

```
title: "The YAML problem"  
subtitle: "Writing and working with  
YAML with yamlthis"  
  
author:  
- name: Malcolm Barrett  
  affiliation: [USC, LA RUG]  
  
output:  
orange_county_r_user_talk:  
n_gifs: 2
```

Rmarkdown

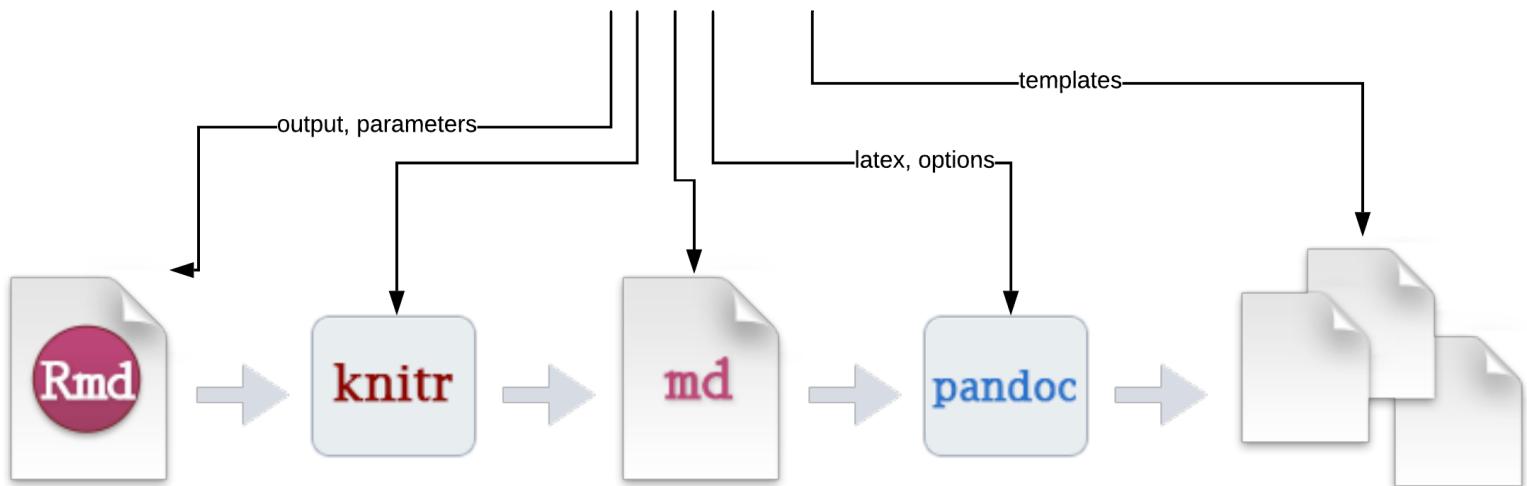
TEXT. CODE. OUTPUT.
(GET IT TOGETHER, PEOPLE.)



Artwork by @allison_horst



yaml



Even the creator of R Markdown and knitr isn't crazy about YAML



Yihui Xie
@xieyihui

Replying to @cantabile @rensa_co and @apreshill

Oh, thanks Twitter for the disorganized conversations... I just saw this one. Maybe Stack Overflow next time?

I don't like YAML or TOML (fn 23: bookdown.org/yihui/blogdown...), but I don't know a better alternative, either. The world of config languages is a total mess.

 Creating Websites with R Markdown

2.2 Configuration | [blogdown: Creating Websites with R Mar...](#)
A guide to creating websites with R Markdown and the R package blogdown.
bookdown.org

11:48 AM · Mar 27, 2019 · Twitter Web Client

YAML:

Yet Another Markup Language

YAML Ain't Markup Language

```
title: "Annual report"
```

```
author: Malcolm Barrett
```

```
date: "`r Sys.Date()`"
```

```
output:
```

```
pdf_document:
```

```
  toc: true
```

```
title: "Annual report"  
author: Malcolm Barrett  
date: "r Sys.Date()"  
  
output:  
  
pdf_document:  
  toc: true
```

key **value**

```
title: "Annual report"
```

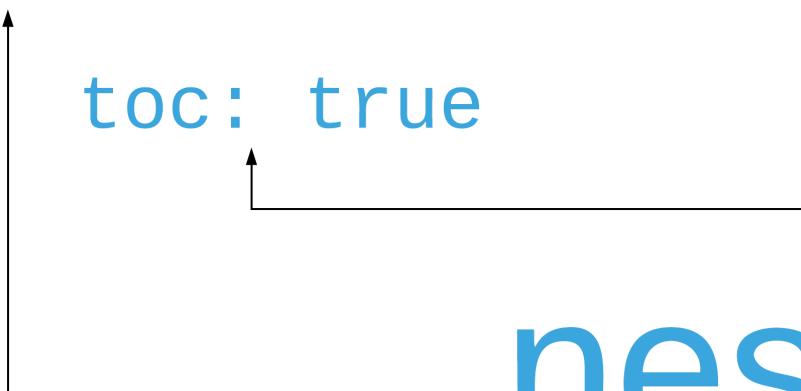
```
author: Malcolm Barrett
```

```
date: "``r Sys.Date()``"
```

```
output: ← top level
```

```
pdf_document:
```

```
  toc: true
```



```
nested
```

title: "Annual report"

author: Malcolm Barron

date: "r Sys.Date()"

output:

pdf_document:

toc: true

output
function

output

arguments



```
title: "Annual report"  
author: Malcolm Barrett  
date: "`r Sys.Date()`"  
output:  
  pdf_document:
```

```
    toc: true
```

pdf_document(toc = TRUE)

```
library(ymlthis)
as_yml(
  "title: Annual Report
author: Malcolm Barrett
date: ``r Sys.Date()``"
output:
  pdf_document:
    toc: true
"
) %>% draw_yml_tree()
```

```
library(ymlthis)
as_yml(
  "title: Annual Report
author: Malcolm Barrett
date: ``r Sys.Date()``"
output:
  pdf_document:
    toc: true
"
) %>% draw_yml_tree()
```

```
library(ymlthis)
as_yml(
  "title: Annual Report
author: Malcolm Barrett
date: ``r Sys.Date()``"
output:
  pdf_document:
    toc: true
"
) %>% draw_yml_tree()
```

```
└── title: Annual Report
└── author: Malcolm Barrett
└── date: ``r Sys.Date()``'
└── output:
    └── pdf_document:
        └── toc: true
```

⚠ YAML fails silently



SENORGIF.COM

Introducing ymlthis

Introducing ymlthis

✓ Write YAML

Introducing ymlthis

- ✓ Write YAML
- ✓ Document YAML

Introducing ymlthis

- ✓ Write YAML
- ✓ Document YAML
- ✓ Improve R Markdown Workflows

Introducing ymlthis

- ✓ Write YAML
- ✓ Document YAML
- ✓ Improve R Markdown Workflows
-  Validation

Writing YAML

`yml()`

Writing YAML

```
yml()
```

```
---
```

```
author: Malcolm Barrett
```

```
date: ``r format(Sys.Date())``
```

```
---
```

Writing YAML

```
yaml() %>%  
  yaml_output(  
    pdf_document(toc = TRUE),  
    html_document()  
)
```

Writing YAML

```
yml() %>%
  yml_output(
    pdf_document(toc = TRUE),
    html_document()
  )
---
author: Malcolm Barrett
date: ``r format(Sys.Date())``
output:
  pdf_document:
    toc: true
  html_document: default
---
```

Writing YAML

```
yml() %>%  
  yml_author(  
    c("Yihui Xie", "Hadley Wickham"),  
    affiliation = "RStudio"  
) %>%  
yml_date("07/04/2019") %>%  
yml_title("Reproducible Research in R") %>%  
yml_category(c("r", "reproducibility")) %>%  
yml_output(  
  pdf_document(  
    keep_tex = TRUE,  
    includes = includes2(after_body = "footer.tex")  
  )  
) %>%  
yml_latex_opts(biblio_style = "apalike")
```

Writing YAML

```
---
author:
- name: Yihui Xie
  affiliation: RStudio
- name: Hadley Wickham
  affiliation: RStudio
date: 07/04/2019
title: Reproducible Research in R
category:
- r
- reproducibility
output:
pdf_document:
  keep_tex: true
  includes:
    after_body: footer.tex
biblio-style: apalike
---
```

R Markdown Extensions

package	output function	top-level YAML
bookdown	✓	✓
blogdown	✓	✓
pkgdown	✓	✓
pagedown	✓	✓
rticles	✓	✓
distill	✓	✓
learnr	✓	✗
xaringan	✓	✗
revealjs	✓	✗
flexdashboard	✓	✗

Documenting YAML

?yml_*()

ymlthis 0.0.0.9000 Reference Articles Changelog

The YAML Fieldguide

Source: vignettes/yaml-fieldguide.Rmd src: @malco_barrett & @riannone

ymlthis attempts to write common YAML for you in the right way and to document the many YAML field options in one place. The fieldguide is a collection of all the fields documented in the ymlthis help pages, organized by source. Note that some argument names do not match the YAML field name exactly in order because not all field names are valid R names (e.g. the link_citations YAML field needs to be link_citations in R); these differences are noted in the argument description. Additionally, not all of these arguments are top-level YAML; see the linked help pages for more details.

Basic YAML

LaTeX & PDF

R Markdown websites

Citations

blogdown

bookdown

rmarkdown

pagedown

pkdown

Image by @dataandme

New YAML

Set up YAML

Author: Malcolm Barrett

Date:
 Use system date

Title: Untitled

Subtitle:

Output: html

Set html options

Export to: R Markdown

Path: Untitled.Rmd

R Markdown Template:

 YAML R Markdown Options LaTeX Options Citations Parameterized Reports

Done

Improving R Markdown Workflows

use_yml()

```
yml() %>%  
  use_yml()  
  
---  
author: Malcolm Barrett  
date: ``r format(Sys.Date())``  
---
```

- Paste into R Markdown or YAML file

```
# Places YAML on your clipboard
```

Improving R Markdown Workflows

use_rmarkdown()

```
yaml() %>%  
  use_rmarkdown()  
# opens a new R Markdown file
```

Improving R Markdown Workflows

```
bookdown_yaml <- yml() %>% yml_output(bookdown::pdf_document2())
use_yml_defaults(bookdown_yaml)
```

Improving R Markdown Workflows

```
bookdown_yaml <- yml() %>% yml_output(bookdown::pdf_document2())
use_yml_defaults(bookdown_yaml)
```

```
options(ymlthis.default_yml = "author: Malcolm Barrett
date: ``r format(Sys.Date())``
output: bookdown::pdf_document2")
```

- Run interactively or paste into .Rprofile (perhaps using `usethis::edit`)

Improving R Markdown Workflows

```
bookdown_yaml <- yml() %>% yml_output(bookdown::pdf_document2())
use_yml_defaults(bookdown_yaml)
```

```
options(ymlthis.default_yml = "author: Malcolm Barrett
date: ``r format(Sys.Date())``
output: bookdown::pdf_document2")
```

- Run interactively or paste into .Rprofile (perhaps using `usethis::edit`)

```
use_rmarkdown()
```

Write to .Rmd files

function	action
use_rmarkdown()	Write yml to a .Rmd file
use_index_rmd()	Write yml to Index.Rmd

Write to .yml files

function	action
use_yml_file()	Write yml to a file
use_bookdown_yml()	Write yml to _bookdown.yml
use_navbar_yml()	Write yml to _navbar.yml
use_output_yml()	Write yml to _output.yml
use_pkgdown_yml()	Write yml to _pkgdown.yml
use_site_yml()	Write yml to _site.yml

visit the site for tutorials and documentation

<http://ymlthis.r-lib.org>



 [malcolmbarrett](#)

 [@malco_barrett](#)

Slides created via the R package `xaringan`.