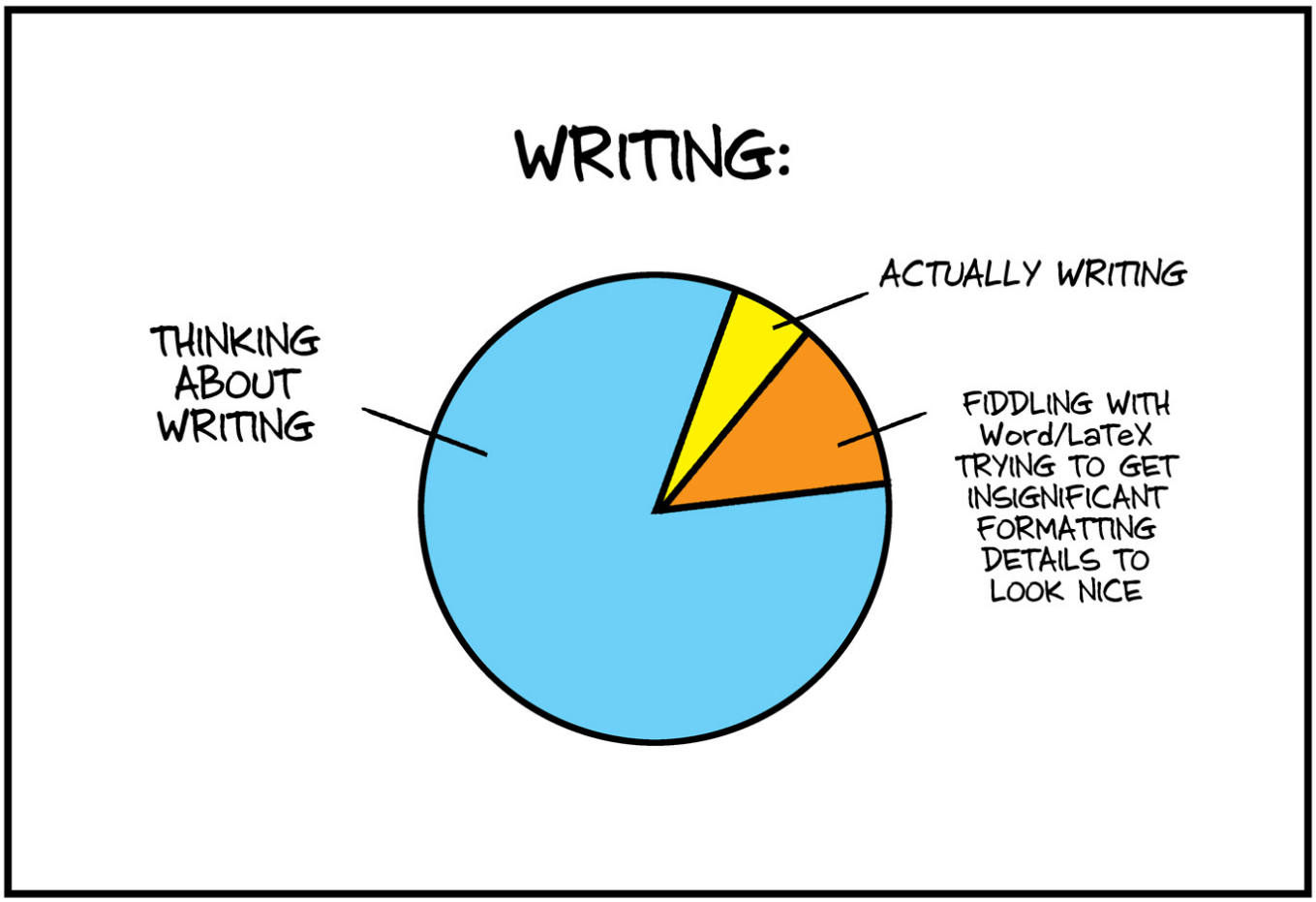
Hints and suggestions on

Academic Writing in *plain* text

Michele GIUGLIANO



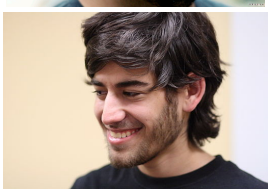
Why not just use a “word processor” like Microsoft *Word* and *.docx files*?

- Ever used *Word* for a MS/BS thesis or a (large) project? Honestly, was it a good experience? Did you really enjoy its citation managers?
- Ever worked on a complicated chapter, a heavy figure, a footnote, an equation, a reference? Was *Word* smooth? Was *Word* stable?
- Did *Word* ever crash? How many times? Ever lost your work?
- Ever procrastinated your writing by tweaking the layout, the fonts, the spacing, the size, the border, ….? Or by re-reading previous text?
- *Word* is expensive! It is neither “mobile” or “future proof”. Size of document files can become very large!

http://wcaleb.org/blog/my-academic-book-in-plain-text
https://medium.com/@krzysztofczarnecki/i-wrote-my-thesis-in-markdown-heres-how-it-went-3f60140dfe65

Embrace minimalism of *plain* text files

Plain text files (written in ***Markdown*** syntax)
and
one single software (**PanDoc**) to convert to any other file format, when needed



- **Markdown** is a lightweight markup language created by John Gruber and Aaron Swartz in 2004. It is used for blogs, documentation, and academic papers. It is conceived to be easy-to-read and easy-to-write.
- **PanDoc** is a free “conversion” software maintained since 2006 by Prof. John MacFarlane (philosophy, UC Berkley) with in mind scholars and academics.

Markdown

- A way to simplify “writing” in the digital age, where we rarely print and instead consume documents as PDFs, eBooks, HTML web pages, Word, etc.

- A syntax allowing to incorporate *rich text elements* into plain text documents: a system of symbols and characters to explain to the computer the exact way we want our text to look.

Benefits:

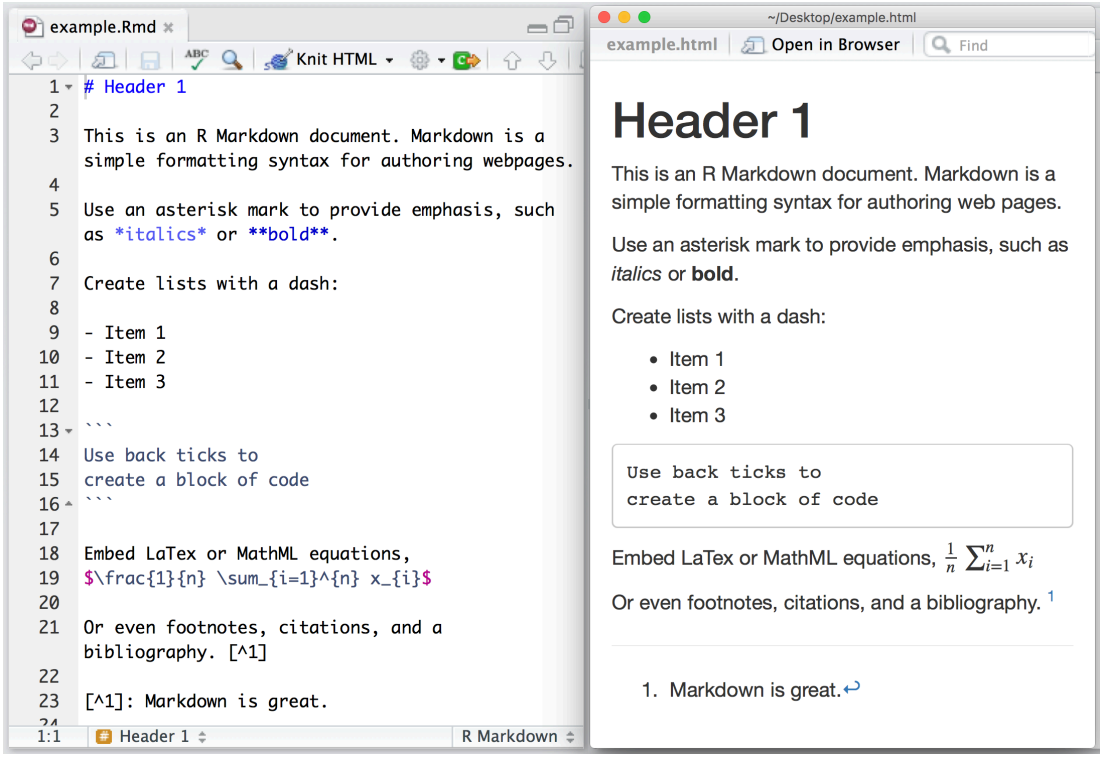
- It makes you focus on the writing, not on the formatting or layout.

- It can easily be exported/converted into a variety of electronic formats.

- It relies on plain text file format: 1) future proof, 2) small size, 3) smooth to synchronise across devices, 4) compatible with ~any software, 5) easy for collaborating, 6) citations and bibliographies are automatic.

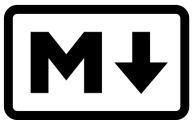
https://youtu.be/hpAJMSS8pvs

Markdown



See also https://commonmark.org

Markdown



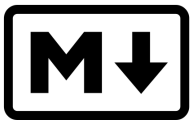
It can be learned in 10 minutes (!)

https://commonmark.org/help/tutorial/

Type	Or	… to Get
`*Italic*`	`_Italic_`	*Italic*
`**Bold**`	`__Bold__`	**Bold**
`# Heading 1`	`Heading 1` `=========`	Heading 1
`## Heading 2`	`Heading 2` `---------`	Heading 2
`[Link](http://a.com)`	`[Link][1]` ⋮ `[1]: http://b.org`	Link
`![Image](http://url/a.png)`	`![Image][1]` ⋮ `[1]: http://url/b.jpg`	

See also https://commonmark.org/help/
https://youtu.be/HUBNt18RFbo

Markdown



`> Blockquote`		> Blockquote
`* List` `* List` `* List`	`- List` `- List` `- List`	• List • List • List
`1. One` `2. Two` `3. Three`	`1) One` `2) Two` `3) Three`	1. One 2. Two 3. Three
`Horizontal Rule` `---`	`Horizontal Rule` `***`	Horizontal Rule ---
`` `Inline code` with backticks ``		`Inline code` with backticks
`` ``` ```` `# code block` `print '3 backticks or'` `print 'indent 4 spaces'` ```` ``` ````	····`# code block` ····`print '3 backticks or'` ····`print 'indent 4 spaces'`	`# code block` `print '3 backticks or'` `print 'indent 4 spaces'`

Say yes to "Plain Text Editors"

- **Zettlr** - for writers and academic researchers
- **Typora** - for writers
- **Sublime Text** (w extensions) - for writers as well as coders
- **Atom** (w extensions) - for writers as well as coders
- **Visual Studio Code** (w extensions) - for writers as well as coders
- Many others, e.g. Notepad++, BBEdit, TextMate, Remarkable, WordMark, GitBook, Abricotine, Haroopad, ghostwriter, UberWriter, Caret, ReText,…
- or use **vim** and **emacs** (if you are/aspire to be a computer wizard!)

Managing Citations

You shall have a citation manager software. Never ever again cite references and curate bibliographies "by hand".

BibTeX and PanDoc-CiteProc

- BibTeX: a file format used to describe lists of references, mostly in conjunction with LaTeX and Markdown documents.
- PanDoc-CiteProc: a "filter" to be used with PanDoc for rendering inline citations and compiling bibliographies at the end of a document.

BibTeX (plain text) file format

See e.g. *https://github.com/mgiugliano/BibTex/blob/master/bib.bib*

Linaro, D, Biró, I, Giugliano, M (2018). Dynamical response properties of neocortical neurons to conductance-driven time-varying inputs. *Eur. J. Neurosci.*, **47**, 1:17-32.

```
@Article{Linaro:2018,
   Author="Linaro, D.  and Biro, I.  and Giugliano, M. ",
   Title="{{D}ynamical response properties of neocortical neurons
to conductance-driven time-varying inputs}",
   Journal="Eur. J. Neurosci.",
   Year="2018",
   Volume="47",
   Number="1",
   Pages="17--32",
   Month="01"
   doi  = {10.3389/fncom.2011.00043}
}
```

https://doi2bib.org/

https://www.bioinformatics.org/texmed/

BibTeX (plain text) file format

Carnevale, NT, Hines, ML (2006). The NEURON book. *Cambridge University Press*.

```
@book{Carnevale:2006,
        Author = {Carnevale, NT and Hines, ML},
        Publisher = {Cambridge University Press},
        Title = {The NEURON book.},
        Year = {2006}
}
```

BibTeX (plain text) file format

Pfister, J-P, Gerstner, W (2006). Beyond pair-based STDP: A phehomenological rule for spike triplet and frequency effects, in *Advances in Neural Inf. Proc. Syst.* **17**:1409-16, Saul, LK, Weiss, Y and Bottou, L eds., *MIT Press.*

```
@inproceedings{Pfister:2006a,
        Author = {Pfister, J-P and Gerstner, W},
       Editor = {Saul, LK and Weiss, Y and Bottou, L},
        Pages = {1409-16},
        Publisher = {MIT Press},
        Series = {Advances in Neural Inf. Proc. Syst.},
        Title = {Beyond pair-based STDP: A phenomenological rule for
spike triplet and frequency effects},
        Volume = {17},
        Year = {2006}
}
```

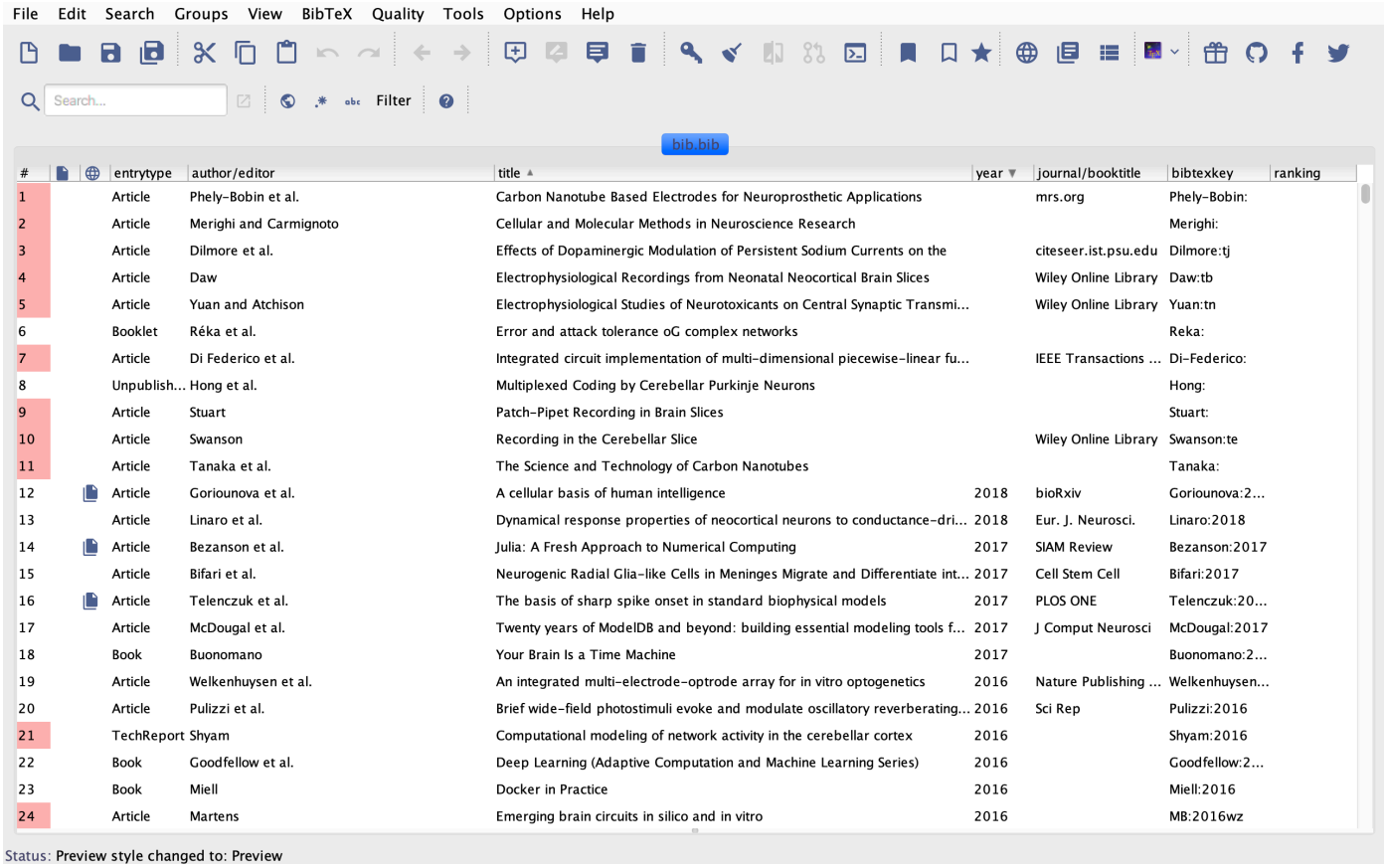
See also https://en.wikibooks.org/wiki/LaTeX/Bibliography_Management

Managing BibTeX files

- Manually, adding entries with a text editor (easy, but not completely painless)
- **JabRef**
- **Bibfilex**
- **BibDesk** (macOs only)
- **Zotero** (and plugin https://retorque.re/zotero-better-bibtex/)
- **Mendeley** (see https://blog.mendeley.com/2011/10/25/howto-use-mendeley-to-create-citations-using-latex-and-bibtex/)

Useful websites to import/search for new BibTeX entries:

- http://truben.no/latex/bibtex/
- https://www.bioinformatics.org/texmed/



http://www.jabref.org

Managing (PDF) papers collections

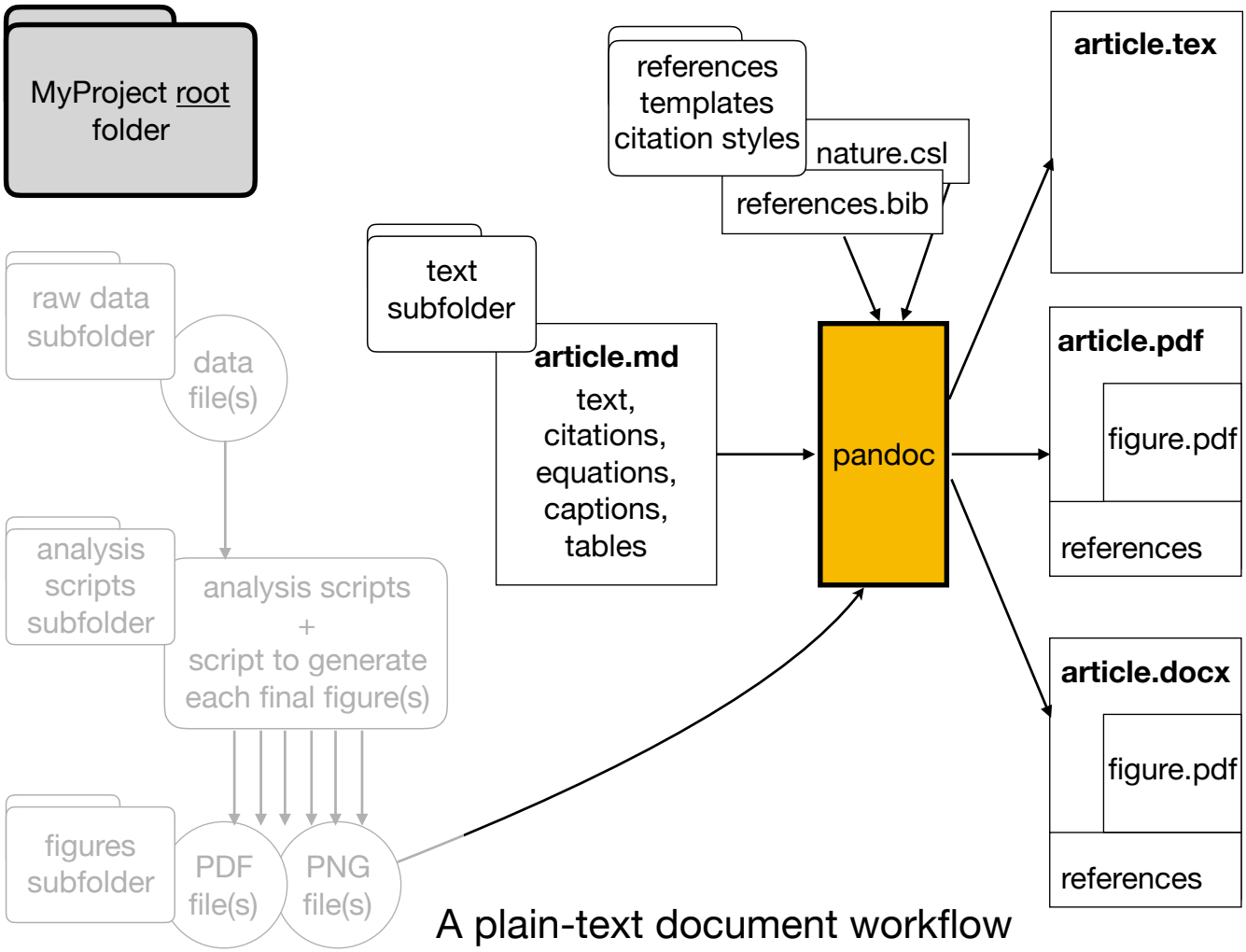
- Zotero and Mendeley can be used for free (locally, offline)
- There are (online storage) costs when synchronising PDF files and annotations across computers/devices/the cloud
- I personally do not use anymore a management software. I keep all my PDFs in a (DropBox) folder, unsorted, without even renaming them.

I count however on a quick method to search for text inside the PDF files and identify the corresponding file for retrieval!

https://www.online-tech-tips.com/computer-tips/how-to-search-for-text-inside-multiple-pdf-files-at-once/

https://github.com/bellecp/fast-p

https://github.com/mgiugliano/maps



A plain-text document workflow

List of resources

- https://plaintextproject.online/links.html
- http://u.arizona.edu/~selisker/post/workflow/
- https://pandoc.org/MANUAL.html
- https://www.youtube.com/channel/UCYspUZGexLdDLjHRkuERQlg

- https://docs.zettlr.com/en/5-minutes/

- https://youtu.be/nO4T8JDNYG0